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K-65 SILOS STUDY & EVALUATION CAMARGO REPORT APPENDIX C, D & E FEBRUARY 1986

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DEPARTMENT OF ENERGY
FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO

K-65 SILOS
STUDY & EVALUATION
APPENDIX C, D & E

FOR:
WESTINGHOUSE MATERIALS COMPANY OF OHIO

PREPARED BY:
CAMARGO ASSOCIATES, LIMITED
CINCINNATI, OHIO

FEBRUARY 1986

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Muenow and Associates, Inc.
MATERIALS AND NONDESTRUCTIVE TESTING
3940 HUNTCLIFF DR.
CHARLOTTE, NORTH CAROLINA 28211
(704) 377-4041 · (704) 542-2223

K-65 SILOS STUDY AND EVALUATION FOR N. L. O., INC. FEED MATERIALS PRODUCTION CENTER FERNALD, OHIO

BY
RICHARD A. MUENOW, P.E.
AND
MELVIN S. ABRAMS

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NONDESTRUCTIVE EVALUATION
OF
K-65 TANK NUMBERS ONE AND TWO
NLO FACILITY
CINCINNATI, OHIO

BY

RICHARD A. MUENOW, P.E.

From September 8, to 13, 1985, a series of nondestructive test techniques were employed to evaluate the in situ condition of tanks numbered one and two of the K-65 Facility at NLO near Cincinnati, Ohio. The purpose of our investgation was to determine the following:

1. Compressive strength of concrete elements.
2. Thickness of concrete tank domes.
3. Thickness of concrete tank walls.
4. Amount of reinforcement steel remaining in dome and present condition.
5. Amount of post tensioning and reinforcement steel in tank walls and present condition.
6. Condition of foundation concrete immediately below tank wall.

7. Uniformity of soil berm embankment around K-65 tanks numbered one and two.
8. Locate and measure size of any voiding in soil berm embankment.
9. Locate an measure size of any moisture concentrations and/or associated riverlets.

Our contract for this investigation was authorized and supervised by Carmago Associates, Limited, through their service agreement No. S-1161 dated July 31, 1985. Personnel associated with our field work investigation were, but not limited to, Messrs. Luther, Sample, Gauggel and others. All field work was conducted by Messrs. Muenow, Blair and Hague of Muenow and Associates, Inc. Data interpretation was accomplished by Messrs. Muenow and Abrams assisted by computer analysis.

TEST METHOD - PULSE ECHO

The theory of pulse echo nondestructive testing for the evaluation of concrete and concrete structures is based upon Snells' Laws of Reflection and Refraction. This law states that as mechanical energy (sound waves) pass through a medium, a portion of the energy will be reflected as changes in density are encountered. These changes in density can be the opposite side of the structural member or internal discontinuities such as cracks, voids, honeycomb or lack of consolidation associated with the reinforcement steel system.

The pulse echo NDT system not only identifies these internal discontinuities as to nature and characteristics, but will also delineate aerial extent and depth within members. A measure of pulse velocity is also recorded which is a measure of the speed with which a sound wave propagates through a medium. This value of pulse velocity is then correlated to the uniformity of concrete, "E" values and the in situ compressive strengths.

TEST METHOD SUBSURFACE GROUND RADAR

Radar utilizes electromagnetic wave energy or radio waves to detect and locate internal discontinuities by reflection in non-metallic construction materials such as concrete and soils. Ground radar or subsurface radar, as it is commonly referred to, has been used for years to do geologic mapping and shallow subsurface foundation mapping. Based upon electromagnetic changes, which relate to changes in density, of a material or series of materials, internal dislocations can be detected and mapped. Moisture gradients in the range of .5 to 1.0 percent can be detected to depths of 30 to 40 feet in certain soils. Only recently has the construction industry recognized radar as a potential NDT technique for detecting, locating, and sizing reinforcing steel bars and other concrete embedments. To detect an internal discontinuity, an internal change must occur. With radar the change is dialectric constants which are related to rather distinctive material changes. Radar will recognize air-filled voids in concrete and in soils since the dialectric change are of major percent. One limiting factor to the use or radar as an overall nondestructive technique for inspection of in situ concrete and soil is its' inability to penetrate to sufficient depths in materials containing minor amounts of free water.

TEST LOGISTICS - DOME CONCRETE

Conditions relative to dome concrete and reinforcement steel were evaluated on a test pattern of approximately 30 degree intervals around the tank and at approximately 3 foot intervals along each 30 degree line up and over the dome. This test pattern without precise layout measurements, resulted in a minimum of two NDT measurements at any single general test spot and a coverage of approximately 70% of the total concrete volume in the dome.

TEST LOGISTICS - TANK WALLS

Conditions relative to wall concrete with post tensioning and reinforcement steel were evaluated on a test pattern of approximately 15 degree intervals on the tank. This test pattern resulted in a coverage of approximately 85% of the total concrete making up the wall volume.

TEST LOGISTICS - SOIL BERM EMBANKMENT

Conditions relative to the uniformity of soil compaction, moisture concentrations and riverlets were evaluated with circular test patterns around each tank located at the top of the berm, mid height of the berm and at the toe of the berm. This test pattern resulted in a coverage of approximately 80% of the total soil making up the berm volume.

Drawings illustrating these test patterns are shown as follows:

Drawing No. 1 - Test locations for K-65 Tank Domes.

Drawing No. 2 - Test locations for K-65 Tank Walls.

Drawing No. 3 - Test locations for soil embankment berm.

Drawing No. 4 - Volume of soil berm evaluated with ground radar.

Drawing No. 5 - Circumferential distances around tank.

TEST RESULTS

Dome

Test results indicate a general overall thinning of concrete in the dome on both tanks one and two. This thinning appears to undulate in no particular pattern; but is interrupted by shape and well defined areas of concrete much thinner than the surrounding concrete. This type deterioration is common in storage tanks 10 to 15 years old. This type deterioration can normally be traced directly back to construction deficiencies, allowing for lack of optimum concrete consolidation and thus accelerated softening of cement matrix. According to the original drawings, four layers of steel were to be placed in the dome concrete section immediately adjacent to the tank wall and extending approximately 9 to 11 feet inward from the wall. In the remainder of the dome, steel reinforcement per the specifications appears to be 4 X 4 mesh placed approximately in the center of the dome concrete thickness.

Reinforcment steel tests indicate that steel around the circumference of the dome reflects minor to no deterioration nor loss of cross section. However, in the remainder of the dome, where 4 X 4 mesh is present, reinforcement tests would indicate that the mesh undulated from zero cover on the bottom to slightly over 1.5 inches. Thus, it would be reasonable to assume that where thinning of dome concrete exceeds the 1.5 inch measured concrete cover, that the reinforcement steel mesh is either severely deteriorated or not within the concrete mass at all and thusly not to be considered an integral part of the dome structure. For specific test results see pages to "Dome Test Results."

Walls

Test results indicate that concrete thinning, total tank wall thickness cracking and considerable loss of horizontal post tension wire is present in both Tanks One and Two.

Wall thickness measurements indicate a maximum reduction of thickness of approximately 2 inches detected in one test location. The vast majority of wall thickness measurement indicate thinning from .05 to 1.0 inches. Test data indicates no deterioration of the vertical "Preload" Unit reinforcement steel bundles.

Reduction and/or loss of horizontal "Preload" wire bundles is for the most part correlated directly to areas of the tank wall

concrete exhibiting through wall cracking. Data indicates that a maximum of 25% of the horizontal reinforcement steel has been lost in specified areas. However, the majority of steel reduction appears to be from 5% to 15 %. Most of the reinforcement wire appears to be in place, but tests do indicate wide spread corrosion on the steel in most parts of the tank wall.

Bottom concrete, which would be considered part of the wall foundation, was also evaluated. In this volume of concrete, a general deterioration can be noted; mainly in the form of minor to severe microcracking; some, but very limited macrocracking and various degrees of cement matrix softening. The deterioration shows no specific pattern; and again reflects lack of initial concrete consolidation in certain areas, thus allowing accelerated deterioration.

GROUND RADAR

Test results indicate that minor voiding, moisture concentrations and layering within the soil embankment berm do exist. No definable riverlets were identified at the current time. There were, however, traces that riverlets did exist at some time since the soil was put in place.

During the ground radar test procedure, at least three run-traces were made along each test pattern. The repeated testing involved a 120MHz transducer for 40 to 50 feet of penetration, a 300MHz transducer for 30 to 45 feet of penetration and a 600 MHz transducer for extremely fine detail definition to depths of 20 to 30 feet.

Definitions of test data from ground radar are as follows;

1. Lack of compaction/voiding. (LCV)

   Small pockets of low density material and/or air spaces within the soil embankment berm. No single occurrence is larger than 18 inches in any direction; however, accumulations of individual pockets do exist as shown.

2. Moisture concentrations. (MC)

   Volumes of the soil embankment berm containing a higher percent of moisture than a surrounding volume. For this specific investigation, these moisture concentrations appear to have well defined bounds with definite patterns indicating excellent compaction quality control at time of placement.

3. Riverlets. (R)

   A well defined moisture concentration with narrow horizontal bounds and very limited variations in elevation within the berm. A typical stream like configuration.

4. Drain discontinuities.

   On each tank 2 drains exist; one directly east, the

other directly west (total of 4 drains). The soil embankment berm at these four locations show high levels of moisture content. The configuration of mositure is a narrow band starting at the tank top, extending approximately 30 to 35 feet downward and spreading out to approximately 20 to 30 feet at the toe of the berm with a maximum depth of 10 to 15 feet. This normal drainage pattern masks any effect the contents of the tank may have had in these areas of the berm.

TEST DATA FROM GROUND RADAR

TANK NO. 2 (NORTH TANK)

Circumferential Distance in Feet From North Pt.	Depth Down From Top of Berm	Outward Dist. From Tank Wall	Type of Discontinuity
31' to 42'	20' to 28'	1' - 4'	LCV
60' to 70'	24' to 28'	1' - 9'	MC
100' to 246'	23' to 27'	1' - 4'	MC
100' to 129'	5' to 9'	10' - 15'	MC
105' to 127'	10' to 25'	10' - 30'	MC
111' to 115'	26' to 28'	10' - 15'	MC
129' to 187'	5' to 10'	19' - 28'	MC
154' to 163'	24' to 28'	1' - 7'	LCV
168' to 173'	14' to 28'	1' - 3'	LCV
186' to 247'	5' to 20'	18' - 26'	MC
193'	21' to 24'	1'	LCV
196' to 204'	12' to 28'	1' - 6'	LCV
224'	26' to 8'	1'	LCV
240'	20' to 24'	1' - 3'	LCV

TEST DATA FROM GROUND RADAR

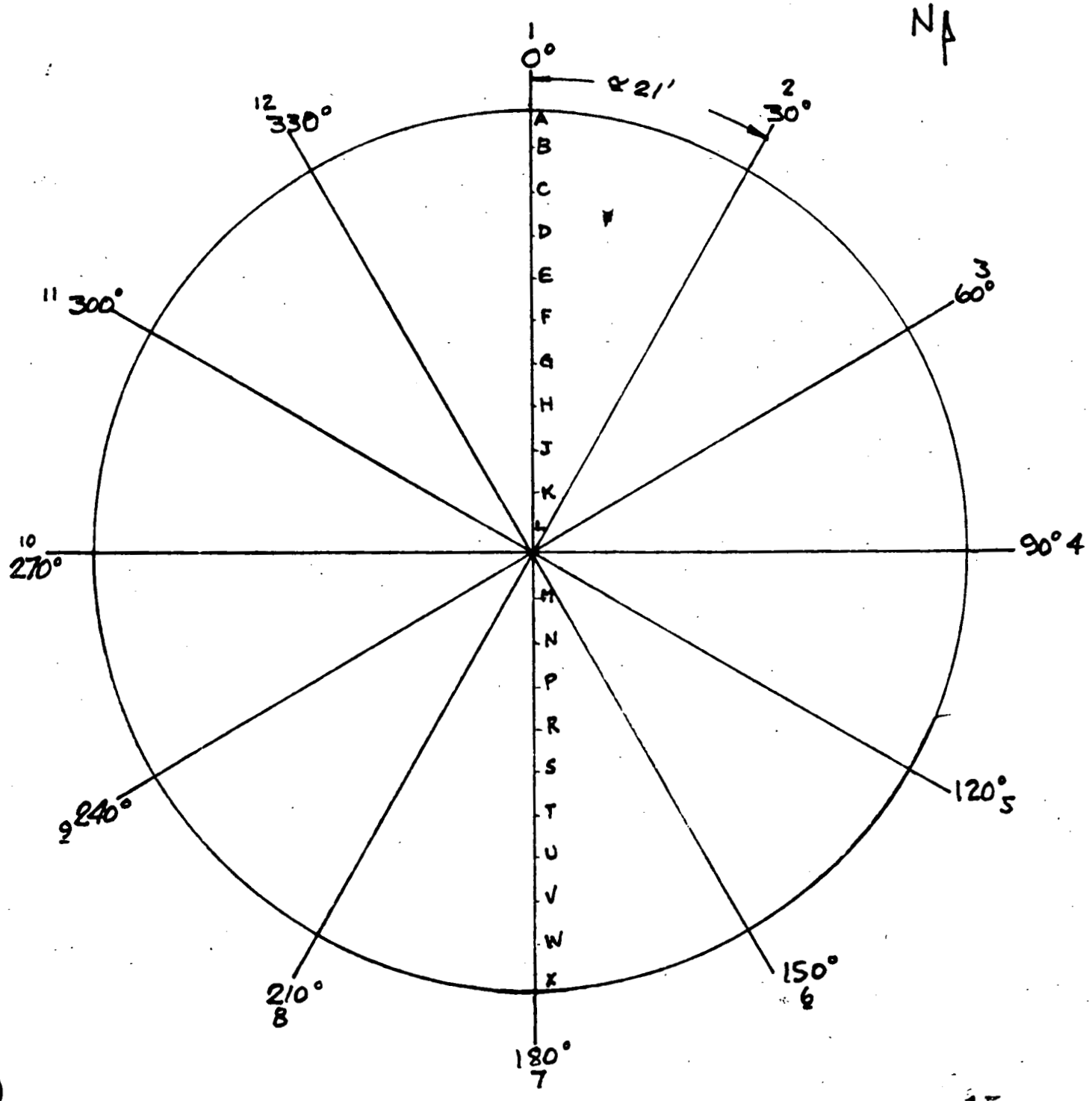
TANK NO. 1 (SOUTH TANK)

Circumfernetial Distance in Feet From North Pt.	Depth Down From Top of Berm	Outward Dist. From Tank Wall	Type of Discontinuity
38' to 43'	11' to 13'	6' - 9'	MC
67' to 73'	10' to 15'	4' - 8'	MC
101' to 115'	7' to 9 '	1' - 2'	LCV
101' to 115'	16' to 23'	1' - 4'	LCV
115' to 125'	15' to 20'	15' - 29'	MC
144' to 150'	26' to 28'	1' - 6'	MC
156' to 163'	23' to 26'	1' - 7'	MC
175'	24' to 26'	1' - 2'	LCV
206'	10'	1'	LCV
206'	24'	1'	LCV
219'	4'	1' - 1.5'	MC
219'	12'	1'	LCV
219'	20'	1' - 2'	MC
219'	26'	1' - 3'	MC
242' to 246'	12'	15' - 18'	R
242' to 246'	15'	20' - 34'	R
242' to 246'	19'	19' - 26'	R
242' to 246'	28'	10' - 31'	R

DRAWING NO. 1 TEST LOCATION FOR K-65 TANK DOMES 3667

TEST LOCATIONS

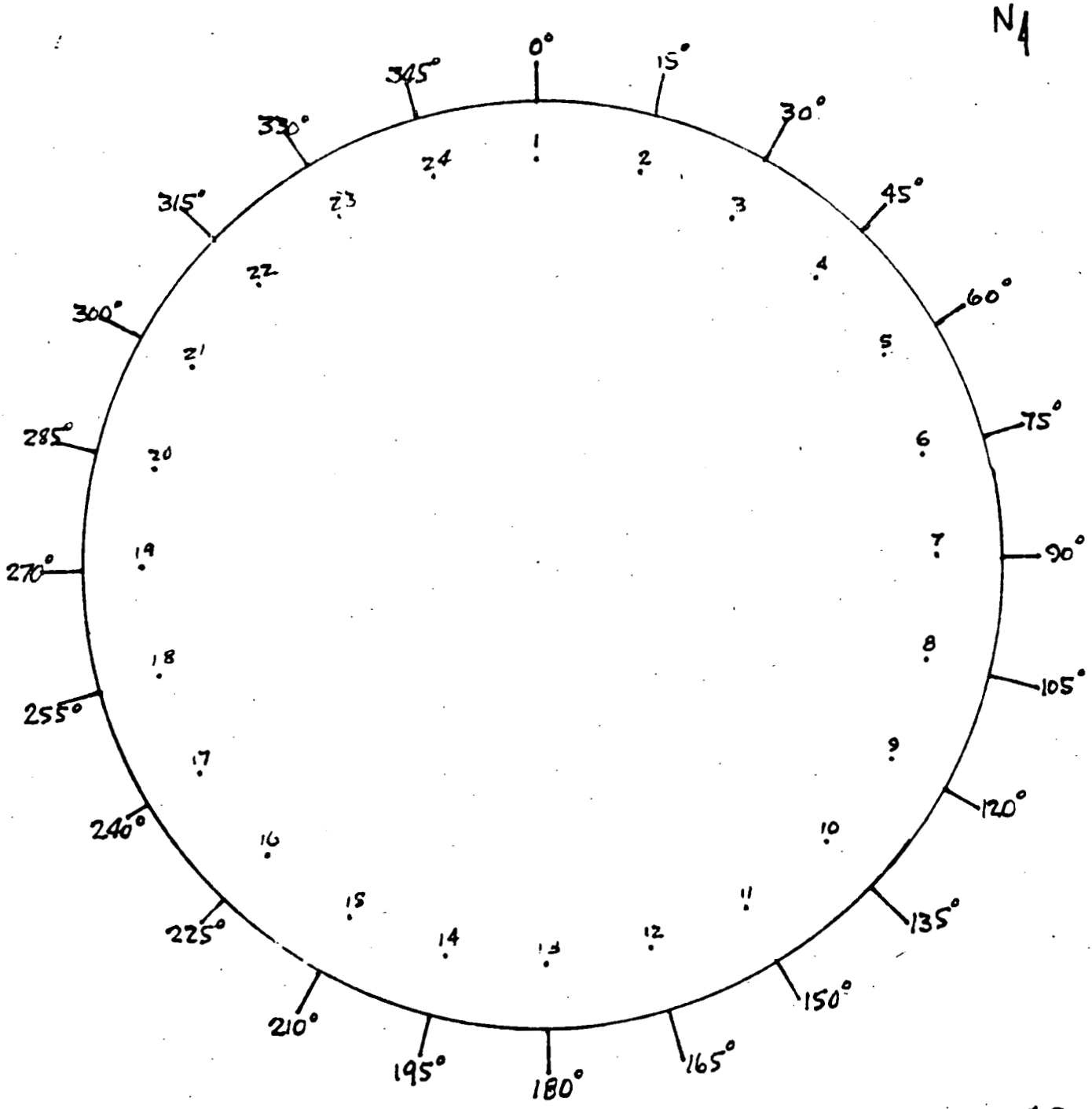
Dome was tested on 30°-21' increments starting at north point assigned 0°, and on 3 foot centers up and over the dome.

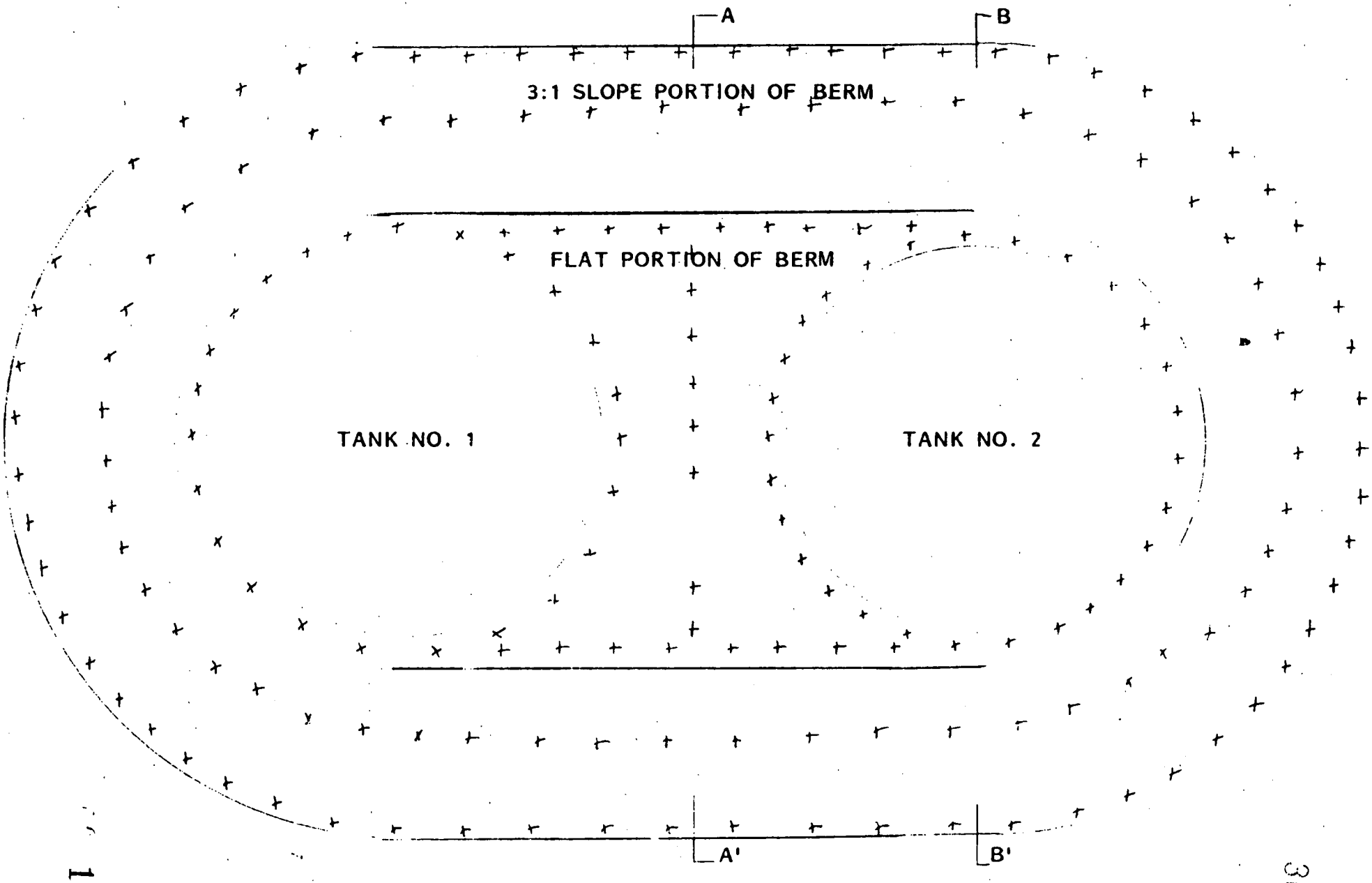


DRAWING NO. 2 TEST LOCATIONS FOR K-65 TANK WALLS 3667

TEST LOCATIONS

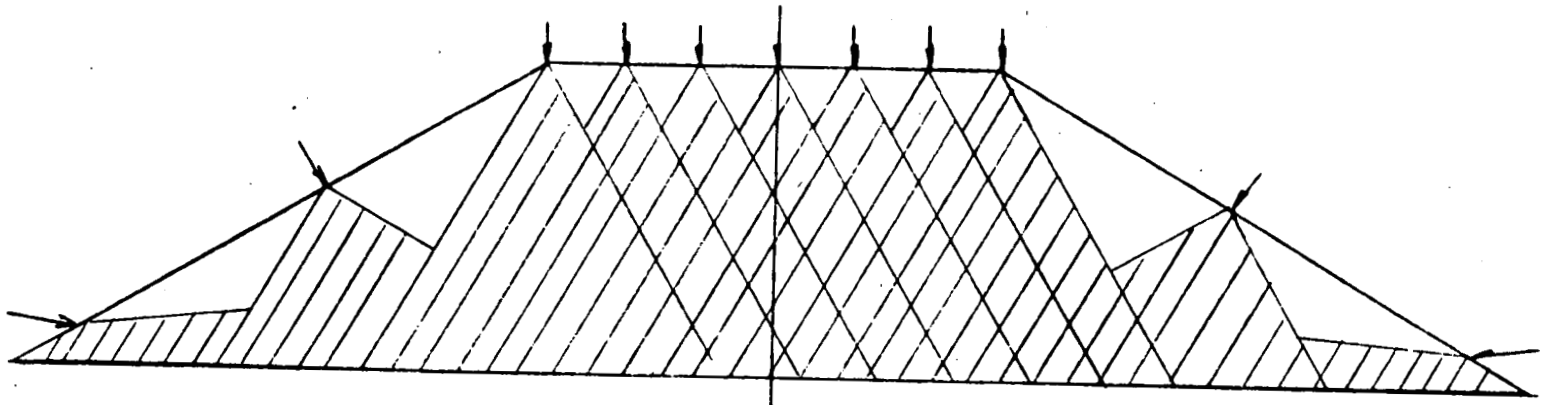
Wall of tank was tested on 15°-10.5' increments starting at north point assigned 0°, on vertical center line.





DRAWING NO. 3 CROSSES MARK THE APPROXIMATE LOCATION OF GROUND RADAR TESTS

3667

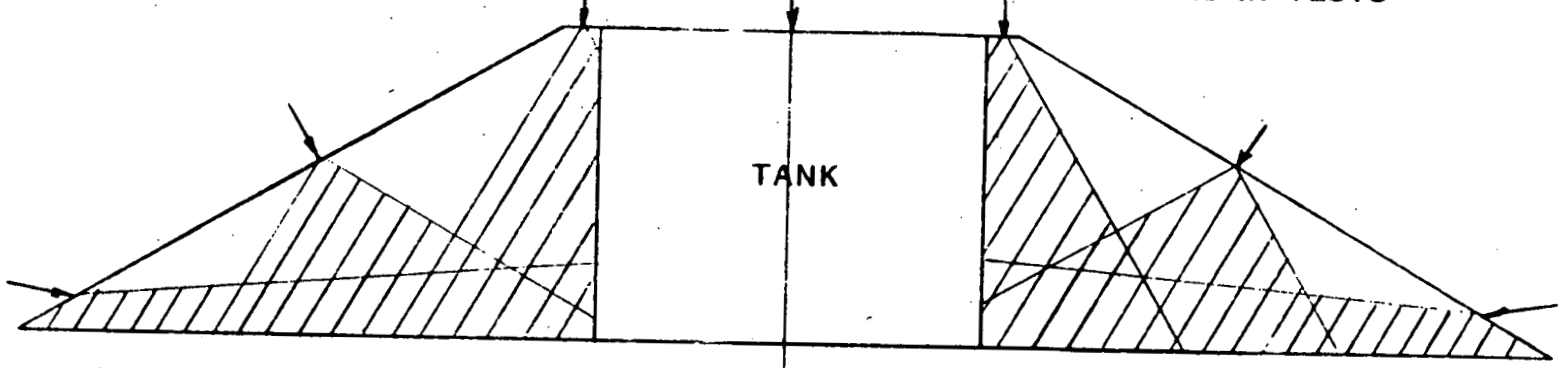


NORTH SOUTH CENTER LINE

SECTION A - A'

SHADED AREAS ON BOTH DRAWINGS INDICATE VOLUME OF SOIL TESTED

ARROWS ON BOTH FIGURES INDICATE LINES OF GROUND RADAR TESTS



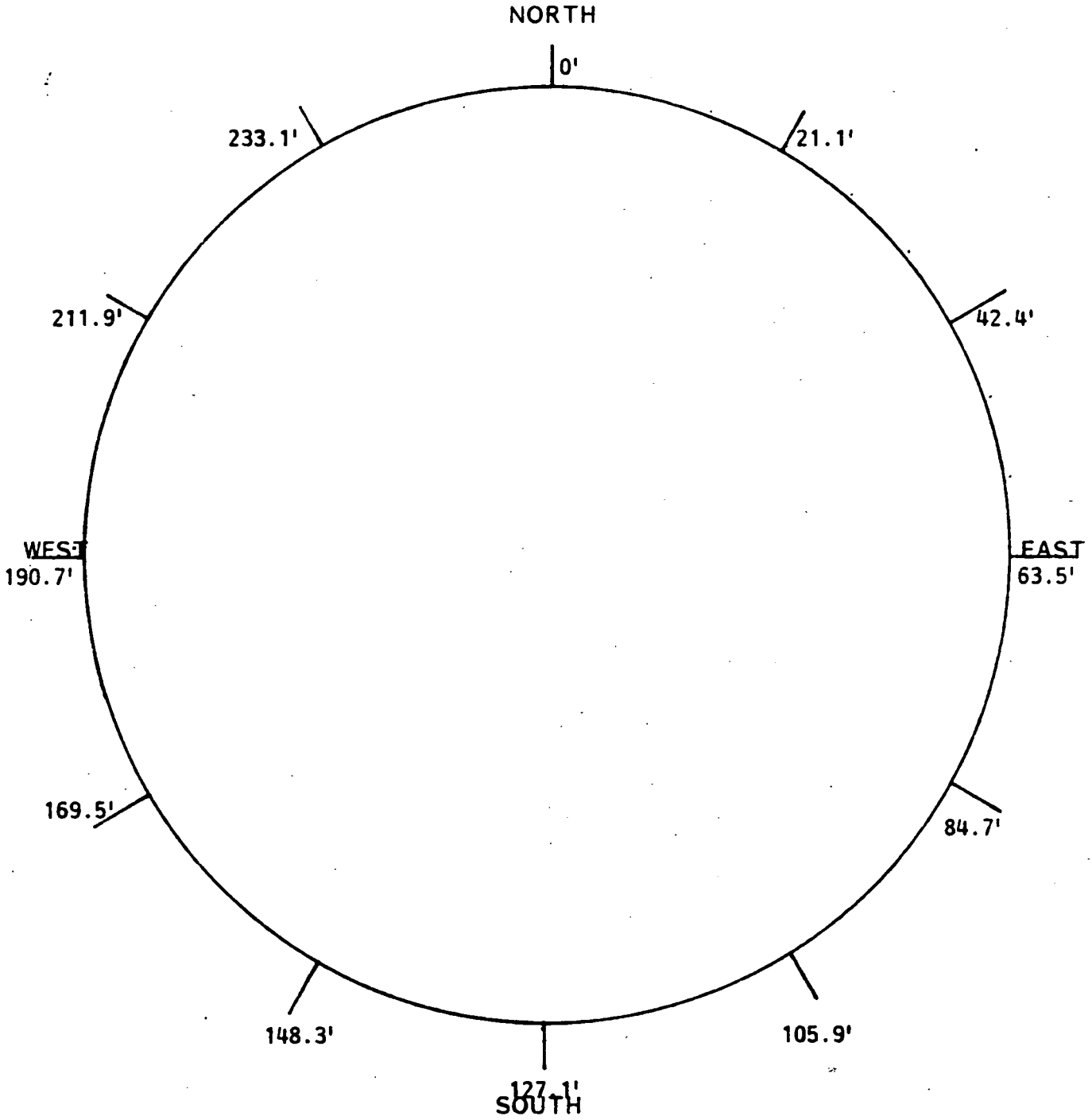
NORTH SOUTH CENTER LINE

SECTION B - B'

DRAWING NO. 4 ILLUSTRATES VOLUME OF SOIL BERN EVALUATED

3667

DRAWING NO. 5 CIRCUMFERENTIAL DISTANCES AROUND TANK



CONCRETE QUALITY STATEMENT

1	SOLID	No cracks - pulse velocity in range of 14000 ft/sec. and higher. Line of deterioration well defined indicating a flat inside surface.
2	AVERAGE	Surface cracking - pulse velocity in range of 13000 to 14000 ft./sec. Line of deterioration less well defined indicating an undulating inside surface.
3	MODERATE	Surface cracks and full depth cracks - pulse velocity in range of 12000 to 13000 ft./sec. Local sharp undulations indicating pockets of deterioration.
4	QUESTION-ABLE	Surface cracks, full depth cracks and some crack plane offset - pulse velocity in range of less than 12000 ft./sec. Grouped and or larger local areas of sharp again indicating pockets of deterioration.

PULSE VELOCITY CORRELATION
TO COMPRESSIVE STRENGHT (PSI)
FOR A TYPICAL CONCRETE MIX
DESIGN AS DENOTED IN NLO RECORDS

PULSE VELOCITY (ft./sec.)	PSI (±15%)
15000 and higher	5000
15000 to 14500	4500
14500 to 14000	4000
14000 to 13500	3500
13500 to 13000	3250
13000 to 12500	3000
12500 to 11500	2750
11500 and lower	2500 to 2000

CONDITION OF WALL FOOTING

1	SOLID	No Deterioration nor cracks observed.
2	AVERAGE	Minor deterioration of cement matrix - no cracks observed.
3	MODERATE	Deterioration of cement matrix with micro-cracking and undefined pulse echo reflectors.
4	QUESTION-ABLE	Deterioration of cement matrix, microcracking, crack planes and defined pulse echo reflectors.

REINFORCEMENT STEEL

Quality Statement

1 No pulse echo reflections noted at reinforcement steel locations and noted depths - indicating no corrosion nor nonbonding of steel to cement matrix.

2 Minor and undefined pulse echo reflections noted at reinforcement steel locations and noted depths - indicating some possible slight corrosion and/or lack of bond between steel and cement matrix.

3 Defined pulse echo reflections noted at reinforcement steel locations and noted depths - indicating a strong possibility of corrosion product in conjunction with a nonbond condition between steel and cement matrix.

TEST DATA

TANK NO. 1
South TANK DOME
TEST LINE NO. 1

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	5.6	1
B	2	5.7	1
C	1	4.1	1
D	3	3.9	2
E	1	4.0	1
F	1	4.0	1
G	2	3.7	2
H	3	3.4	3
J	3	2.9	3
K	3	2.6	2
L	4	2.4	2
M	2	2.9	2
N	1	3.1	1
P	2	3.0	1
R	2	2.9	2
S	3	2.9	3
T	2	3.0	2
U	1	4.5	1
V	1	5.0	1
W	1	5.1	1
X	1	5.7	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 1

South TANK DOME

TEST LINE NO. 2

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	5.6	1
B	1	5.9	1
C	1	4.6	1
D	2	3.6	1
E	2	3.4	2
F	1	3.7	1
G	3	3.1	2
H	3	3.0	2
J	4	2.9	3
K	4	2.6	3
L	4	2.4	3
M	4	2.6	3
N	2	2.9	3
P	3	3.0	2
R	3	3.1	2
S	4	2.9	3
T	4	2.7	3
U	2	3.0	1
V	1	4.6	2
W	1	4.9	1
X	1	5.6	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South TANK — DOME
TEST LINE NO. 3

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	5.5	1
B	1	5.4	1
C	2	3.9	2
D	2	4.0	2
E	2	3.7	2
F	2	3.6	2
G	2	3.4	3
H	3	3.0	3
J	3	2.7	2
K	4	2.4	2
L	4	2.4	2
M	2	2.6	2
N	2	3.4	2
P	1	3.6	1
R	1	4.0	1
S	1	4.1	1
T	1	3.9	1
U	1	4.0	1
V	1	4.5	1
W	1	5.7	1
X	1	5.9	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South TANK
TEST LINE NO. 4

DOME

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	2	4.3	2
B	2	4.0	2
C	2	3.9	2
D	3	3.6	3
E	3	3.4	3
F	2	3.0	3
G	2	3.1	2
H	2	2.9	2
J	3	2.7	2
K	4	2.6	3
L	4	2.4	3
M	4	2.6	3
N	2	2.7	2
P	2	2.9	1
R	2	3.0	1
S	2	3.4	1
T	2	3.6	1
U	1	3.4	2
V	1	3.9	2
W	2	4.0	2
X	1	4.1	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South TANK DOME
TEST LINE NO. 5

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	4.6	1
B	2	4.5	1
C	2	4.4	1
D	2	4.3	1
E	2	3.4	1
F	2	3.1	2
G	3	2.6	2
H	3	2.4	2
J	3	2.2	2
K	3	2.3	2
L	4	2.4	3
M	2	2.7	2
N	3	2.9	3
P	2	3.0	2
R	1	3.5	1
S	1	3.6	1
T	1	3.4	1
U	2	3.0	1
V	1	3.4	1
W	1	3.9	1
X	1	4.4	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 1

South TANK DOME

TEST LINE NO. 6

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	4.9	1
B	1	4.9	1
C	1	4.4	1
D	2	3.7	1
E	2	3.6	1
F	3	3.4	1
G	3	2.9	2
H	4	2.9	2
J	4	2.2	3
K	4	2.3	3
L	4	2.4	3
M	2	3.1	2
N	2	3.4	1
P	2	3.4	1
R	2	4.0	1
S	1	3.7	2
T	2	3.6	1
U	2	3.4	1
V	3	3.4	2
W	3	3.3	2
X	2	3.4	2

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 1

South TANK DOME

TEST LINE NO. 7

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	4.6	1
B	1	4.7	1
C	1	5.0	1
D	1	4.1	1
E	1	3.9	1
F	1	3.6	2
G	2	3.3	2
H	3	3.1	2
J	3	2.9	3
K	2	2.8	3
L	4	2.4	3
M	3	2.6	2
N	4	2.7	2
P	3	3.0	2
R	2	3.1	2
S	2	3.4	2
T	3	3.1	1
U	2	3.1	1
V	2	3.1	2
W	1	4.9	1
X	1	4.9	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South TANK DOME
TEST LINE NO. 8

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	4.7	1
B	1	4.9	1
C	1	4.6	1
D	2	3.4	2
E	2	3.1	2
F	3	3.0	2
G	4	2.9	2
H	2	3.4	3
J	2	3.4	2
K	3	2.6	3
L	4	2.4	3
M	2	3.0	2
N	2	2.9	3
P	2	2.9	3
R	3	3.0	2
S	1	3.4	1
T	1	3.5	1
U	1	3.6	1
V	1	4.4	2
W	1	4.9	1
X	1	5.0	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO.1
South TANK
TEST LINE NO. 9

DOME

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	5.1	1
B	1	5.1	1
C	1	4.8	1
D	2	3.4	2
E	3	3.1	2
F	4	2.9	2
G	4	2.7	2
H	4	2.6	2
J	2	3.1	2
K	2	3.0	2
L	4	2.4	3
M	2	3.0	2
N	1	3.1	2
P	2	2.9	3
R	3	2.8	3
S	2	3.1	2
T	1	3.3	1
U	1	4.0	1
V	1	4.5	1
W	1	5.0	1
X	1	5.5	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 1

South TANK DOME

TEST LINE NO. 10

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	5.5	1
B	1	5.6	1
C	1	4.9	1
D	1	3.6	2
E	1	3.7	2
F	1	3.1	2
G	3	2.9	2
H	2	3.0	2
J	1	3.4	1
K	3	2.9	2
L	4	2.4	3
M	3	2.9	2
N	2	3.1	1
P	1	3.2	2
R	1	3.4	2
S	1	3.6	2
T	2	3.0	2
U	3	2.9	3
V	1	4.0	1
W	1	4.5	1
X	1	5.1	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 1

South TANK DOME

TEST LINE NO. 11

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	5.5	1
B	1	4.9	1
C	1	3.9	1
D	1	3.4	2
E	2	3.1	2
F	1	3.9	2
G	3	2.9	3
H	1	4.0	1
J	1	3.9	2
K	3	2.9	3
L	4	2.4	3
M	4	2.9	3
N	3	3.1	2
P	2	3.4	2
R	2	3.4	1
S	2	4.0	1
T	1	4.1	1
U	1	4.9	1
V	1	5.0	1
W	1	5.6	1
X	1		1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South TANK DOME
TEST LINE NO. 12

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	5.5	1
B	1	5.1	1
C	1	5.0	1
D	1	4.6	1
E	1	3.4	2
F	3	2.9	3
G	3	2.8	3
H	2	3.0	2
J	1	3.4	2
K	2	2.7	3
L	4	2.4	3
M	2	3.0	2
N	2	3.1	2
P	2	3.4	2
R	3	2.9	3
S	2	3.1	2
T	2	3.4	2
U	1	3.6	1
V	1	4.8	1
W	1	5.1	1
X	1	5.6	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2

North TANK DOME

TEST LINE NO. 1

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	5.9	1
B	1	6.0	1
C	1	4.6	1
D	1	4.7	1
E	2	3.1	2
F	3	2.9	2
G	3	2.7	2
H	2	2.6	2
J	3	2.9	2
K	3	3.1	2
L	4	2.2	3
M	4	2.9	3
N	3	3.0	2
P	2	3.4	2
R	1	3.3	2
S	1	3.6	1
T	1	3.7	2
U	1	4.1	1
V	1	4.9	1
W	1	5.0	1
X	1	6.0	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North TANK DOME
TEST LINE NO. 2

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	5.0	1
B	1	5.0	1
C	1	4.9	1
D	2	3.4	2
E	1	3.6	2
F	2	3.4	2
G	3	2.9	3
H	3	2.4	3
J	4	2.6	3
K	3	2.8	2
L	4	2.2	3
M	4	2.4	3
N	3	2.9	2
P	2	2.9	2
R	3	3.1	2
S	1	3.4	2
T	1	4.0	1
U	1	3.4	2
V	1	4.1	1
W	1	4.9	1
X	1	5.6	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2

North TANK DOME

TEST LINE NO. 3

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	4.9	1
B	1	4.9	1
C	3	3.4	2
D	1	3.7	2
E	1	3.8	1
F	2	3.4	1
G	2	3.4	2
H	3	2.9	3
J	3	2.7	3
K	2	3.0	2
L	4	2.2	3
M	2	3.0	2
N	3	2.9	2
P	4	2.7	2
R	4	2.4	2
S	4	2.2	3
T	1	4.0	1
U	1	4.0	1
V	2	3.9	2
W	1	5.0	1
X	1	5.8	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North TANK DOME
TEST LINE NO. 4

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	5.0	1
B	1	5.1	1
C	1	4.9	1
D	1	4.8	1
E	2	3.4	2
F	1	4.0	1
G	1	4.1	1
H	1	3.7	2
J	2	3.4	1
K	3	2.6	2
L	4	2.2	3
M	3	2.9	2
N	4	2.7	2
P	4	2.7	2
R	3	2.9	2
S	1	3.4	1
T	1	4.1	1
U	3	3.4	2
V	1	4.9	1
W	1	5.5	1
X	1	5.9	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2

North TANK DOME

TEST LINE NO. 5

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	5.0	1
B	1	5.0	1
C	1	4.9	1
D	1	4.8	1
E	2	3.1	2
F	3	2.9	2
G	3	2.9	2
H	4	2.6	2
J	4	2.4	3
K	4	2.4	3
L	4	2.2	3
M	4	2.1	3
N	4	2.2	3
P	2	3.0	2
R	3	2.9	2
S	1	3.4	1
T	1	4.0	1
U	1	3.6	2
V	1	4.8	1
W	1	4.9	1
X	1	5.6	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2

North TANK DOME

TEST LINE NO. 6

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	5.0	1
B	1	5.1	1
C	1	5.1	1
D	1	4.9	1
E	1	4.7	1
F	2	3.1	2
G	2	3.0	2
H	2	2.9	2
J	3	2.7	2
K	3	2.6	2
L	4	2.2	3
M	3	2.4	3
N	4	2.4	3
P	2	3.1	2
R	3	3.4	1
S	1	4.0	1
T	1	3.7	2
U	1	3.9	1
V	1	4.4	1
W	1	4.7	1
X	1	5.4	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North TANK
TEST LINE NO. 7

DOME

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	5.1	1
B	1	5.4	1
C	1	4.9	1
D	1	4.7	1
E	1	4.5	1
F	2	3.1	2
G	2	3.1	2
H	3	2.9	2
J	1	3.4	2
K	2	3.0	2
L	4	2.2	3
M	3	2.9	2
N	3	2.7	3
P	2	2.6	3
R	4	2.4	3
S	2	3.0	2
T	2	3.1	2
U	1	4.0	1
V	1	4.9	1
W	1	5.5	1
X	1	5.8	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North TANK DOME
TEST LINE NO. 8

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	5.5	1
B	1	5.9	1
C	3	3.1	3
D	1	4.6	1
E	2	3.4	2
F	3	3.1	3
G	3	3.0	3
H	3	2.9	3
J	4	2.7	3
K	4	2.4	3
L	4	2.2	3
M	4	2.1	3
N	4	2.1	3
P	3	3.1	2
R	1	4.0	1
S	2	3.9	1
T	1	3.7	1
U	1	4.5	1
V	1	4.5	1
W	1	5.6	1
X	1	6.0	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2

North TANK DOME

TEST LINE NO. 9

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	5.1	1
B	1	5.1	1
C	1	5.1	1
D	1	4.9	1
E	1	4.7	1
F	1	3.9	1
G	1	4.0	1
H	1	4.0	1
J	3	3.1	2
K	4	2.6	2
L	4	2.2	3
M	4	2.1	3
N	4	2.1	3
P	1	3.9	2
R	1	3.4	2
S	2	3.9	1
T	1	4.0	1
U	2	3.7	1
V	1	5.0	1
W	1	5.5	1
X	1	6.0	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North TANK DOME
TEST LINE NO. 10

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	5.5	1
B	1	4.7	1
C	1	4.7	1
D	1	4.6	1
E	1	3.9	1
F	1	4.0	1
G	1	3.9	1
H	1	4.1	1
J	1	3.7	1
K	2	3.0	2
L	4	2.2	3
M	3	2.6	2
N	4	2.4	3
P	3	3.1	2
R	2	3.4	2
S	2	3.5	2
T	1	3.6	1
U	1	4.0	1
V	1	5.5	1
W	1	5.5	1
X	1	6.1	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North TANK
TEST LINE NO. 11

DOME

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	5.1	1
B	1	5.4	1
C	1	5.0	1
D	2	3.9	1
E	2	3.7	1
F	2	3.6	2
G	1	4.0	1
H	1	3.9	1
J	3	2.9	2
K	3	2.8	2
L	4	2.2	3
M	4	2.1	3
N	4	2.1	3
P	3	2.9	2
R	2	3.4	1
S	2	3.6	1
T	2	3.7	1
U	1	4.0	1
V	1	4.1	1
W	1	5.0	1
X	1	5.7	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2

North TANK DOME

TEST LINE NO. 12

Test Point	Concrete* Quality	Concrete Thickness (in.)	Reinforcement* Steel Condition
A	1	5.1	1
B	1	5.4	1
C	1	4.0	1
D	1	3.9	1
E	1	3.8	1
F	1	4.0	1
G	3	2.9	2
H	3	2.7	2
J	4	2.6	2
K	2	3.0	2
L	4	2.2	3
M	3	2.4	3
N	1	3.9	1
P	1	4.0	1
R	1	3.6	1
S	1	3.4	2
T	3	3.0	3
U	1	4.0	1
V	1	3.9	2
W	1	4.4	1
X	1	5.5	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North TANK
TEST NO. 1

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.1	0	-	14.1	-
2	8.4	0	x	14.2	-
4	7.7	0	x	14.2	-
6	7.6	5	-	14.1	-
8	7.5	5	-	13.9	-
10	7.9	0	-	13.8	-
12	8.1	0	-	13.8	-
14	8.2	0	-	13.7	-
16	8.0	0	-	13.7	-
18	7.7	0	-	13.6	-
20	7.3	10	-	13.4	-
22	7.4	15	-	13.9	-
24	7.0	15	x	12.6	-
26	6.9	15	x	12.7	-
28	6.9	15	-	13.1	-
30	7.1	0	-	13.4	-
Footing	-	-	-	-	1 to 2

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North TANK
TEST NO. 2

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.4	0	-	14.1	-
2	8.0	0	x	14.1	-
4	7.9	0	-	14.4	-
6	7.7	0	-	14.5	-
8	7.6	5	-	14.6	-
10	7.4	10	-	14.0	-
12	7.3	10	-	14.8	-
14	7.2	10	-	14.9	-
16	7.0	15	-	15.1	-
18	7.0	10	-	15.1	-
20	6.9	15	-	13.1	-
22	7.3	10	-	13.9	-
24	7.0	5	x	11.9	-
26	7.0	5	x	12.3	-
28	7.4	0	-	12.6	-
30	6.9	15	x	11.9	-
Footing	-	-	-	-	2

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North Tank
TEST NO. 3

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.1	0	-	14.1	-
2	7.7	5	x	14.4	-
4	7.6	5	-	15.1	-
6	7.5	0	-	15.1	-
8	7.9	0	-	13.9	-
10	7.6	0	-	13.6	-
12	7.8	0	-	14.1	-
14	7.4	5	x	14.2	-
16	7.3	10	-	14.3	-
18	7.0	10	-	14.1	-
20	6.9	10	-	13.7	-
22	7.4	x	-	13.6	-
24	7.5	x	-	13.6	-
26	7.0	x	x	12.9	-
28	6.9	15	x	12.7	-
30	6.7	15	-	12.0	-
Footing	-	-	-	-	2

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North Tank
TEST NO. 4

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.0	0	-	15.1	-
2	8.0	0	x	15.0	-
4	7.9	0	-	15.4	-
6	7.8	0	-	14.9	-
8	7.6	0	-	14.7	-
10	7.4	5	-	13.9	-
12	7.9	0	-	13.6	-
14	7.7	0	-	13.6	-
16	7.6	0	-	13.7	-
18	7.4	5	-	13.8	-
20	7.3	10	-	13.9	-
22	7.2	10	-	14.0	-
24	7.7	0	-	13.1	-
26	7.0	0	x	11.9	-
28	6.9	5	x	11.7	-
30	6.4	10	-	10.9	-
Footing	-	-	-	-	2 to 3

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North Tank
TEST NO. 5

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.1	0	-	14.1	-
2	8.1	0	-	14.6	-
4	7.9	0	-	14.7	-
6	7.7	0	-	14.8	-
8	7.9	0	-	13.9	-
10	7.7	0	-	13.9	-
12	7.8	0	-	13.7	-
14	7.6	0	-	14.1	-
16	7.4	0	-	14.4	-
18	7.5	0	-	15.1	-
20	6.9	10	x	13.1	-
22	6.4	15	x	11.9	-
24	6.3	15	x	11.7	-
26	6.4	15	x	11.6	-
28	6.4	20	x	10.9	-
30	6.1	20	x	10.7	-
Footing	-	-	-	-	2 to 3

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North Tank
TEST NO. 6

WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.1	0	-	14.1	-
2	8.1	0	-	14.4	-
4	7.9	0	-	14.5	-
6	7.8	0	-	14.6	-
8	7.7	0	-	14.7	-
10	7.6	0	-	14.8	-
12	7.3	0	-	14.0	-
14	7.2	0	-	13.9	-
16	7.4	0	-	13.8	-
18	7.3	0	-	13.7	-
20	7.6	0	-	13.8	-
22	7.7	0	-	13.0	-
24	6.4	10	x	11.8	-
26	6.1	15	x	11.7	-
28	6.0	20	x	11.0	-
30	6.2	20	x	10.4	-
Footing	-	-	-	-	2 to 3

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North Tank
TEST NO. 7

WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.0	0	-	14.1	
2	8.0	0	-	14.1	
4	7.9	0	-	14.4	
6	7.4	0	-	15.1	
8	7.3	5	-	15.0	
10	7.2	5	-	14.7	
12	7.1	5	-	14.3	
14	7.7	0	-	14.0	
16	7.6	0	-	13.6	
18	7.7	0	-	13.7	
20	6.9	5	-	14.1	
22	6.8	10	-	13.0	
24	6.4	15	x	12.6	
26	6.9	15	x	11.9	
28	7.0	5	x	11.6	
30	7.1	5	x	11.9	
Footing	-	-	-	2	

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North Tank
TEST NO. 8 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.0	0	-	14.1	-
2	8.0	0	-	14.2	-
4	7.9	0	-	14.6	-
6	7.4	0	x	14.4	-
8	7.5	5	x	13.9	-
10	7.6	5	x	13.7	-
12	7.4	10	x	13.4	-
14	7.4	5	-	13.6	-
16	7.6	0	-	13.7	-
18	7.0	5	-	13.9	-
20	6.9	15	-	13.1	-
22	7.4	0	-	13.1	-
24	7.0	0	-	12.9	-
26	6.9	15	x	12.8	-
28	6.8	10	x	12.9	-
30	6.4	15	x	12.6	-
Footing	-	-	-	-	2

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North Tank
TEST NO. 9 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.0	0	-	14.1	-
2	8.0	0	-	14.2	-
4	7.7	5	-	14.3	-
6	7.6	5	-	14.4	-
8	7.7	5	-	15.1	-
10	7.3	5	x	15.0	-
12	7.4	5	x	13.9	-
14	7.6	0	x	13.7	-
16	7.7	0	-	14.1	-
18	7.4	0	-	14.2	-
20	7.3	5	-	14.1	-
22	7.0	10	-	13.9	-
24	7.0	0	-	13.6	-
26	6.9	5	-	13.7	-
28	7.1	0	-	13.8	-
30	7.2	0	-	13.4	-
Footing	-	-	-	-	1 to 2

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North Tank
TEST NO. 10 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	7.9	0	-	14.1	-
2	7.7	0	-	14.4	-
4	7.6	0	x	14.1	-
6	7.7	0	x	14.4	-
8	7.5	0	x	15.1	-
10	7.4	0	x	15.4	-
12	7.0	5	-	14.4	-
14	6.9	10	-	13.9	-
16	6.8	10	-	13.8	-
18	6.7	10	-	13.7	-
20	6.6	10	-	13.4	-
22	7.4	0	-	13.0	-
24	6.9	5	x	12.6	-
26	6.9	5	x	11.9	-
28	6.7	5	x	11.7	-
30	6.9	5	-	12.6	-
Footing	-		-	-	2

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North Tank
TEST NO. 11

WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.1	0	-	14.1	-
2	8.1	0	-	14.1	-
4	7.7	0	x	13.9	-
6	7.6	5	x	13.7	-
8	7.4	5	x	13.4	-
10	7.3	5	x	13.6	-
12	7.4	5	-	12.9	-
14	7.7	0	-	13.1	-
16	7.7	0	-	13.4	-
18	7.3	5	-	13.6	-
20	7.3	5	-	13.7	-
22	6.9	10	-	13.8	-
24	6.8	10	x	11.9	-
26	6.7	15	x	11.9	-
28	6.4	15	x	11.6	-
30	6.5	15	x	11.4	-
Footing	-	-	-	-	3 to 4

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North Tank
TEST NO. 12 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.0	0	-	14.1	-
2	7.6	0	-	14.1	-
4	7.4	5	x	14.1	-
6	7.3	10	x	13.9	-
8	7.2	10	x	13.7	-
10	7.1	15	x	13.8	-
12	7.4	10	-	13.7	-
14	7.7	0	-	13.1	-
16	7.7	0	-	13.1	-
18	7.9	0	-	12.9	-
20	8.1	0	-	12.7	-
22	7.0	5	x	12.7	-
24	6.9	15	x	12.6	-
26	6.4	20	x	12.3	-
28	6.5	20	x	11.9	-
30	6.9	15	-	10.9	-
Footing	-	-	-	-	2 to 3

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North Tank
TEST NO. 13 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.0	0	-	14.1	-
2	7.9	0	-	14.4	-
4	7.7	0	x	13.9	-
6	7.6	5	x	13.7	-
8	7.4	5	x	13.6	-
10	7.4	5	-	14.1	-
12	7.0	0	x	13.6	-
14	6.9	10	x	12.9	-
16	7.2	10	-	13.4	-
18	7.3	5	-	13.4	-
20	7.0	10	-	13.3	-
22	6.9	5	-	13.4	-
24	6.4	15	x	12.9	-
26	6.4	20	x	12.9	-
28	6.3	25	x	11.6	-
30	6.9	20	-	11.9	-
Footing	-	-	-	-	2 to 3

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North Tank
TEST NO. 14 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.1	0	-	14.1	-
2	7.7	0	-	14.4	-
4	7.6	0	x	13.9	-
6	7.4	5	x	13.6	-
8	7.3	10	x	13.7	-
10	7.0	15	x	13.8	-
12	6.9	15	x	13.4	-
14	6.8	15	x	13.2	-
16	6.8	20	x	13.1	-
18	7.0	5	-	13.9	-
20	7.1	5	-	13.9	-
22	7.2	0	-	13.9	-
24	6.4	15	x	12.9	-
26	6.3	25	x	12.1	-
28	6.9	20	-	12.0	-
30	7.0	5	-	11.9	-
Footing	-	-	-	-	2 to 3

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North Tank
TEST NO. 15 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	7.9	0	-	14.1	-
2	8.0	0	-	14.2	-
4	7.9	0	x	14.3	-
6	7.8	0	x	14.1	-
8	7.6	5	x	14.1	-
10	7.5	5	x	13.9	-
12	7.4	10	x	13.7	-
14	7.3	10	x	13.6	-
16	7.2	10	x	13.4	-
18	7.0	5	-	12.9	-
20	6.9	15	-	11.9	-
22	7.4	0	-	11.6	-
24	6.9	5	x	11.9	-
26	6.8	5	x	11.8	-
28	6.7	15	x	11.6	-
30	6.6	15	-	12.1	-
Footing	-	-	-	-	2 to 3

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North Tank
TEST NO. 16 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.4	0	-	14.1	-
2	7.9	0	-	14.1	-
4	7.7	0	x	13.6	-
6	7.6	5	x	12.9	-
8	7.4	10	x	11.9	-
10	7.0	10	x	11.8	-
12	6.9	15	x	11.7	-
14	6.8	15	x	11.6	-
16	6.6	20	x	11.4	-
18	6.4	20	x	12.1	-
20	6.9	10	-	13.9	-
22	7.4	0	-	13.4	-
24	7.5	0	-	13.6	-
26	7.7	0	-	13.7	-
28	7.6	0	-	13.9	-
30	7.0	0	-	13.9	-
Footing	-	-	-	-	1

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North Tank
TEST NO. 17 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	7.9	0	-	14.1	-
2	7.4	0	-	13.6	-
4	7.1	5	x	12.9	-
6	7.2	10	x	11.8	-
8	7.3	10	x	11.7	-
10	7.0	10	x	11.6	-
12	6.9	15	x	11.9	-
14	6.8	20	x	11.9	-
16	6.7	20	x	11.9	-
18	6.6	25	x	12.6	-
20	7.1	0	-	13.4	-
22	7.0	0	-	13.9	-
24	7.2	0	-	13.9	-
26	7.3	0	-	13.9	-
28	7.4	0	-	14.1	-
30	7.0	5	-	14.0	-
Footing	-	-	-	-	2

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North Tank
TEST NO. 18 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.1	0	-	13.9	-
2	8.2	0	-	13.7	-
4	7.6	5	x	13.6	-
6	7.4	0	x	13.4	-
8	7.3	5	x	12.7	-
10	7.2	10	x	12.6	-
12	6.9	20	x	12.3	-
14	6.4	25	x	12.1	-
16	6.3	20	x	11.6	-
18	6.5	15	x	11.3	-
20	6.9	0	-	12.9	-
22	7.1	0	-	13.1	-
24	7.2	0	-	13.0	-
26	7.3	5	-	12.9	-
28	7.0	10	-	11.9	-
30	6.9	-	-	11.8	-
Footing	-		-	-	2 to 3

* See detailed statement for explanation of value.

TEST DATA

TANK NO.
North Tank
TEST NO. 19 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.1	0	-	13.9	-
2	7.9	0	-	13.1	-
4	7.4	5	x	12.9	-
6	7.0	5	x	11.9	-
8	6.8	10	x	11.8	-
10	6.6	10	x	11.7	-
12	6.4	10	x	11.6	-
14	6.6	10	x	11.3	-
16	7.0	5	x	11.1	-
18	7.1	0	-	12.6	-
20	7.2	[illegible]	-	12.7	-
22	7.4	0	-	12.9	-
24	7.6	0	-	13.1	-
26	7.0	0	-	13.4	-
28	6.9	5	-	13.9	-
30	6.8	10	-	12.0	-
Footing	-	-	-	-	2

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North Tank
TEST NO. 20 **WALL**

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	7.9	0	-	14.1	-
2	7.8	0	x	13.4	-
4	7.7	0	x	13.1	-
6	7.6	0	x	13.1	-
8	7.4	0	x	12.9	-
10	7.6	0	-	12.6	-
12	6.9	5	x	11.9	-
14	6.4	10	x	11.7	-
16	6.7	10	x	11.8	-
18	7.0	0	-	10.9	-
20	7.1	0	-	12.6	-
22	7.2	0	-	12.9	-
24	7.3	5	-	13.1	-
26	7.4	5	-	13.4	-
28	7.5	0	-	13.4	-
30	7.6	0	-	14.1	-
Footing		-	-	-	2

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North Tank
TEST NO. 21 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	7.9	0	-	14.1	-
2	7.7	0	x	13.7	-
4	7.6	0	x	13.6	-
6	7.4	0	x	13.7	-
8	6.9	15	x	13.4	-
10	7.4	0	-	13.6	-
12	7.3	0	-	13.7	-
14	6.9	15	x	12.9	-
16	6.7	15	x	11.7	-
18	6.6	20	x	11.8	-
20	7.0	0	-	12.9	-
22	7.1	0	-	12.9	-
24	7.2	0	-	11.9	-
26	7.3	5	-	11.9	-
28	7.4	0	-	11.8	-
30	7.0	5	-	12.0	-
Footing	-	-	-	-	2 to 3

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North Tank
TEST NO. 22 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	7.9	0	-	14.1	-
2	8.1	0	x	13.9	-
4	7.7	0	x	13.7	-
6	7.4	5	x	13.4	-
8	7.0	10	x	13.4	-
10	7.7	0	-	14.1	-
12	6.9	5	x	13.6	-
14	7.0	5	x	12.9	-
16	6.4	5	x	11.6	-
18	6.4	5	x	11.4	-
20	7.0	0	-	12.9	-
22	7.1	0	-	12.7	-
24	7.2	0	-	12.9	-
26	7.4	0	-	13.1	-
28	7.5	0	-	13.0	-
30	7.1	0	-	12.6	-
Footing	-	-	-	-	2

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North Tank
TEST NO. 23 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.1	0	-	13.6	-
2	7.9	0	x	13.4	-
4	7.4	0	x	13.3	-
6	7.0	5	x	14.1	-
8	7.3	0	-	12.9	-
10	7.4	0	-	12.6	-
12	7.3	5	-	11.9	-
14	6.9	10	x	12.6	-
16	6.7	10	x	12.7	-
18	6.7	15	-	12.9	-
20	6.7	15	-	13.1	-
22	7.0	0	-	13.4	-
24	7.1	0	-	13.4	-
26	7.2	0	-	13.1	-
28	7.0	0	-	14.1	-
30	6.9	5	-	13.0	-
Footing	-	-	-	-	2

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 2
North Tank
TEST NO. 24

WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	7.9	0	-	13.1	-
2	7.8	0	x	13.4	-
4	7.7	0	x	13.0	-
6	7.4	0	x	12.9	-
8	7.5	0	-	11.6	-
10	7.7	0	-	11.9	-
12	7.6	0	-	12.6	-
14	7.0	5	x	12.6	-
16	6.9	10	x	12.7	-
18	6.8	5	-	12.9	-
20	6.4	10	-	13.0	-
22	7.0	0	-	14.1	-
24	7.1	0	-	14.2	-
26	7.2	0	-	14.1	-
28	6.9	5	-	13.0	-
30	6.8	10	-	12.5	-
Footing	-	-	-	-	2

* See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 1 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.1	0	-	14.1	-
2	8.2	0	x	14.4	-
4	7.9	0	x	15.1	-
6	7.7	0	x	15.4	-
8	7.6	5	-	15.1	-
10	7.5	5	-	14.6	-
12	7.6	0	-	14.7	-
14	7.8	0	-	14.8	-
16	8.1	0	-	14.7	-
18	8.1	0	-	13.9	-
20	8.1	0	-	13.9	-
22	8.2	0	-	13.9	-
24	8.0	0	-	14.1	-
26	7.7	5	x	12.9	-
28	7.7	5	x	12.4	-
30	7.6	5	-	13.9	-
Footing	-	-	-	-	1 to 2

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 2

WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.4	0	-	13.1	-
2	7.6	0	x	14.4	-
4	7.4	5	x	15.1	-
6	7.4	5	x	15.4	-
8	7.9	0	-	14.4	-
10	7.9	0	-	13.9	-
12	8.1	0	-	13.8	-
14	8.3	0	-	13.7	-
16	8.1	0	-	12.9	-
18	8.0	0	-	12.9	-
20	7.9	5	-	11.9	-
22	7.9	0	-	11.9	-
24	7.9	0	-	12.6	-
26	8.0	0	-	12.4	-
28	7.7	5	x	11.6	-
30	7.4	10	x	11.5	-
Footing	-	-	-	-	2 to 3

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 3 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.4	0	-	15.1	-
2	7.9	0	x	15.2	-
4	7.7	0	x	15.1	-
6	7.6	0	x	14.9	-
8	7.7	5	-	14.9	-
10	7.6	0	-	14.7	-
12	7.5	5	-	14.8	-
14	7.5	5	-	13.9	-
16	7.6	0	-	13.9	-
18	7.6	0	-	12.9	-
20	7.7	5	x	11.9	-
22	7.8	0	x	11.9	-
24	7.9	0	-	12.9	-
26	8.1	0	-	12.9	-
28	8.2	0	-	13.1	-
30	7.7	5	x	11.9	-
Footing	-	-	-	-	2 to 3

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 4

WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.4	0	-	14.4	-
2	8.0	0	x	14.1	-
4	7.7	0	x	12.9	-
6	7.4	0	x	12.6	-
8	7.5	5	-	13.7	-
10	7.6	5	-	13.8	-
12	7.7	0	-	13.9	-
14	7.9	0	-	13.9	-
16	7.7	5	-	14.1	-
18	7.6	0	x	11.9	-
20	8.0	0	-	12.9	-
22	8.1	0	-	12.9	-
24	7.9	0	-	12.9	-
26	7.9	5	-	12.9	-
28	8.0	0	-	13.4	-
30	7.3	10	x	11.9	-
Footing	-		-	-	2

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 5 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.0	0	-	13.4	-
2	8.0	0	-	13.1	-
4	6.0	0	x	13.2	-
6	6.0	0	x	14.1	-
8	5.5	10	x	14.1	-
10	7.0	0	x	13.1	-
12	6.8	15	-	12.9	-
14	7.2	5	-	11.9	-
16	7.7	0	-	11.9	-
18	8.0	0	-	12.6	-
20	7.9	5	-	13.4	-
22	7.6	5	-	13.1	-
24	7.4	10	x	12.9	-
26	7.3	5	x	11.8	-
28	6.4	10	x	11.7	-
30	7.3	5	-	12.9	-
Footing	-	-	-	-	2

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 6

WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.0	0	-	13.4	-
2	8.1	0	-	13.6	-
4	7.9	0	x	14.1	-
6	7.8	0	x	12.9	-
8	6.9	10	x	11.8	-
10	5.9	10	x	10.9	-
12	6.9	5	-	10.9	-
14	7.0	0	-	11.9	-
16	7.4	0	-	13.4	-
18	7.3	0	-	14.1	-
20	7.4	5	x	14.1	-
22	8.0	0	x	13.6	-
24	6.4	15	-	11.9	-
26	5.9	20	x	10.9	-
28	5.9	15	x	10.8	-
30	7.6	10	x	14.1	-
Footing	-	-	-	-	3

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 7

WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.0	0	-	13.6	-
2	8.0	0	-	14.1	-
4	8.0	0	x	14.1	-
6	7.6	5	x	13.9	-
8	7.7	5	x	13.9	-
10	7.6	5	x	13.6	-
12	6.9	10	-	12.7	-
14	8.0	0	-	14.1	-
16	8.1	0	-	14.4	-
18	8.3	0	-	14.5	-
20	8.1	0	-	14.5	-
22	8.4	0	-	14.6	-
24	7.7	5	x	13.6	-
26	7.6	10	x	13.4	-
28	6.9	15	x	12.6	-
30	6.8	10	-	12.1	-
Footing	-	-	-	-	2

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 8 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.0	0	-	13.9	-
2	8.0	0	-	13.9	-
4	7.4	5	x	13.1	-
6	7.2	5	x	12.6	-
8	6.9	5	x	11.9	-
10	7.9	5	-	12.6	-
12	8.0	0	-	12.9	-
14	7.7	5	x	13.4	-
16	7.9	0	-	14.1	-
18	7.6	5	x	13.6	-
20	7.7	5	-	13.6	-
22	6.9	10	x	12.6	-
24	6.8	10	x	11.9	-
26	6.9	10	x	11.9	-
28	7.0	5	x	12.9	-
30	8.1	0	-	14.0	-
Footing	-	-	-	-	2

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 9 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.1	0	-	13.9	-
2	8.2	0	-	13.9	-
4	7.9	0	x	14.1	-
6	7.6	5	x	14.1	-
8	7.4	5	x	14.0	-
10	7.3	5	x	13.6	-
12	7.9	0	-	14.1	-
14	8.1	0	-	14.1	-
16	7.9	0	-	13.6	-
18	7.6	0	x	12.9	-
20	7.6	0	-	12.6	-
22	6.9	5	x	11.9	-
24	6.7	10	x	11.7	-
26	6.4	10	x	11.6	-
28	6.9	5	x	11.7	-
30	7.4	0	-	12.9	-
Footing	-	-	-	-	2

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 10

WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.0	0	-	13.9	-
2	7.7	0	x	13.9	-
4	7.6	5	x	12.6	-
6	7.4	5	x	12.4	-
8	7.3	0	x	12.2	-
10	6.9	10	x	11.9	-
12	7.7	0	-	12.6	-
14	7.6	0	-	13.4	-
16	7.0	0	x	14.1	-
18	6.4	10	x	12.6	-
20	7.7	0	-	13.4	-
22	8.1	0	-	14.1	-
24	7.3	5	x	14.1	-
26	6.9	10	x	12.6	-
28	6.8	15	x	11. 9	-
30	6.4	15	x	11.4	-
Footing	-	-	-	-	3

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 11 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.1	0	-	13.9	-
2	8.3	0	-	14.1	-
4	8.2	0	-	14.2	-
6	7.9	0	-	14.1	-
8	7.9	0	-	13.6	-
10	8.1	0	-	14.1	-
12	7.4	5	x	13.9	-
14	7.0	5	x	12.9	-
16	6.9	5	x	11.6	-
18	6.6	10	x	11.7	-
20	7.4	5	-	12.9	-
22	8.0	0	-	14.1	-
24	6.9	10	x	11.6	-
26	6.4	15	x	11.4	-
28	6.7	15	x	11.5	-
30	6.6	15	x	11.6	-
Footing	-	-	-	-	3

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 12 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.4	0	-	14.1	-
2	8.3	0	-	14.1	-
4	8.2	0	-	14.6	-
6	8.2	0	-	14.4	-
8	8.0	0	-	14.5	-
10	7.7	0	-	13.9	-
12	7.4	0	x	13.4	-
14	6.9	5	x	11.7	-
16	6.8	10	x	11.8	-
18	7.6	5	-	13.4	-
20	7.7	0	-	14.1	-
22	7.8	0	-	14.2	-
24	7.9	0	-	14.4	-
26	6.6	5	x	11.6	-
28	6.9	10	x	11.9	-
30	7.0	10	x	13.9	-
Footing	-	-	-	-	3

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 13 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.4	0	-	13.9	-
2	8.5	0	-	14.6	-
4	7.7	0	-	14.4	-
6	7.3	0	x	14.1	-
8	7.0	5	x	14.2	-
10	6.7	10	x	13.1	-
12	7.4	5	-	12.9	-
14	7.9	0	-	12.9	-
16	8.2	0	-	14.6	-
18	8.2	0	-	14.8	-
20	7.9	0	-	14.9	-
22	7.8	0	-	14.9	-
24	7.6	0	-	15.1	-
26	5.9	20	x	10.4	-
28	6.4	15	x	11.1	-
30	6.3	15	x	11.6	-
Footing	-	-	-	-	3 to 4

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 14 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.1	0	-	13.9	-
2	8.2	0	-	14.1	-
4	8.4	0	-	14.2	-
6	7.9	5	-	14.2	-
8	7.4	0	x	13.9	-
10	7.0	0	x	13.8	-
12	6.9	10	-	13.1	-
14	7.7	5	-	14.4	-
16	7.6	0	-	14.4	-
18	7.7	0	-	14.6	-
20	7.7	0	-	15.0	-
22	6.4	10	x	13.0	-
24	6.9	10	-	12.4	-
26	7.0	5	-	13.1	-
28	6.7	15	x	13.1	-
30	6.4	20	x	11.9	-
Footing	-	-		-	3 to 4

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 15

WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.1	0	-	14.6	-
2	7.9	0	x	15.1	-
4	7.4	0	x	15.1	-
6	8.0	0	-	15.4	-
8	8.1	0	-	14.7	-
10	8.4	0	-	13.9	-
12	8.1	0	-	13.6	-
14	8.3	0	-	13.6	-
16	8.4	0	-	14.1	-
18	7.9	0	-	12.9	-
20	7.7	0	-	12.9	-
22	7.6	5	x	13.6	-
24	7.3	0	x	14.1	-
26	6.8	15	x	11.6	-
28	6.7	20	x	11.3	-
30	6.6	20	x	10.9	-
Footing	-	-	-	-	2 to 3

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 16 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.4	0	-	14.1	-
2	8.3	0	-	14.1	-
4	8.4	0	-	14.2	-
6	7.9	0	-	14.4	-
8	7.4	0	x	14.5	-
10	7.7	5	-	14.6	-
12	7.9	0	-	14.7	-
14	7.9	0	-	13.9	-
16	6.9	10	x	12.9	-
18	6.9	15	x	12.9	-
20	7.4	0	-	14.1	-
22	7.7	0	-	14.2	-
24	7.4	0	-	13.9	-
26	7.0	0	x	13.9	-
28	6.9	10	x	11.9	-
30	7.0	5	x	12.4	-
Footing	-	-	-	-	2

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 17

WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.0	0	-	14.1	-
2	7.9	0	x	15.1	-
4	7.8	0	-	15.1	-
6	7.8	0	-	14.9	-
8	7.9	0	-	14.7	-
10	8.1	0	-	14.6	-
12	8.2	0	-	13.9	-
14	8.3	0	-	13.8	-
16	8.4	0	-	13.9	-
18	7.7	0	x	14.1	-
20	7.6	0	x	14.4	-
22	7.3	5	x	15.1	-
24	7.7	0	-	15.1	-
26	7.9	0	-	14.0	-
28	6.9	5	x	13.1	-
30	6.4	15	x	12.6	-
Footing	-	-	-	-	2

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 18

WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.4	0	-	13.6	-
2	8.4	0	-	14.1	-
4	8.4	0	-	14.8	-
6	8.6	0	-	14.8	-
8	8.3	0	-	14.9	-
10	8.1	0	-	14.9	-
12	7.7	0	-	15.1	-
14	7.7	0	-	15.1	-
16	7.4	5	x	14.9	-
18	7.4	5	x	14.3	-
20	7.3	0	x	14.1	-
22	7.7		-	13.9	-
24	7.9	0	-	13.7	-
26	8.0	0	-	15.1	-
28	7.4	5	x	14.6	-
30	6.9	15	x	12.9	-
Footing	-	-	-	-	3

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 19

WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.1	0	-	14.1	-
2	8.1	0	-	14.8	-
4	8.2	0	-	14.9	-
6	8.0	0	x	13.1	-
8	7.9	5	-	14.1	-
10	7.8	5	-	14.6	-
12	7.7	0	-	15.1	-
14	7.6	5	-	15.1	-
16	7.4	5	x	13.9	-
18	7.9	0	-	14.1	-
20	7.4	5	-	14.1	-
22	7.6	5	-	13.9	-
24	6.9	15	x	12.7	-
26	7.1	0	-	13.4	-
28	6.9	10	x	12.9	-
30	6.7	10	x	12.6	-
Footing	-	-	-	-	2 to 3

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 20 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.4	0	-	13.9	-
2	8.4	0	-	14.1	-
4	7.6	0	x	14.7	-
6	7,.4	5	x	14.6	-
8	7.7	0	-	13.9	-
10	7.6	0	-	13.9	-
12	7.7	0	-	14.1	-
14	7.9	5	-	14.1	-
16	8.1	0	-	13.9	-
18	8.2	0	-	13.4	-
20	8.4	0	-	13.6	-
22	7.9	0	-	13.9	-
24	7.6	5	-	14.1	-
26	6.7	10	x	11.9	-
28	6.6	15	x	11.4	-
30	6.4	20	x	11.3	-
Footing	-	-	-	-	2 to 3

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 21

WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.1	0	-	14.1	-
2	8.4	0	-	14.6	-
4	8.3	0	-	14.7	-
6	8.2	0	-	14.8	-
8	7.9	0	-	13.9	-
10	7.7	5	-	13.6	-
12	7.8	0	-	13.9	-
14	7.9	0	-	14.1	-
16	7.7	0	-	14.4	-
18	7.4	0	x	12.9	-
20	7.5	0	-	12.9	-
22	7.7	5	-	13.4	-
24	7.6	5	-	13.7	-
26	6.9	10	x	11.6	-
28	6.4	15	x	11.4	-
30	6.3	15	x	11.2	-
Footing	-	-	-	-	1 to 2

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 22 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.1	0	-	14.1	-
2	8.1	0	-	14.4	-
4	8.1	0	-	15.0	-
6	7.9	0	x	13.9	-
8	7.8	0	-	14.4	-
10	7.7	0	-	14.1	-
12	7.4	5	-	14.1	-
14	7.9	0	-	13.7	-
16	7.9	0	-	13.8	-
18	8.1	0	-	14.0	-
20	7.9	0	x	14.1	-
22	7.9	5	x	13.9	-
24	7.6	0	x	12.6	-
26	7.9	0	x	12.4	-
28	7.7	5	-	13.1	-
30	7.4	10	-	12.9	-
Footing	-	-	-	-	2

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 23 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	7.9	0	-	13.9	-
2	7.7	0	x	14.1	-
4	8.4	0	-	14.0	-
6	8.1	0	-	14.4	-
8	8.0	0	-	14.1	-
10	8.1	0	-	14.1	-
12	8.0	0	-	14.2	-
14	7.9	5	-	13.9	-
16	7.8	5	-	12.9	-
18	7.7	0	-	13.1	-
20	7.6	5	-	14.1	-
22	7.0	5	x	14.0	-
24	6.9	10	x	11.9	-
26	6.5	10	x	11.8	-
28	6.4	10	x	11.9	-
30	7.2	5	-	12.6	-
Footing	-	-	-	-	2 to 3

*See detailed statement for explanation of value.

TEST DATA

TANK NO. 1
South Tank
TEST NO. 24 WALL

Depth (ft.)	Est. Wall Thickness (in.)	Est. Percent of Wire Loss	Cracks	Average Pulse Vel.	Condition of Footing*
1	8.1	0	-	13.4	-
2	7.6	0	x	13.6	-
4	7.4	0	x	13.9	-
6	7.3	0	x	14.1	-
8	7.4	0	-	14.1	-
10	7.9	0	-	14.4	-
12	8.1	0	-	15.1	-
14	8.1	0	-	15.2	-
16	8.1	0	-	14.9	-
18	8.4	0	-	14.6	-
20	8.0	0	-	13.9	-
22	7.7	5	-	13.6	-
24	7.4	0	x	12.6	-
26	7.3	5	x	12.4	-
28	7.6	0	-	13.9	-
30	7.4	5	-	14.0	-
Footing	-	-	-	-	1 to 2

*See detailed statement for explanation of value.

CAMARGO ASSOCIATES, LTD.
K-65 SILOS, NLO
FERNALD, OHIO
S&ME PROJECT NO. 021-85-123
OCTOBER 4, 1985

SOIL & MATERIAL ENGINEERS, INC. CINCINNATI BRANCH

225 Corporate Court, Fairfield, OH 45014, Phone (513) 874-4111

3667

October 4, 1985

Camargo Associates, Ltd.
P.O. Box 465600
Cincinnati, Ohio 45246

Attention: Mr. W. Christopher Luther, P.E.

Regarding: K-65 Silos, NLO
Fernald, Ohio
S&ME Project No. 021-85-123

Gentlemen:

Soil & Material Engineers, Inc. (S&ME) is pleased to submit this report presenting the results of geotechnical explorations for the above referenced project. The exploration was performed in general accordance with the proposal submitted July 23, 1985. The attached report presents the scope of the exploration, conditions encountered, and our evaluations of the subsurface conditions.

We appreciate the opportunity of providing our services to Camargo Associates, Ltd. at the NLO facility. If there are any questions concerning the exploration or our findings, please contact us.

Respectfully submitted,

SOIL & MATERIAL ENGINEERS, INC.

James E. Veith, P.E.
Senior Geotechnical Engineer

Gregory N. Richardson, Ph.D., P.E.
Corporate Engineer

Reviewed by:

John L. Payne, P.E.
Branch Manager

JEV/GNR:ko

Attachments

RALEIGH, GREENSBORO, ASHEVILLE, WILMINGTON, [illegible] SPARTANBURG, COLUMBIA, CHARLESTON, MYRTLE BEACH, SC
ATLANTA, ALBANY, ST. MARY'S, GA—TRI-CITIES, TN—CINCINNATI, OH, [illegible] TAMPA, DEERFIELD BEACH, FL

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INTRODUCTION

Two berm stabilized K-65 storage silos exist at the southwest corner of the NLO, Inc. Facility, Fernald, Ohio. As part of the Environmental Safety & Health Improvement Plan, studies will be conducted to evaluate effective means for removal and processing of residues currently stored in the silos. Essential to the implementation of the removal and processing studies are testing and analyses of the silos to determine their structural integrity and to evaluate any potential structural deficiencies requiring immediate remedial action. Incorporated in these studies are evaluations of the current load conditions and the allowable loads (seismic, static and dynamic) that may be applied to the silos without substantial failure or damage.

Soil & Material Engineers, Inc. (S&ME) has conducted an exploration of the subsurface conditions at the site of the K-65 storage silo. The purposes of the exploration were to determine:

1) site stratigraphy,
2) index properties,
3) shear strength characteristics, and
4) dynamic soil properties.

S&ME has also researched historical seismic events in the Fernald, Ohio area. Based upon this research, synthetic time-history data is provided for use in the dynamic analyses of the storage silos.

K-65 SILO BACKGROUND INFORMATION

The two K-65 storage silos were originally constructed in 1955. Each tank is 80 ft. in diameter and about 27 ft. high along the outer walls. Construction drawings show the perimeter walls of the silos to be supported on a reinforced concrete ringwall footing 3-1/2 ft. wide and 3-1/2 ft. thick. The floor of the silo is 4" thick reinforced concrete supported on 8" of stone gravel, 2" of asphaltic concrete, and 18" of compacted clay fill. The drawings indicate that the footing design is based upon a maximum soil bearing pressure of 4000 pounds per square foot (psf).

In 1964, the silos were further protected by construction of an earth embankment. This embankment started at the top of the perimeter concrete wall and sloped to meet original ground on a 1-1/2H:1V grade. Substantial sloughing and surface erosion of this slope occurred because of its steepness. The embankment was regraded in 1983 to create a 3H:1V side slope. This embankment configuration currently exists around the K-65 storage silos.

GEOTECHNICAL EXPLORATION PROCEDURES

Four soil test borings were drilled on the perimeter of the silos at locations shown on Figure III-1. Locations of the borings were established by referencing existing topographic features. Relative ground surface elevations were determined using the temporary bench mark shown on Figure III-1 as reference.

The borings were advanced with 3-1/2" inside diameter hollow stem augers to depths 51.5 to 71.5 ft. below present grades. As the augers were advanced samples were recovered using the drive sample technique, ASTM D1586. Samples were recovered at

2.5 to 5 ft. intervals. Thin-walled, 3" diameter Shelby tube samples were also recovered at selected locations and depths.

During advancement of the borings, groundwater and/or seepage conditions were noted. Bore holes were backfilled with the drilling spoils upon completion of the borings.

Four hand auger borings were drilled on the earth embankment surrounding the storage silos. These borings were advanced with a power auger to depths 9.5 to 12 ft. below present grades. Samples were recovered by hand driving split barrel or Shelby tube samplers.

The samples recovered in the test borings were examined and classified in the laboratory and test boring logs prepared. Indicated on each log are the depth and elevation of each stratum change, the visual description of each stratum penetrated, the depths and types of samples obtained, penetration resistances, and the groundwater conditions.

Tests were performed in the laboratory to determine the index properties of the primary strata encountered. These tests included natural moisture contents, Atterberg Limits, and grain size analyses. Engineering property testing included dry density and unconsolidated-undrained, one-point triaxial compressive strengths.

The test boring logs are included in Appendix I. Tabulated and plotted laboratory test results are included in Appendix II.

SOIL DYNAMIC EXPLORATION PROCEDURE

S&ME measured the dynamic properties of the subgrade using crosshole seismic techniques. No accepted standards exist for

performing this test. However, ASTM Committee D18.09 is in the process of preparing standards for the seismic crosshole method. Where possible, the seismic testing procedures developed rely on techniques developed in the working draft of this pending ASTM Standard.

The crosshole technique uses three adjacent boreholes, a downhole seismic source, two downhole triaxial geophone arrays, and a multichannel enhancement seismograph to record the generated wave trains. This equipment is sufficient to generate P- and S-waves and to measure the travel time required by these waves to move from borehole to borehole. Calculation of wave velocities requires knowledge of the distance each wave actually traveled. Measurement of these distances requires the use of inclinometer techniques.

Seismic sources are chosen according to the needs of the survey, the primary consideration being whether P- or S-wave veolcities are to be determined. To produce good P-wave data the seismic source should transmit most of its energy to the ground in compression or volume changes. To produce good S-wave data, the seismic source should transmit most of its energy to the ground primarily by directionalized distortion. S&ME utilizes a proprietary drop-hammer S-wave generator. This drop-hammer source produces a repeatable and reversible impulse-type energy. The reversible S-wave seismic source can produce measureable P-wave trains if required; reversing the direction of impulse causes cumulative S-waves to cancel but enhances the P-waves.

A downhole triaxial geophone array is mounted within each of the two receiving boreholes. Each geophone is a moving coil type that generates a voltage directly proportional to the particle velocity of the seismic wave train. Each traixial array consists of three geophones combined orthogonally,

i.e., one vertical and two horizontal geophones mounted at right angles to the other. Each geophone array is housed in a single cylindircal container that is held in firm contact with the side wall of the borehole using an air-bladder mechanism. Both the downhole S-wave seismic source and the triaxial geophone arrays are desinged to fit within standard, 2.75-inch plastic inclinometer casings.

The seismic recording system utilized is a 12 channel enhancement seismograph manufactured by EG&G Geometrics. Data is stored in a digital format and simultaneously displayed on a cathode ray tube. When the seismic excitation is repeated, the subsequent signals are added together. Random background noise signals tend to cancel out, while the desired signal grows progressively larger. A built-in strip chart recorder allows the final wave forms to be preserved for later analysis.

The standard crosshole test incorporates three boreholes in line. Typically the spacing between the boreholes is precisely 10 ft. apart center-to-center. Undisturbed or Standard Penetration Test samples are obtained when possible from each significant layer encountered during drilling of the first borehole. Borings are then cased using 2.75-inch O.D. plastic slope inclinometer casing and the casing grouted in place.

Calculation of accurate wave veolcities requires an accurate measure of the true horizontal distance between the boreholes at all elevaitons. These data are obtained by performing a borehole deviation survey in all three borings. A borehole deviation survey is conducted using an instrument capable of measuring the precise vertical alignment of each hole. S&ME utilizes a Slope Indicator Digitilt Probe to perform these surveys on boreholes less than 100 ft. in depth.

The crosshole test is performed with the seismic source clamped in an end borehole and with the two triaxial geophone arrays firmly clamped in place at the same elevation within each of the designated receiver holes. The first test is conducted at a depth of approximately 5 ft. with succeeding tests performed at 5 ft. intervals until the maximum borehole depth has been reached.

After the source and geophone arrays are firmly clamped in place at the given elevation, the seismic source is activated and the output of the two geophone arrays is displayed simultaneously on the seismograph. Signal amplitude and duration are adjusted such that the P-wave train and/or S-wave train are displayed in their entirety. Best results will frequently be obtained by performing two separate tests; one with the recorder optimized for P-wave recovery (faster sweep rate, higher gain settings) and the second for S-wave recovery (slower sweep rate, lower gain settings).

If both P- and S-wave trains are displayed on the preserved records, the S-wave is identified by the following characteristics:

A. A sudden increase in amplitude of at least two times that of the P-wave train.

B. An abrupt change in frequency coinciding with the amplitude change which results in a period increase of at least two times that of the P-waves characteristic period.

C. If a reverse polarity seismic source is used, the S-wave arrival will be determined as that point meeting criteria (A) and (B) and where a 180° polarity change is noted to have occurred.

The P-wave train arrival time is identified as the first departure of the static receiver trace after time zero. The downhole seismic generator developed by S&ME is rich in S-wave energy and produces a readily identifiable S-wave train. This

same seismic generator, however, is weak in P-wave energy and frequently produces a less than desirable P-wave train.

The arrival time for the P- or S-wave is determined directly from the record as that lapse time between time zero (activation of the seismic source) and the arrival of the respective wave trains at each of the receivers. Using the S&ME triaxial geophone array, the S-wave train is monitored on the vertical geophone, and the P-wave train is monitored on the horizontal geophone radially aligned with the seismic source.

At sites where abrupt changes in density or elasticity occur between layers, the travel path of the waves may not be in a straight line between the seismic source and the triaxial geophones. For example, if a soft layer (slow P-wave velocity) is bounded on one face by a hard layer (fast P-wave velocity), then the first P-wave arrival recorded at this depth may have actually left the source and traveled to the hard layer, crossed the travel path within the hard layer, and then traveled again to the triaxial geophones. In complex layered sites, a computer program applying Snell's Law is used to develop a true velocity interpretation consistent with the data from a given survey.

Analytical procedures for dynamic analyses require that the designer know values for the soil shear modulus, Poisson's ratio, and mass density. Crosshole test data has at this point provided only a measure of S- and P-wave velocities. The soil shear modulus and Poison's ratio are calculated using the following equations:

Poisson's Ratio, $v = \dfrac{(V_p/V_s)^2 - 2}{2(V_p N_s)^2 - 2}$

Shear Modulus $g = d\ V_s^2$

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The mass density, d, is obtained from laboratory tests on the undisturbed samples taken from the field borings.

SITE STRATIGRAPHY

The NLO Fernald facility is located in the ancestral valley of the Great Miami River. This ancestral valley is approximately two miles wide at Fernald with the floor approximately 200 ft. below the present topography. During the initial glaciation of southwestern Ohio, the valley was filled with sand and gravel deposited by melt waters of the receding glaciers. Subsequent advances of glaciers deposited glacial till on the surface of the sand and gravel. Again, as the glaciers receded the till surface was eroded with a thin veneer of more recent alluvium deposited on the surface.

The stratigraphy in the immediate area of the K-65 storage silos is shown on Figure III-2. The four test borings drilled on the perimeter of the area are plotted at their respective elevations and the Primary strata encountered are identified with code symbols. The following are the characteristics of the primary materials penetrated in the borings.

Fill

Test borings 1 and 4 penetrated approximately 5 ft. of fill at the surface. The fill is primarily silty clay with traces of sand and fine gravel. This soil has probably resulted from construction of tanks north of the investigated silos and the access road west of the silos.

Strata A, B, and C

These materials represent post glacial deposits on the eroded surface of glacial till. Soils A and B are silt and clay rich

materials containing varying amounts of sand and fine gravel. Based upon Atterberg Limits and gradation analyses these soils have Unified Soil Classification (USCS), classifications CL ad CL-ML, clays and silts of low to moderate plasticity. In situ, the silty clay is stiff in consistency with moisture contents approximating 20%. Based upon review of the silo construction drawings, foundations for the silos probably bear in these near surface clayey soils.

Soil C is sand containing varying amounts of silt, clay and gravel and also has USCS classification SM. The sand is medium dense as indicated by the Penetration Resistance and is very moist to wet.

Strata D and E

Soils D and E are glacial till deposited as the glaciers advanced into southwestern Ohio. Brown till, material D, was encountered in only boring 1. This soil reflects either weathering of gray till or deposits of a more recent glacial period.

The till is a heterogeneous mixture of gravel, sand, silt, and clay. Average composition of the till is 16% gravel, 37% sand, 34% silt, and 13% clay. USCS classifications of the soil are CL-ML, SC, SM, and SC-SM. In situ the till is very stiff to hard as evidenced by the Penetration Resistance.

Strata F and G

The surface of outwash sand and gravel was encountered between reference elevations 65 and 70 ft. and extends to the depths explored. The nearer surface portion (Strata F) of the outwash is finer grained, containing greater percentages of silt and

clay fines (37%). With increased depth, the percentage of silt and clay fines decreases and the percentage of gravel increases. The Penetration Resistances indicate that the outwash is medium dense to dense.

Embankment Fill

Test boring 6 through 9 were drilled to depths 9.5 to 12 ft. into the existing embankment fill. The fill is described as silty clay with some fine sand. Moisture contents of the fill range from about 14 to 23% averaging about 20%. The dry density of the fill varies from 97 to 113 pcf, averaging about 107 pcf.

Specifications for the original embankment construction (1-1/2:1 slopes) required maximum 12-inch thick lifts, but no compaction criteria was specified. The specifications for construction of the embankment with 3:1 slopes required maximum 12-inch thick lifts with compaction to at least 98% of Standard Proctor maximum dry density. Based upon data generated during the embankment construction, the fill was compacted to about 90 to 100% of the maximum dry density.

Groundwater

Test borings 1 through 4 encountered water between 7 and 9 ft. below present grades. This is a perched water table condition. The water is trapped in the near surface clay and granular layers by the underlying lower permeability glacial till.

Test boring 1 also encountered water in the glacial outwash about 55 ft. below grade. This represents the groundwater table in the immediate area of the silos. Borings 2, 3 and 4 did not extend to this groundwater table.

ENGINEERING EVALUATION

The subsurface conditions encountered at the storage silo site are consistent with those anticipated from reviews of geologic literature and our previous experience at the Fernald Facility of NLO, Inc. Based upon the results of the field and laboratory data, a generalized subsurface profile has been developed for modeling silo performance under static and dynamic loading conditions. The profile developed for modeling is as follows:

LAYER NO.	MATERIAL DESCRIPTION	--ELEVATION (ft.)- TOP	BOTTOM	LAYER THICKNESS (ft.)
I	Silty Clay	100	90	10
II	Sand & Gravel	90	85	5
III	Glacial Till	85	70	15
IVA	Sand w/Gravel	70	65	5
IV	Sand w /Gravel	65	<30	>35

The numerical analyses to be performed for the K-65 silos require knowledge of the in situ strength and elastic properties of the model profile. The in situ density and shear strength properties were evaluated using the results of tests performed in the laboratory on samples recovered in the test borings. The elastic subgrade properties were determined using the crosshole seimic technique. This data was verified using empirical relationships based upon the standard penetration resistance and mean effective shear stress (See Appendix IV).

Table I following this section presents the typical strength and elastic properties for the model profile. Figure 1 presents graphically the dynamic subgrade properties for the profile.

The ultimate bearing capacity of each of the layers has been determined using the results of laboratory shear strength tests. The applied vertical pressure at various depths beneath the center of a silo has also been computed assuming a uniform applied pressure of 4000 psf at the base of the silo. It should be noted that the assumed 4000 psf pressure is probably in excess of the actual applied load of the silo and its contents. On Figure 2 the ultimate bearing capacity and applied vertical pressure at the center of the tank are plotted verses the depth below grade. Also shown on Figure 2 is the allowable bearing pressure using a safety factor of 2.5. As demonstrated by this figure, the applied vertical pressure is less than the allowable bearing pressure, i.e., the factor of safety against bearing capacity failure exceeds 2.5.

No evaluation of settlement of the silos has been made. Settlement of the silos under dead plus storage loads is anticipated to be complete. Historically, some settlement probably occurred during original construction with additional movement occurring during and shortly after application of storage loads. Construction of the original earth berm in 1963 and reconstruction of the berm in 1983 each have caused additional movements to occur. However, based upon the uniformity of the subsurface profile and the concentric nature of the silo and berm construction, it is our opinion that settlement has been uniform with only minor differential movements.

The earth berms constructed on the perimeter of the silos have created lateral earth pressures on the silos. These pressures have counteracted pressures caused by materials stored in the silos below the elevation of the stored materials. Above the stored material, the earth pressures have caused ring compression forces on the perimeter walls of the silos. For evaluating the lateral earth pressures on the perimeter walls caused by the enbankment fill, we recommend that a total unit weight

of backfill of 130 pcf and a lateral earth pressure coefficient of 0.5 be used.

A seismic site study (Appendix IV) was performed to develop seismic ground motions for use in evaluation of the K-65 silos. Historical seismicity in the study region is dominated by the New Madrid earthquakes of 1811-1812. Those earthquakes produced Itensity (MM) VII ground motions in the study area. The NLO facility itself is located in a seismically quiet region that has experienced ground motion only due to events in adjacent regions. The closest reported earthquakes to the Fernald site occurred near Maysville, Kentucky, Cincinnati, Ohio and Anna, Ohio. These events have been less than Intensity (MM) VII.

The epicenters of adjacent seismic events do not coincide with identifiable faults capable of such motion. All felt seismic events appear to have been generated within the North American Tectonic plate, or intraplate. Areas of intraplate seismic events are grouped into regions of common geologic history and seismic activity called seismotectonic provinces. The NLO site lies within the Cntral Stable Seismotectonic Region. Geologic data available on the region does not identify capable faults responsible for the seismicity, and no geologic structure appears associated with the epicenters of the events.

Two earthquake recurrence relationships have been established for the Central Stable Region. A probabilistic analysis of these recurrence relationships was performed to establish the influence of design life on the strong motion parameters. Assuming a 90% probability of an event occurring over a 50 year design life, the design event is shown to have an Intensity (MM) IV ground motion. The key ground motion parameters for the Intensity (MM) IV event are as follows:

Peak Velocity:	2.0 cm/sec
Peak Acceleration:	0.05 g
Duration:	10 seconds

Two earthquake seismic ground motions were generated to a target spectra based upon these parameters. Generated time-histories and response spectra curves for the two synthetic ground motions are shown on Figures 3,4,5, and 6, following this section. These synthetic motions correspond to an Intensity (MM) IV event having 90% probability of occurrence in 50 years.

TABLE 1 - TYPICAL SOIL PROPERTIES

Layer No.	Material Description	Typical Thickness (Ft)	Moisture Content (%)	Dry Density (pcf)	Total Density (pcf)	Ø	c (pcf)	Poisson's Ratio	Shear Modulus (ksi)
I	Silty Clay	10	21	105	126	0	2000	0.40	13
II	Sand & Gravel	5	20	106	127	21	0	0.30	22
III	Glacial Till	15	11	125	139	0	1200	0.40	11
IV A	Sand w/Gravel	5	6	120(1)	128(1)	30(1)	0	0.35	79
IV	Sand w/Gravel	>35	6	120(1)	128(1)	30(1)	0	0.30	27

(1) Assumed Value

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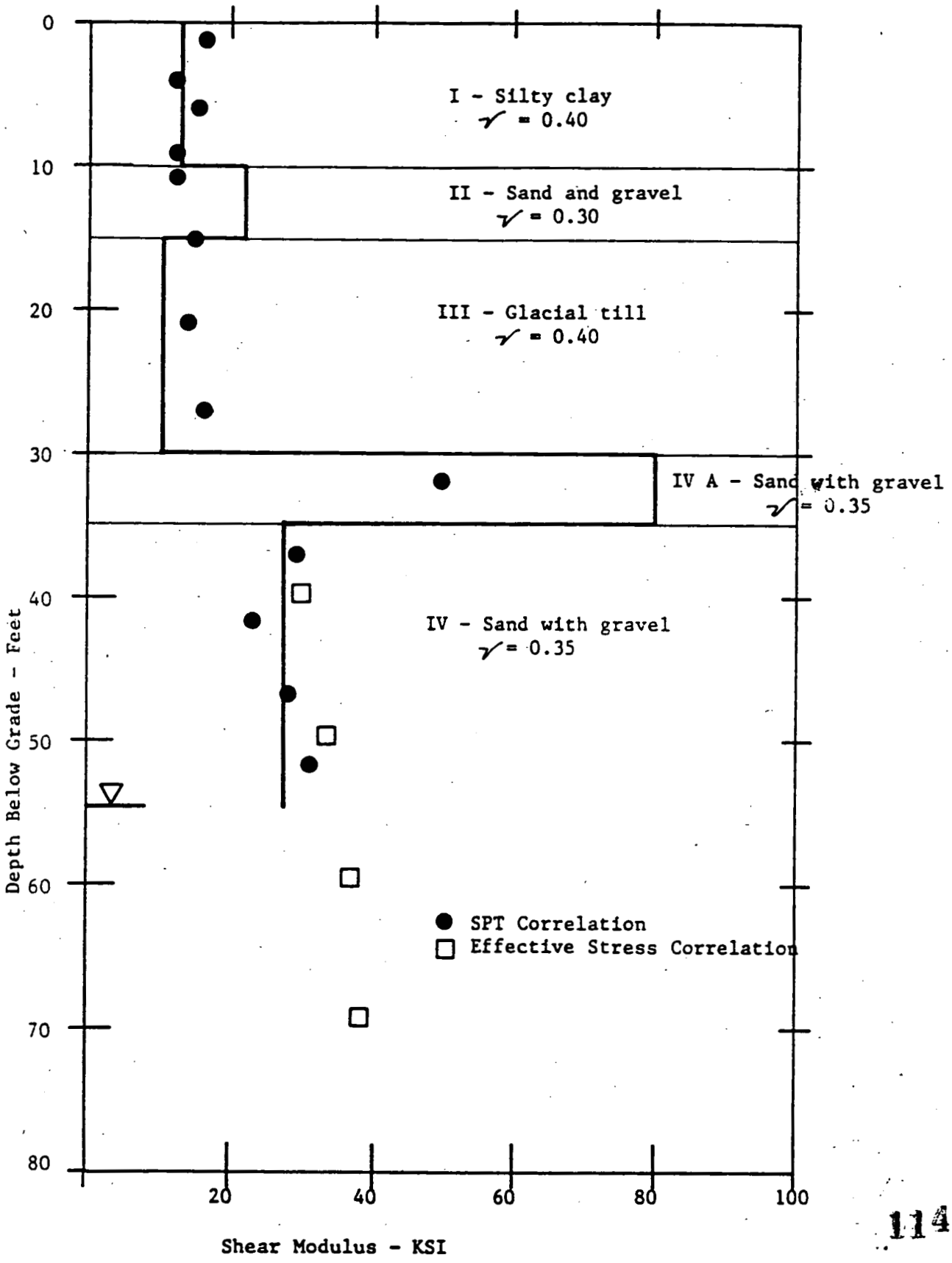

DYNAMIC SUBGRADE PROPERTIES

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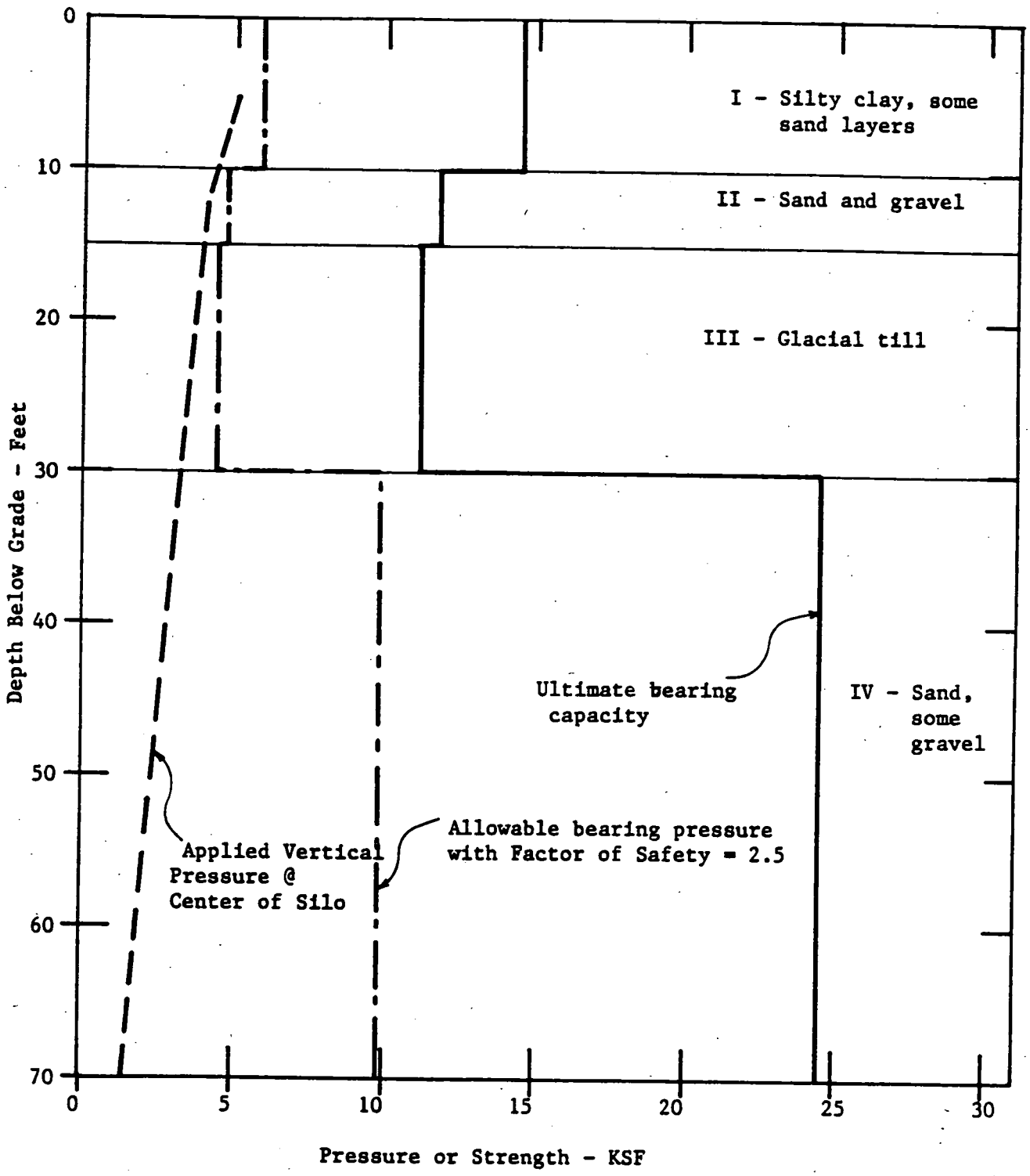
CINCINNATI, OHIO

FIGURE 1



PRESSURE DISTRIBUTION BENEATH K-65 SILO

SOIL & MATERIAL ENGINEERS INC.
CINCINNATI, OHIO

FIGURE 2

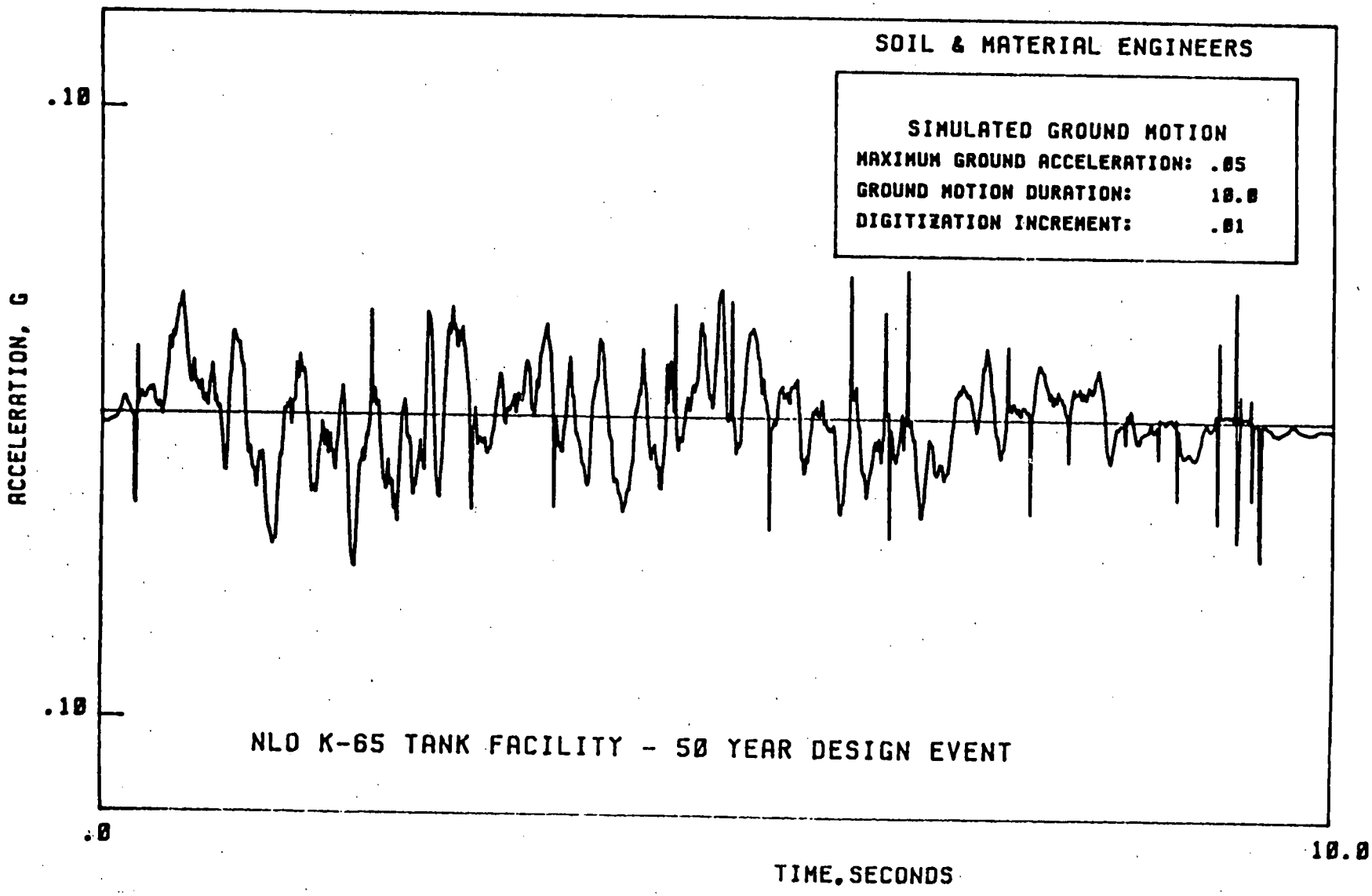

SOIL & MATERIAL ENGINEERS
SIMULATED GROUND MOTION
MAXIMUM GROUND ACCELERATION: .05
GROUND MOTION DURATION: 10.0
DIGITIZATION INCREMENT: .01
.10
.10
ACCELERATION, G
NLO K-65 TANK FACILITY - 50 YEAR DESIGN EVENT
.0
10.0
TIME, SECONDS

FIGURE: 3

RESPONSE SPECTRA

NLO K-65 TANK FACILITY - 50 YEAR DESIGN EVENT

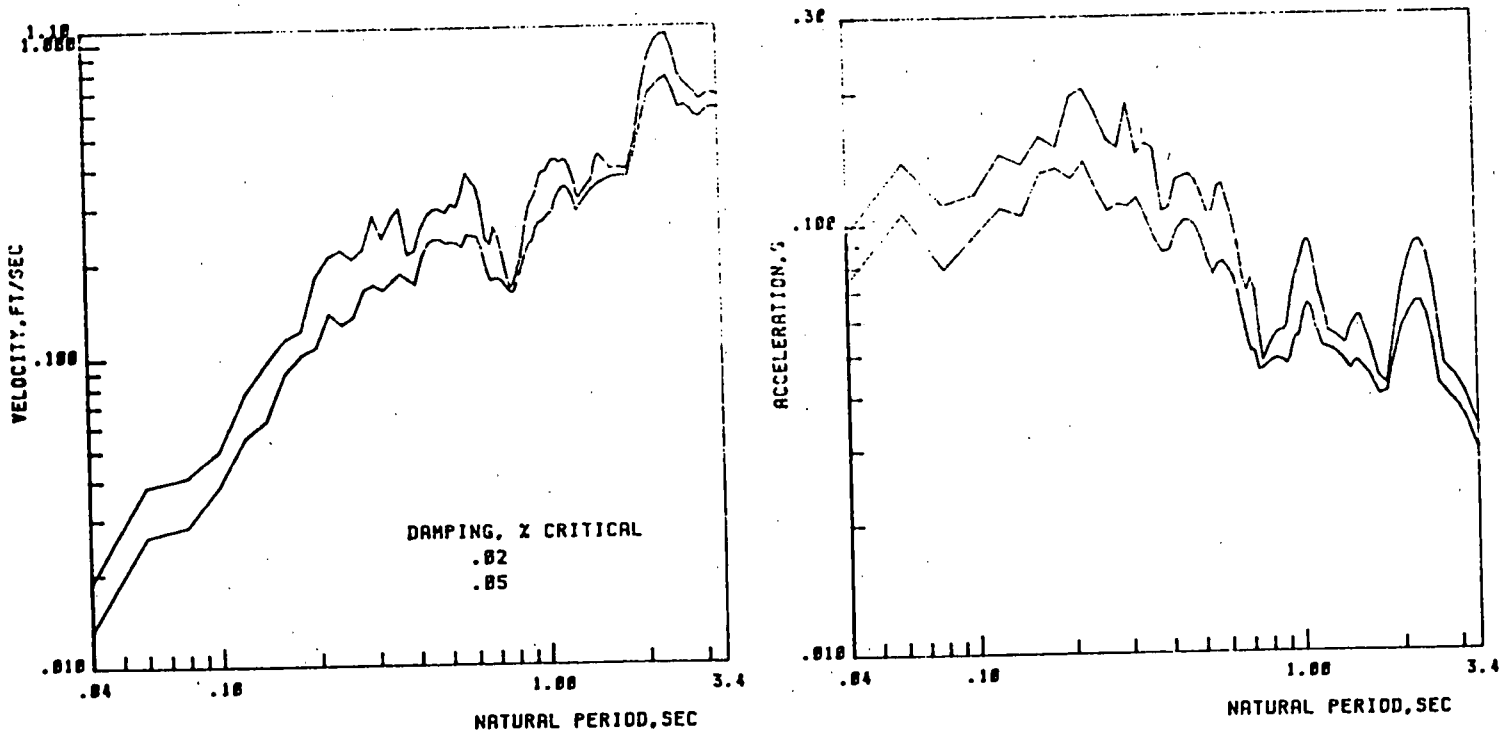


FIGURE: 4

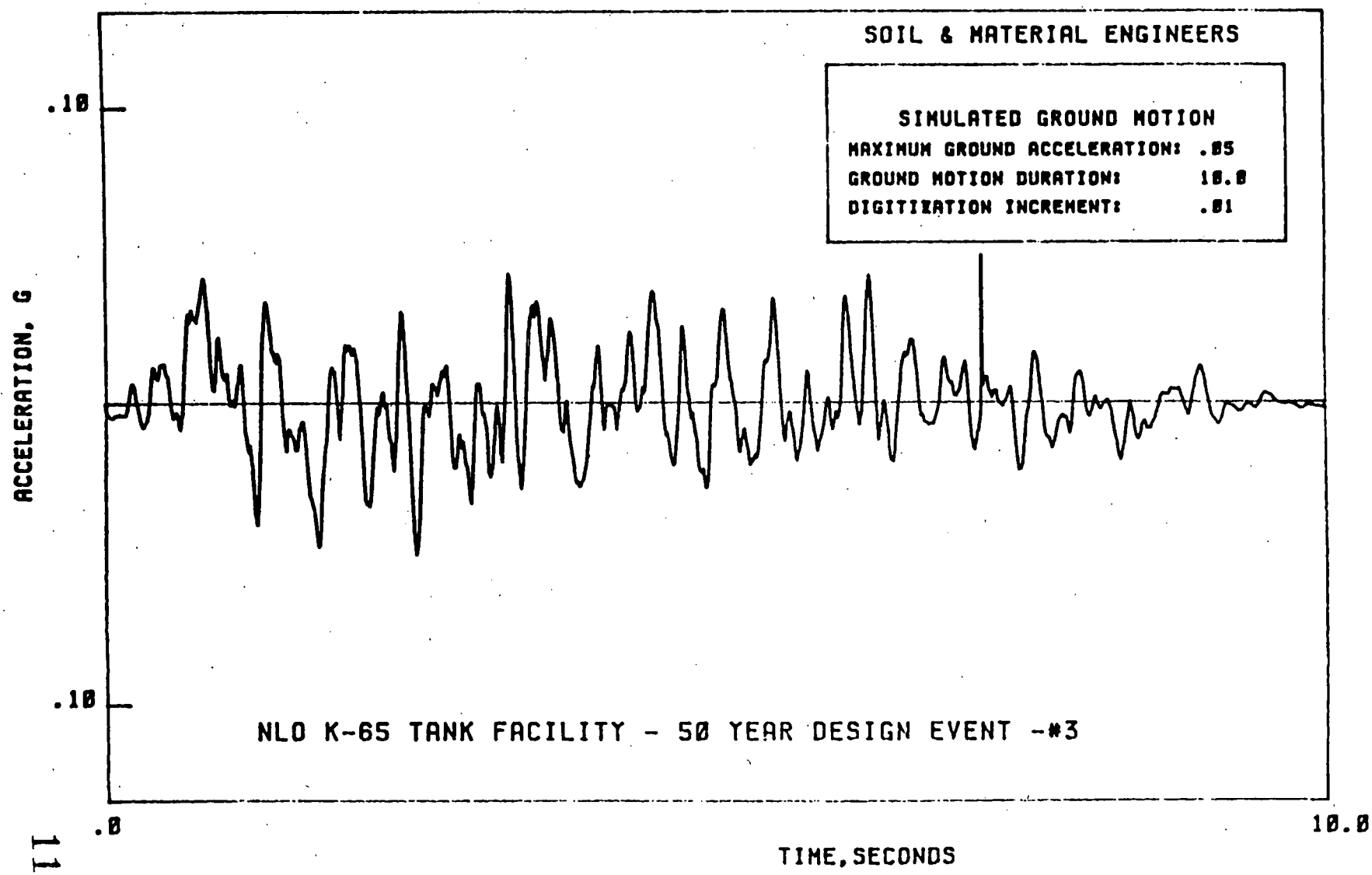


FIGURE: 5

3667

RESPONSE SPECTRA

NLO K-65 TANK FACILITY - 50 YEAR DESIGN EVENT -#3

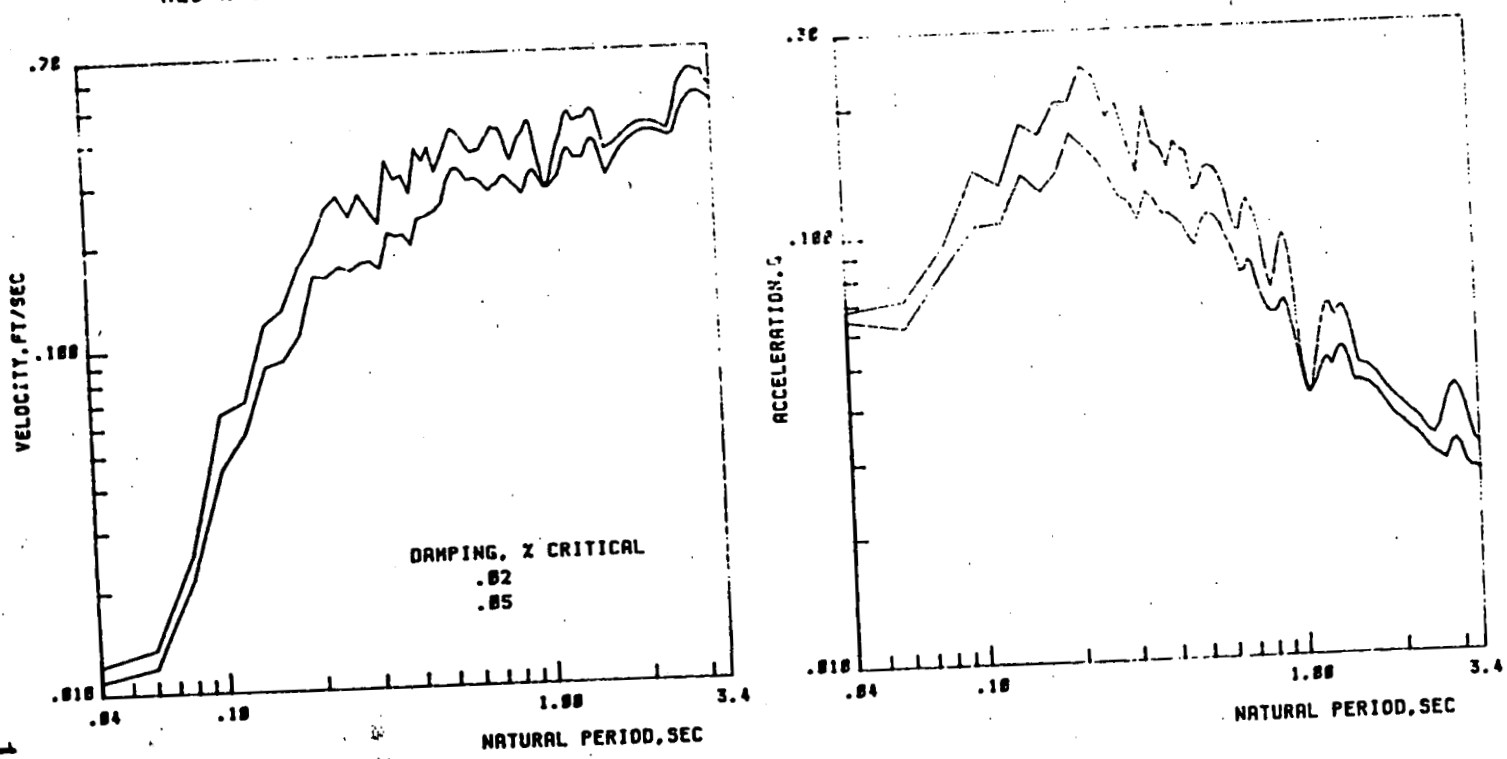


FIGURE: 6

3667

3667

RECORD OF BORING NO. 1

Client: Camargo Associates

Project: NLO K-65 Tanks

Project No.: 021-85-123

Elev. (ft.)	Depth (ft.)	Description	Sample No.	Sample Depth (ft.)	Sample Type	Blows per 6"	Recovery (in.)
100.0	0.0						
		Brown silty clay fill, little sand; moist - medium stiff	1	0.0-1.5	SS	3-3-3	15
			2	2.5-4.0	SS	2-3-2	18
95.0	5.0						
		Brown and gray varved silt and clay, trace very fine sand; moist - medium stiff	3	5.0-6.5	SS	1-3-5	18
92.5	7.5						
		Brown sandy silty clay, little fine gravel; moist-very stiff	4	7.5-9.0	SS	4-8-15	18
			5	10.0-11.5	SS	5-7-10	18
86.0	14.0						
		Gray sandy silty clay, little fine gravel; very moist-stiff	6	15.0-17.0	ST		24
			7	20.0-22.0	ST		24
			8	22.0-23.5	SS	6-6-7	18
			9	25.0-26.5	SS	5-5-6	18
70.0	30.0						
		Brown fine sand and silt little clay; wet-dense	10	30.0-31.5	SS	12-17-20	18
65.0	35.0						
		Brown fine to medium sand, trace silt and clay; moist-medium dense to dense	11	35.0-36.5	SS	12-12-14	18
			12	40.0-41.5	SS	11-15-19	18
			13	45.0-46.5	SS	15-15-18	18
			14	50.0-51.5	SS	10-15-16	18
			15	55.0-56.5	SS	10-10-12	18
		Sand becomes wet @ 55'	16	60.0-61.5	SS	11-13-16	18
			17	65.0-66.5	SS	8-15-19	18
			18	70.0-71.5	SS	10-14-17	18
28.5	71.5						
		Boring terminated @ 71.5'					

Dates Drilled: 8-22-85

Driller: F. Moore

Water Depth: Initial: 7' & 55'

_____ **Days after Completion:** _____

_____ **Days after Completion:** _____

Drilling Method: 8" Hollow Stem Augers

SOIL & MATERIAL ENGINEERS, INC.
Cincinnati, Ohio

RECORD OF BORING NO. 2

3667

Client: Camargo Associates

Project: NLO K-65 Tanks

Project No.: 021-85-123

Elev. (ft.)	Depth (ft.)	Description	Sample No.	Sample Depth (ft.)	Sample Type	Blows per 6"	Recovery (in.)
99.7	0.0						
		Topsoil					
99.2	0.5						
		Brown silty clay; moist-stiff	1	0.0-1.5	SS	5-8-11	18
			2	2.5-4.0	SS	4-5-7	18
94.7	5.0						
		Brown and gray silty clay with fine sand lenses; moist-stiff	3	5.0-6.5	SS	8-8-9	18
			4	7.5-9.0	SS	4-5-7	18
89.7	10.0						
		Brown and gray silty fine to coarse sand and gravel very moist-medium dense	5	10.0-11.5	SS	6-6-6	18
84.7	15.0						
		Gray sandy silty clay little gravel; very moist very stiff	6	15.0-16.5	SS	5-7-10	18
			7	20.0-21.5	SS	6-8-8	18
			8	25.0-26.5	SS	7-9-11	18
70.7	29.0						
		Brown silty fine sand; Moist-very dense					
69.7	30.0						
		Brown fine to medium sand, trace silt and clay; moist-dense	9	30.0-31.5	SS	19-31-43	18
			10	35.0-36.5	SS	12-16-22	18
			11	40.0-41.5	SS	10-13-16	18
			12	45.0-46.5	SS	15-15-20	18
			13	50.0-51.5	SS	13-17-25	18
48.2	51.5						
		Boring terminated @ 51.5'					

Dates Drilled: 8-23-85

Driller: F. Moore

Water Depth: Initial: 8.5'

_____ **Days after Completion:** _____

_____ **Days after Completion:** _____

Drilling Method: 8" Hollow Stem Augers

SOIL & MATERIAL ENGINEERS, INC.
Cincinnati, Ohio

RECORD OF BORING NO. 3

3667

Client: Camargo Associates

Project: NLO K-65 Tanks

Project No.: 021-85-123

Elev. (ft.)	Depth (ft.)	Description	Sample No.	Sample Depth (ft.)	Sample Type	Blows per 6"	Recovery (in.)
92.6	0.0						
		Topsoil					
92.2	0.4						
		Brown and gray clay, little silt; moist-very stiff	1	0.0-1.5	SS	5-8-12	18
			2	2.5-4.0	SS	8-9-9	18
			3	5.0-6.5	SS	3-4-6	18
			4	7.5-9.0	SS	3-4-5	18
		Contains fine sand lenses at 7.5'					
82.6	10.0						
		Brown silty fine sand little clay; wet-medium dense	5	10.0-11.5	SS	5-5-6	18
78.6	14.0						
		Gray sandy silty clay, little fine gravel; moist-very stiff to hard	6	15.0-16.0	SS	8-12-15	18
			7	20.0-21.0	SS	15-17-20	18
67.6	25.0						
		Brown fine to medium sand, trace silt and clay moist-dense	8	25.0-26.0	SS	10-14-16	18
			9	30.0-31.0	SS	6-10-15	18
			10	35.0-36.0	SS	10-18-12	18
41.1	51.5						
		Boring terminated @ 51.5'					

Dates Drilled: 8-19-85

Driller: F. Moore

Water Depth: Initial: 7.0'

_____ **Days after Completion:** _____

_____ **Days after Completion:** _____

Drilling Method: 8" Hollow Stem Augers

SOIL & MATERIAL ENGINEERS, INC.
Cincinnati, Ohio

RECORD OF BORING NO. 4

3667

Client: Camargo Associates

Project: NLO K-65 Tanks

Project No.: 021-85-123

Elev. (ft.)	Depth (ft.)	Description	Sample No.	Sample Depth (ft.)	Sample Type	Blows per 6"	Recovery (in.)
95.9	0.0						
		Brown silty clay little sand and fine gravel fill moist-stiff	1	0.0-1.5	SS	12-8-8	18
			2	2.5-4.0	SS	5-7-8	18
90.9	5.0						
		Brown silty clay, little fine to coarse sand and fine gravel; moist-stiff	3	5.0-6.5	SS	5-5-5	18
			4	7.5-9.0	SS	5-6-5	18
			5	10.0-11.5	SS	5-6-6	18
81.9	14.0						
		Gray sandy silty clay, little fine gravel; moist very stiff	6	15.0-16.5	SS	3-6-10	2
			7	20.0-21.5	SS	6-25-18	15
			8	25.0-26.5	SS	10-10-9	1
67.9	28.0						
		Brown fine to medium sand trace silt and clay; moist-dense	9	30.0-31.5	SS	15-19-25	18
			10	35.0-36.5	SS	12-17-22	18
			11	40.0-41.5	SS	19-17-23	18
			12	45.0-46.5	SS	20-20-24	18
			13	50.0-51.5	SS	12-17-21	18
44.4	51.5						
		Boring terminated @ 51.5'					

Dates Drilled: 8-21-85

Driller: F. Moore

Water Depth: Initial: 9.0'

_____ **Days after Completion:** _____

_____ **Days after Completion:** _____

Drilling Method: 8" Hollow Stem Augers

SOIL & MATERIAL ENGINEERS, INC.
Cincinnati, Ohio

3667

RECORD OF BORING NO. 6

Client: Camargo Associates

Project: NLO K-65 Tanks

Project No.: 021-85-123

Elev. (ft.)	Depth (ft.)	Description	Sample No.	Sample Depth (ft.)	Sample Type	Blows per 6"	Recovery (in.)
	0.0						
		Brown silty clay little fine to coarse sand moist, (Fill)	1	2.0-4.0	ST		16
			2	4.0-5.5	SS	17-22-30	18
			3	7.0-9.0	ST		22
			4	9.0-10.0	SS	25-28-33	18
	10.5	Boring terminated @ 10.5'					

Dates Drilled: 8-29-85

Driller: F. Moore

Water Depth: Initial: Dry

_____ **Days after Completion:** _____

_____ **Days after Completion:** _____

Drilling Method: Hand Sampling

SOIL & MATERIAL ENGINEERS, INC.
Cincinnati, Ohio

3667

RECORD OF BORING NO. 7

Client: Camargo Associates

Project: NLO K-65 Tanks

Project No.: 021-85-123

Elev. (ft.)	Depth (ft.)	Description	Sample No.	Sample Depth (ft.)	Sample Type	Blows per 6"	Recovery (in.)
	0.0						
		Brown silty clay, trace sand, moist, (Fill)	1	2.0-4.0	ST		15
			2	4.0-5.5	SS	5-12-19	18
			3	6.0-8.0	ST		15
			4	8.0-9.5	SS	15-30-41	18
	9.5						
		Boring terminated @ 9.5'					

Dates Drilled: 8-29-85

Driller: F. Moore

Water Depth: Initial: Dry

_____ **Days after Completion:** _____

_____ **Days after Completion:** _____

Drilling Method: Hand Sampling

SOIL & MATERIAL ENGINEERS, INC.
Cincinnati, Ohio

RECORD OF BORING NO. 8

Client: Camargo Assocaites

Project: NLO K-65 Tanks

Project No.: 021-85-123

Elev. (ft.)	Depth (ft.)	Description	Sample No.	Sample Depth (ft.)	Sample Type	Blows per 6"	Recovery (in.)
	0.0						
		Brown and gray silty clay, little sand; moist, (Fill)	1	0.0-1.5	SS	6-8-15	18
			2	2.0-4.0	ST		18
	5.0						
		Brown and gray clay, little silt; moist, (Fill)	3	7.0-9.0	ST		15
			4	9.0-10.5	SS	21-29-39	18
			5	10.5-12.0	SS	30-35-46	18
	12.0						
		Boring terminated @ 12.0'					

Dates Drilled: 8-30-85

Driller: F. Moore

Water Depth: Initial: 8.5'

_____ **Days after Completion:** _____

_____ **Days after Completion:** _____

Drilling Method: Hand Sampling

SOIL & MATERIAL ENGINEERS, INC.
Cincinnati, Ohio

RECORD OF BORING NO. 9

Client: Camargo Associates

Project: NLO K-65 Tanks

Project No.: 021-85-123

Elev. (ft.)	Depth (ft.)	Description	Sample No.	Sample Depth (ft.)	Sample Type	Blows per 6"	Recovery (in.)
	0.0						
		Brown and gray silty clay with fine sand lenses, moist, (Fill)	1	2.0-4.0	ST		16
			2	4.5-5.0	SS	16-16-22	18
			3	6.0-8.0	SS		15
			4	8.0-9.5	SS	15-30-41	18
	9.5						
		Boring terminated @ 9.5'					

Dates Drilled: 8-30-85

Driller: F. Moore

Water Depth: Initial: Dry

_____ **Days after Completion:** _____

_____ **Days after Completion:** _____

Drilling Method: Hand Sampling

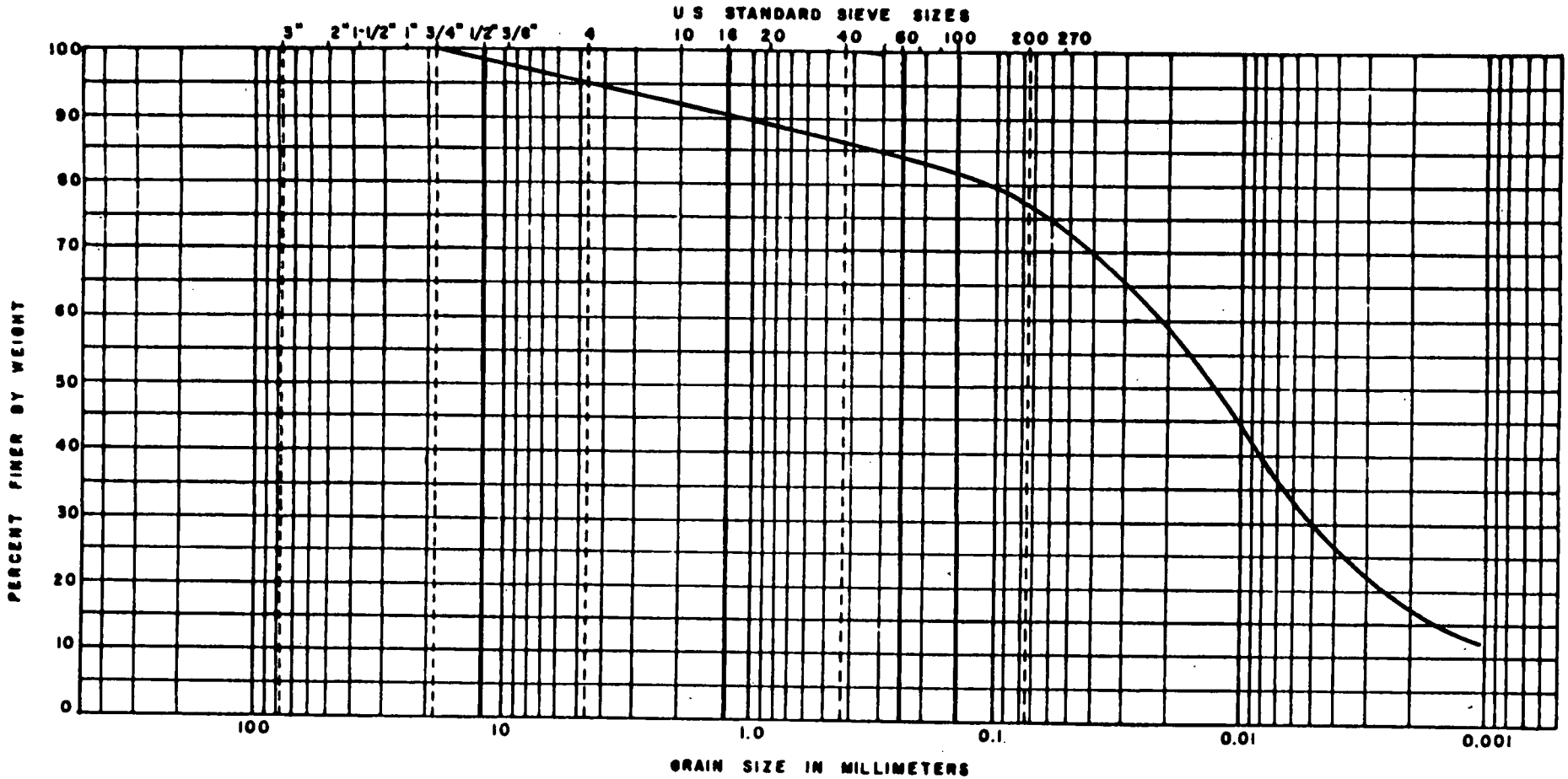
SOIL & MATERIAL ENGINEERS, INC.
Cincinnati, Ohio

SOIL & MATERIAL ENGINEERS, INC.
Cincinnati, Ohio

PROJECT: CAMARGO ASSOCIATES Ltd.
NLO, K-65 Storage Silos
S&ME Project No. 021-85-123

LABORATORY TEST RESULTS

Boring No.	Depth (in.)	Moisture Content (%)	Atterberg Limits LL (%)	PL (%)	PI (%)	Grain Size Analysis Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Classification	Dry Density (pcf)	Compressive Strength Confin. Pres.(psi)	Strain %	Strength (tsf)	Permeability cm/sec.
1	15.0-17.0	14.9	22.0	15.6	6.4	5	18	59	18	CL-ML	122.1	15	17.0	1.19	
	20.0-22.0	12.2	21.8	14.6	7.2	14	40	28	18	SC	127.3	20	17.8	1.19	
	60.0-61.5	20.4				1	82	- 17 -		SW					
	70.0-71.5	16.7													
2	2.0-4.0	20.7	38.5	25.6	12.9		45	39	16	CL	101.9	5	6.2	2.28	
	5.0-7.0	20.5	23.2	17.8	5.4		8	69	23	CL-ML	107.6	5	19.0	1.65	
	10.0-12.0	19.8	Non- Plastic				57	47	2	SM	106.1	10	6.2	0.82	
	15.0-17.0	9.2	14.9	12.5	2.4	34	49	10	7	SM					
	20.0-22.0	8.9	16.2	12.7	3.5	7	46	36	11	SC-SM					
	25.0-27.0	10.9	19.6	13.0	6.6	18	35	35	12	SC-SM					
	30.0-31.5	18.4				2	61	- 37 -		SP					
	40.0-41.5	8.4				4	86	- 10 -		SW					
	50.0-51.5	4.3				17	75	- 8 -		SW					
6	2.0-4.0	19.6									110.8				
	7.0-9.0	15.1	25.5	16.3	9.2	8	27	46	19	CL	112.8				
	9.0-10.5	14.0													
7	2.0-4.0	16.5									113.0				
	4.0-5.5	22.9													
	6.0-8.0	20.9									101.0				
8	0.0-1.5	23.4													
	2.0-4.0	23.1	27.9	22.8	5.1		25	63	12	CL-ML	97.3				
	7.0-9.0	22.8									105.7				
	9.0-10.5	22.7													
	10.5-12	19.8	36.4	19.8	16.6	2	10	51	37	CL					



BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT SIZES	CLAY SIZES

BORING NO	ELEV. OR DEPTH	NAT WC	LL	PL	PI	DESCRIPTION OR CLASSIFICATION
1	15.0-17.0	14.9	22.0	15.6	6.4	

GRAIN SIZE DISTRIBUTION

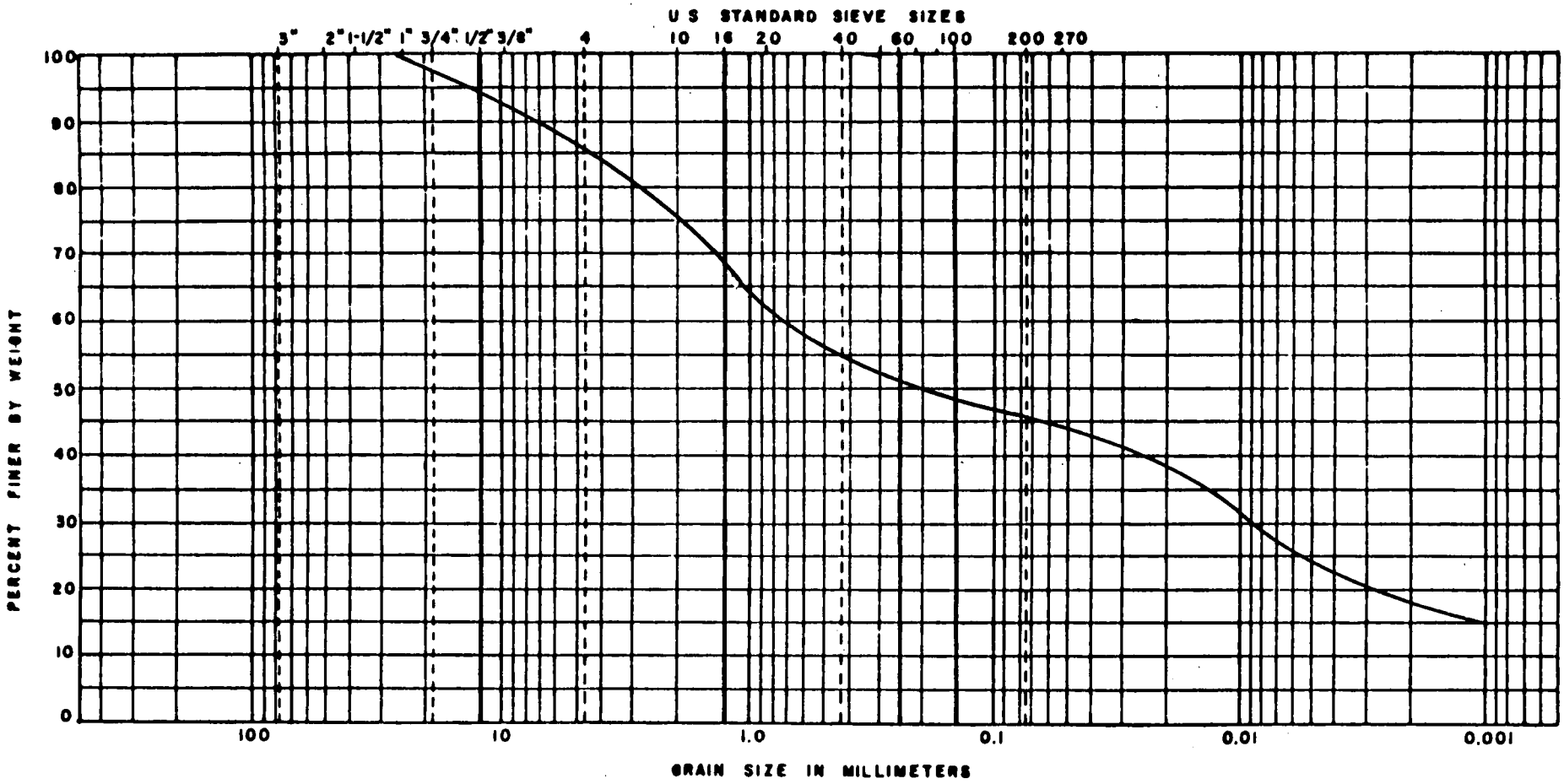
JOB NO. 021-85-123

SOIL & MATERIAL ENGINEERS, INC.

123

DUNCAN-PARNELL, INC., RALEIGH 781

SM-19



BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT SIZES	CLAY SIZES

BORING NO	ELEV. OR DEPTH	NAT WC	LL	PL	PI	DESCRIPTION OR CLASSIFICATION
1	20.0-22.0	12.2	21.8	14.6	7.2	

GRAIN SIZE DISTRIBUTION

JOB NO. 021-85-123

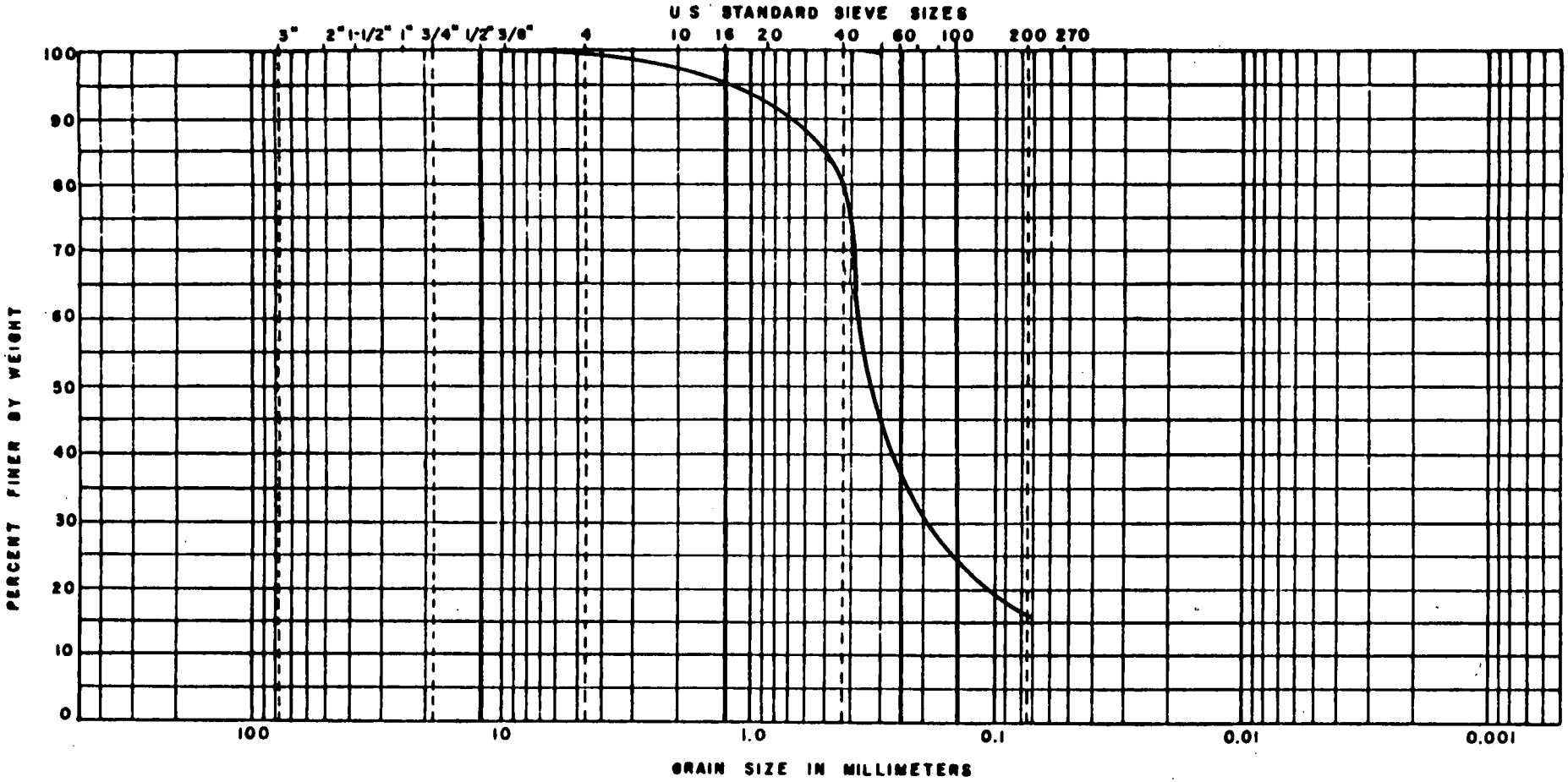
SOIL & MATERIAL ENGINEERS, INC.

130

36667

DUNCAN-PARNELL, INC., RALEIGH 781

SM-19



BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT SIZES	CLAY SIZES

BORING NO	ELEV. OR DEPTH	NAT WC	LL	PL	PI	DESCRIPTION OR CLASSIFICATION
1	60.0-61.5	20.4				

GRAIN SIZE DISTRIBUTION

JOB NO. 021-85-123

SOIL & MATERIAL ENGINEERS, INC.

13

3667

DUNCAN-PARNELL, INC., RALEIGH 781

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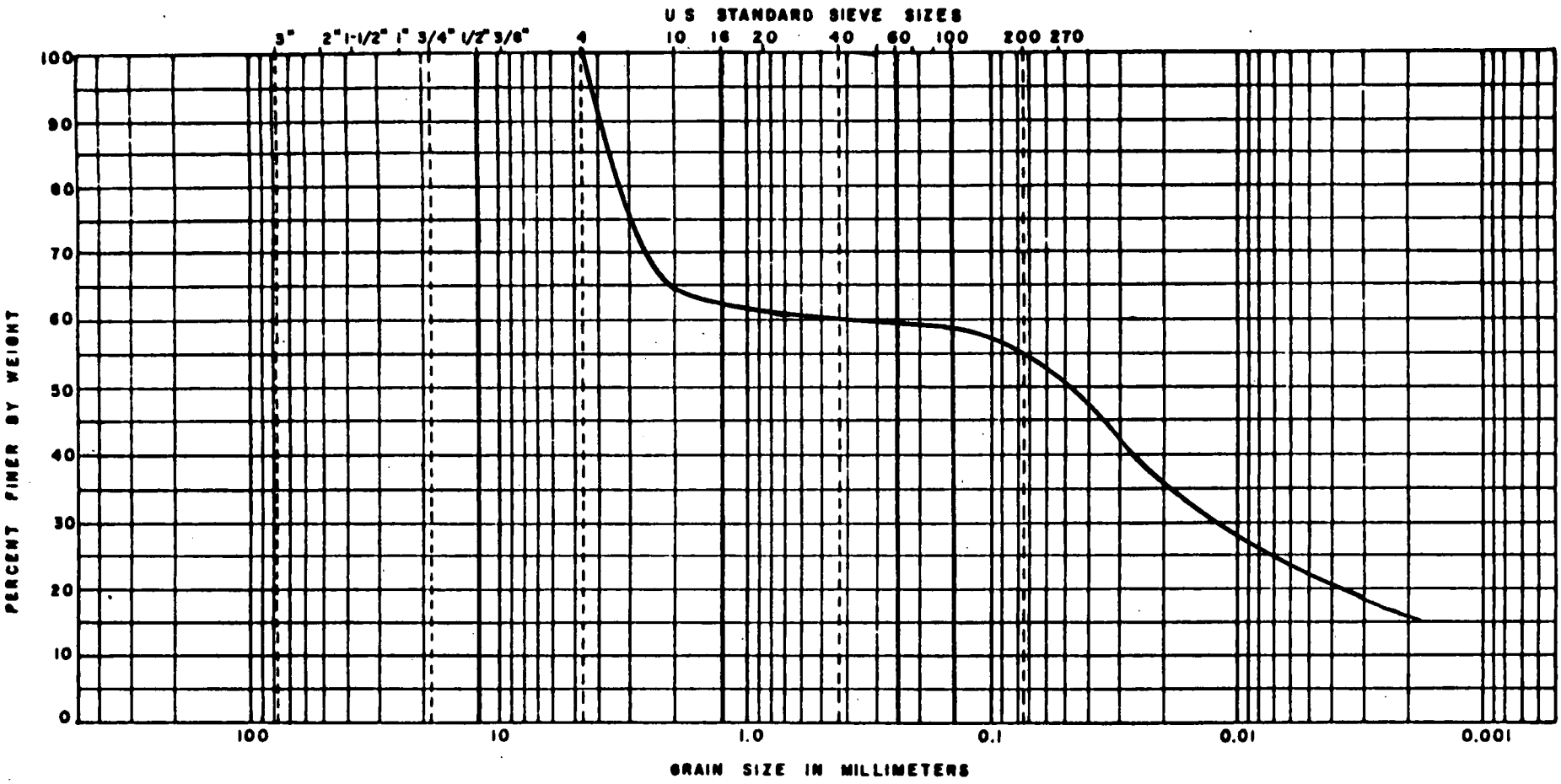

BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT SIZES	CLAY SIZES

BORING NO	ELEV. OR DEPTH	NAT WC	LL	PL	PI	DESCRIPTION OR CLASSIFICATION
2	2.0-4.0	20.7	38.5	25.6	12.9	

GRAIN SIZE DISTRIBUTION

JOB NO. 021-85-123

SOIL & MATERIAL ENGINEERS, INC.

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DUNCAN-PARNELL, INC., RALEIGH 781

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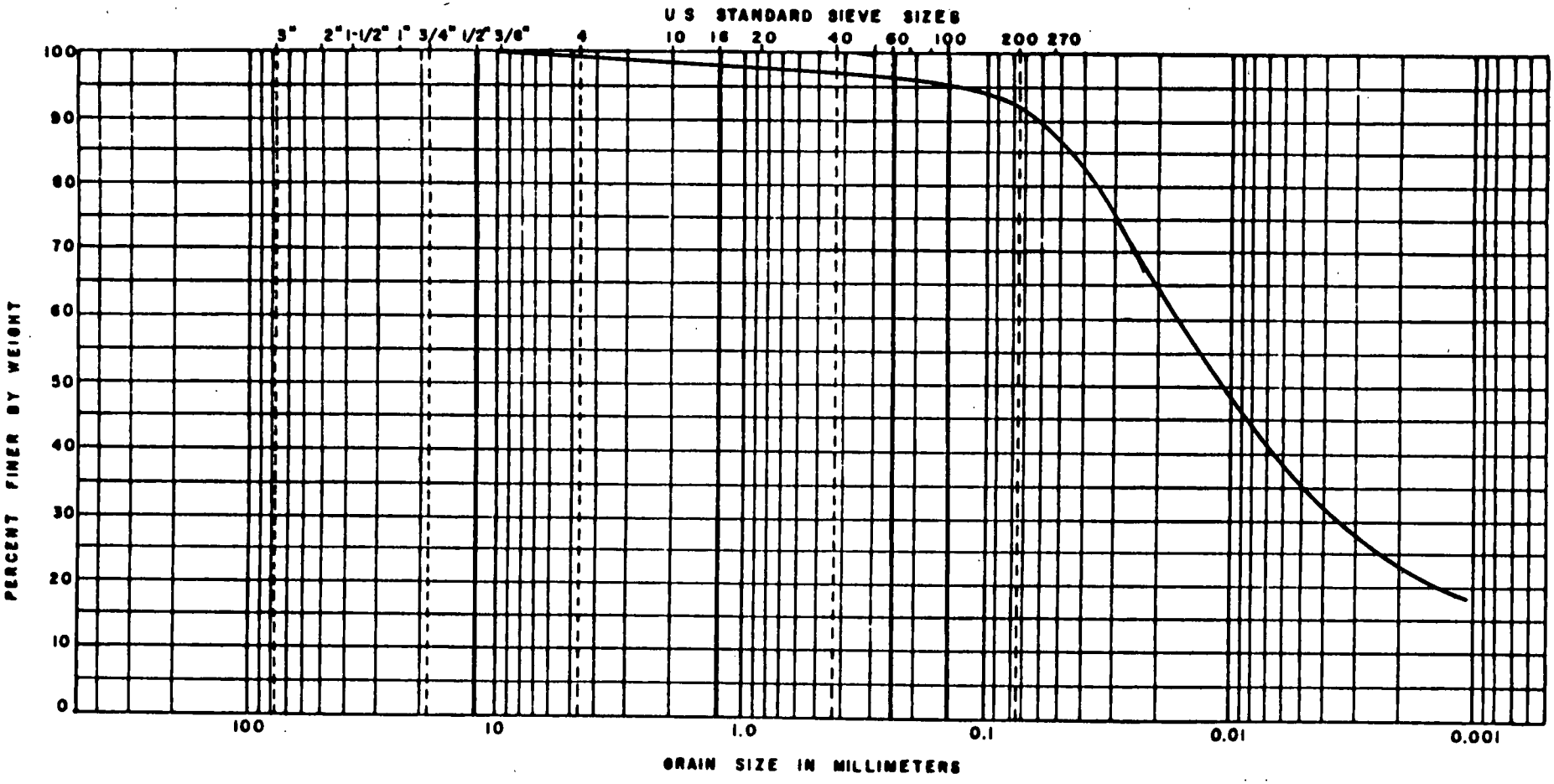
3667



BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT SIZES	CLAY SIZES

BORING NO	ELEV. OR DEPTH	NAT WC	LL	PL	PI	DESCRIPTION OR CLASSIFICATION
2	5.0-7.0	20.5	23.2	17.8	5.4	

GRAIN SIZE DISTRIBUTION

JOB NO. 021-85-123

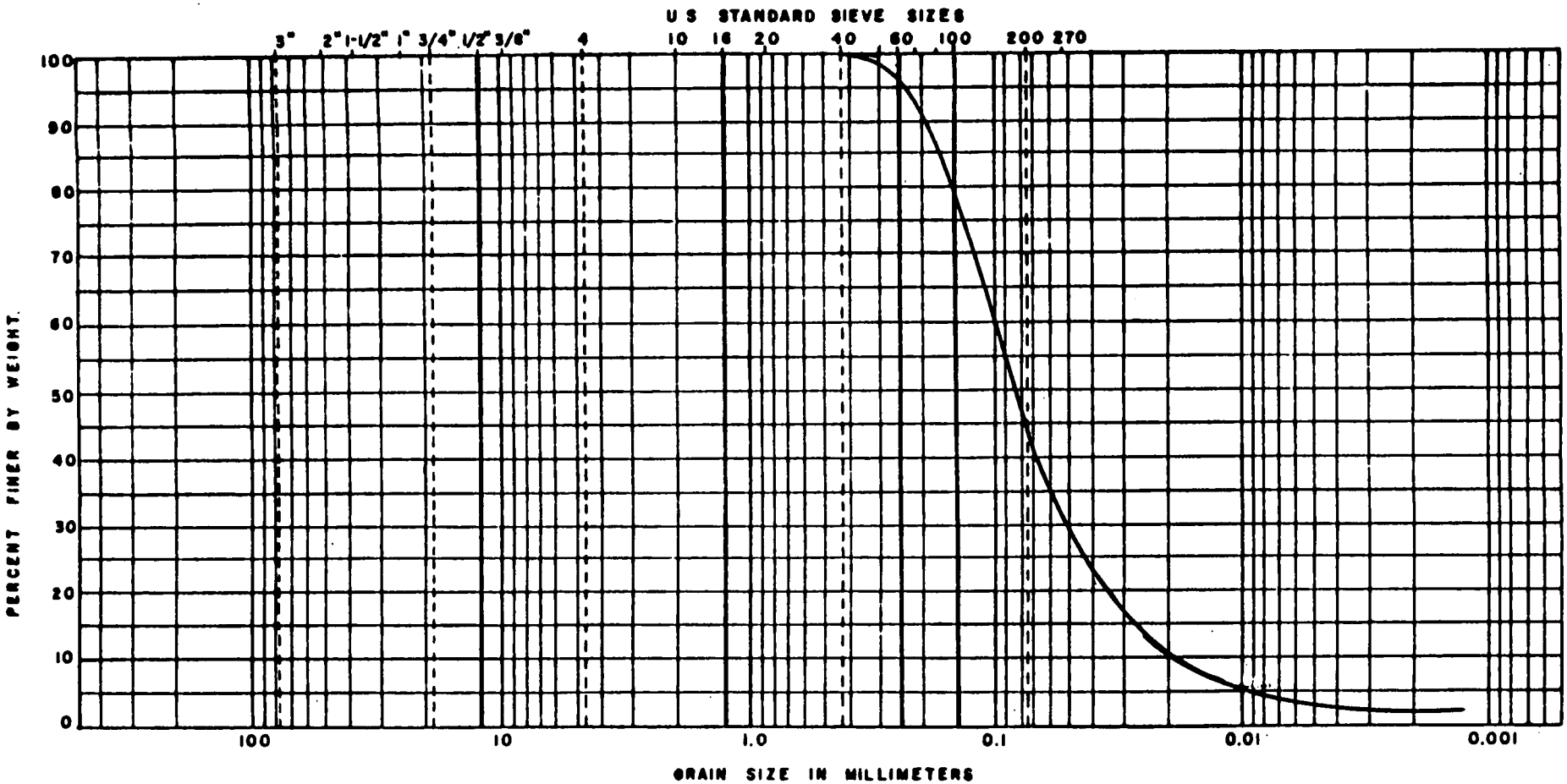
SOIL & MATERIAL ENGINEERS, INC.

DUNCAN-PARNELL, INC., RALEIGH 781

SM-19

139

4998



BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT SIZES	CLAY SIZES

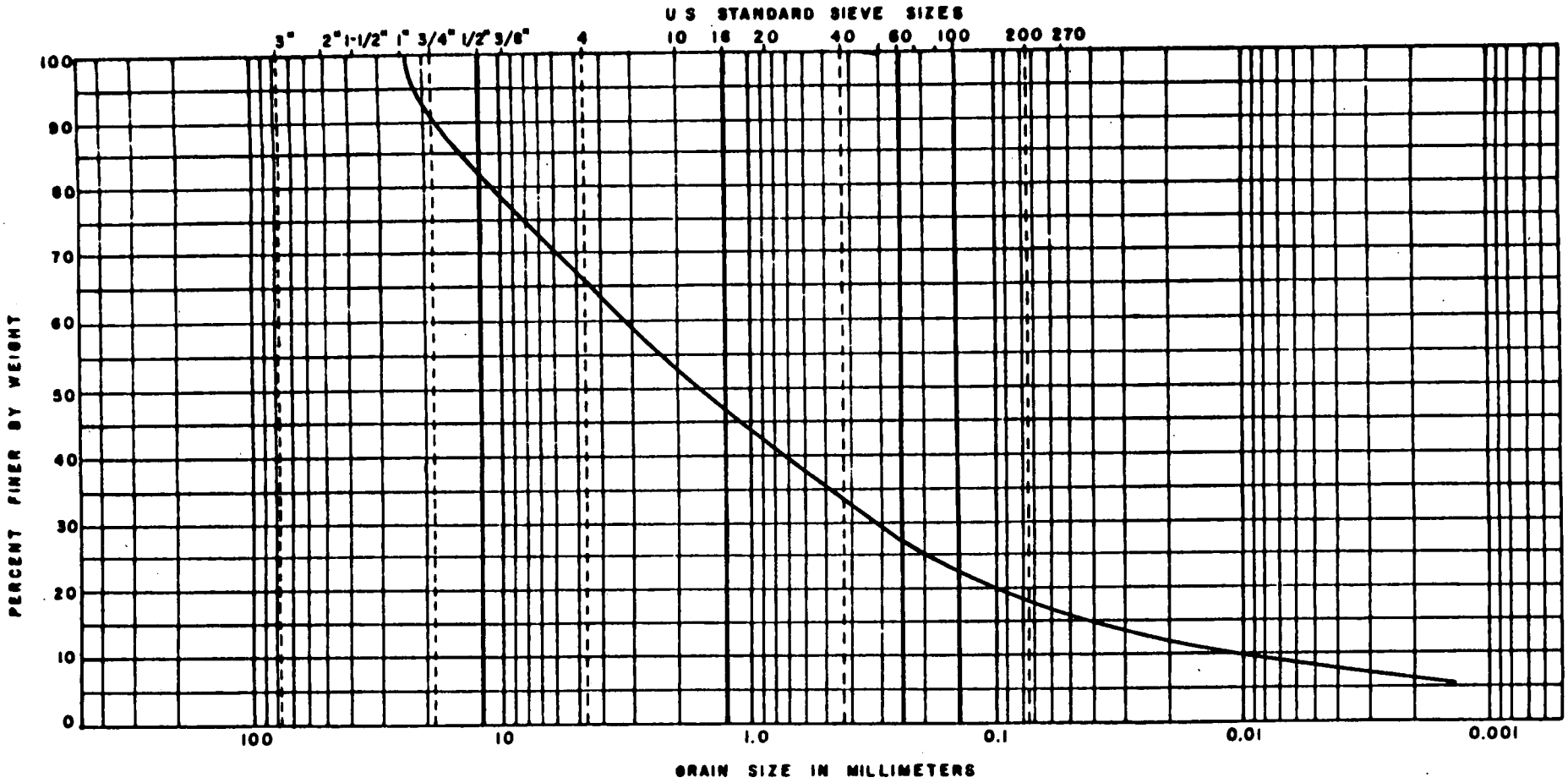
BORING NO	ELEV. OR DEPTH	NAT WC	LL	PL	PI	DESCRIPTION OR CLASSIFICATION
2	10.0-12.0	19.8			NP	

134

GRAIN SIZE DISTRIBUTION

JOB NO. 021-85-123

SOIL & MATERIAL ENGINEERS, INC.



BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT SIZES	CLAY SIZES

BORING NO	ELEV. OR DEPTH	NAT WC	LL	PL	PI	DESCRIPTION OR CLASSIFICATION
2	15.0-17.0	9.2	14.9	12.5	2.4	

GRAIN SIZE DISTRIBUTION

JOB NO. 021-85-123

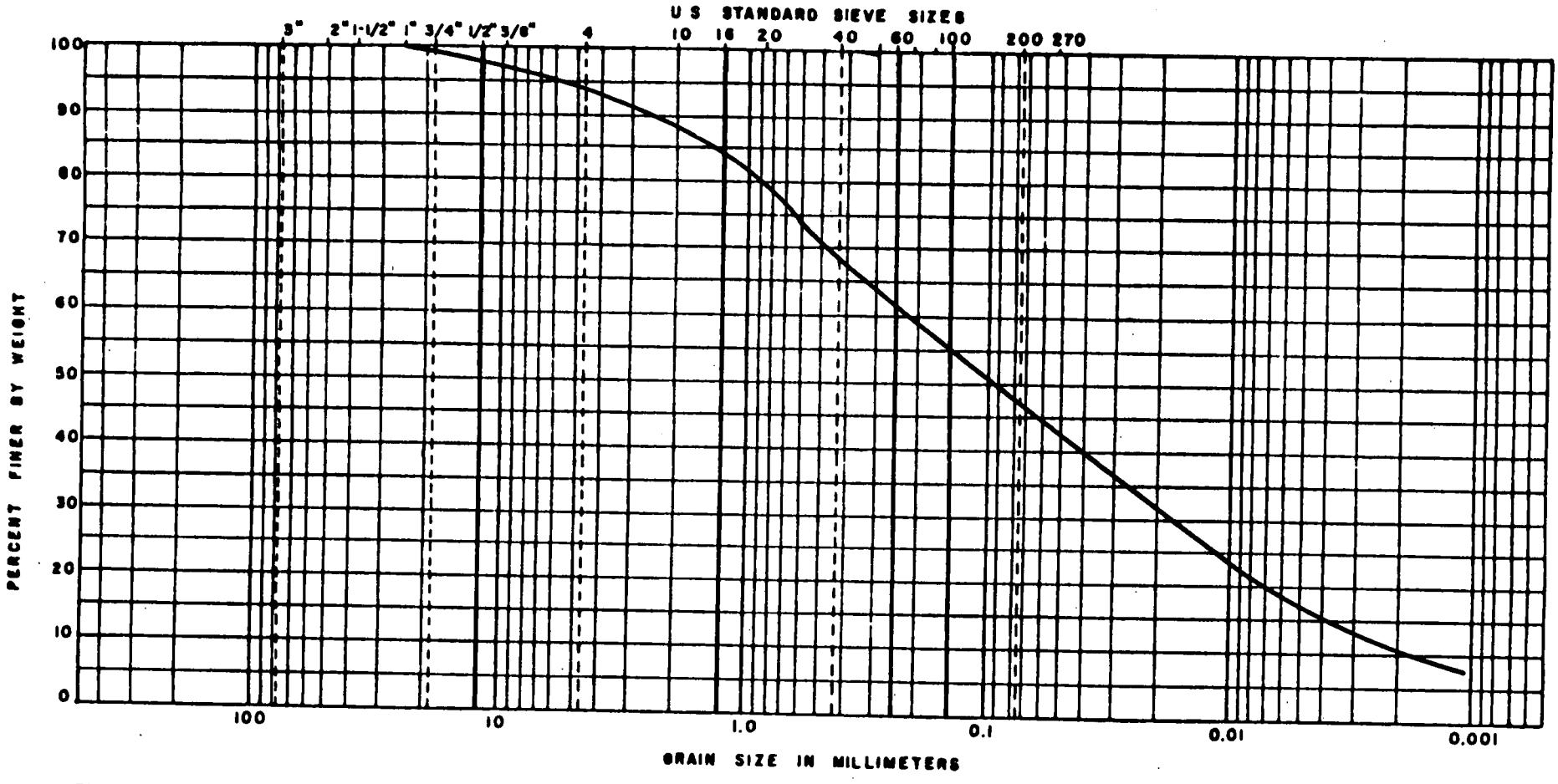
SOIL & MATERIAL ENGINEERS, INC.

135

3667

DUNCAN-PARNELL, INC., RALEIGH 781

SM-19



BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT SIZES	CLAY SIZES

BORING NO	ELEV. OR DEPTH	NAT WC	LL	PL	PI	DESCRIPTION OR CLASSIFICATION
2	20.0-22.0	8.9	16.2	12.7	3.5	

GRAIN SIZE DISTRIBUTION

JOB NO. 021-85-123

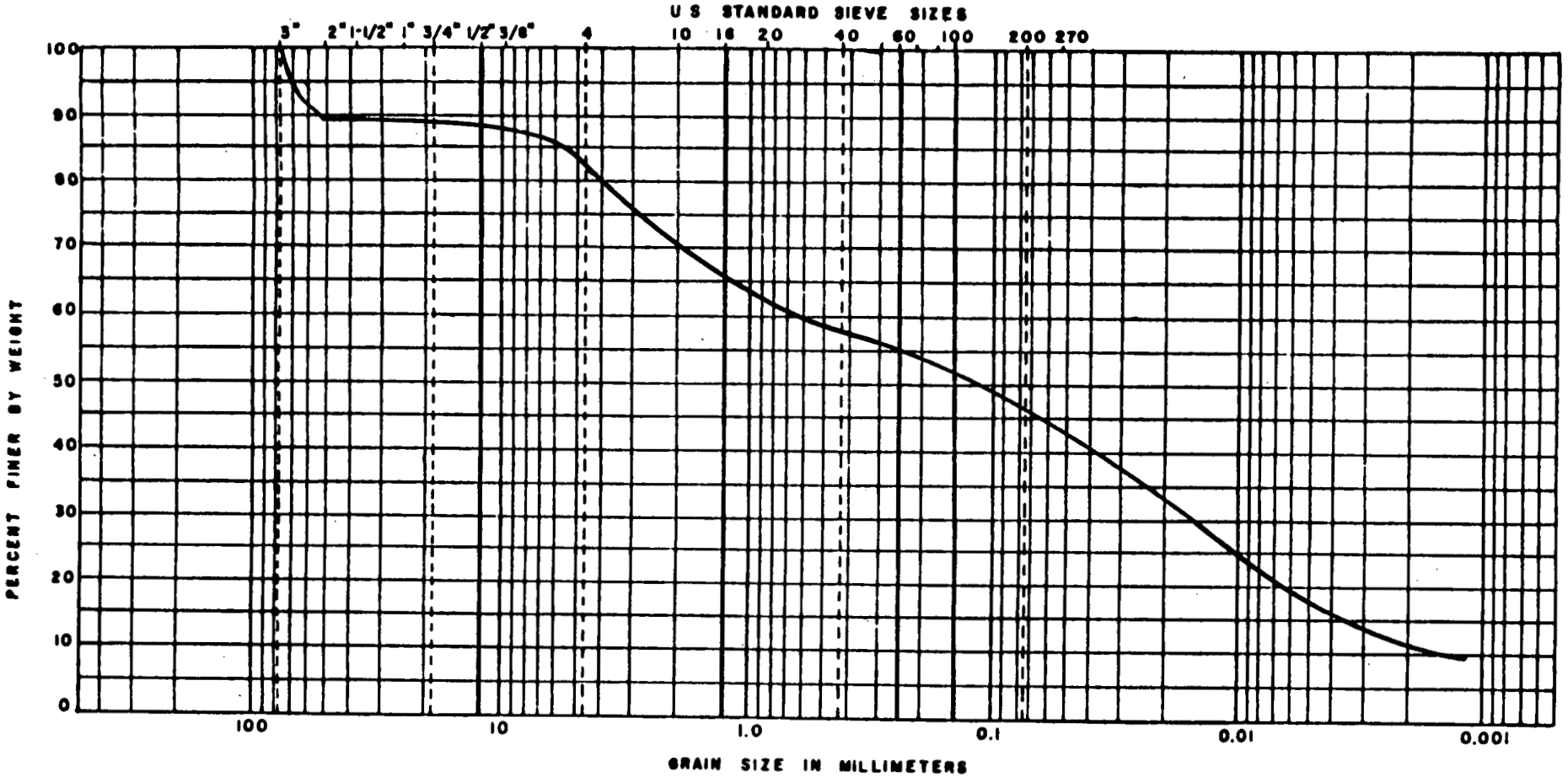
SOIL & MATERIAL ENGINEERS, INC.

1396

3667

DUNCAN-PARNELL, INC., RALEIGH 781

SM-19



BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT SIZES	CLAY SIZES

BORING NO	ELEV. OR DEPTH	NAT WC	LL	PL	PI	DESCRIPTION OR CLASSIFICATION
2	25.0-27.0	10.9	19.6	13.0	6.6	

GRAIN SIZE DISTRIBUTION

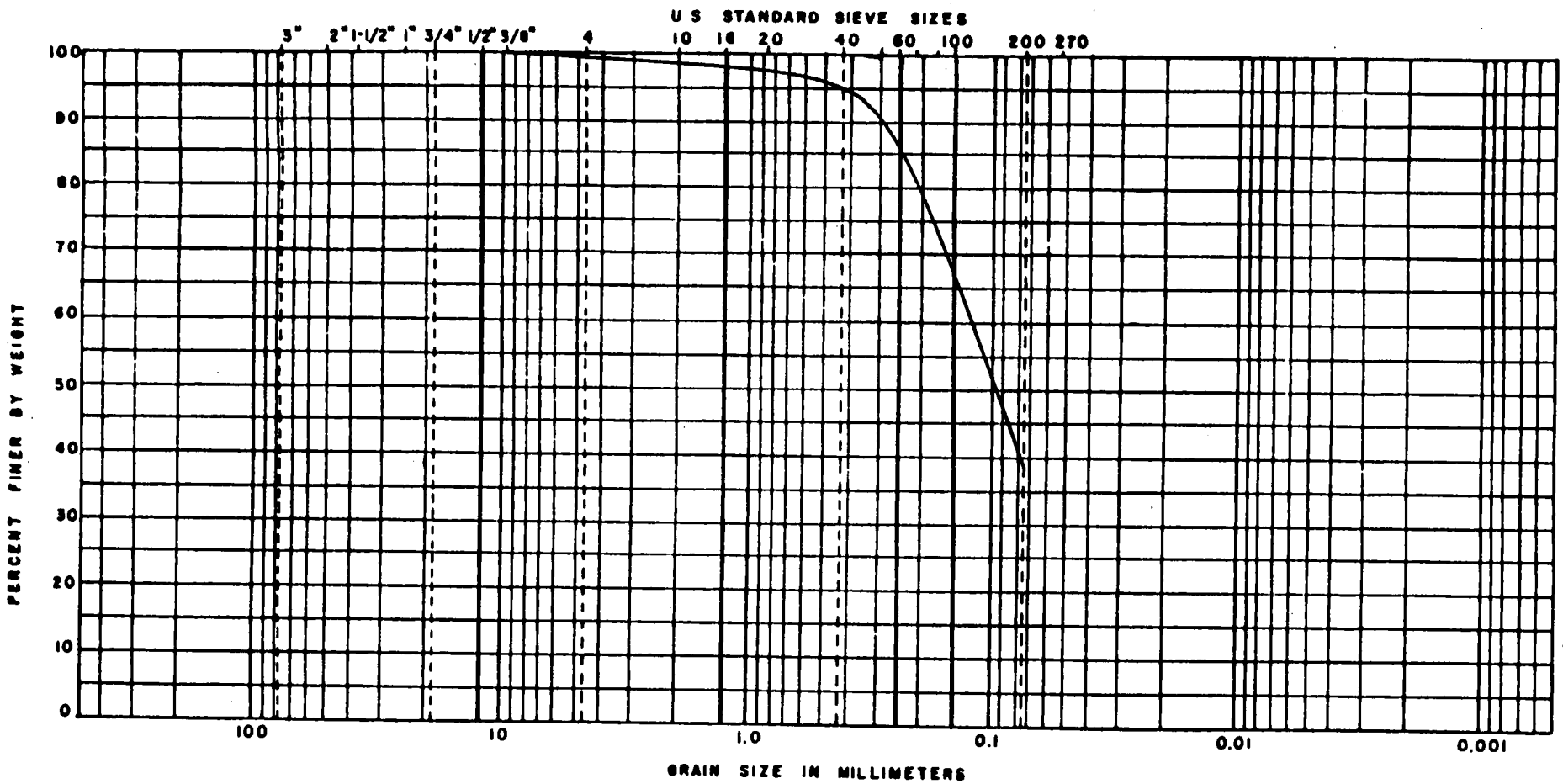
JOB NO. 021-85-123

SOIL & MATERIAL ENGINEERS, INC.

137

DUNCAN-PARNELL, INC., RALEIGH 781

SM-19



BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT SIZES	CLAY SIZES

BORING NO	ELEV. OR DEPTH	NAT WC	LL	PL	PI	DESCRIPTION OR CLASSIFICATION
2	30.0-31.0	18.4				

138

GRAIN SIZE DISTRIBUTION

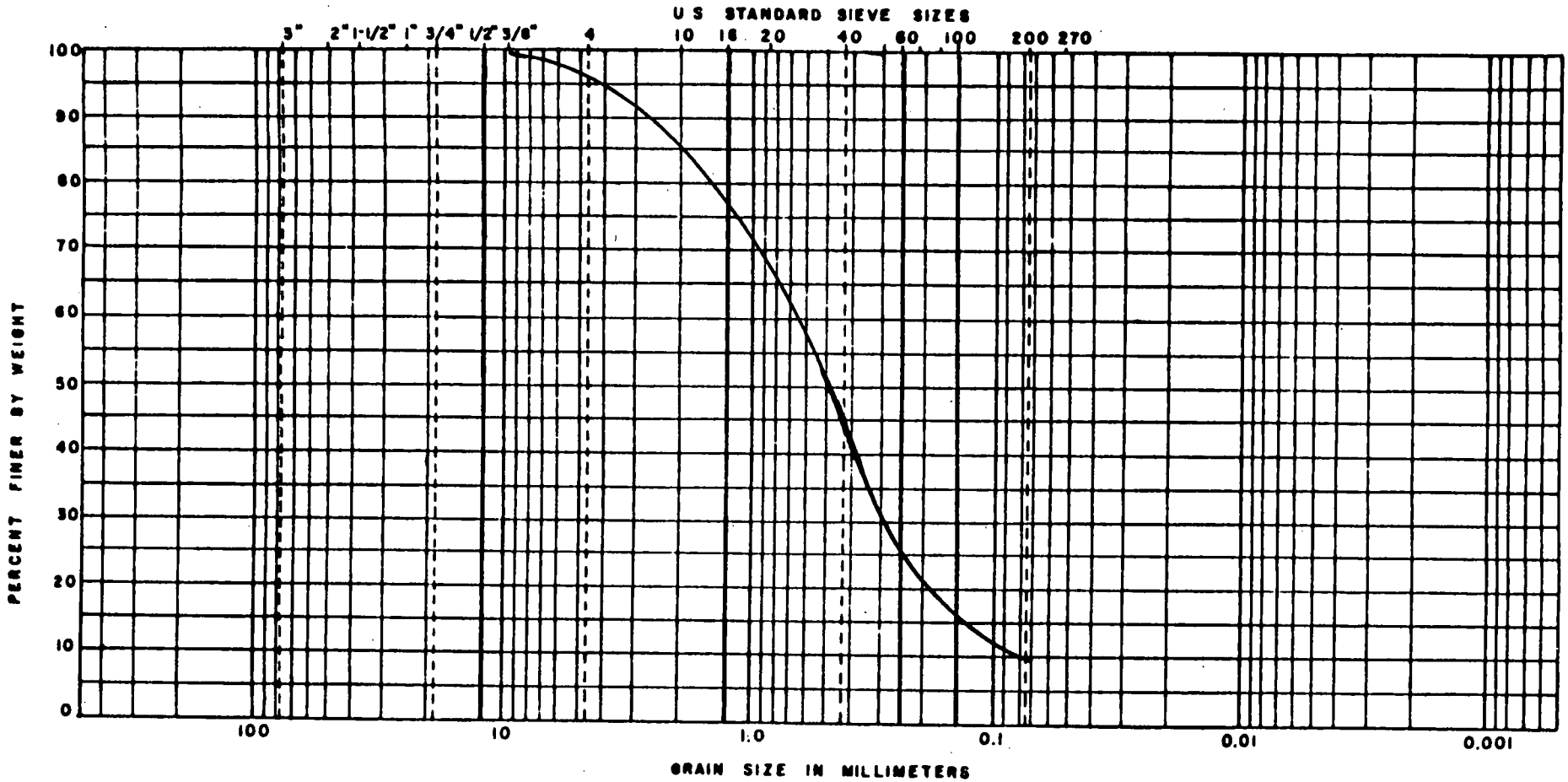
JOB NO. 021-85-123

SOIL & MATERIAL ENGINEERS, INC.

DUNCAN-PARNELL, INC., RALEIGH 781

SM-19

3667



BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT SIZES	CLAY SIZES

BORING NO	ELEV. OR DEPTH	NAT WC	LL	PL	PI	DESCRIPTION OR CLASSIFICATION
2	40.0-41.5	8.4				

GRAIN SIZE DISTRIBUTION

JOB NO. 021-85-123

SOIL & MATERIAL ENGINEERS, INC.

133

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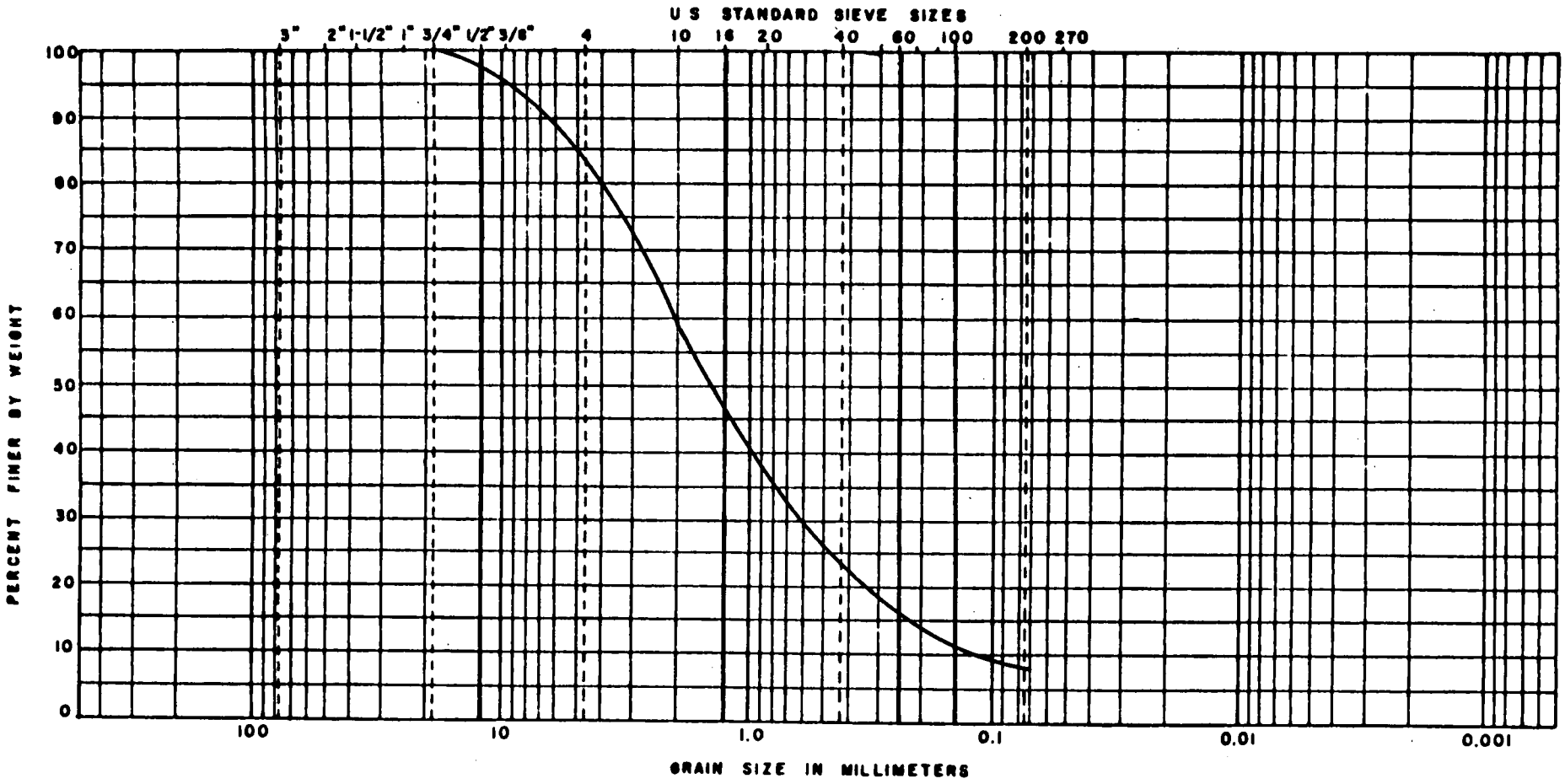
SM-19



BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT SIZES	CLAY SIZES

BORING NO	ELEV. OR DEPTH	NAT WC	LL	PL	PI	DESCRIPTION OR CLASSIFICATION
2	50.0-51.5	4.3				

140

GRAIN SIZE DISTRIBUTION

JOB NO. 021-85-123

SOIL & MATERIAL ENGINEERS, INC.

DUNCAN-PARNELL, INC., RALEIGH 781

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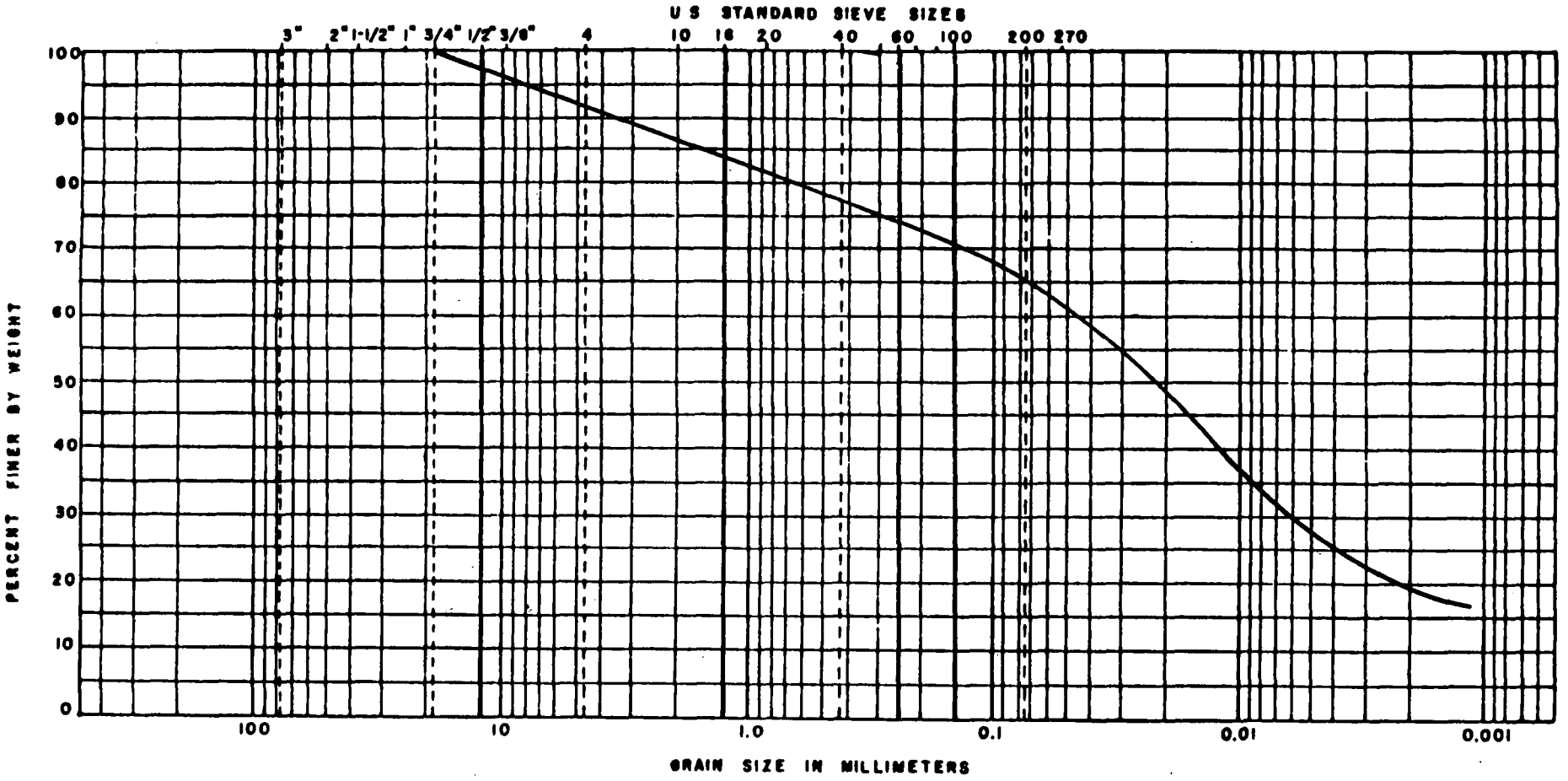


BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT SIZES	CLAY SIZES

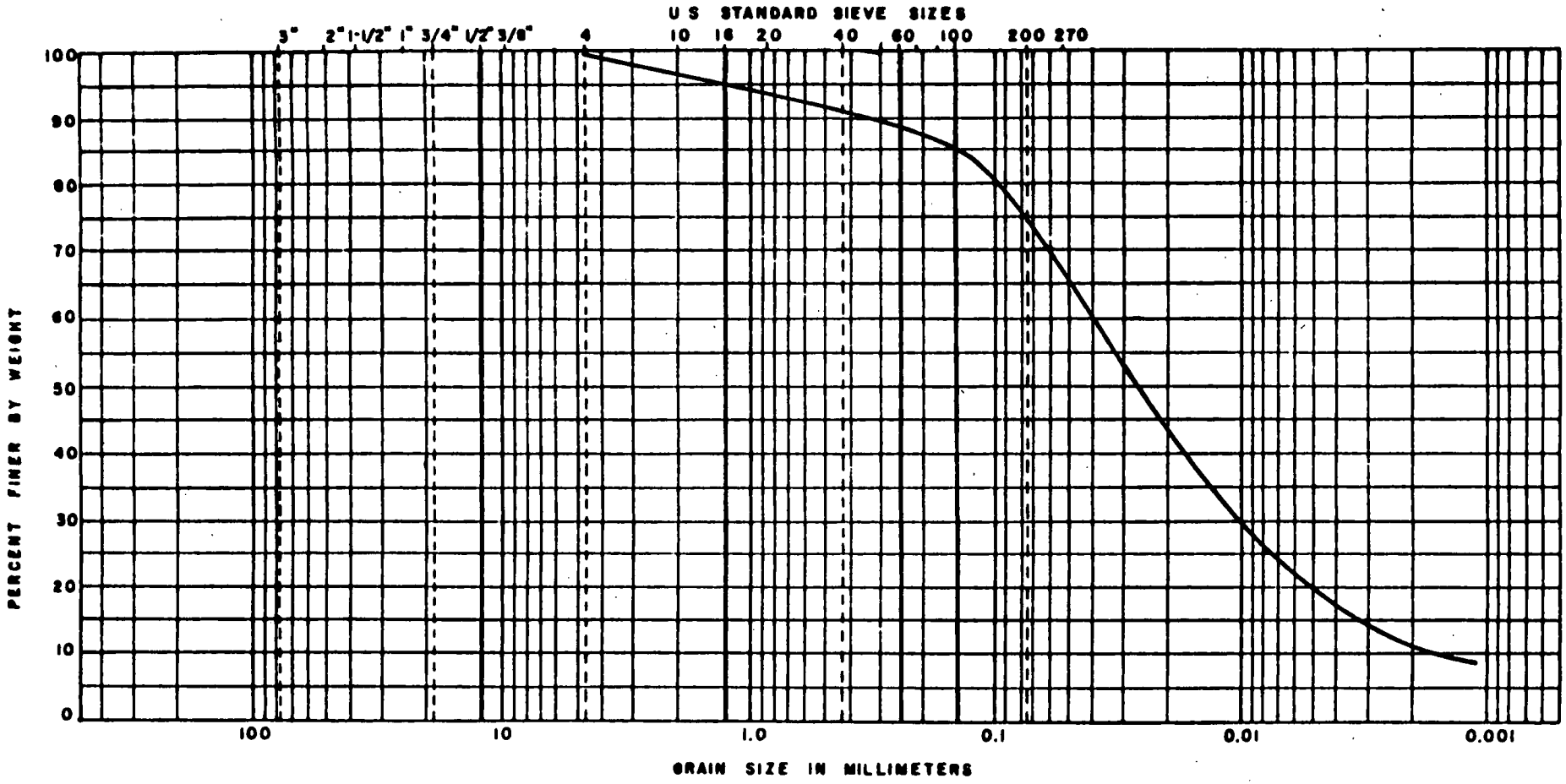
BORING NO	ELEV. OR DEPTH	NAT WC	LL	PL	PI	DESCRIPTION OR CLASSIFICATION
6	7.0-9.0	15.1	25.5	16.3	9.2	

GRAIN SIZE DISTRIBUTION

JOB NO. 021-85-123

SOIL & MATERIAL ENGINEERS, INC.

DUNCAN-PARNELL, INC., RALEIGH 781



BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT SIZES	CLAY SIZES

BORING NO	ELEV. OR DEPTH	NAT WC	LL	PL	PI	DESCRIPTION OR CLASSIFICATION
8	2.0-4.0	23.1	27.9	22.8	5.1	

GRAIN SIZE DISTRIBUTION

JOB NO. 021-85-123

SOIL & MATERIAL ENGINEERS, INC.

142

3667

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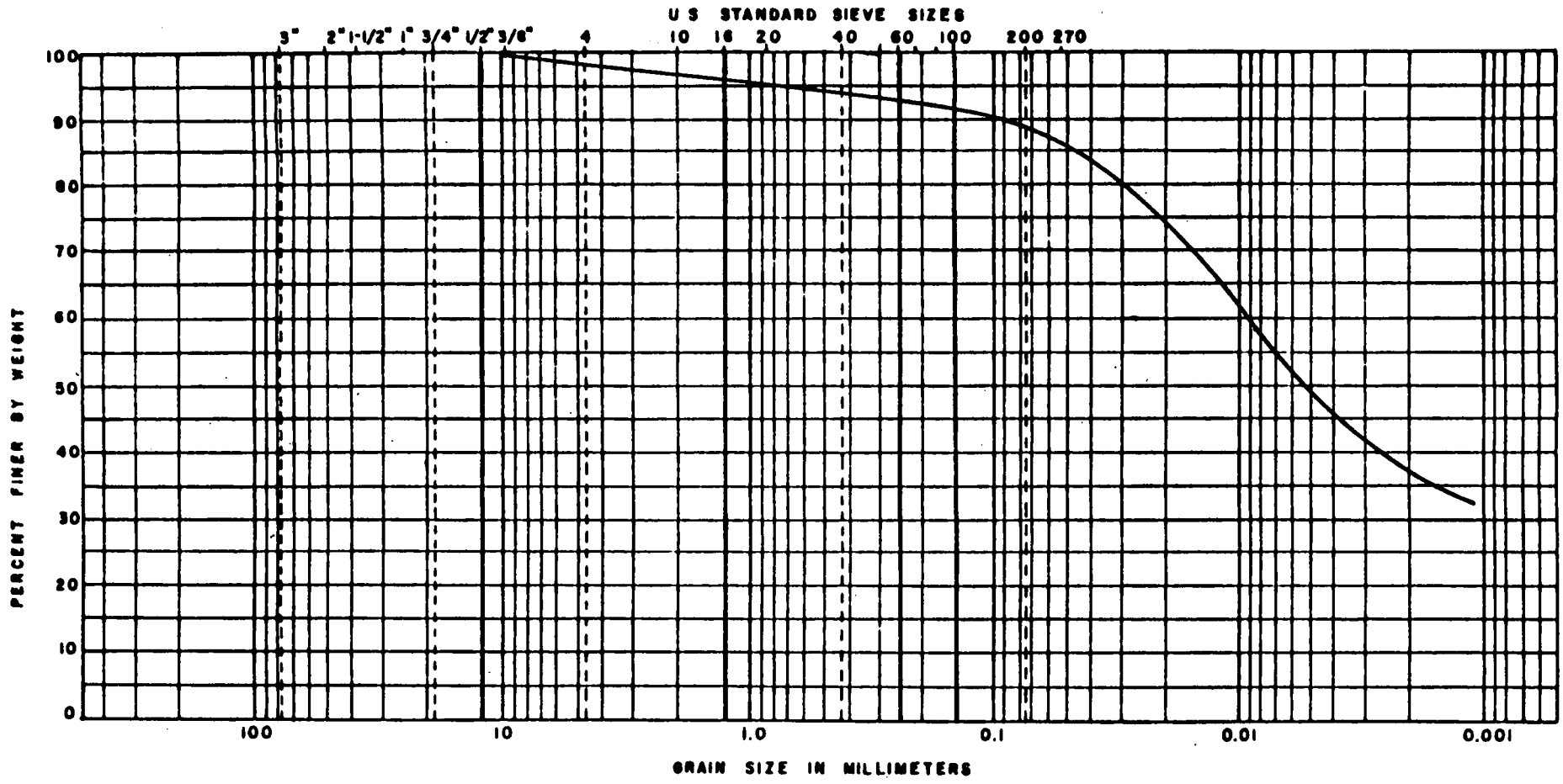


BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT SIZES	CLAY SIZES

BORING NO	ELEV. OR DEPTH	NAT WC	LL	PL	PI	DESCRIPTION OR CLASSIFICATION
8	10.5-12.0	19.8	36.4	19.8	16.6	

143

GRAIN SIZE DISTRIBUTION

JOB NO. 021-85-123

SOIL & MATERIAL ENGINEERS, INC.

DUNCAN-PARNELL, INC., RALEIGH 781

SM-19

2996

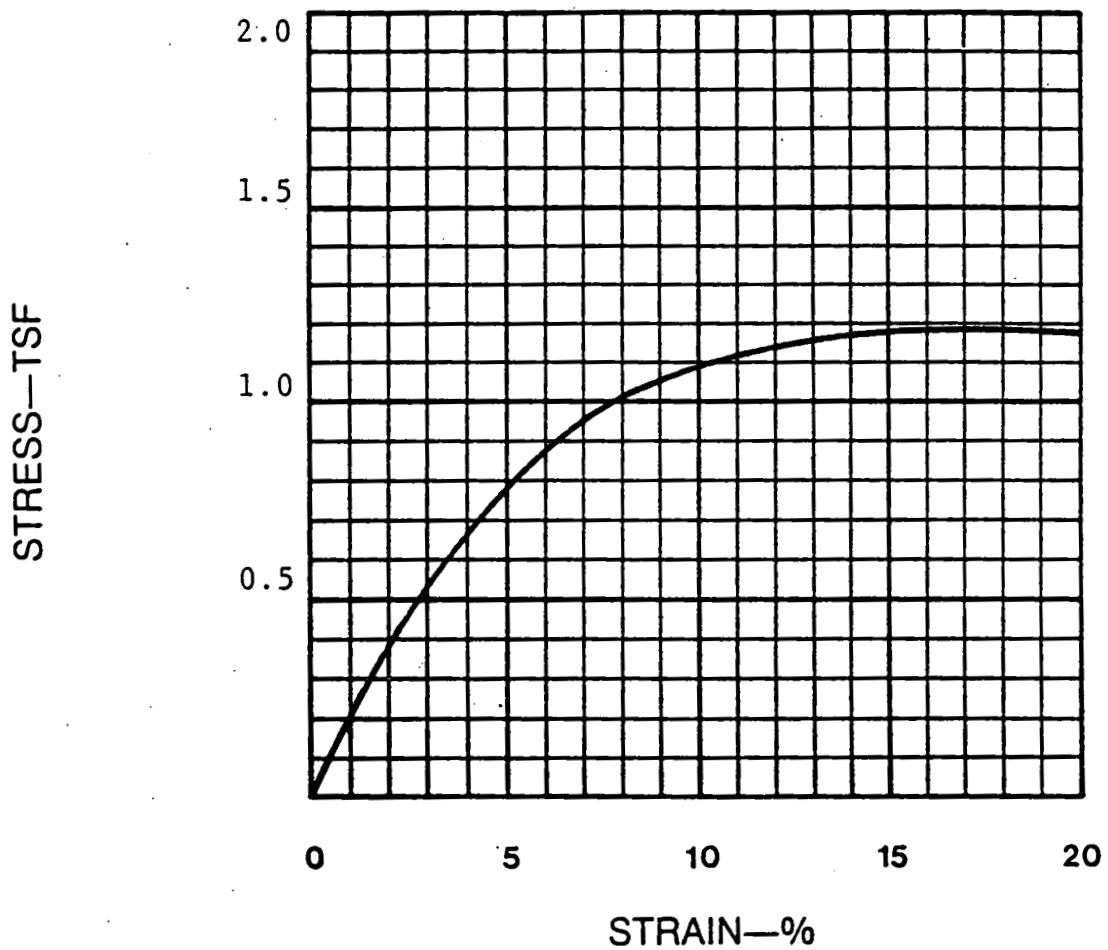
UNCONFINED OR TRIAXIAL COMPRESSION TEST

Client: Camargo Associates Ltd. Project No.: 021-85-123

Project: K-65 Storage Silos

Boring No.: 1 Sample Depth: 15 - 17

Sample Description:



Confining Pressure 15 psi

Height 5.6 in.

Diameter 2.8 in.

Dry Density 122.1 pcf.

Moisture Content 14.9 %

Strength 1.19 TSF

Failure Strain 17 %

SOIL & MATERIAL ENGINEERS, INC.
CINCINNATI, OHIO
(513) 874-4111

UNCONFINED OR TRIAXIAL COMPRESSION TEST

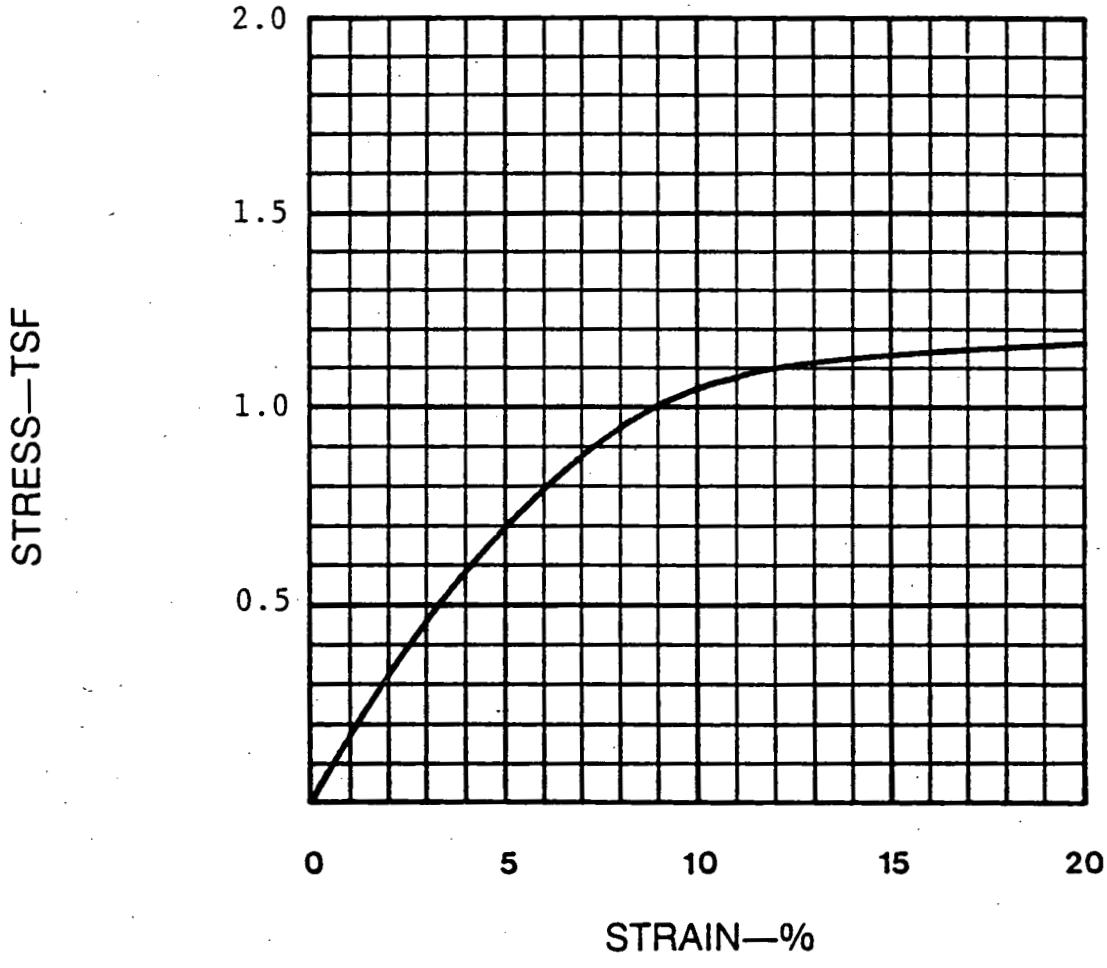
3667

Client: Camargo Associates Ltd. NLO Project No.: 021-85-123

Project: K-65 Storage Silos

Boring No.: 1 Sample Depth: 20.0 - 22.0

Sample Description:



Confining Pressure 20.0 psi

Height 5.6 in.

Diameter 2.8 in.

Dry Density 127.3 pcf.

Moisture Content 12.2 %

Strength 1.19 TSF

Failure Strain 17.8 %

SOIL & MATERIAL ENGINEERS, INC.
CINCINNATI, OHIO
(513) 874-4111

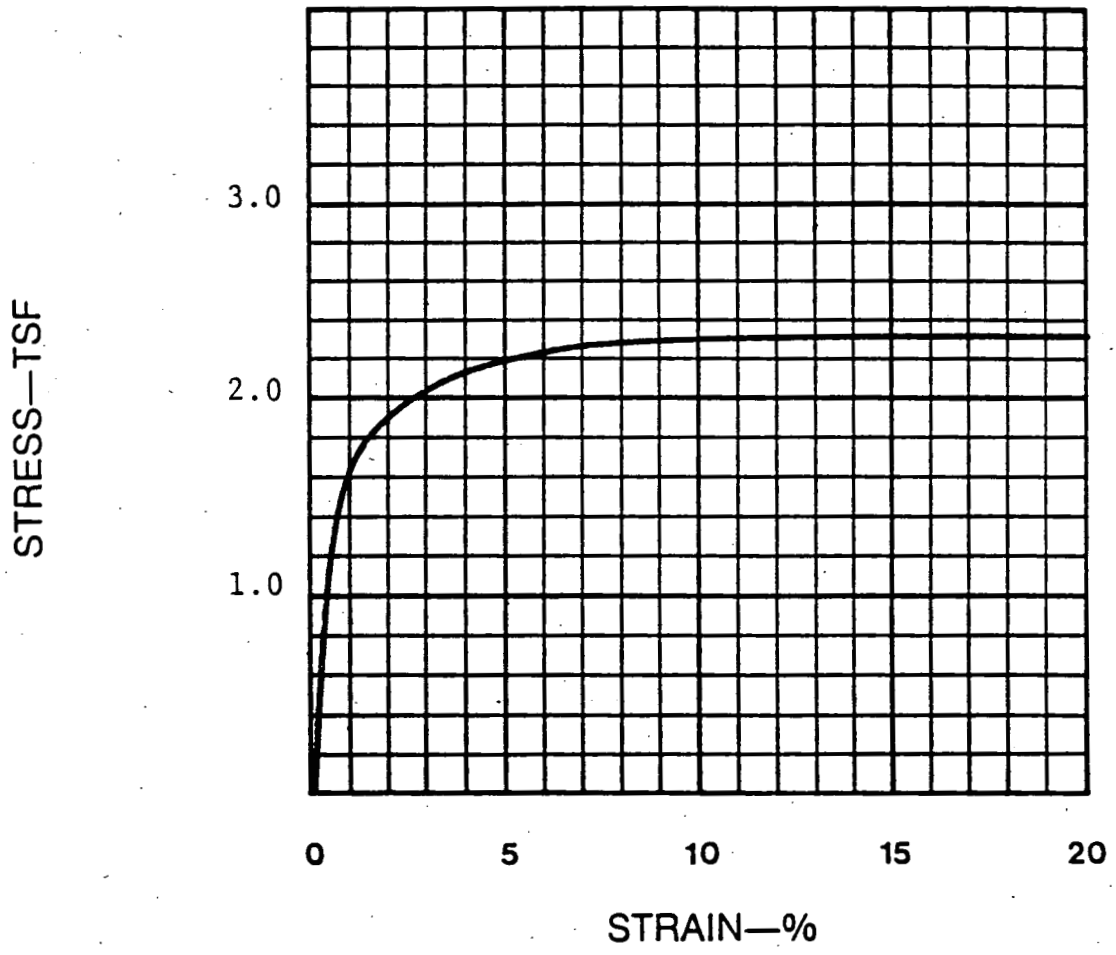
UNCONFINED OR TRIAXIAL COMPRESSION TEST 3667

Client: Camargo Associates Ltd. Project No.: 021-85-123

Project: K-65 Storage Silos

Boring No.: 2 Sample Depth: 2.0 - 4.0

Sample Description:



Confining Pressure 5.0 psi

Height 5.6 in.

Diameter 2.7 in.

Dry Density 101.9 pcf.

Moisture Content 20.7 %

Strength 2.28 TSF

Failure Strain 6.2 %

SOIL & MATERIAL ENGINEERS, INC.
CINCINNATI, OHIO
(513) 874-4111

UNCONFINED OR TRIAXIAL COMPRESSION TEST

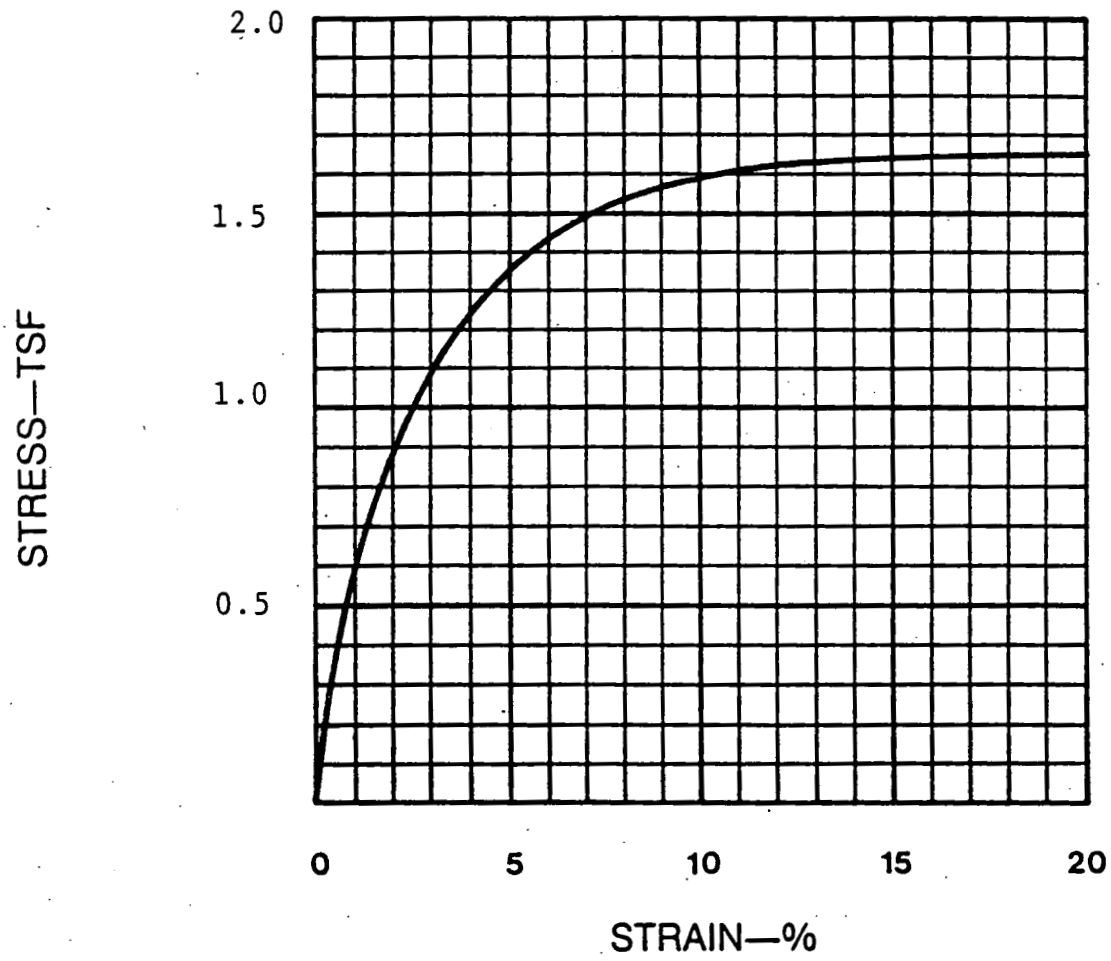
3667

Client: Camargo Associates Ltd. Project No.: 021-85-123

Project: K-65 Storage Silos

Boring No.: 2 Sample Depth: 5.0 - 7.0

Sample Description:



Confining Pressure 5 psi

Height 4.8 in.

Diameter 2.7 in.

Dry Density 107.6 pcf.

Moisture Content 20.5 %

Strength 1.65 TSF

Failure Strain 19 %

SOIL & MATERIAL ENGINEERS, INC.
CINCINNATI, OHIO
(513) 874-4111

UNCONFINED OR TRIAXIAL COMPRESSION TEST

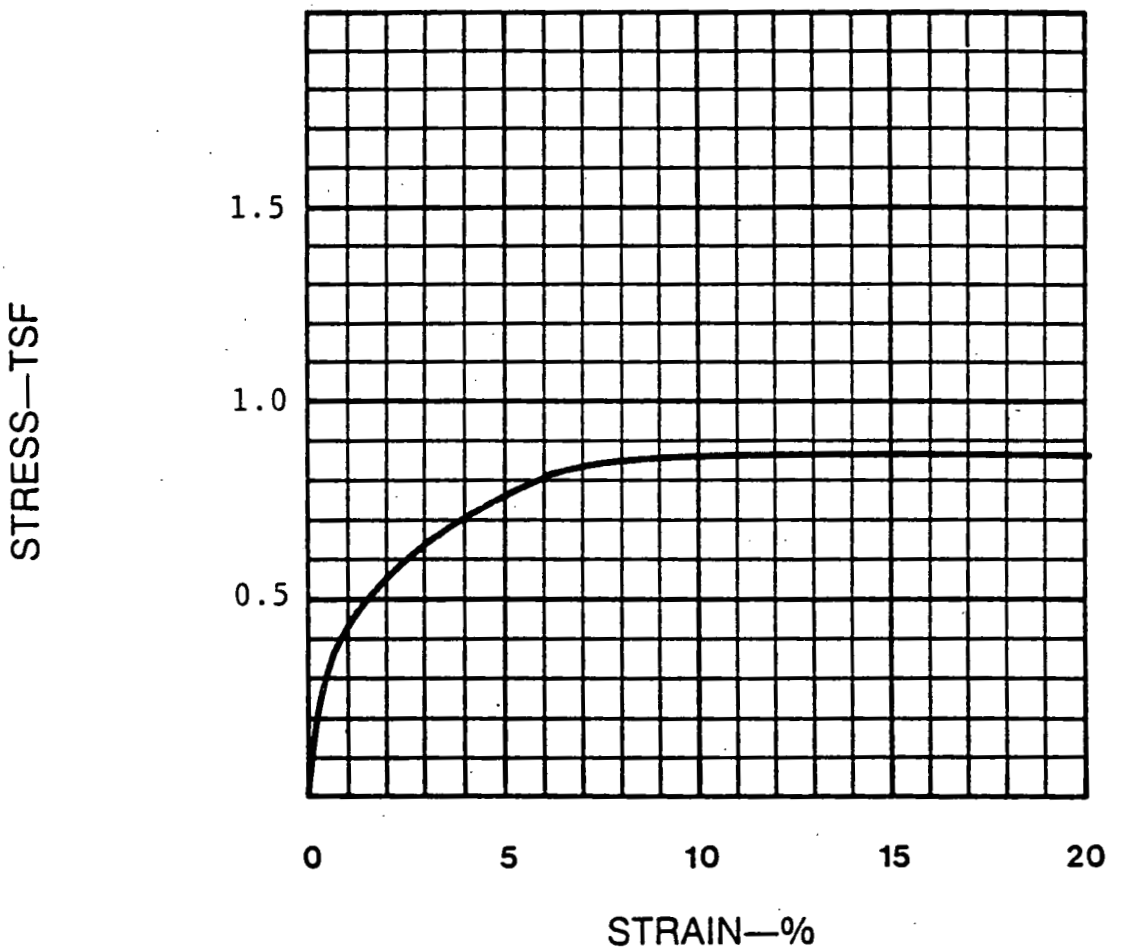
3667

Client: Camargo Associates Ltd. NLO Project No.: 021-85-123

Project: K-65 Storage Silos

Boring No.: 2 Sample Depth: 10.0 - 12.0

Sample Description:



Confining Pressure 11.4 psi

Height 5.5 in.

Diameter 2.9 in.

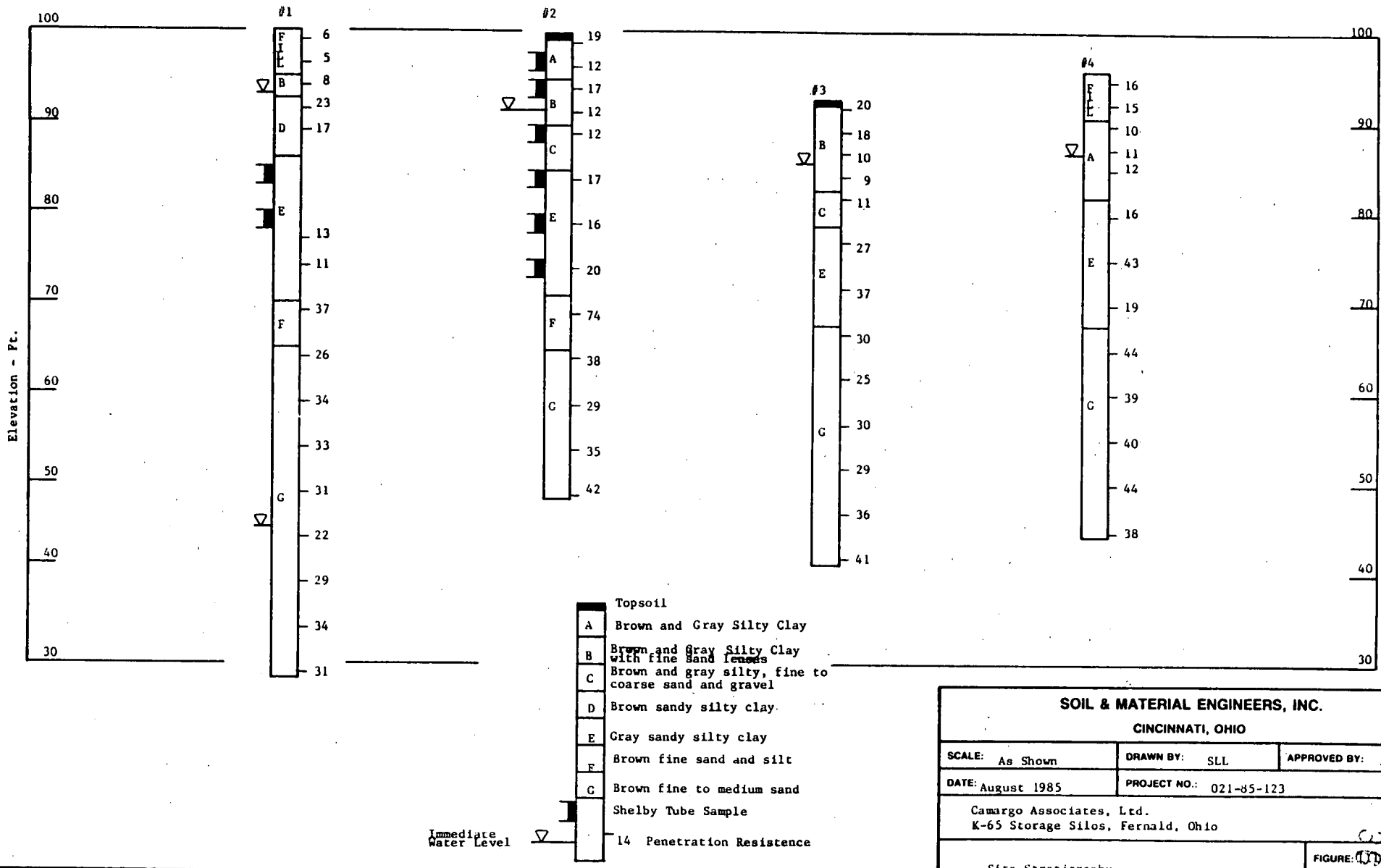
Dry Density 106.1 pcf.

Moisture Content 19.8 %

Strength 0.82 TSF

Failure Strain 6.2 %

SOIL & MATERIAL ENGINEERS, INC.
CINCINNATI, OHIO
(513) 874-4111



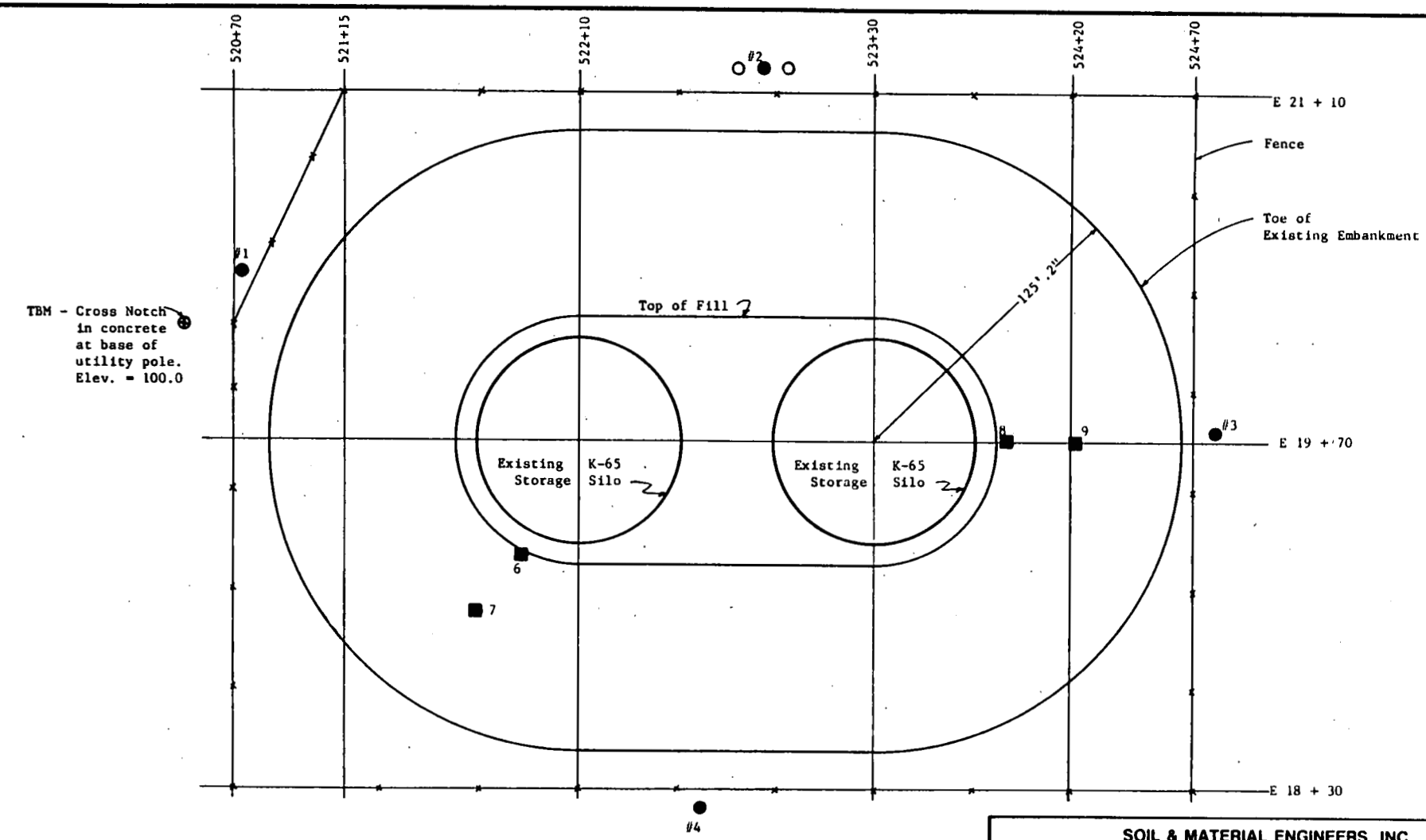
SOIL & MATERIAL ENGINEERS, INC.
CINCINNATI, OHIO

SCALE: As Shown	DRAWN BY: SLL	APPROVED BY: JEV
DATE: August 1985	PROJECT NO.: 021-85-123	

Camargo Associates, Ltd.
K-65 Storage Silos, Fernald, Ohio

Site Stratigraphy

FIGURE: 3D -2



North

Scale

0 20' 40'

● Test Boring

○ Auger Boring

■ Hand Sample Boring

SOIL & MATERIAL ENGINEERS, INC.

CINCINNATI, OHIO

SCALE: Graphic	DRAWN BY: SLL	APPROVED BY: JEV
DATE: August 1985	PROJECT NO.: 021-85-123	

Camargo Associates, Ltd
K-65 Storage Silos, Fernald, Ohio

Test Boring Location Plan

FIGURE: III - 1

APPENDIX IV

SEISMIC INVESTIGATION
K-65 TANK EVALUATION, NLO, INC.
FERNALD, OHIO

SECTION	PAGE NUMBER
I. Site Seismic Considerations	1
II. Regional Geology	
2.1 Physiography	4
2.2 Stratigraphy	5
2.3 Structural Geology	6
III. Seismological Study	
3.1 Historical Seismicity	11
3.2 Postulated Source Mechanisms	12
3.3 Probabilistic Bedrock Motion Characteristics	14
IV. Generation of Synthetic Ground Motions	
4.1 Elastic Subgrade Properties	19
4.2 Design Basis Earthquakes	20
REFERENCES	23

SECTION I

SITE SEISMIC CONDITIONS

K-65 TANK EVALUATION, NLO, INC.

FERNALD, OHIO

The objective of this study is an assessment of the magnitude of seismic ground motions that can be reasonably expected to occur during the service life of the K-65 tanks. Site specfic studies for developing seismic ground motions require the following steps[1]:

(1) Geological and Seismological Study to identify the type and location of earthquake sources that can potentially impact the site.

(2) Establish Average Recurrence Rates for each source to determine the return period and magnitude for both the major source and local source, if appropriate.

(3) Determine Ground Motion Characteristics for the design source using either empirical or analytical procedures.

There are certain aspects of structural design which have a direct effect on the details of the ground motion study: recurrence intervals, e.g. design life time, and the choice of time history or response spectrum description of the ground motion. For this seismic study, a 50 year design life is assumed for the K-65 tanks and a family of earthquake time histories are generated. Because of the subjective nature of seismic evaluations, an attempt has been made to clearly present the decision making process leading to our final recommendations.

This report presents a summary of the regional geology and seismology to provide a basis for defining potential tectonic mechanisms. Much of the information presented in this review was obtained from the FSAR for the Wm. H. Zimmer Nuclear Power Plant. This information has been supplemented with subsequent data obtained from the Western Ohio-Indiana Seismic Array and United States Geological Survey open-file reports.

Two synthetic earthquakes were generated in the preparation of this study for use as input ground motion for the numerical evaluation of the K-65 tanks. Both earthquakes reflect ground motion characteristics for a 90% probability of occurence within the assumed 50 year design life. The two time-histories are developed using different assumptions for intensity functions used to simulate the transient character of real earthquakes. Design spectra for these design earthquakes are provided for reference.

SECTION II

REGIONAL GEOLOGY

K-65 TANK EVALUATION, NLO, INC.

FERNALD, OHIO

On December 16, 1811, the largest earthquake man has recorded on the North American continent occurred at New Madrid, Missouri. This Intensity XII (MM) event was followed by equal intensity events on January 23, 1812, and February 7, 1812. These earthquakes were felt over an area of 2,000,000 square miles. Three hundred and fifty miles to the northeast, these events were felt as Intensity VI-VII (MM) events in the Cincinnati region[2]. An understanding of the geologic origin of the Cincinnati region and its tectonic coupling to adjacent reqions such as New Madrid is important to the development of site specific seismic characteristics.

Earthquakes occurring within the Eastern United States are of tectonic origin in that they are associated with large-scale strains in the crust of the earth as opposed to earthquakes associated with volcanic sources. Tectonic earthquakes are generally assumed to be caused by slippage along planes of weakness (faults) that separate the large plates forming the earth's crust. The concept of plate tectonics is straight forward: the crust of the earth can be divided into six major plates and many smaller ones that move relative to each other at velocities ranging from a few centimeters per year to up to 20 or more[4]. A recent estimate of plate boundary locations is shown on Figure 2.1. Note that the Cincinnati region lies within the North American Plate.

The great New Madrid earthquakes of 1811-12 and all other earthquakes affecting the Cincinnati region have had their source located well within the North American tectonic plate. While mechanisms for earthquakes that occur along boundaries of plates are understood in terms of relative plate movements and tectonics, no similiar understanding yet exists for earthquakes that originate within tectonic plates. Intraplate movements or faults near the Cincinnati region are obsured by a mantle of sedimentary and glacial deposits. The eventual determination of seismic source mechanisms in this region will require a better understanding of regional geology.

2.1 Physiography

The physiography of the eastern United States are dominated by northeast-trending provinces associated with the Appalachian System. These features roughly parallel the boundary of the North American continental mass as shown on Figure 2.2. Physiographic provinces are regions of similiar geologic structure, rock type, and geomorphic history.

The region surrounding the NLO facility includes portions of the Interior Plains and the Appalachian Highlands Physiographic Divisions[3]. Within each such division are areas of similiar structure and climate that have a unified land formation history. The NLO facility itself lies within the Interior Plains Physiographic Division.

In the NLO vicinity there are two physiographic provinces within the Interior Plains Physiographic Division. These are the Central Lowlands and the Interior Low Plateaus Provinces. The Central Lowlands Province contains plains of low relief with recent to mature erosional relief. Most of this province is characterized by the widespread

topographic effects of continental glaciation and by nearly horizontal rock strata. The Interior Low Plateaus Province is characterized by youthful to mature plateaus developed on the underlying bedrock structure. Surface topography is directly related to the underlying bedrock structure and composition.

The Appalachian Highlands Physiographic Division lies east of the NLO facility and includes the Appalachian Plateaus and the Valley and Ridge Provinces. The Appalachian Plateaus Provinces is developed from mountains which were repeatedly uplifted and eroded. The province remains as a shallow synclinal structure that is hightly dissected with significant topographic variation. The Valley and Ridge Province is characterized by a topography of alternating ridges and valleys generally trending northeast to southwest. This topography was produced by differential erosion of folded and thrust-faulted limestones, dolomites, shales and sandstones. Most of these strata dip to the southeast.

2.2 Stratigraphy

The stratigraphic sequence in the NLO region consists of sedimentary strata, ranging in age from Quaternary to Cambrian, reference Figure 2.3. The sedimentary sequence is underlain by Precambrian igneous, sedimentary, and metamorphic rocks. Precambrian rocks are not exposed in this region and are known mainly from deep borehole studies. The distribution of the surface geologic features is shown on Figure 2.4. Maps depicting the distribution of major geological units in both the surface and subsurface are presented on Figure 2.5. These maps indicate that the NLO site stratigraphy consists of Cambrian strata overlain by Ordovician strata.

2.3 Structural Geology

The NLO facility lies within the Central Stable Tectonic Region. This region is a tectonically stable area characterized by gently dipping Paleozoic strata that overlie a basement complex of Precambrian rocks. The mild deformations of the Paleozoic strata attests to the long term tectonic stability of the Central Stable Region. The tectonic history of this region is that of steadily and gently subsiding basins and compensating dome or platform areas. The gently dipping rocks of the Central Stable Region grade to the southeast into the steeply dipping rocks of the Central and Southern Appalachian Tectonic Regions.

The majority of both Ohio and Indiana is underlain by a well-deformed basin and arch framework as shown on Figure 2.6. The regional tectonic features on Figure 2.6 are defined by the extent of various stratigraphic units and are therefore only an approximation of the structural features. Nearly centered on the NLO site, the Cincinnati Arch dominates the local tectonic structure. The Cincinnati Arch is a broad, positive structural feature between the Appalachian Basin to the east and the Illinois Basin to the west. The arch extends from Tennessee, through Kentucky, along the Indian-Ohio state line. The Cincinnati Arch is itself composed of several distinct structural features: the Nashville Dome, the Cumberland Saddle, the Jessamine Dome, and the Indiana-Ohio Platform.

Containing the NLO site within its northern extremity, the Jessamine Dome (Lexington Dome) is distinquished from the Ohio-Indiana Platform by a slightly greater regional dip. Significant development of the Jessamine Dome began during Middle Devonian time and continued intermittently throughout the Paleozoic Era.

The distribution of strata folds having axial traces of 2 miles or greater in length are shown on Figure 2.7. These folds have all been interpreted as being within the sedimentary strata. There are three directions of axial fold traces in the region surrounding the NLO facility: a northwest to southwest system to the west of the facility, a north to south system north of the site, and a northeast to southwest system located southeast of the site.

The distribution of reported faults within the regional area having traces of 2 miles or greater in length are presented on Figure 2.8. As with folds, the faults have been interpreted as occurring within the sedimentary strata. The ages of faults in this region are assigned based on the youngest strata cut by the fault. There are three principal trends of faulting within the regional area: an east to west system, a northeast to southwest system, and northwest to southeast system.

The east to west system consists of a series of discontinuous fault zones extending from southwestern Illinois through eastern Kentucky referred to by the Illinois State Geological Survey as the Rough Creek Lineament system. The major movement along these faults is considered to be vertical with some strike-slip movement. Each of the fault zones in this system has been reported to displace Pennsylvanian strata. The youngest of the faults appear to be pre-late Cretaceous in age.

South of the NLO facility, the northeast to southwest trending faults include a cluster at the southern externity of the Jessamine Dome and in the Appalachian Basin. The Appalachian Overthrust Belt is the most hightly developed zone of faulting in this region. The faults in the

northeast to southwest system are generally high angle vertical faults. Strata break evidence indicates that most of this fault movement occurred during the Paleozoic Era.

The northwest to southeast trending faults are the least developed of the three principal directions of faulting and extends from the Mt. Carmel Fault west of the NLO facility to the Appalachian Overthrust Belt southeast of NLO. Much of the faulting in this direction occurred during the Alleghenyan Orogeny.

SECTION III

SEISMOLOGICAL STUDY

K-65 TANK EVALUATION, NLO, INC.

FERNALD, OHIO

A significant objective of this report is to develop an assessment of the magnitude and characteristics of seismic ground motions that can be reasonably expected to occur during the anticipated life of the K-65 tanks. Suggested procedures[1] for developing these design ground motion characteristics generally include the following steps:

(1) Determine the regional geologic setting and identify the location, extent, length, and seismicity of regional faults within 100 km of the proposed site.

(2) Define those faults that are capable, i.e. show movement in the past 10,000 years, and estimate the maximum capable magnitude and recurrence rate of this activity.

(3) Estimate the average recurrence rate relationship using available historical tectonic data. Typically this data contains a significant amount of information for the moderate magnitudes, but only a few points for the larger magnitudes that can significantly affect structures.

(4) Select a probability model for magnitude occurrence, typically assumed to be Poisson distribution, and estimate the probability of either a magnitude exceedence or the occurrence of a given magnitude during any selected time period.

(5) Having defined the source, the size of the postulated event, and

the distance of the site to the source, the final step is to develop appropriate ground motion parameters using either empirical relationships or analytical models.

The review of regional geology presented in Section II did not identify capable faults within the NLO region. Faults identified date to the Paleozoic era and do not show signs of recent movement, e.g., during the Pleistocene Epoch.

In the absence of identifiable active faults or active seismic structures, the use of regions characterized by consistency of geological structure and historical seismicity has been proposed [5,6] to evaluate seismic potential. These regions have commonly been termed seismic source zones or seismotectonic regions. Each seismotectonic region must accurately reflect the frequency of occurrence of historic seismicity. This implies that the known historical seismic data is sufficient to define the rate of seismic activity within a given seismotectonic region. Research [7] has shown that for zones in which the total number of earthquakes is less than 40, significant errors in the computed recurrence rates can occur. The maximum possible earthquake in a seismotectonic region is assumed to be defined by the largest that has occurred within this region in historical times. For the NLO region this may be the ground motions induced by the distant event of New Madrid, Missouri, or ground motions resulting from nearer events at Maysville, Kentucky, or Anna, Ohio.

The delineation of seismotectonic zones is subjective and subject to the limitations of the available information. Seismotectonic regions

within the eastern United States are shown on Figure 3.1 based on two recent studies of regional and national seismic activity. The general trends of the seismotectonic zones in these two interpretations are similar, yet the two maps are sufficiently distinct that the subjective nature of idealization should be evident. Both seismotectonic maps place the NLO site in the Central Stable Region where the seismicity appears to be associated with high basement features and margins of Paleozoic basins.

3.1 Historical Seismicity

The NLO facility is located in a seismically quiet region that has experienced ground motion principally due to events in adjacent regions. Because of the low level of seismic activity and the resulting lack of interest in the regional seismicity, the record of instrumentally monitored events is small and the record must be supplemented with newspaper accounts and other published references. Since the area has been populated for almost 200 years, it is likely that any earthquake of consequence has been reported.

The locations, Modified Mercalli Intensities, and years of occurrence for historical events within the NLO region are shown on Figures 3.2 and 3.3. The Modified Mercalli Intensity scale is presented on Figure 3.4. Ground motions from the New Madrid, Missouri, earthquakes of 1811-12 resulted in Intensity VI (MM) ground motions at the NLO site and appear to be the highest historical ground motion intensity. The closest reported earthquakes to the NLO site occurred near Maysville, Kentucky, approximately 64 miles to the southeast, and at Cincinnati, Ohio, approximately 10 miles to the southeast. Four earthquakes have been

reported in the Maysville area, two Intensity V (MM) events in 1928, an Intensity V (MM) event in 1933, and an Intensity III (MM) event in 1937.

Seventy-five miles north of the NLO Facility, thirty-seven earthquakes have been reported in the Anna, Ohio, area. These earthquakes are concentrated in a 40-mile long northeast to southwest trending zone extending southward from Lima, Ohio. During the 12-year period from 1928 to 1939, 24 of the known earthquakes occurred, including two earthquakes of Intensity VII (MM), one earthquake of Intensity VII-VIII (MM), one earthquake of Intensity VI+ (MM), and one earthquake of Intensity VI (MM). Epicenter distances from the NLO site range from 50 to 90 miles.

3.2 Postulated Source Mechanisms

Correlation of earthquake epicenters with geologic structures is valid only if the geologic structure near surface actually reflect deeper geologic structures within the earth's crust. Small earthquakes (Intensity IV (MM) or less) appear to have a random distribution within the NLO region. A few localized areas exist that are characterized by large earthquakes (Intensity VII (MM) or greater) that occur in sufficient frequency to establish these regions as seismic zones. These zones geographically coincide with geologic structure, indicating a possible relationship between the structures and the earthquake activity.

The New Madrid, Missouri, area has been the source of Intensity XII (MM) earthquakes, such as those of 1811-1812 that generated maximum historical ground motion at the site. The locus of epicenters for the New Madrid-type earthquakes is within the Reelfoot Tectonic Structure. The precise origin for these events has not been definitely established but

recent geophysical investigations suggest that abnormal stresses have accumulated at the intersection of the downwarped Mississippi Embayment with the pre-existing Pascola Arch. Faulting in the New Madrid, Missouri, area is not related to any geologic structure in the vicinity of the NLO site.

The earthquakes in the Wabash Valley area of southeastern Illinois and southwestern Indiana are clustered about the Sabash Valley Fault Zone. Recent fault plane solution studies have indicated that the stress patterns and earthquake mechanisms in this area are different than those in the New Madrid, Missouri, area. Seismic activity in the Wabash Valley area may be due to interaction along the flanks of the old Fairfield Basin and may be directly related to Wabash Valley surficial faults. The nearest approach of this area to the NLO site is 150 miles; faulting in the Wabash Valley area is not related to any geologic structure in the vicinity of the NLO site.

Several large and many small earthquakes have occurred in a small restricted region surrounding Anna, Ohio (Figure 3.3); this area is located on the northeast flank of the Jessamine Dome (Figure 2.6). The degree of seismic activity is dramatically different from that in the surrounding area, where only a very few low intensity earthquakes have occurred. Various interpretations relating the seismic activity to geologic structures exist. Faulting may exist at depth and be responsible for this concentration of seismic activity. As an alternate explanation, this area is also located near the confluence of the Kankakee and Findlay arches and the Indiana-Ohio Platform; and, this area may be a zone of

structural weakness. These theories and unpublished geophysical evidence suggest that the Anna, Ohio, area is unique in the region and that the seismic activity is associated with localized structural features; there is no reason to assume similar structures near the NLO site. This epicentral area is about 80 miles from the NLO site.

A small number of low intensity earthquakes (Intensity III to V (MM)) have occurred near Maysville, Kentucky, approximately 64 miles to the southeast of the NLO site. These earthquakes may be associated with a structure related to the West Hickman-Bryan Station Fault Zone or they may simply represent a cluster of random earthquakes. Three other earthquakes (Figure 3.3) have occurred near Lexington, Kentucky, and may be associated with the same fault zone; they are the Intensity V (MM) earthquakes of 1850 and 1869 and the Intensity VI (MM) earthquake of 1854. No movement in the sedimentary strata along this fault zone has occurred in post-Paleozoic time.

With the exception of those earthquakes associated with the Appalachian Folded Belt generally 180 miles to the southeast of the NLO site (Figure 3.2), most of the other earthquakes in the regional area appear to be random events, unrelated to known geologic structures.

3.3 Probabilistic Ground Motion Characteristics

There are numerous approaches to the determination of the appropriate seismicity for use in the design process. The most common approaches are to determine the regional seismicity surrounding the site and/or determination of the seismicity of individual faults believed of significance to the site. For the NLO region, the determination of

capable faults was not possible due to the thick surface layer of Pleistocene sediments that obfuscate the underlying crystalline earthquake occurrence and intensity (MM).

The regional seismicity for a given site is determined by examining the earthquakes that have occurred within a given radius of the site and establishing a magnitude or intensity recurrence curve for this region. For this study, recurrence relationships are established in terms of earthquake intensity (MM) due to the preponderance of historical data obtained prior to the availability of instrumental recordings. It should be noted that such historical accounts are poor scientific records that are undoubtedly affected by the low density and distribution of population during the settlement of this region.

Recurrence relationships for the NLO region were obtained from two recent published probabilistic studies of the relative seismic hazard of this region. The most recent of these studies [8] examined the influence of three plausible seismic models on the recurrence relationships predicted within the Central Stable Region. Within the NLO Region, all seismic models predicted the recurrence relationship shown on Figure 3.5. This agreement was the best observed within the Central Stable Region and the good agreement between seismic models is not typical. The second recurrence relationship was obtained from a recent study [9] of the seismicity near Sharpsburg, Kentucky, approximately 90 miles southeast of the NLO facility. The seismic model in this study used the seismotectonic provinces previously shown on Figure 3.1. Good agreement exists between the recurrence relationships.

To estimate the probability of occurrence of earthquakes, it is assumed that earthquakes occur randomly in time and that a Poisson distribution is applicable[9]. Using a Poisson distribution, the probability of occurrence that X number of events will occur over a span of time t is given by:

$$P_X(x) = \frac{(\lambda t)^x e^{-\lambda t}}{x!} \qquad x = 0,1,2,3 \text{ ---}$$

Where λ is equal to the inverse of the recurrence interval for a particular intensity (MM) event. The application of Poisson distribution to the two recurrence relationships provides estimates of the probability of earthquake occurrence which can be represented as shown on Figure 3.6. Assuming Poisson theory to be valid, the data can be interpreted to indicate that an earthquake of intensity V (MM) has 90% probability of at least one occurrence within a time of 50 years.

The next step in the development of probabilistic ground motion characteristics is the conversion of a probable earthquake intensity to ground or bedrock peak acceleration and velocity value for use in the design process. Earthquake intensities (MM) are related to earthquake magnitudes (Richter) in this report using the following relations[10].

$$M = 1 + 2/3\ I_0$$

Where M is magnitude and I_0 intensity. Earthquake magnitude versus peak <u>ground</u> motion acceleration relationships are shown on Figure 3.7. The values present by Housner[11] are generally found to be on the high side and, in general, actual earthquakes generated in the western United States produce somewhat smaller values. The Computer Science

Corporation[12] relationship is based on a computer evaluation of nearly 1,600 earthquake accelerograms from around the world. These earthquakes occurred in widely scattered regions and no attempt was made to obtain subgrade profiles for each region. As a result of that, the resulting peak accelerations are those occurring near the ground surface and not necessarily at bedrock. Design values of peak acceleration are a function of the assumed design life span: the longer the design life span the larger the design values for peak acceleration.

Within this report, two synthetic time histories are developed. Development of synthetic ground motions is based on the defined peak accelerations and velocities, but also requires estimates of both ground motion duration and the freefield ground motion spectra. A general relationship of earthquake duration versus magnitude as proposed by Housner[11] is given on Figure 3.8. While this relationship is used to define strong motion duration within this report, it should be noted that a computer analysis of approximately 1,600 earthquakes time-histories[12] failed to indicate a clear relationship between duration and magnitude. Published accounts of intra-plate seismic events in the eastern United States strongly indicates that such events are of significantly longer duration than predicted by the Housner relationship. The dashed line on Figure 3.8 is an adjusted duration relationship for intra-plate events.

The probabilistic ground motion study indicates that the design earthquake having 90% probability of occurrence during a 50 year design life is an Intensity IV (MM) event having the following characteristics:

- Peak Acceleration = 0.04 to 0.06 g
- Peak Velocity = 2.0 cm/sec
- Duration = 10 seconds

These ground motion parameters are in excellent agreement with the results of a recent probabilistic study performed by the U.S. Geological Survey[6]. Maps of horizontal bedrock velocitieis and accelerations with a 90 percent probability of not being exceeded in 50 years are shown in Figure 3.9. These maps indicate a peak acceleration of 0.05 to 0.06 g and a peak velocity of 2.0 cm/sec.

SECTION IV

SYNTHETIC GROUND MOTIONS

K-65 TANK EVALUATION, NLO, INC.

FERNALD, OHIO

As part of this study, two synthetic earthquake ground motion time-histories are generated for use in the analysis of the K-65 tanks. The use of synthetic ground motions allows control of the spectral energy distributions used in the analysis. Lacking a locally recorded seismic strong motion time-history, it is necessary to either generate synthetic records or use available accelerograms of actual earthquakes. The vast majority of available time-histories are from events occurring in the edge of the Pacific Plate (see Figure 2.1). For these events, a causative fault is identifiable and focal mechanisms are related to fault movements. The NLO site is located within the North American Plate and no causative faults or forcal mechanisms can be identified. Thus the use of available time-histories offers little hope of simulating site specific spectral characteristics.

4.1 Elastic Subgrade Properties

The numerical analysis proposed for the K-65 tanks require knowledge of elastic subgrade properties including shear modulus and Poisson's ratio. Elastic soil properties can be determined in-situ or in the laboratory. For the NLO study, the elastic subgrade properties were determined in-situ using the crosshole seismic technique. The cross-hole seismic method determines the elastic subgrade properties by measuring the time required for a wave to travel from an impact energy source to

receivers in adjacent boreholes.

A profile of shear modulus values obtained from the cross-hole test at the NLO facility are shown on Figure 4.1. This data was verified using two empirical relationships. The first of the empirical relationships relates the shear modulus of a soil to its standard penetration resistance [13].

$$g = 1550N^{0.8} \quad (lb/IN^2)$$

The second empirical relationship relates soil void ratio and mean effective stress to shear modulus[14] as follows:

$$g = \frac{1230(2-97-e)^2}{1+e}\bar{\sigma}_0^{0.5} \quad (lb/IN^2)$$

Shear modulus values predicted by these empirical relationships are shown on Figure 4.1 and are in excellent agreement with those obtained from the cross-hole seismic test. Estimated values for subgrade Poisson's ratios and unit weights are also provided on Figure 4.1.

The shear modulus profile given in Figure 4.1 enables the fundamental site period to be estimated. Using the equivalent single layer method proposed by SEAOC[15], the fundamental site period at the NLO facility is estimated to lie within the range of 1.8 to 2.2 seconds. Target spectral energies used in the development of site specific ground motions reflect greater response energies over this frequency band.

4.2 Design Basis Earthquake

The method used for generation of the synthetic ground motion is based[16,17] on the ability to model any periodic function as a series of sine waves such as:

$$X(t) = \sum A_n \sin(\omega_n t + \emptyset_n)$$

where A_n is the amplitude and $\emptyset_n$ is the phase angle of the nth contributing sinusoid. A random number generator is used to produce a string of phase angles having a uniform distribution over the range of $\emptyset$ to 6.28 radians.

Each sinusoid contributes power to the proportional to A_n squared. Thus, the total power of the steady state motion is proportional to:

$$X(t) = \sum A^2_n \sin(\omega_n t + \emptyset_n)$$

An actual acceleration time history will, of course, contain an infinite range of sinusoids, each contributing to the total power of the motion. The series simulation used in the generation of synthetic ground motions uses only a finite number of discrete harmonics. Allowing the number of sinusoids in the motion to become very large, the total power in the synthetic motion will approach that of the actual target motion.

The series solution used in building the synthetic ground motion maintains a constant frequency content with time referred to as a stationary frequency distribution. The actual earthquakes, however, the frequency content is not stationary so that the relative contribution (or amplitude) of a given sinusoid will change with time. To simulate the transient character of real earthquakes, the stationary motions produced by the series solution are multiplied by a deterministic intensity function. For the earthquake generated as part of this report, a trapezoidal intensity function was used. The intensity function simply indicates that the levels of vibration will be zero initially and

increases with time to some maximum value. This maximum value will continue for a discrete period of time and then the energy will decrease and finally cease. Thus, the intensity function provides a beginning and an ending to the infinite series used to model the ground motion.

The target horizontal ground motion response spectra used to generate the synthetic earthquakes is based on published[18] spectra versus epicentral distance relationships for a Central United States Earthquake. This spectral relationship is shown in Figure 4.2. The target spectra reflects a fundamental site period of 1.8-2.2 Hz., a maximum acceleration of 0.06g, a maximum velocity of 2 cm/sec, and an estimated soil damping of 15%. The response spectra was estimated assuming the Newmark and Hall[19] relationships that peak spectral acceleration, velocity and displacement equal 2.12, 1.65, and 1.39 times the peak acceleration, velocity and displacement, respectively for 5% damping. Generated time-histories and response spectra curves for the two synthetic ground motions are shown on Figures 4.3 through 4.6. These synthetic motions correspond to an Intensity IV (MM) event having 90% probability of occurrence in 50 years.

References

(1) Suggested Procedures for Developing Seismic Ground Motions, Structural Engineers Association of California, San Francisco, CA, 1979.

(2) Fuller, Myron L., "The New Madrid Earthquake," Bulletin 494, U.S. Geological Survey, 1912.

(3) Final Site Assessment Report (FSAR), Wm. H. Zimmer Nuclear Power Plant, 1978.

(4) Burchfiel, B. Clark, "The Continental Crust," Scientific American, Vol. 249, No. 3, Sept., 1983, pp. 133.

(5) Drumheller, Joe C., et al, "Delineation of Seismotectonic Regions in the Southeastern United States," Proceedings of Earthquakes and Earthquake Engineering: The Eastern United States, Knoxville, TN, 1981.

(6) Algermissen, S.T., et al, Probabilistic Estimates of Maximum Acceleration and Velocity in Rock in the Contiguous United States, U.S. Geological Survey, Open-File Report 82-1033, 1982.

(7) Bender, B., Sensitivity Analysis for Seismic Risk Using a Fault Rupture, U.S. Geological Survey, Open-File Report 82-294, 1982.

(8) G. C. Klimkiewicz, et al, "Relative Seismic Hazard Assessment for the North Central United States," Eighth World Conference on Earthquake Engineering, San Francisco, 1984.

(9) Benjamin, J.R. and Cornell, C.A., Probability Statistics and Decision for Civil Engineers, McGraw-Hill, New York, NY, 1970.

(10) Richter, C.F., Elementary Seismology, W.H. Freeman, San Francisco, 1958.

(11) Housner, G.W., "Strong Ground Motion," chapter within Earthquake Engineering, Edited by Robert Wiegel, Prentice-Hall, Englewood Cliffs, N.J., 1970.

(12) Murphy, J.R., et al, Analysis of a Worldwide Strong Motion Data Sample to Develop and Improve Correlation, Computer Sciences Corporation, Arlington, VA, 1978.

(13) Ohsaki, Y. and Iwasaki, R., "On Dynamic Shear Moduli and Poisson's Ratios of Soil Deposits," Soil and Foundations, Japanese Society of Soil Mechanics and Foundation Engineering, Vol. 13, No. 4, December, 1973.

(14) Hardin, B.O., and Durnvich, V.P., "Shear Modulus and Damping in Soils: Design Equations and Curves," Journal of the Soil Mechanics and Foundations Division, ASCE, Vol. 98, No. SM7, 1972.

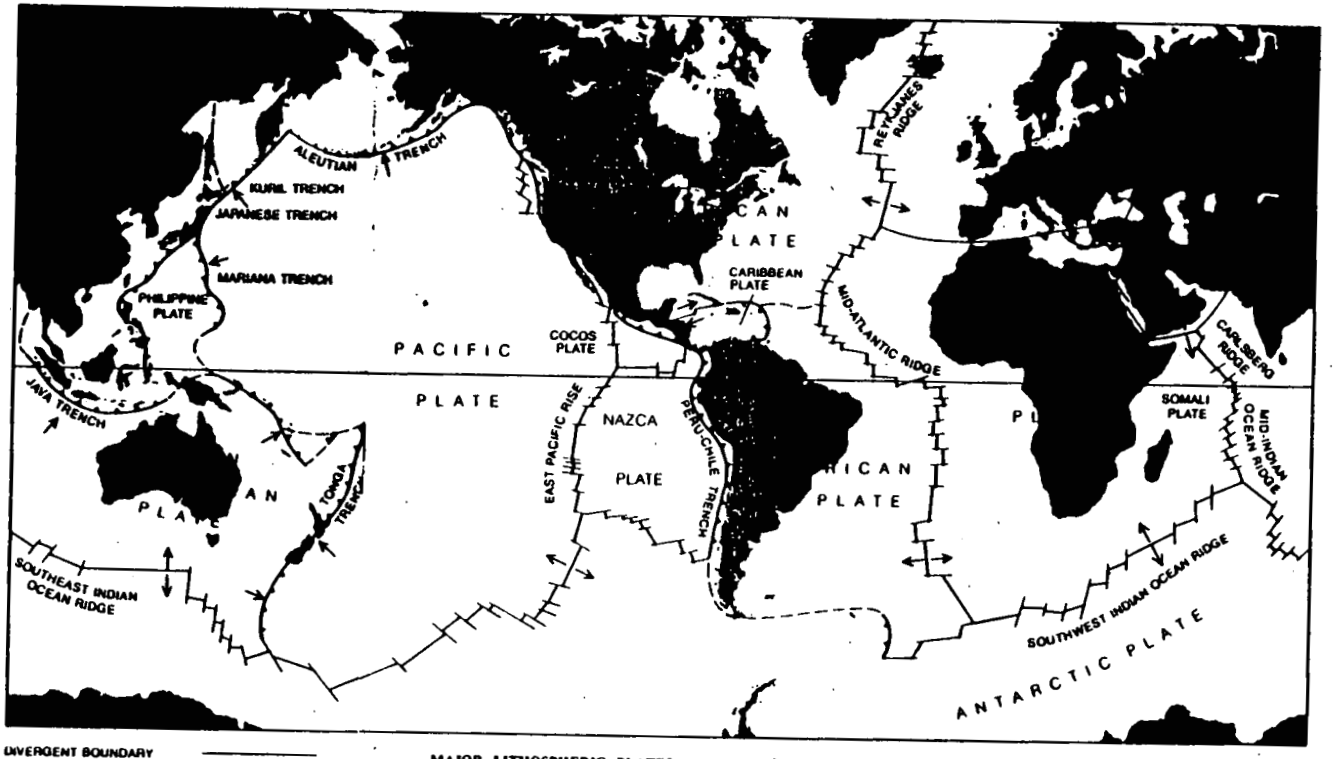
(15) Recommended Lateral Force Requirements and Commentary, Structural Engineers Association of California, San Francisco, CA, 1980.

(16) SIMQKE-A Program for Artificial Motion Generation, Dept. of Civil Engineering, Massachusetts Institute of Technology, November, 1976.

(17) PSEQGN-Artificial General of Earthquake Accelerograms, College of Engineering, University of California, Berkeley, California, March, 1969, Report No. EERC 69-3.

(18) Nuttli, Otto W., "Similarities and Differences Between Western and Eastern United States Earthquakes, and Their consequences for Earthquake Engineering," Proceedings of Earthquakes and Earthquake Engineering: The Eastern United States, Knoxville, TN, 1981.

(19) Newmark, H.M. and Hall, W.J., "Design Response Spectra," Earthquake Spectra and Design, Earthquake Engineering Research Institute, Berkeley, California.



MAJOR LITHOSPHERIC PLATES and their boundaries are mapped. The lithosphere consists of the crust and the rigid upper part of the mantle. In midocean, away from the spreading center, the lithosphere is about 100 kilometers thick. The upper five to seven kilometers is crust. The lithospheric plates are in motion with respect to one another, and the boundaries are defined according to this relative motion. At divergent boundaries the plates move apart; the spreading centers at the midocean ridges are divergent boundaries. At transform faults the plates slide past each other. At convergent boundaries the plates move together and one plate plunges under the other in the process of subduction. Thus oceanic crust is created at divergent boundaries and destroyed at convergent boundaries.

Figure 2.1 Global Tectonic Lithospheric Plates

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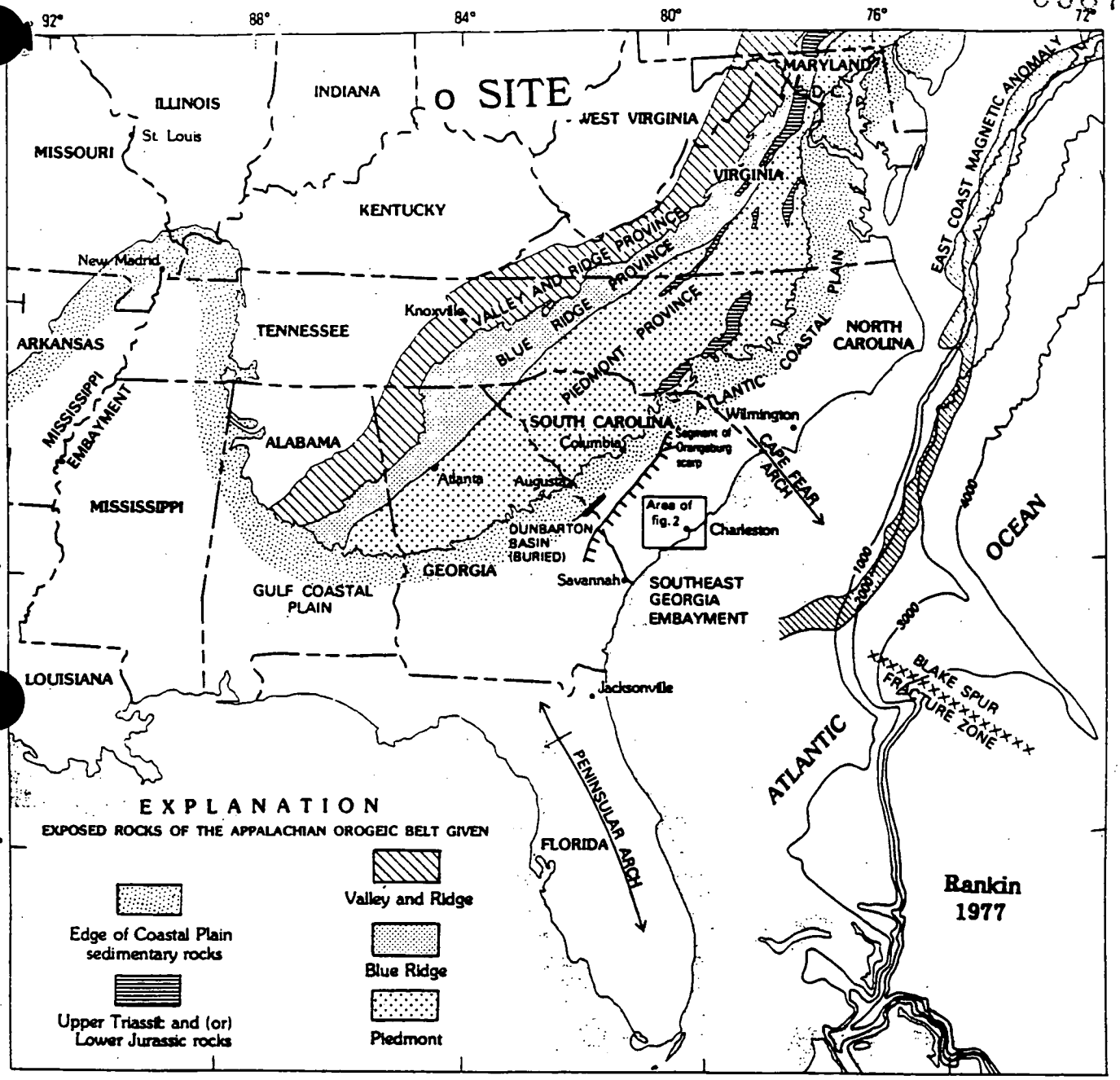
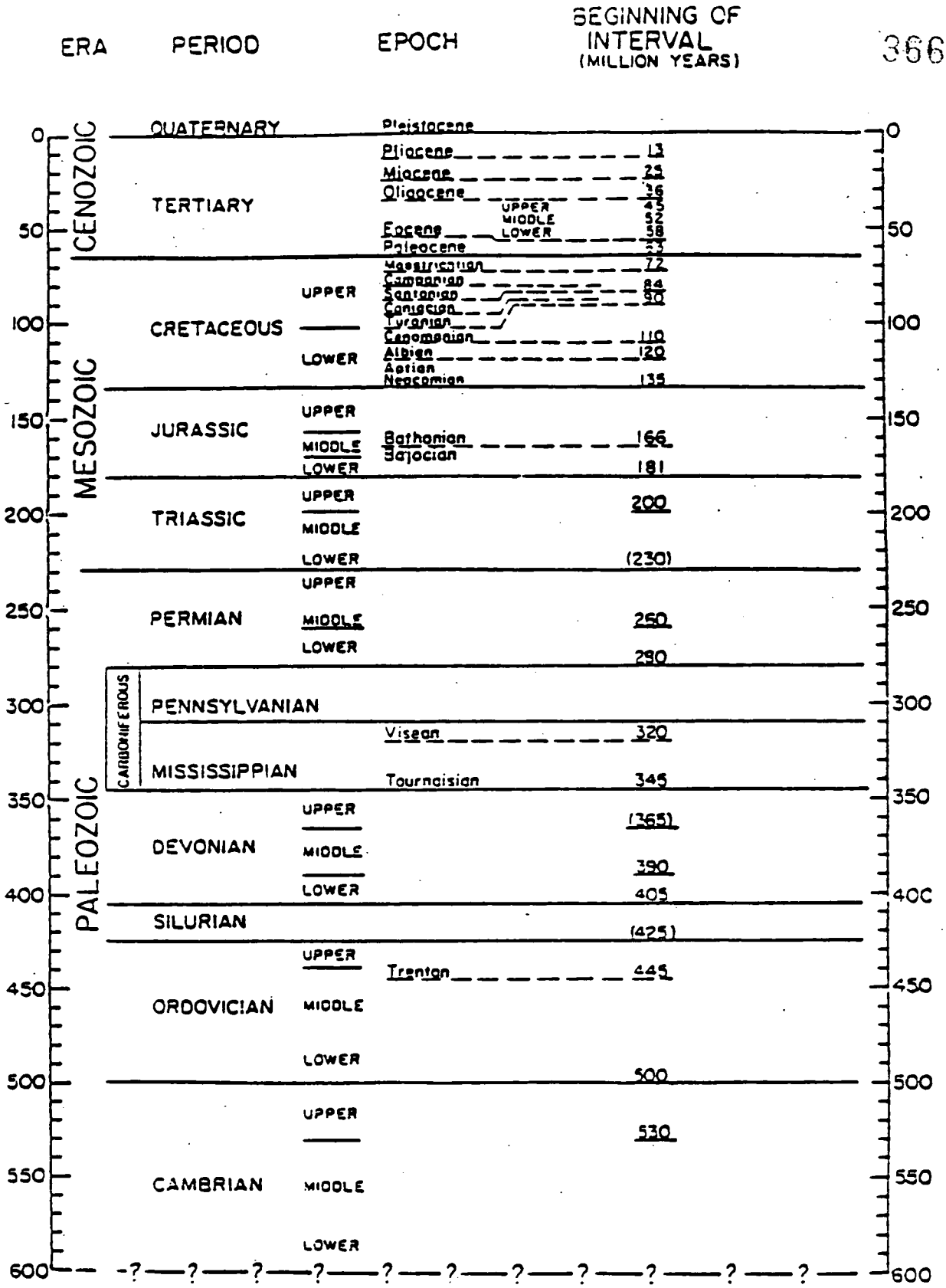


Figure 2.2 Physiographic Provinces



J. L. Kulp "Geologic Time Scale" Science, Vol. 133, No. 3459 April 14, 1961, p. 1105-14

Figure 2.3 Geologic Time Table

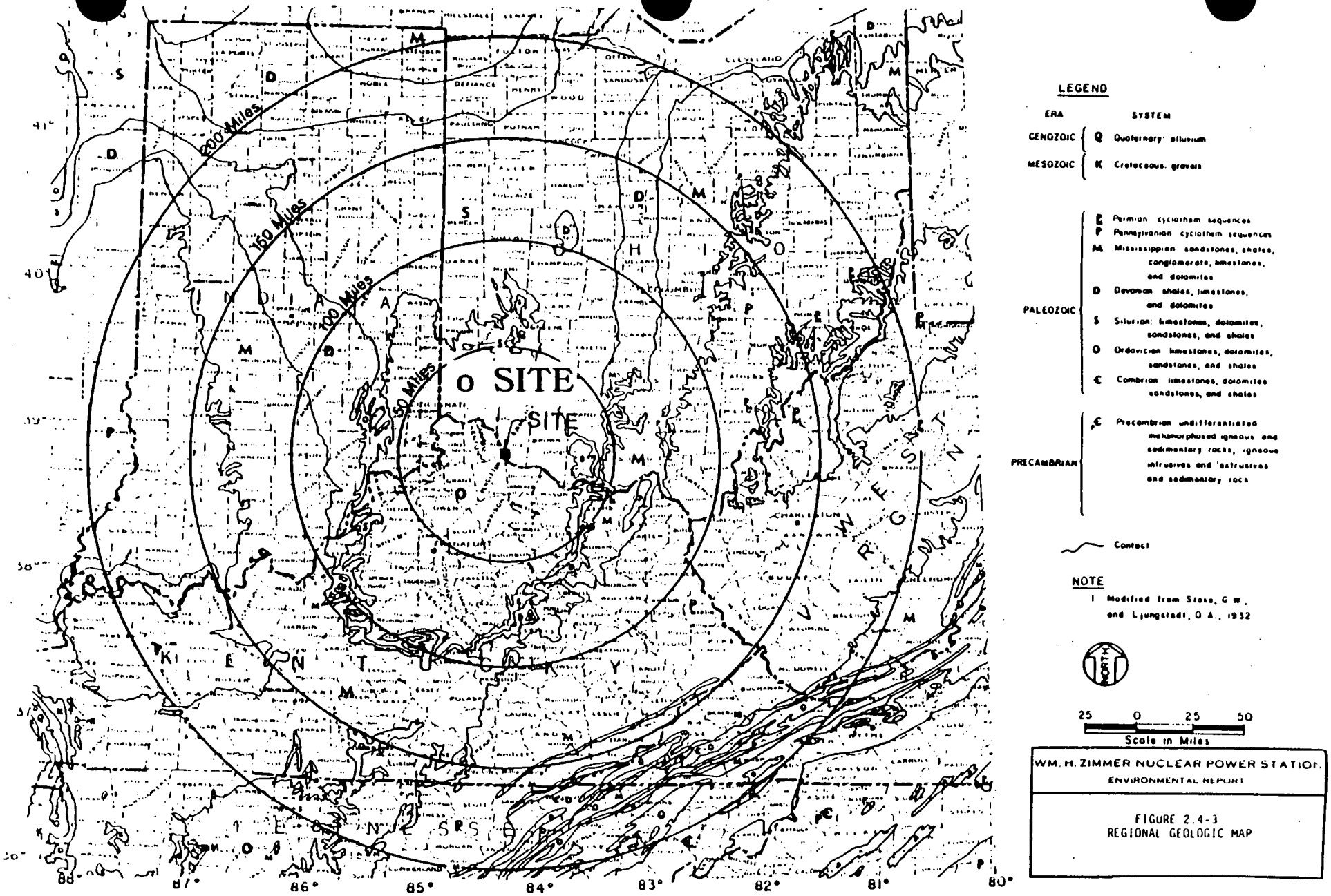
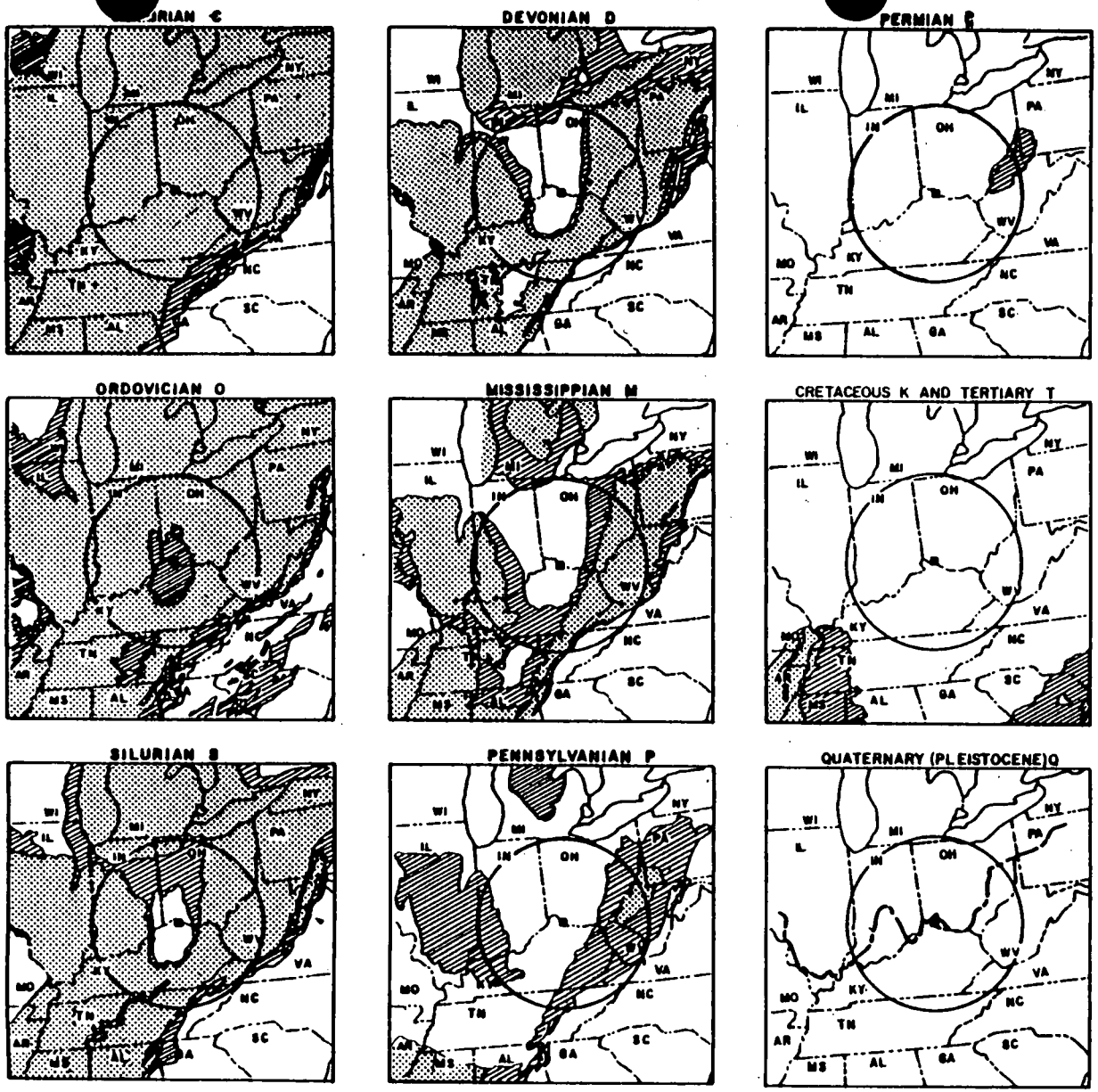


Figure 2.4 Surface Geologic Regions



LEGEND

- Absent
- Present at surface
- Known or inferred to be present subsurface
- Southernmost limit of Pleistocene glaciation

NOTE

1. Modified from Moore, R.C., 1958.
2. Limit of Pleistocene glaciation taken from Flint, R.F., 195

0 50 100 200
Approximate Scale in Miles

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FIGURE 2.4-4
SYSTEMATIC DISTRIBUTION MAPS

Figure 2.5 Distribution of Geologic Strata

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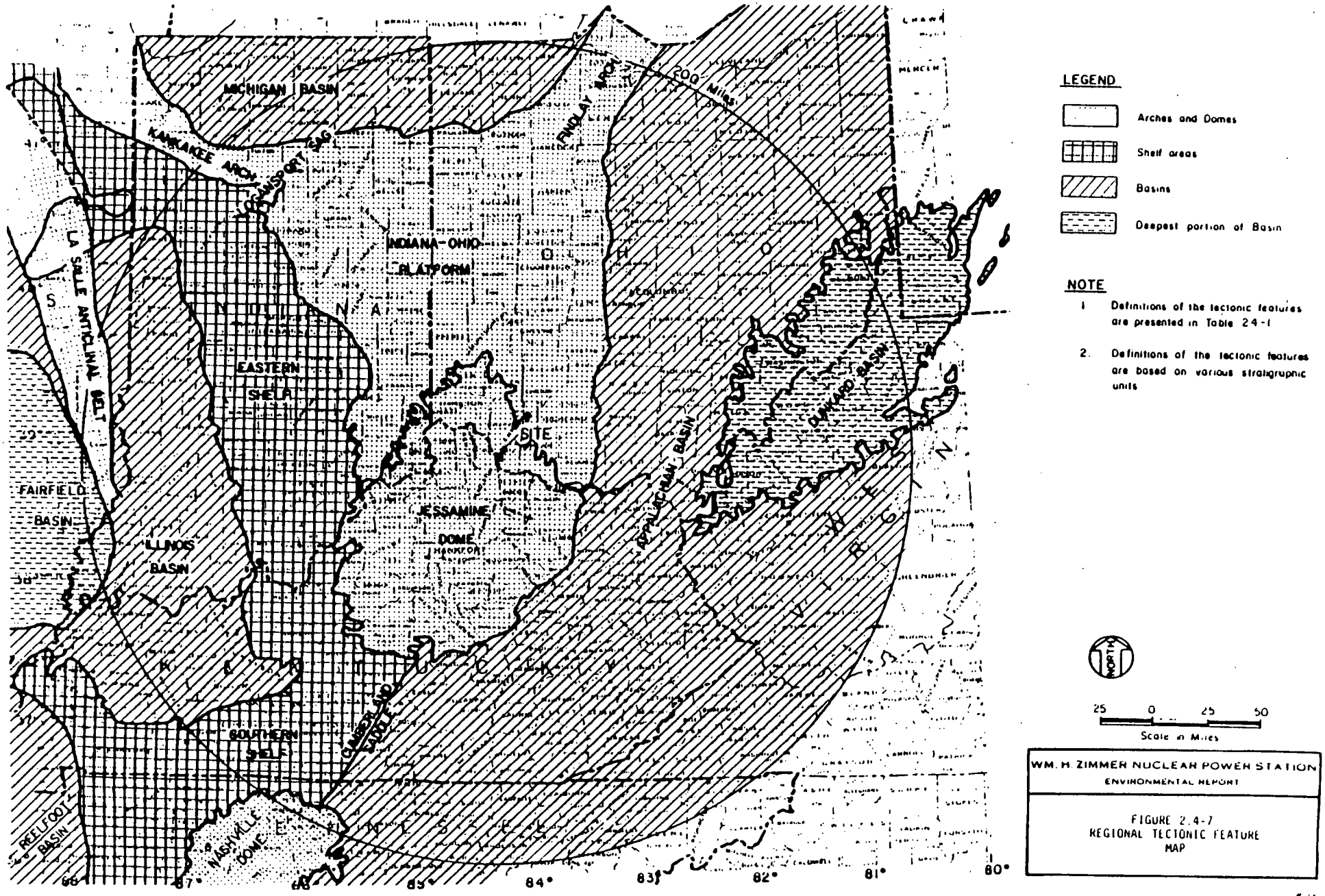
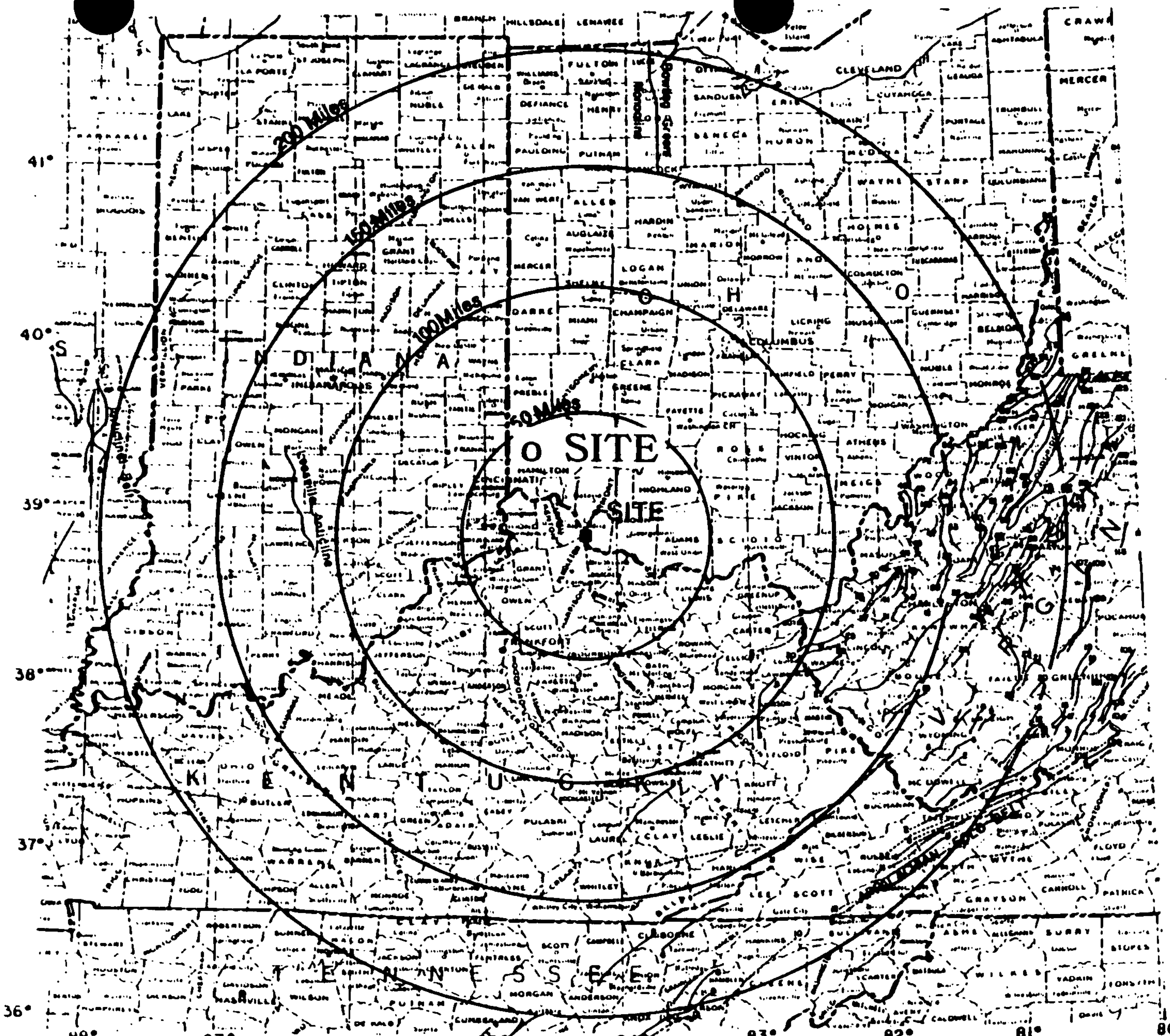


Figure 2.6 Regional Tectonic Features



LEGEND

—— Anticline or monocline

.... Syncline

• Fold identification number

NOTES

1. Folds are numbered according to state, but tabulation of data is not included in this report.
2. Only folds having axes two miles or longer are shown.

NORTH

25 0 25 50
Scale in Miles

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FIGURE 2.4-8
REGIONAL FOLD MAP

Figure 2.7 Regional Fold Map

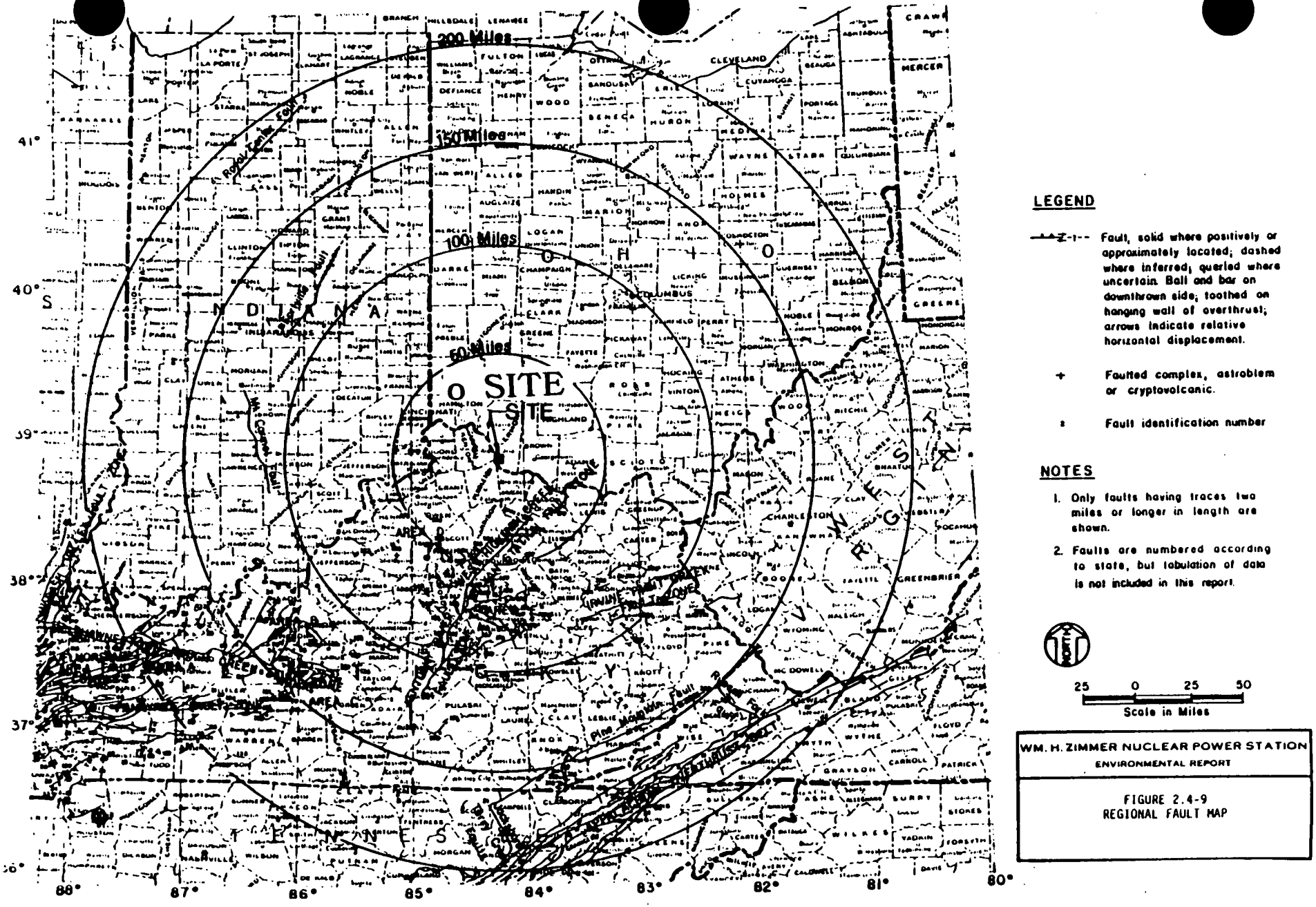
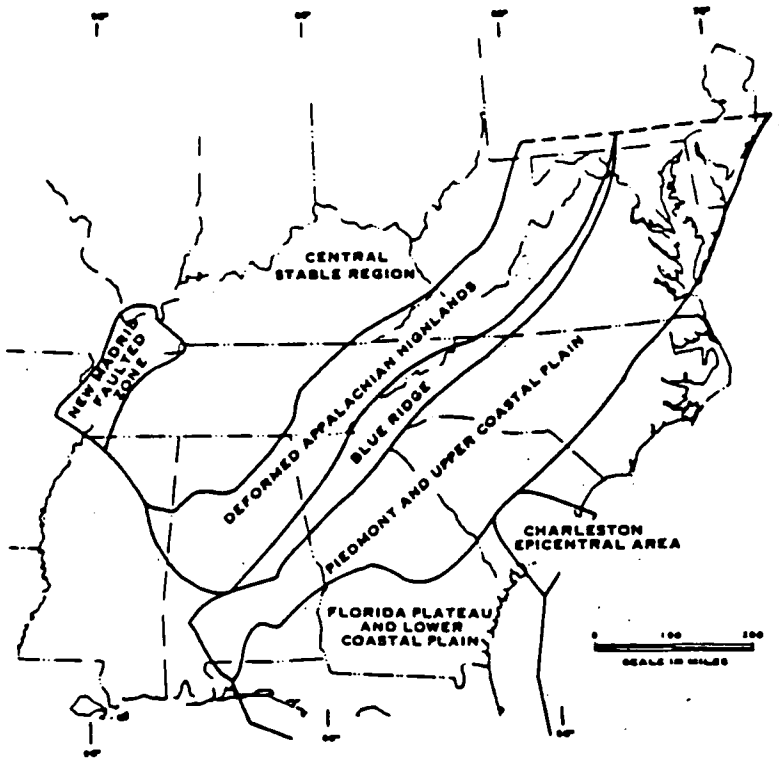
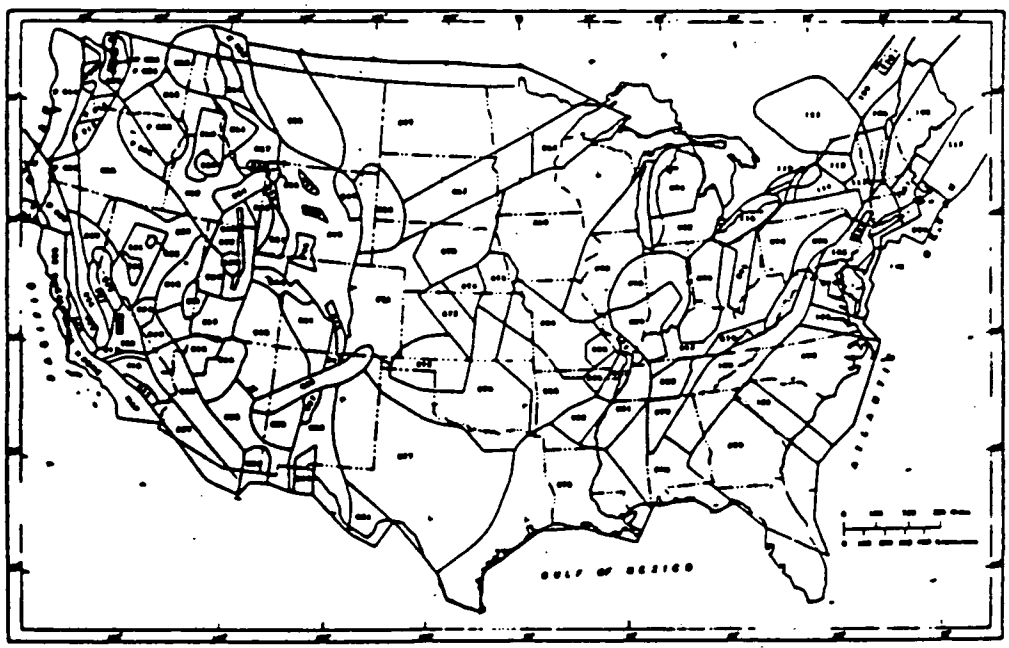


Figure 2.8 Regional Fault Map

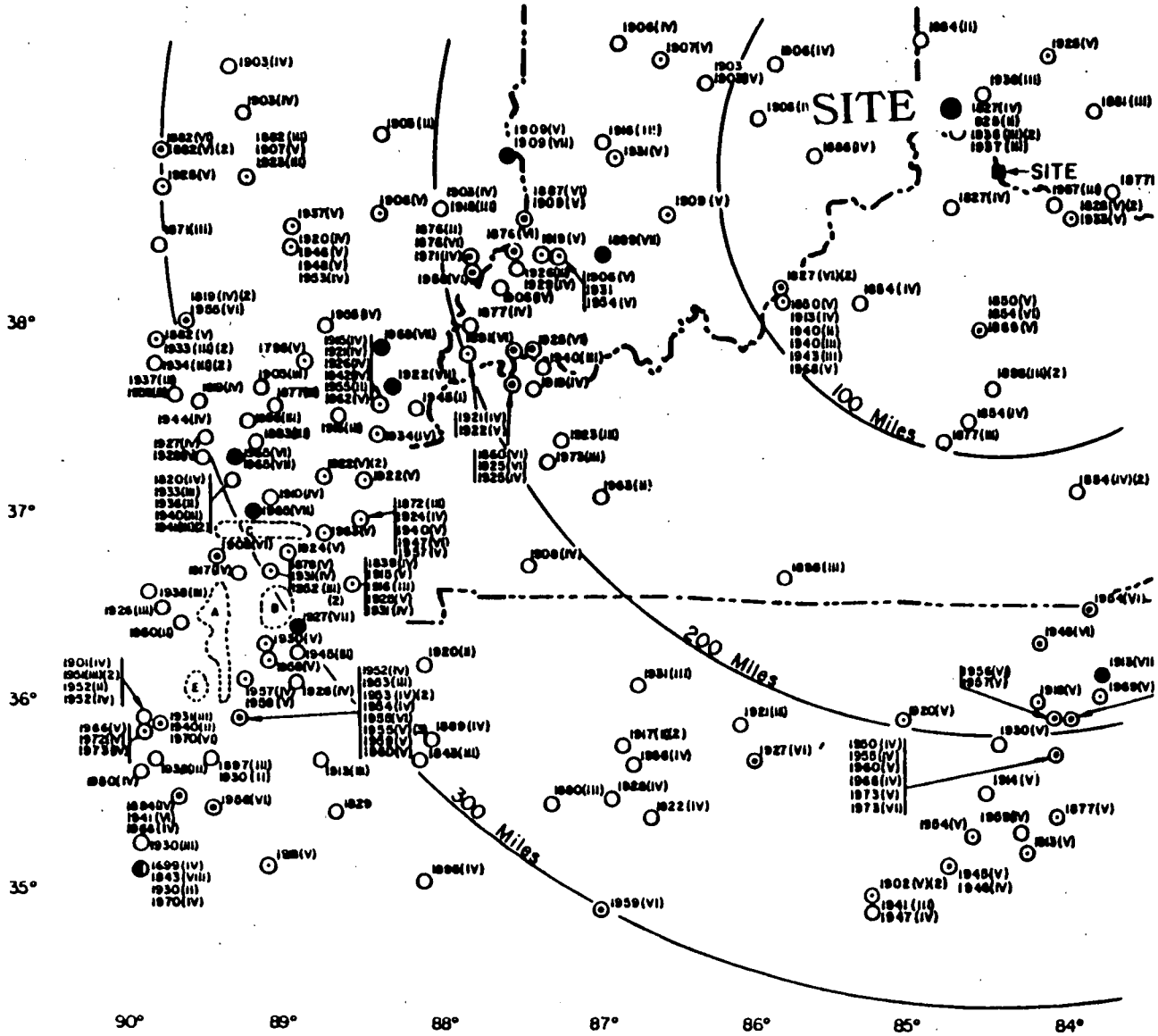


(Drumheller, 1981)



(Algermissen, 1982)

Figure 3.1 Seismotectonic Regions



LEGEND

Epicenter and intensity of earthquake, Modified Mercalli Intensity Scale of 1931

- VII
- VI
- V
- IV and less
- B — Area of many earthquakes

NOTES

1. Earthquake data compiled from the literature, but compilation of data is not included in this report
2. Earthquake data for areas of many earthquakes are presented in Table 2.4-2

NORTH

25 0 25 50

Scale in Miles

WM. H. ZIMMER NUCLEAR POWER STATION
ENVIRONMENTAL REPORT

FIGURE 2.4-11
EARTHQUAKE EPICENTER MAP
SOUTHWEST OF REGIONAL AREA

Figure 3.2 Historic Seismic Events

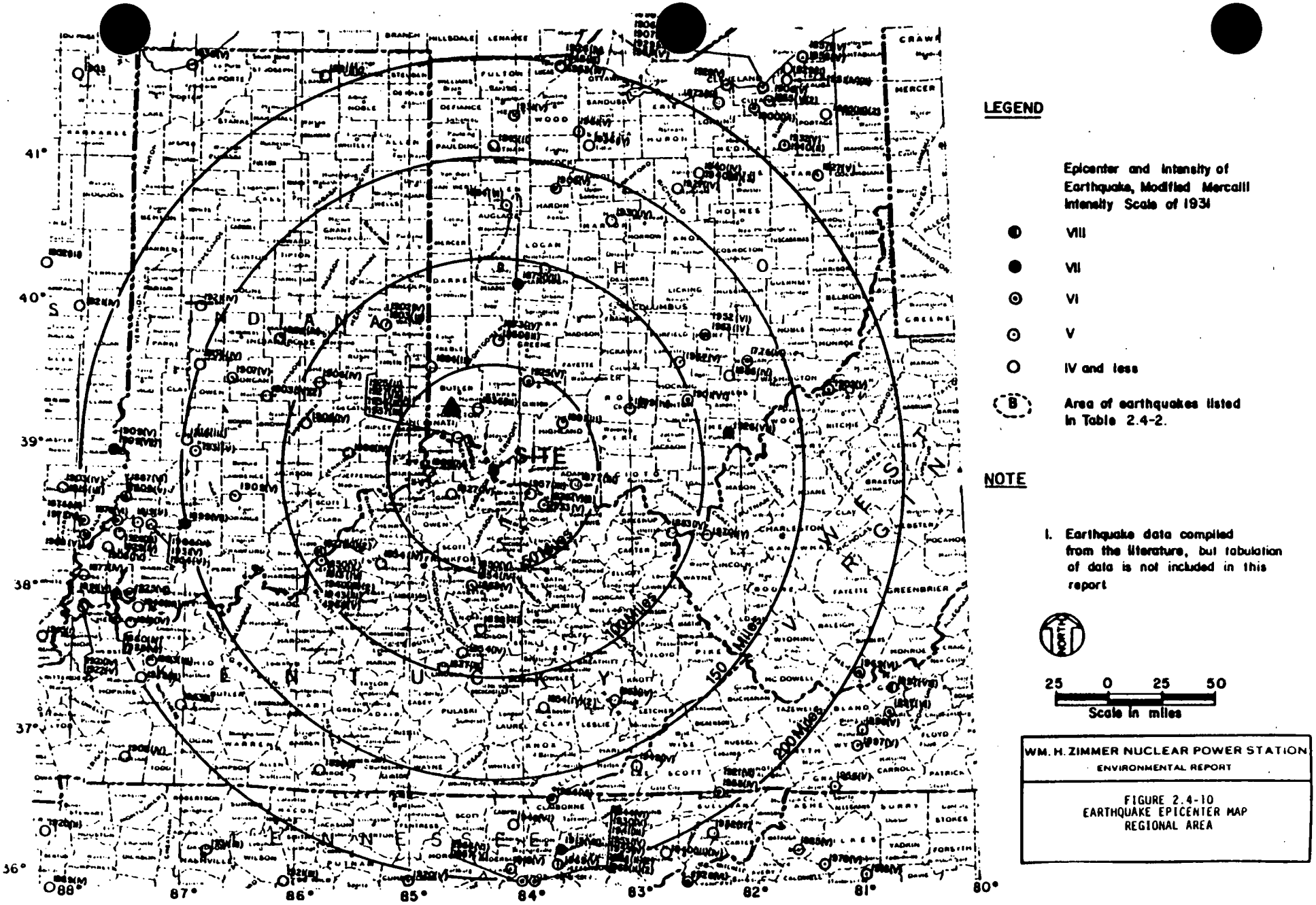


Figure 3.3 Historical Seismic Events

Modified Mercalli Intensity Scale
(1956 Version) •

I. Not felt. Marginal and long-period effects of large earthquakes.

II. Felt by persons at rest, on upper floors, or favorably placed.

III. Felt indoors. Hanging objects swing. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake.

IV. Hanging objects swing. Vibration like passing of heavy trucks; or sensation of a jolt like a heavy ball striking the walls. Standing motor cars rock. Windows, dishes, doors rattle. Glasses clink. Crockery clashes. In the upper range of IV wooden walls and frame creak.

V. Felt outdoors; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors swing, close, open. Shutters, pictures move. Pendulum clocks stop, start, change rate.

VI. Felt by all. Many frightened and run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Knickknacks, books, etc., off shelves. Pictures off walls. Furniture moved or overturned. Weak plaster and masonry D cracked. Small bells ring (church, school). Trees, bushes shaken visibly, or heard to rustle.

VII. Difficult to stand. Noticed by drivers of motor cars. Hanging objects quiver. Furniture broken. Damage to masonry D, including cracks. Weak chimney broken at roof line. Fall of plaster, loose bricks, stones, tiles, cornices also unbraced parapets and architectural ornaments. Some cracks in masonry C. Waves on ponds; water turbid with mud. Small slides and caving in along sand or gravel banks. Large bells ring. Concrete irrigation ditches damaged.

VIII. Steering of motor cars affected. Damage to masonry C; partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting, fall of chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes.

IX. General panic. Masonry D destroyed; masonry C heavily damaged, sometimes with complete collapse; masonry B seriously damaged. General damage to foundations. Frame structures, if not bolted, shifted off foundations. Frames racked. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground. In alluviated areas sand and mud ejected, earthquake fountains, sand craters.

X. Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments. Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.

XI. Rails bent greatly. Underground pipelines completely out of service.

XII. Damage nearly total. Large rock masses displaced. Lines of sight and level distorted. Objects thrown into the air.

In this version of the scale, an attempt has been made to distinguish between various qualities of masonry, the performance of which frequently form a principal basis for evaluating the intensity of an earthquake. Descriptions of the various classes of masonry to which reference is made are as follows:

Masonry A. Good workmanship, mortar, and design; reinforced, especially laterally, and bound together by using steel, concrete, etc.; designed to resist lateral forces.

Masonry B. Good workmanship and mortar; reinforced, but not designed in detail to resist lateral forces.

Masonry C. Ordinary workmanship and mortar; no extreme weaknesses like failing to tie in at corners, but neither reinforced nor designed against horizontal forces.

Masonry D. Weak materials, such as adobe; poor mortar; low standards of workmanship; weak horizontally.

Figure 3.4 Modified Mercalli Scale

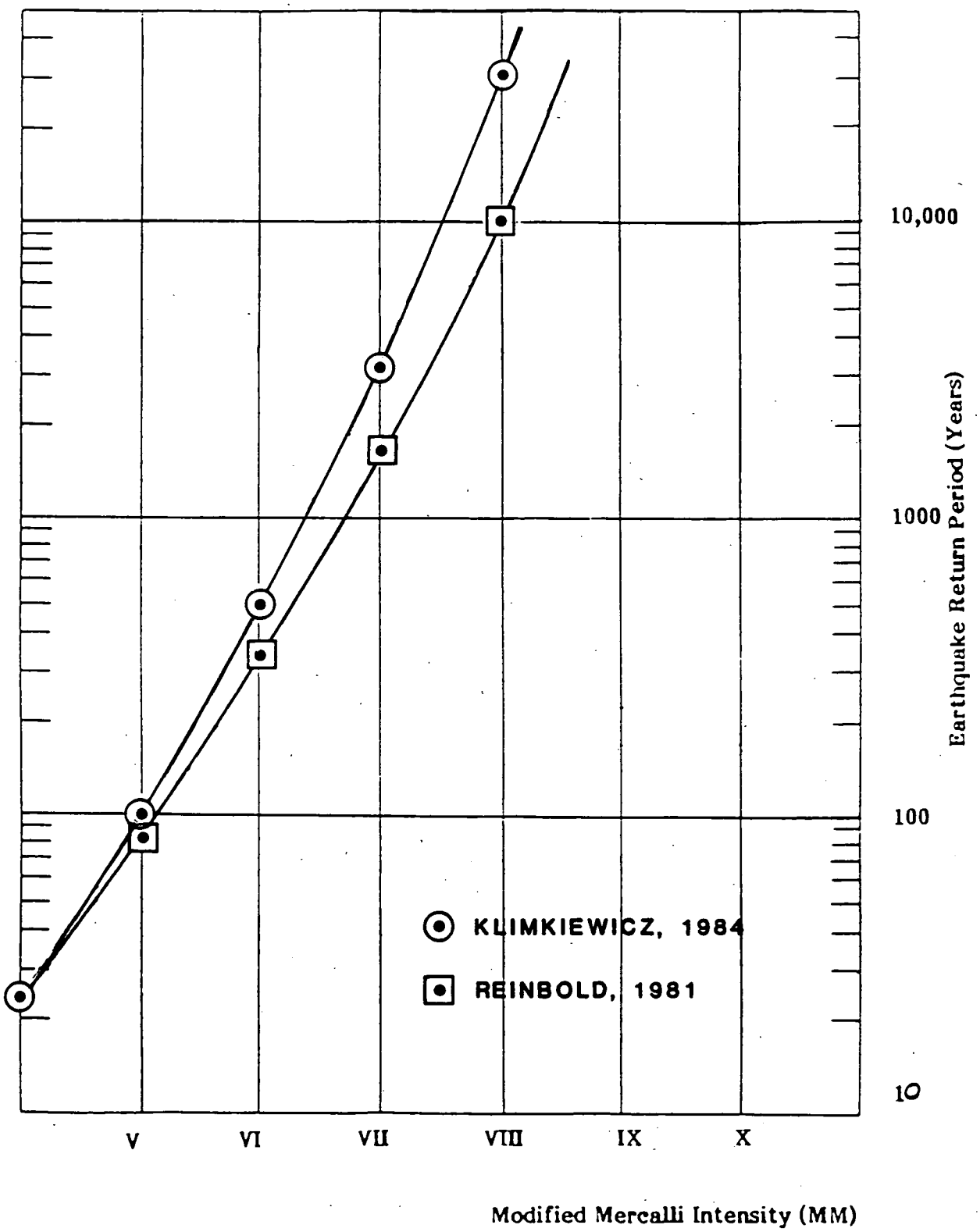


Figure 3.5 Earthquake Recurrence Relationships

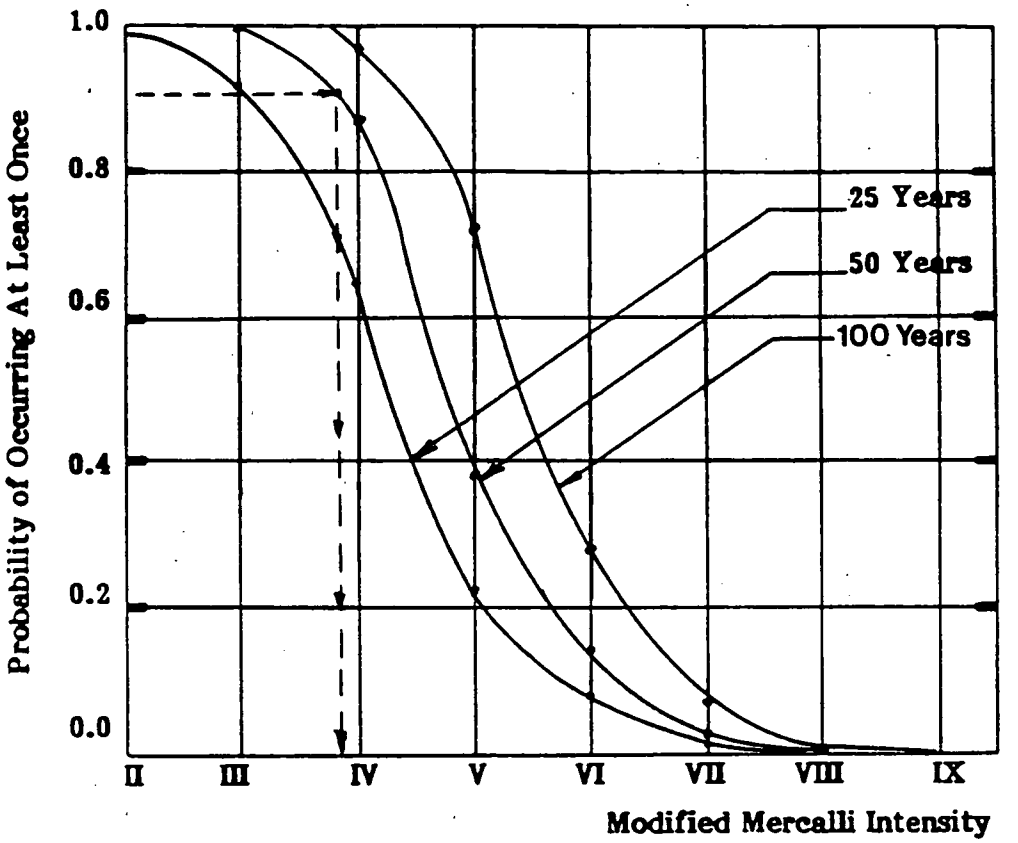


Figure 3.6 Poisson Recurrence Values

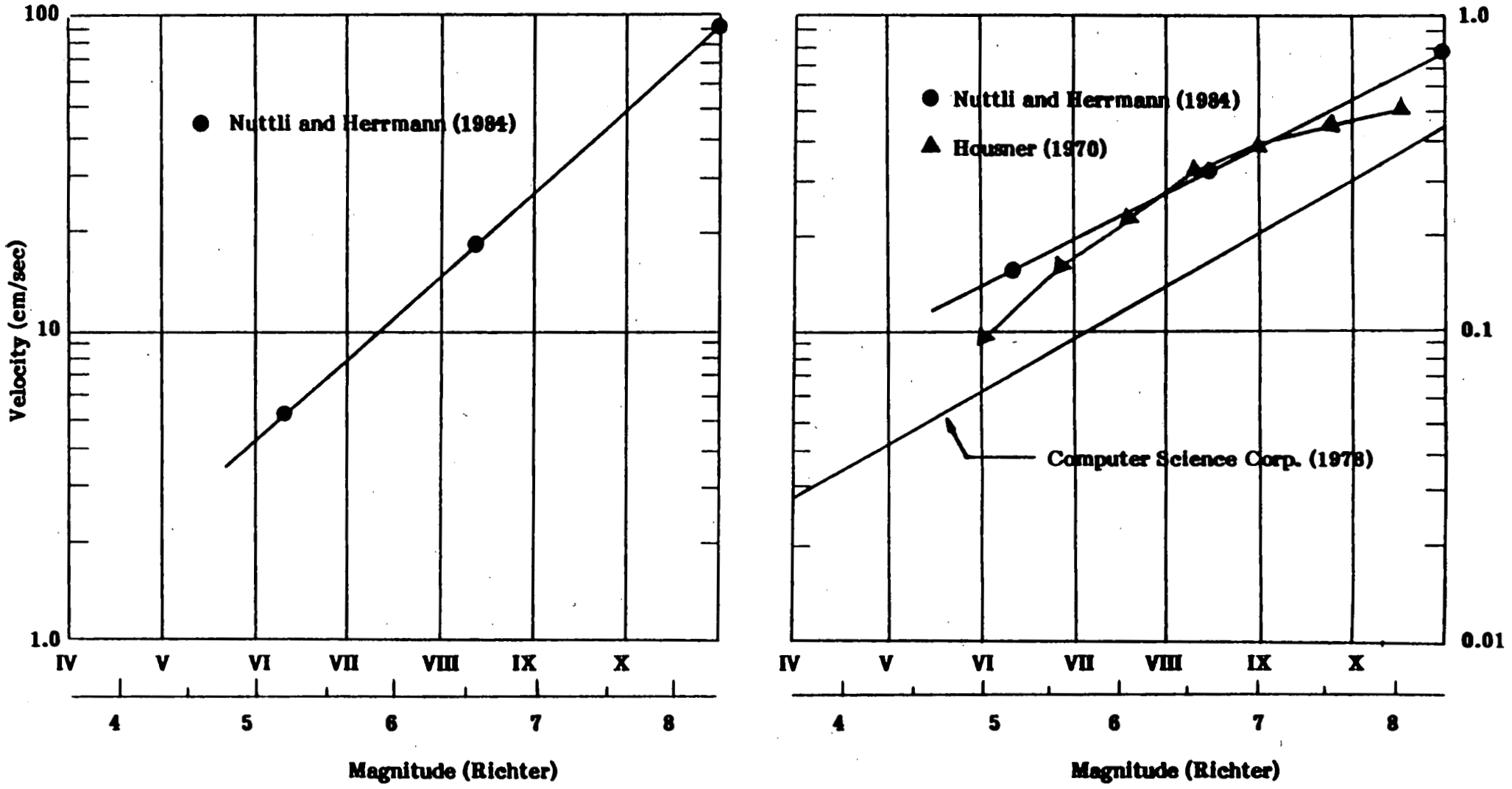


Figure 3.7 Peak Response Versus Intensity

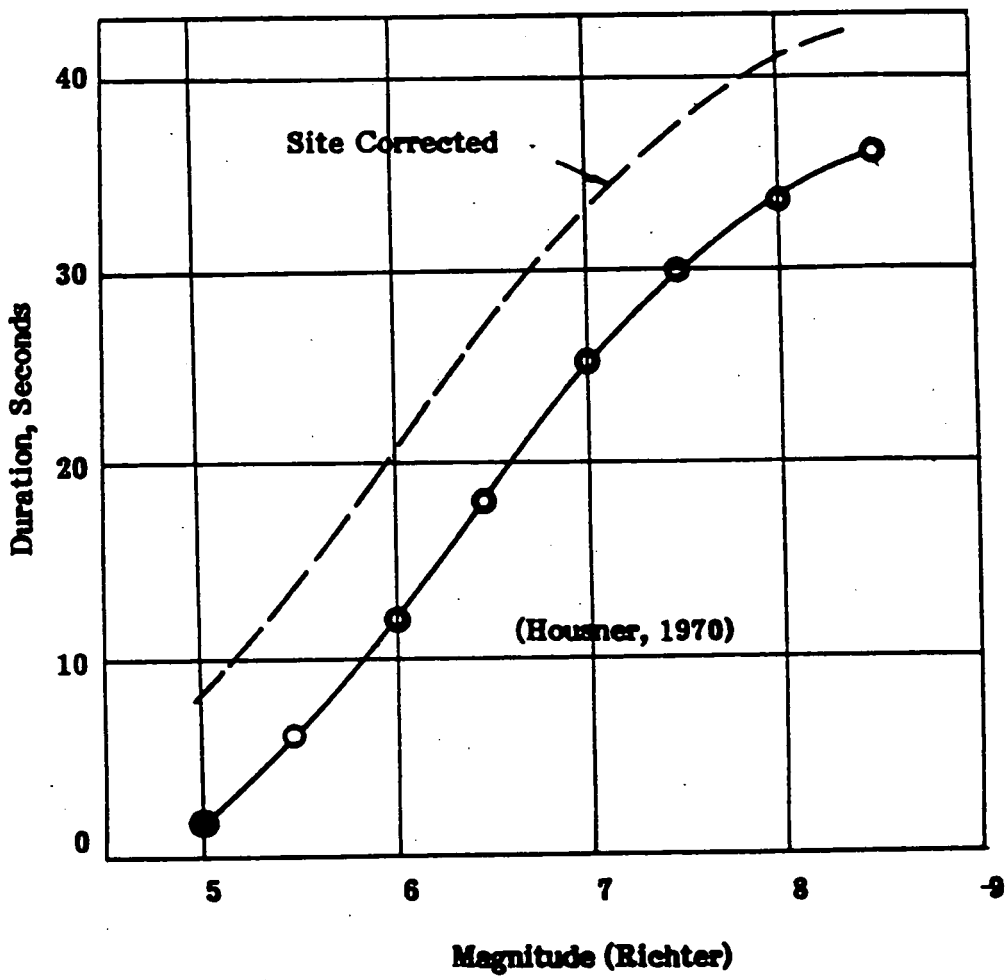
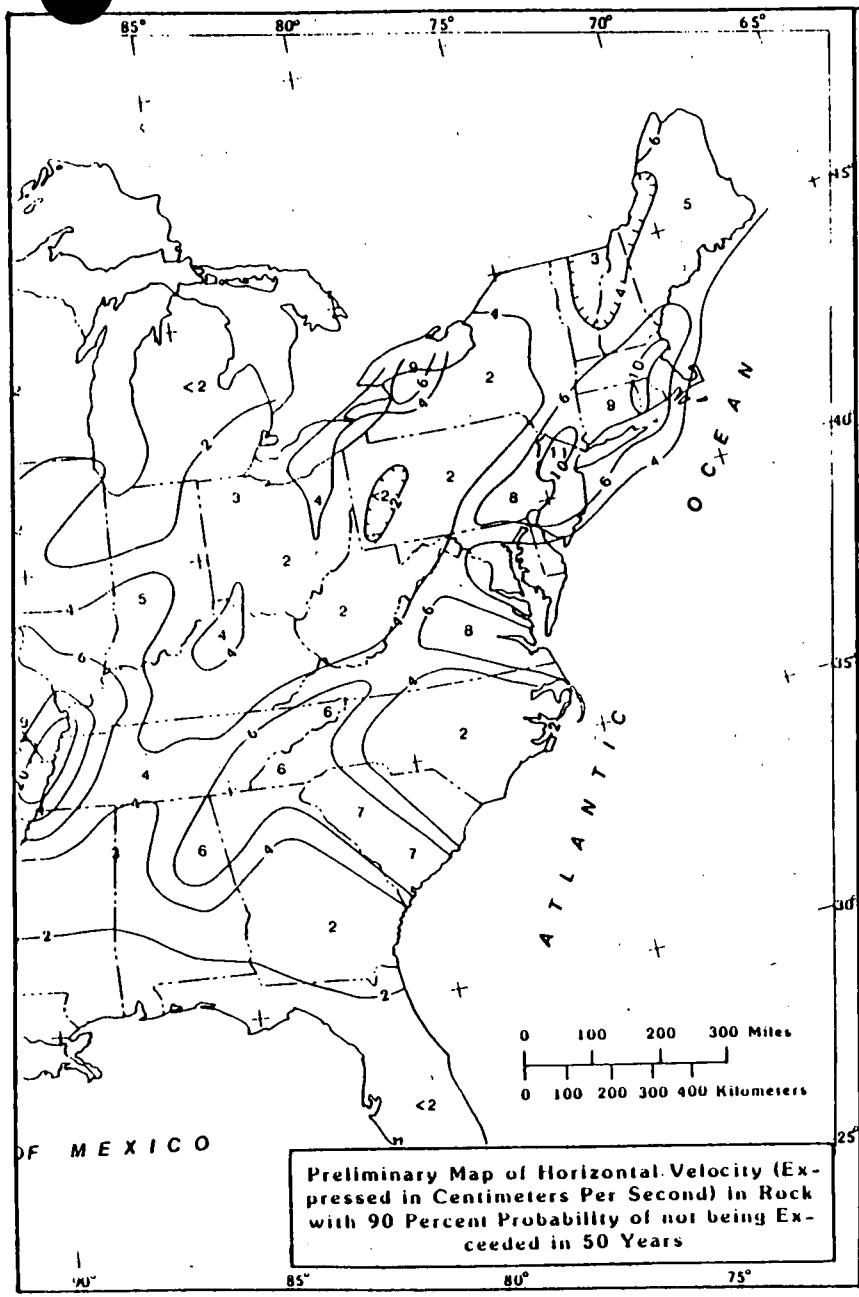
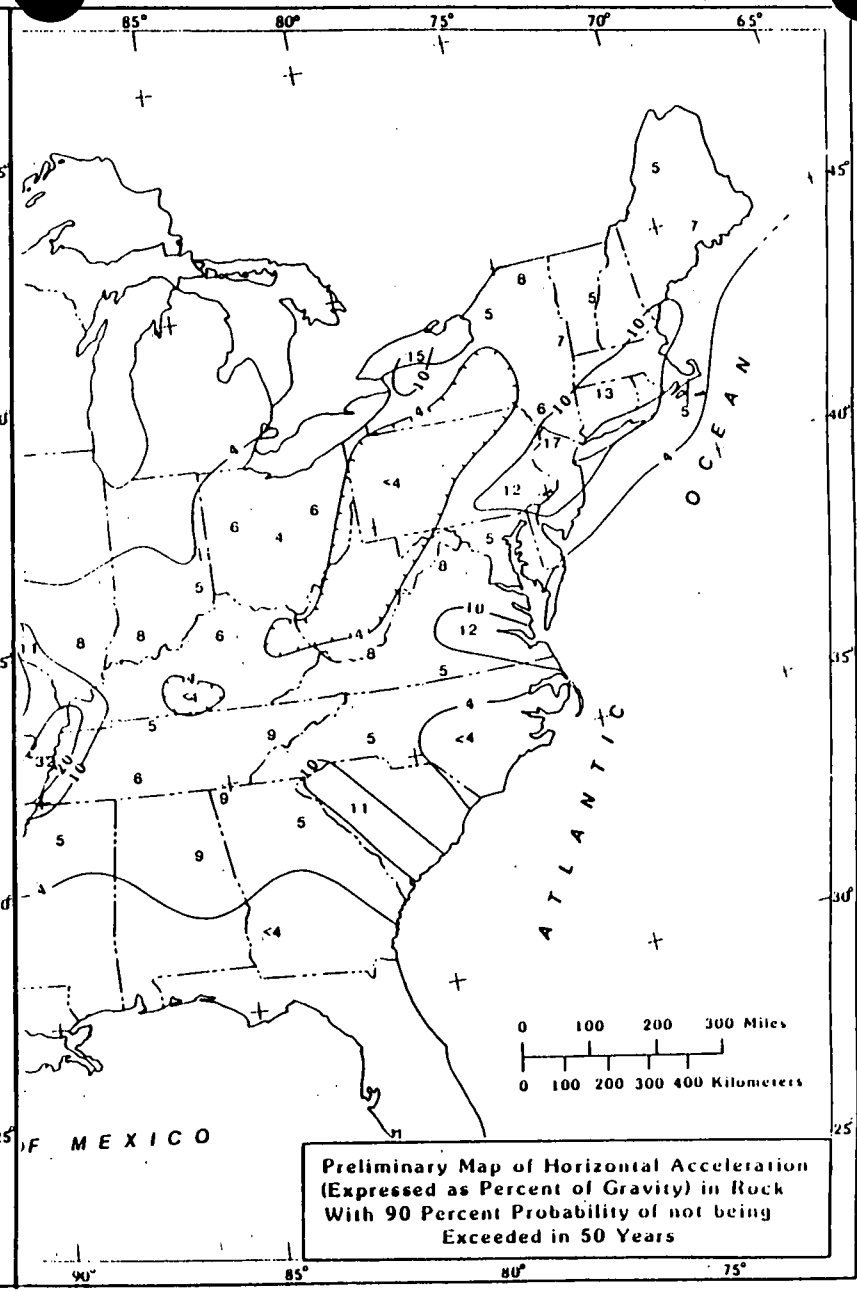


Figure 3.8 Empirical Ground Motion Duration



Preliminary Map of Horizontal Velocity (Expressed in Centimeters Per Second) in Rock with 90 Percent Probability of not being Exceeded in 50 Years



Preliminary Map of Horizontal Acceleration (Expressed as Percent of Gravity) in Rock With 90 Percent Probability of not being Exceeded in 50 Years

Figure 3.9 U.S. Geological Survey Probabilistic Ground Motion

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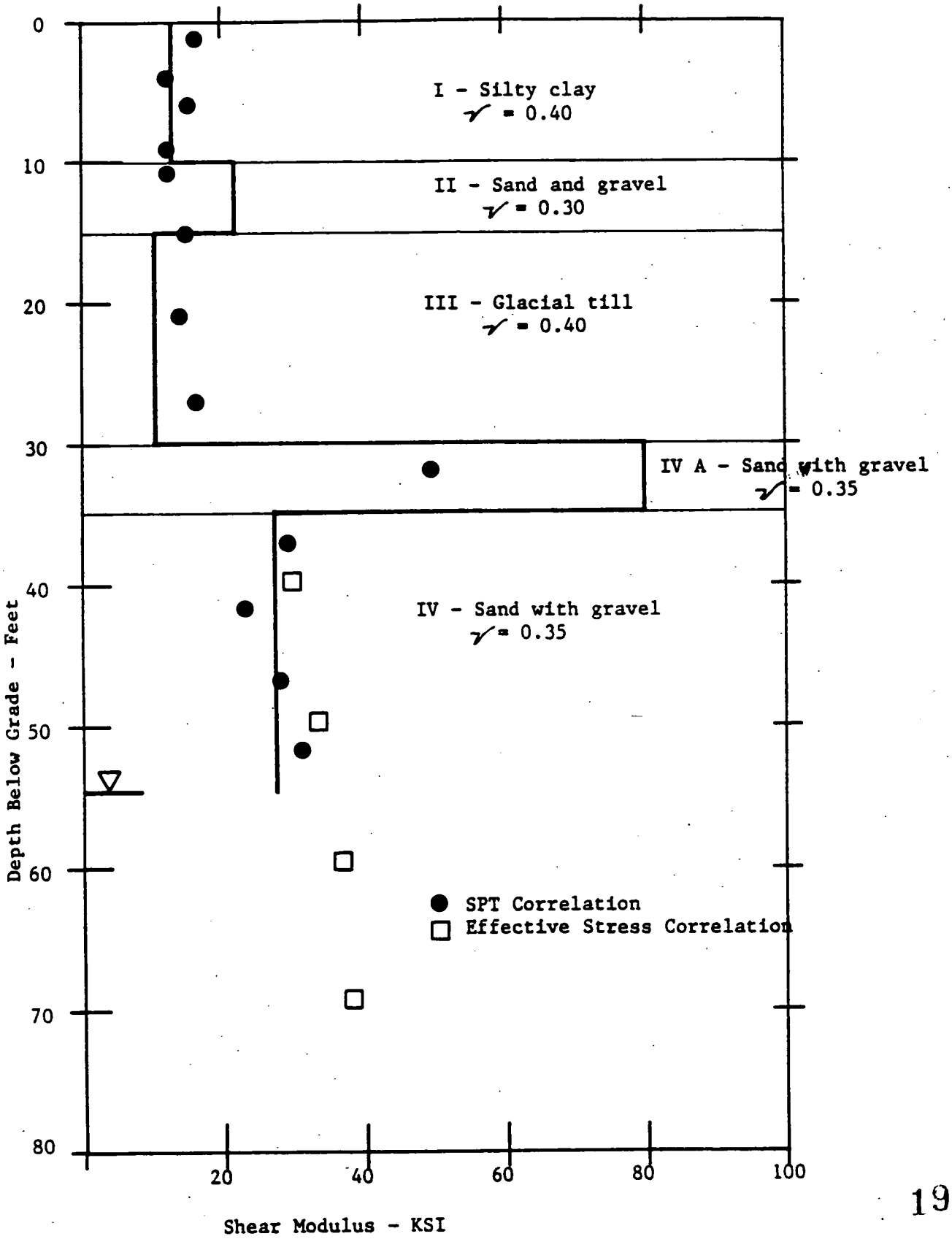


DYNAMIC SUBGRADE PROPERTIES

SOIL & MATERIAL ENGINEERS INC.
CINCINNATI, OHIO

FIGURE 4.1

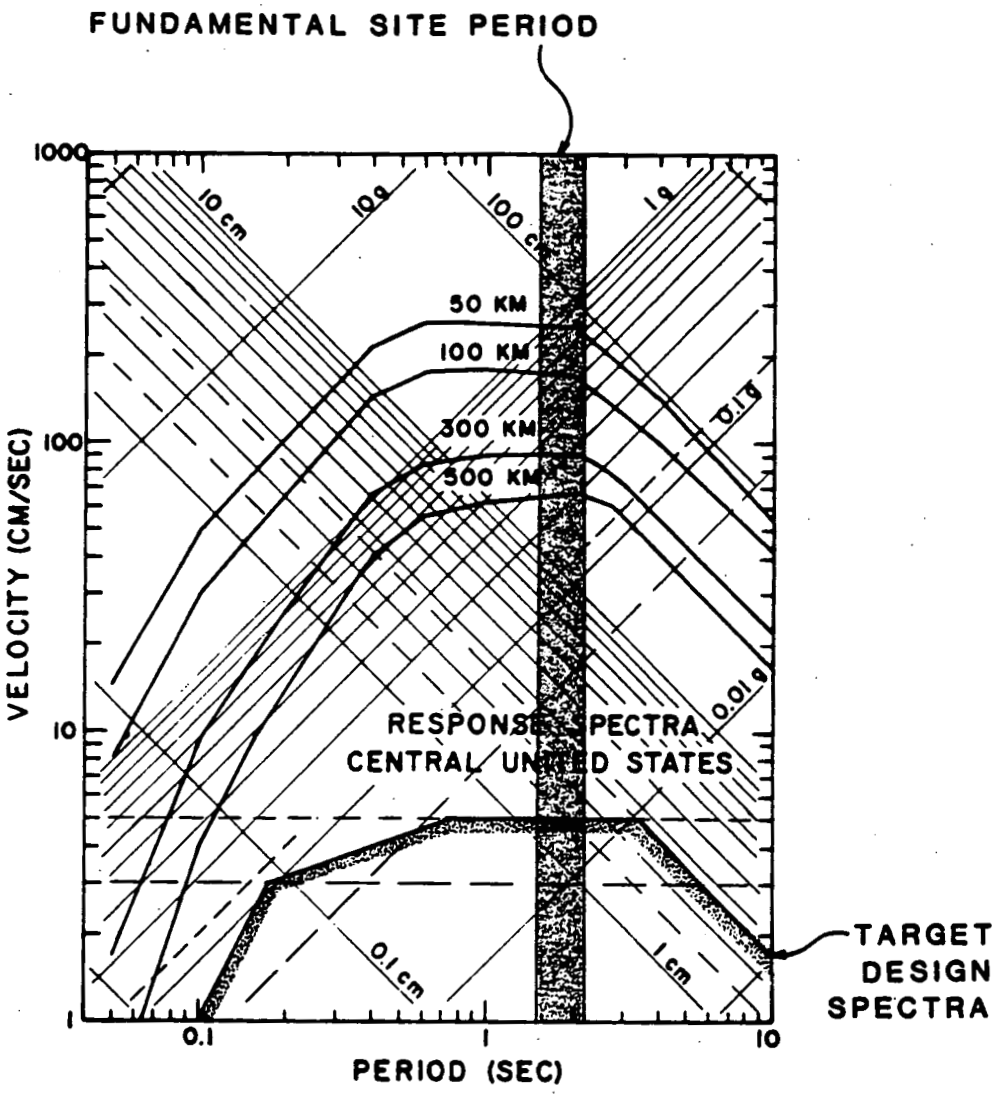

FUNDAMENTAL SITE PERIOD
1000
100
10
1
VELOCITY (CM/SEC)
0.1
1
10
PERIOD (SEC)
10 cm
10 g
100 cm
1 g
0.1 g
0.01 g
0.1 cm
1 cm
50 KM
100 KM
300 KM
500 KM
RESPONSE SPECTRA
CENTRAL UNITED STATES
TARGET
DESIGN
SPECTRA

FIGURE 4.2

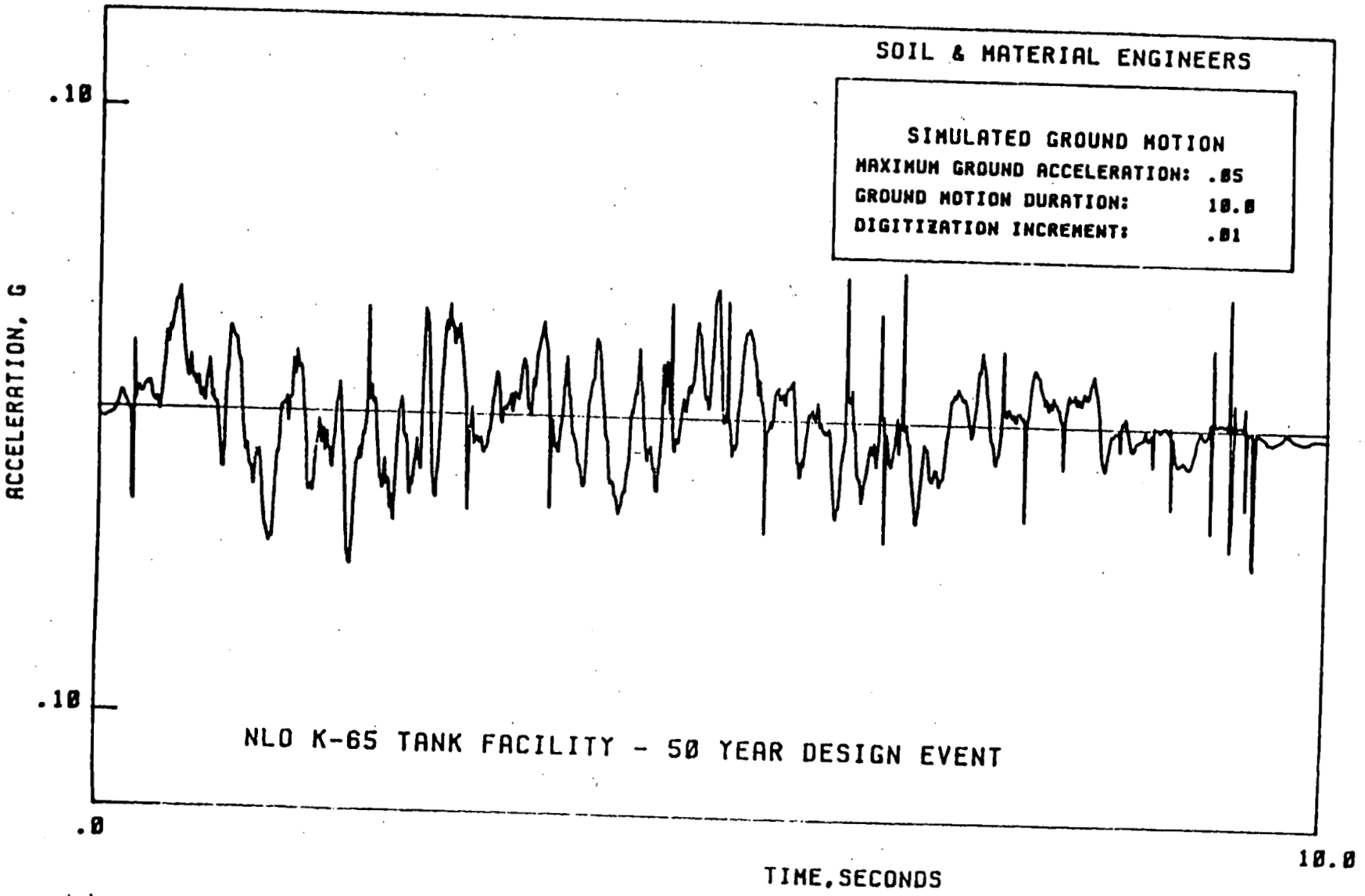


FIGURE: 4.3

3667

RESPONSE SPECTRA

NLO K-65 TANK FACILITY - 50 YEAR DESIGN EVENT

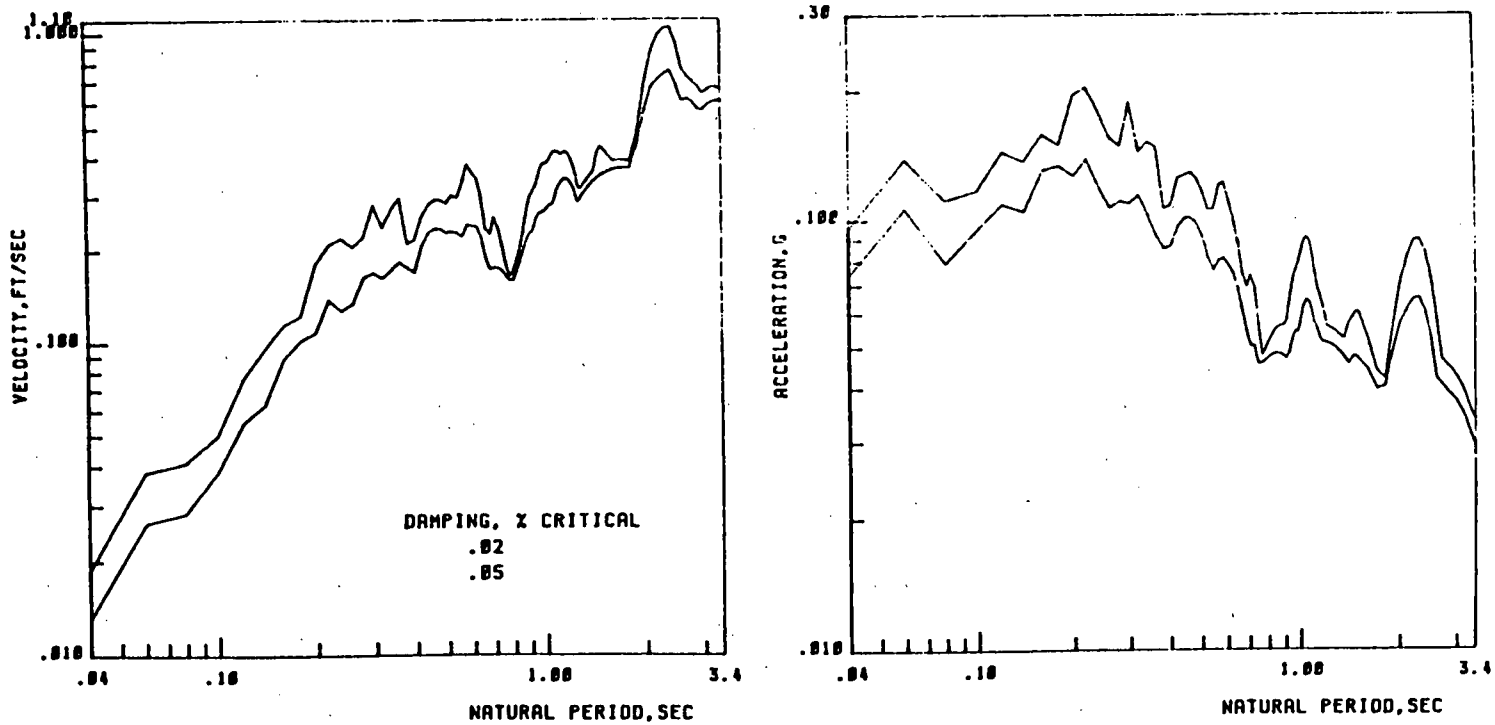


FIGURE: 4.4

3667

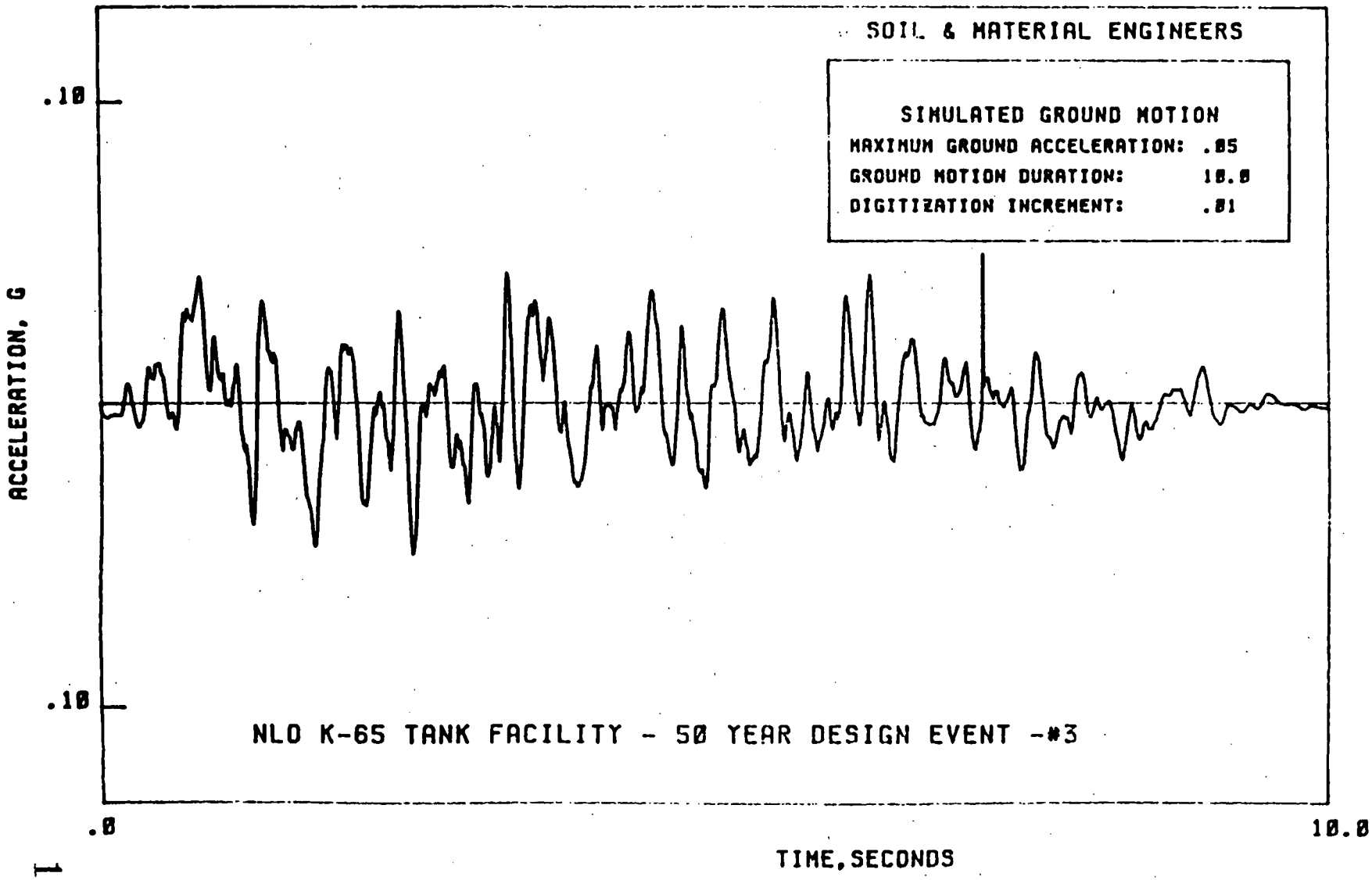
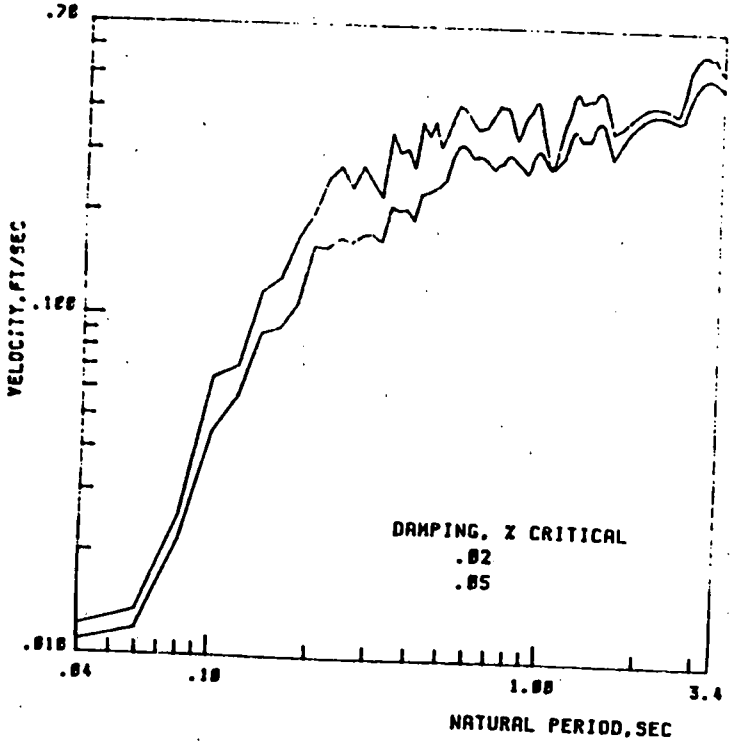

SOIL & MATERIAL ENGINEERS
SIMULATED GROUND MOTION
MAXIMUM GROUND ACCELERATION: .05
GROUND MOTION DURATION: 10.0
DIGITIZATION INCREMENT: .01
.10
.10
ACCELERATION, G
NLO K-65 TANK FACILITY - 50 YEAR DESIGN EVENT -#3
.0
10.0
TIME, SECONDS

FIGURE: 4.5

RESPONSE SPECTRA

NLO K-65 TANK FACILITY - 50 YEAR DESIGN EVENT .03



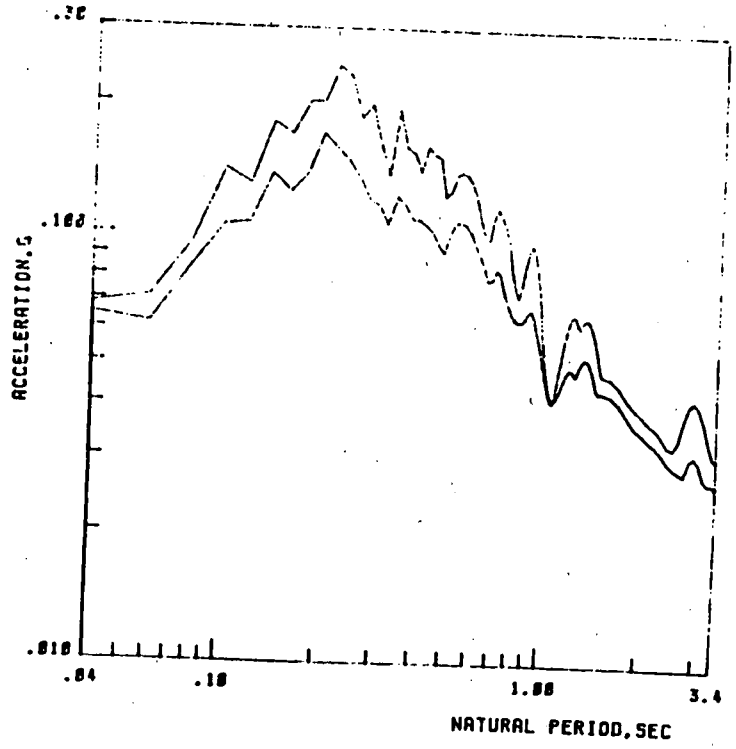


FIGURE: 4.6

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CAMARGO ASSOCIATES
LIMITED
ARCHITECTS—ENGINEERS—PLANNERS

3667

Client NLO
Location FERNALD, OHIO
Subject APPENDIX E

W.O. 568-01
Date
By

APPENDIX E: FINAL MODEL ANALYSIS

TABLE OF CONTENTS

ITEM	PAGE
1. APPLICATION OF FIELD RESULTS	E2
2. FINAL MODEL GEOMETRY	E21
3. FINAL MODEL CALCULATIONS	
A. CONTENT LOADS	E25
B. BERM & PROPOSED EARTH COVER LOADS	E26
C. POST-TENSIONING LOADS	E28
D. TORNADO LOADS	E29
E. HORIZONTAL WIRES — OVERSTRESS	E34
F. ALLOWABLE BUCKLING PRESSURE	E36
G. ALLOWABLE HOOP STRESS	E38
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4. 568 TANK 7	E40
5. 568 TANK 8	E494

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Client NLO

Location FERNALD, OHIO

Subject FINAL MODEL

W.O. 568-01

Date

By BC

1. APPLICATION OF FIELD RESULTS

FIELD RESULTS ARE PRESENTED IN APPENDICES C (PULSE-ECHO & GROUND RADAR) AND D (SOIL & SEISMIC). THE PURPOSE OF THIS SECTION IS TO APPLY RESULTS & DATA OBTAINED FOR A 3-DIMENSIONAL STRUCTURE AND TRANSFORMING THAT DATA FOR USE ON A 2-DIMENSIONAL AXI-SYMMETRIC COMPUTER MODEL.

FIELD TEST POINT LOCATIONS ARE SHOWN IN APPENDIX C (DRAWINGS 1 & 2) FOR THE DOME, WALLS, & FOOTING. THESE POINTS ARE SUMMED UP AXISYMMETRICALLY IN FIGURE E-1. NOTE FROM DRAWING NO. 1 THAT TEST POINTS A & X HAVE THE SAME OUTWARD RADIUS FROM THE CENTER OF THE DOME. LIKEWISE POINTS D & U HAVE CORRESPONDING RADIAL LOCATIONS. THE FOLLOWING ASSUMPTIONS ARE MADE REGARDING THE TWO K-65 SILOS PHYSICAL CHARACTERISTICS AS

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Location FERNALD, OHIO

Subject FINAL MODEL

W.O. 568-01

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DETERIORATED BY THEIR CONTENTS:

1. MAXIMUM DEGENERATION OF THE DOME IS AT ITS CENTER AND DECREASES TO A MINIMUM AT THE EDGE. THIS IS BASED ON THE FACT THAT THE GASES FORMED BY THE CONTENTS WILL COLLECT AT THE DOME TOP.
2. MAXIMUM DEGENERATION IN THE WALL IS AT THE BASE SLAB AND DECREASES TO A MINIMUM AT THE TOP. THIS IS BASED ON BOTH THE DURATION AND INTENSITY OF THE LOAD APPLIED AS THE TANK WAS FILLED.

FIELD DATA IS TABULATED ON PAGES E5 THROUGH E20 AND RESULTS SHOWN IN FIGURES E-2 AND E-3.

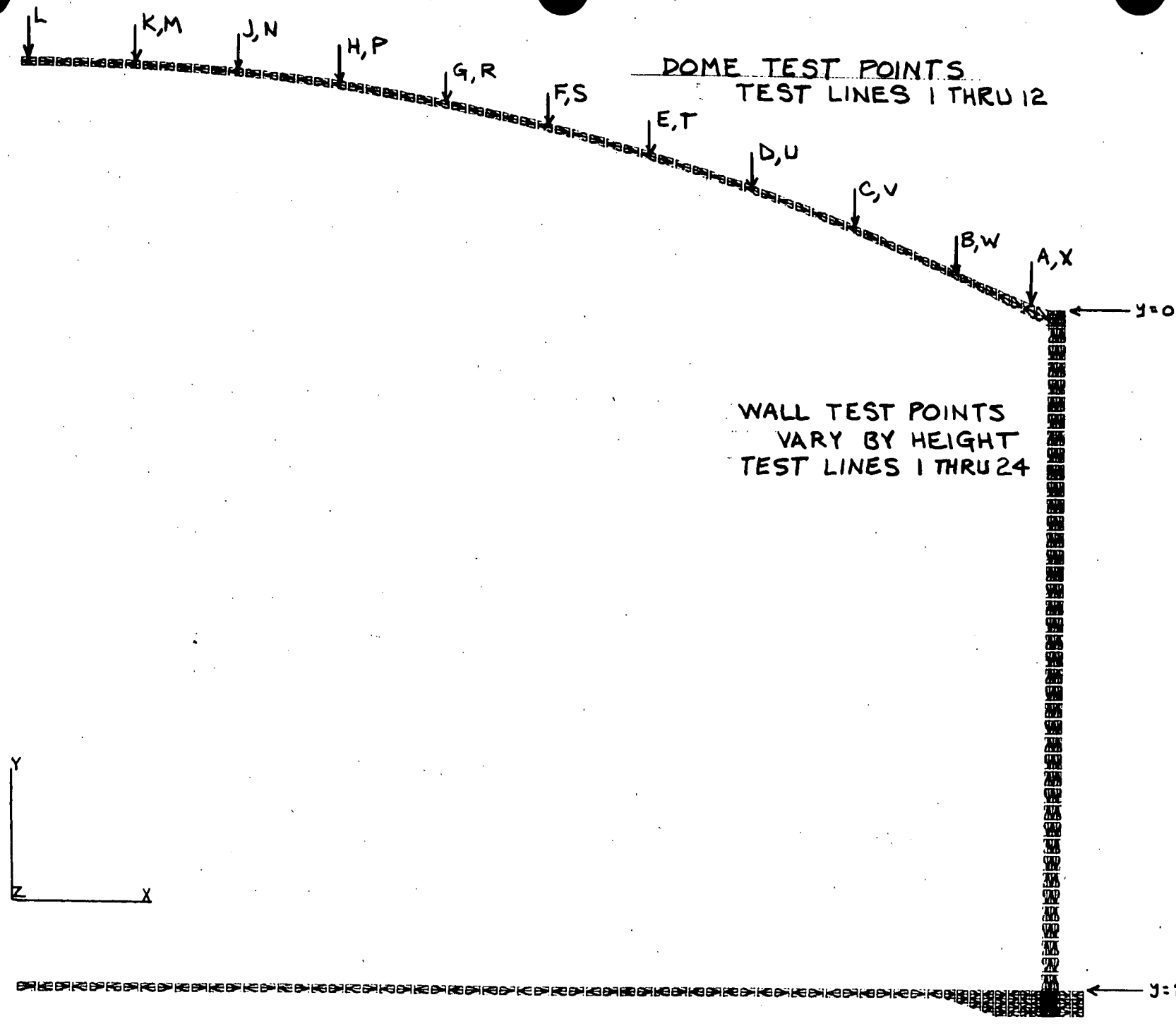

FIGURE E-1

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Location FERNALD, OHIO

Subject FIELD RESULTS – NORTH TANK

W.O. 568-01

Date

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DOME THICKNESS				CONCRETE QUALITY	
TEST POINTS	t_{avg}	σ	USE t	Q_{AVG}	σ
A/X	5.48	.39	5.0	1.00	0
B/W	5.19	.38	5.0	1.00	0
C/V	4.56	.57	4.5	1.21	.58
D/U	4.15	.49	4.0	1.21	.50
E/T	3.76	.45	4.0	1.38	.56
F/S	3.45	.44	3.5	1.79	.82
G/R	3.25	.48	3.0	2.21	1.00
H/P	3.12	.51	3.0	2.33	.99
J/N	2.77	.47	2.5	3.17	.99
K/M	2.63	.33	2.5	3.17	.74
L	2.20	0	2.0	4.00	0

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Client NLO

Location FERNALD

Subject DOME THICKNESS — NORTH TANK

W.O. 568-01

Date 9/25/85

By BC

TEST LINE #

	1	2	3	4	5	6	7	8	9	10	11	12
A	5.9	5.0	4.9	5.0	5.0	5.0	5.1	5.5	5.1	5.5	5.1	5.1
X	6.0	5.6	5.8	5.9	5.6	5.4	5.8	6.0	6.0	6.1	5.7	5.5
B	6.0	5.0	4.9	5.1	5.0	5.1	5.4	5.9	5.1	4.7	5.4	5.4
W	5.0	4.9	5.0	5.5	4.9	4.7	5.5	5.6	5.5	5.5	5.0	4.4
C	4.6	4.9	3.4	4.9	4.9	5.1	4.9	3.1	5.1	4.7	5.0	4.0
V	4.9	4.1	3.9	4.9	4.8	4.4	4.9	4.5	5.0	5.5	4.1	3.9
D	4.7	3.4	3.7	4.8	4.8	4.9	4.7	4.6	4.9	4.6	3.9	3.9
U	4.1	3.4	4.0	3.4	3.6	3.9	4.0	4.5	3.7	4.0	4.0	4.0
E	3.1	3.6	3.8	3.4	3.1	4.7	4.5	3.4	4.7	3.9	3.7	3.8
T	3.7	4.0	4.0	4.1	4.0	3.7	3.1	3.7	4.0	3.6	3.7	3.0
F	2.9	3.4	3.4	4.0	2.9	3.1	3.1	3.1	3.9	4.0	3.6	4.0
S	3.6	3.4	2.2	3.4	3.4	4.0	3.0	3.9	3.9	3.5	3.6	3.4
G	2.7	2.9	3.4	4.1	2.9	3.0	3.1	3.0	4.0	3.9	4.0	2.9
R	3.3	3.1	2.4	2.9	2.9	3.4	2.4	4.0	3.4	3.4	3.4	3.6
H	2.6	2.4	2.9	3.7	2.6	2.9	2.9	2.9	4.0	4.1	3.9	2.7
P	3.4	2.9	2.7	2.7	3.0	3.1	2.6	3.1	3.9	3.1	2.9	4.0
J	2.9	2.6	2.7	3.4	2.4	2.7	3.4	2.7	3.1	3.7	2.9	2.6
N	3.0	2.9	2.9	2.7	2.2	2.4	2.7	2.1	2.1	2.4	2.1	3.9
K	3.1	2.8	3.0	2.6	2.4	2.6	3.0	2.4	2.6	3.0	2.8	3.0
M	2.9	2.4	3.0	2.9	2.1	2.4	2.9	2.1	2.1	2.6	2.1	2.4
L	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2

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Client NLO

Location FERNALD

Subject NORTH TANK — f'c (DOME)

W.O. 568-01

Date 9/27/85

By BC

TEST LINE # (CONCRETE QUALITY)

TEST POINTS	1	2	3	4	5	6	7	8	9	10	11	12
A	1	1	1	1	1	1	1	1	1	1	1	1
X	1	1	1	1	1	1	1	1	1	1	1	1
B	1	1	1	1	1	1	1	1	1	1	1	1
W	1	1	1	1	1	1	1	1	1	1	1	1
C	1	1	3	1	1	1	1	3	1	1	1	1
V	1	1	2	1	1	1	1	1	1	1	1	1
D	1	2	1	1	1	1	1	1	1	1	2	1
U	1	1	1	3	1	1	1	1	2	1	1	1
E	2	1	1	2	2	1	1	2	1	1	2	1
T	1	1	1	1	1	1	2	1	1	1	2	3
F	3	2	2	1	3	2	2	3	1	1	2	1
S	1	1	4	1	1	1	2	2	2	2	2	1
G	3	3	2	1	3	2	2	3	1	1	1	3
R	1	3	4	3	3	3	4	1	1	2	2	1
H	2	3	3	1	4	2	3	3	1	1	1	3
P	2	2	4	4	2	2	2	3	1	3	3	1
J	3	4	3	2	4	3	1	4	3	1	3	4
N	3	3	3	4	4	4	3	4	4	4	4	1
K	3	3	2	3	4	3	2	4	4	2	3	2
M	4	4	2	3	4	3	3	4	4	3	4	3
L	4	4	4	4	4	4	4	4	4	4	4	4

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Client NLO

Location FERNALD

Subject NORTH TANK — WALL CONC. QUALITY

W.O. 568-01

Date 9/27/85

By BC

DEPTH (ft)

	1	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
1	14.1	14.2	14.2	14.1	13.9	13.8	13.8	13.7	13.7	13.6	13.4	13.9	12.6	12.7	13.1	13.4
2	14.1	14.1	14.4	14.5	14.6	14	14.8	14.9	15.1	15.1	13.1	13.9	11.9	12.3	12.6	11.9
3	14.1	14.9	15.1	15.1	13.9	13.6	14.1	14.2	14.3	14.1	13.7	13.6	13.6	12.9	12.7	12
4	15.1	15	15.4	14.9	14.7	13.9	13.6	13.6	13.7	13.8	13.9	14	13.1	11.9	11.7	10.9
5	14.1	14.6	14.7	14.8	13.9	13.9	13.7	14.1	14.4	15.1	13.1	11.9	11.7	11.6	10.9	10.7
6	14.1	14.4	14.5	14.6	14.7	14.8	14.0	13.9	13.8	13.7	13.8	13.0	11.8	11.7	11.0	10.4
7	14.1	14.1	14.4	15.1	15	14.7	14.3	14	13.6	13.7	14.1	13	12.6	11.9	11.6	11.9
8	14.1	14.2	14.6	14.4	13.9	13.7	13.4	13.6	13.7	13.9	13.1	13.1	12.9	12.8	12.9	12.6
9	14.1	14.2	14.3	14.4	15.1	15	13.9	13.7	14.1	14.2	14.1	13.9	13.6	13.7	13.8	13.4
10	14.1	14.4	14.1	14.4	15.1	15.4	14.4	13.9	13.8	13.7	13.4	13	12.6	11.9	11.7	12.6
11	14.1	14.1	13.9	13.7	13.4	13.6	12.9	13.1	13.4	13.6	13.7	13.8	11.9	11.9	11.6	11.4
12	14.1	14.1	14.1	13.9	13.7	13.8	13.7	13.1	13.1	12.9	12.7	12.7	12.6	12.3	11.9	10.9
13	14.1	14.4	13.9	13.7	13.6	14.1	13.6	12.9	13.4	13.4	13.3	13.4	12.9	12.9	11.6	11.9
14	14.1	14.4	13.9	13.6	13.7	13.8	13.4	13.2	13.1	13.9	13.9	13.9	12.9	12.1	12	11.9
15	14.1	14.2	14.3	14.1	14.1	13.9	13.7	13.6	13.4	12.9	11.9	11.6	11.9	11.8	11.6	12.1
16	14.1	14.1	13.6	12.9	11.9	11.8	11.7	11.6	11.4	12.1	13.9	13.4	13.6	13.7	13.9	13.9
17	14.1	13.6	12.9	11.8	11.7	11.6	11.9	11.9	11.9	12.6	13.4	13.9	13.9	13.9	14.1	14.0
18	13.9	13.7	13.6	13.4	12.7	12.6	12.3	12.1	11.6	11.3	12.9	13.1	13	12.9	11.9	11.8
19	13.9	13.1	12.9	11.9	11.8	11.7	11.6	11.3	11.1	12.6	12.7	12.9	13.1	13.4	13.9	12
20	14.1	13.4	13.1	13.1	12.9	12.6	11.9	11.7	11.8	10.9	12.6	12.9	13.1	13.4	13.4	14.1
21	14.1	13.7	13.6	13.7	13.4	13.6	13.7	12.9	11.7	11.8	12.9	12.9	11.9	11.9	11.8	12
22	14.1	13.9	13.7	13.4	13.4	14.1	13.6	12.9	11.6	11.4	12.9	12.7	12.9	13.1	13	12.6
23	13.6	13.4	13.3	14.1	12.9	12.6	11.9	12.6	12.7	12.9	13.1	13.4	13.4	13.1	14.1	13
24	13.1	13.4	13	12.9	11.6	11.9	12.6	12.6	12.7	12.9	13.0	14.1	14.2	14.1	13	12.5
μ	14.1	14.0	14.0	13.9	13.6	13.5	13.3	13.1	13.0	13.2	13.3	13.3	12.8	12.7	12.5	12.2

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Form 10-CS

CAMARGO ASSOCIATES LIMITED

ARCHITECTS—ENGINEERS—PLANNERS

3667

Client NLO

Location Fernald, Ohio

Subject North Tank - Wall Thickness

W.O. 568-01

Date 9-26-85

By JAS

Test No. \ Depth (ft.)	1	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
1	8.1	8.4	7.7	7.6	7.5	7.9	8.1	8.2	8.0	7.7	7.3	7.4	7.0	6.9	6.9	7.1
2	8.4	8.0	7.9	7.7	7.6	7.4	7.3	7.2	7.0	7.0	6.9	7.3	7.0	7.0	7.4	6.9
3	8.1	7.7	7.6	7.5	7.9	7.6	7.8	7.4	7.3	7.0	6.9	7.4	7.5	7.0	6.9	6.7
4	8.0	8.0	7.9	7.8	7.6	7.4	7.9	7.7	7.6	7.4	7.3	7.2	7.7	7.0	6.9	6.4
5	8.1	8.1	7.9	7.7	7.9	7.7	7.8	7.6	7.4	7.5	6.9	6.4	6.3	6.4	6.4	6.1
6	8.1	8.1	7.9	7.8	7.7	7.6	7.3	7.2	7.4	7.3	7.6	7.7	6.4	6.1	6.0	6.2
7	8.0	8.0	7.9	7.4	7.3	7.2	7.1	7.7	7.6	7.7	6.9	6.8	6.4	6.9	7.0	7.1
8	8.0	8.0	7.9	7.4	7.5	7.6	7.4	7.4	7.6	7.0	6.9	7.4	7.0	6.9	6.8	6.4
9	8.0	8.0	7.7	7.6	7.7	7.3	7.4	7.6	7.7	7.4	7.3	7.0	7.0	6.9	7.1	7.2
10	7.9	7.7	7.6	7.7	7.5	7.4	7.0	6.9	6.8	6.7	6.6	7.4	6.9	6.9	6.7	6.9
11	8.1	8.1	7.7	7.6	7.4	7.3	7.4	7.7	7.7	7.3	7.3	6.9	6.8	6.7	6.4	6.5
12	8.0	7.6	7.4	7.3	7.2	7.1	7.4	7.7	7.7	7.9	8.1	7.0	6.9	6.4	6.5	6.9
13	8.0	7.9	7.7	7.6	7.4	7.4	7.0	6.9	7.2	7.3	7.0	6.9	6.4	6.4	6.3	6.9
14	8.1	7.7	7.6	7.4	7.3	7.0	6.9	6.8	6.8	7.0	7.1	7.2	6.4	6.3	6.9	7.0
15	7.9	8.0	7.9	7.8	7.6	7.5	7.4	7.3	7.2	7.0	6.9	7.4	6.9	6.8	6.7	6.6
16	8.1	7.9	7.7	7.6	7.4	7.0	6.9	6.8	6.6	6.4	6.9	7.4	7.5	7.7	7.6	7.0
17	7.9	7.4	7.1	7.2	7.3	7.0	6.9	6.8	6.7	6.6	7.1	7.0	7.2	7.3	7.4	7.0
18	8.1	8.2	7.6	7.4	7.3	7.2	6.9	6.4	6.3	6.5	6.9	7.1	7.2	7.3	7.0	6.9
19	8.1	7.9	7.4	7.0	6.8	6.6	6.4	6.6	7.0	7.1	7.2	7.4	7.6	7.0	6.9	6.8
20	7.9	7.8	7.7	7.6	7.4	7.6	6.9	6.4	6.7	7.0	7.1	7.2	7.3	7.4	7.5	7.6
21	7.9	7.7	7.6	7.4	6.9	7.4	7.3	6.9	6.7	6.6	7.0	7.1	7.2	7.3	7.4	7.0
22	7.9	8.1	7.7	7.4	7.0	7.7	6.9	7.0	6.4	6.4	7.0	7.1	7.2	7.4	7.5	7.1
23	8.1	7.9	7.4	7.0	7.3	7.4	7.3	6.9	6.7	6.7	6.7	7.0	7.1	7.2	7.0	6.9
24	7.9	7.8	7.7	7.4	7.5	7.7	7.6	7.0	6.9	6.8	6.4	7.0	7.1	7.2	6.9	6.8
μ	8.04	7.92	7.66	7.50	7.42	7.38	7.26	7.17	7.12	7.05	7.05	7.15	7.00	6.93	6.92	6.83

Form 10-CS

CAMARGO ASSOCIATES LIMITED

ARCHITECTS—ENGINEERS—PLANNERS

3667

Client NLO

Location Fernald Ohio

Subject North Tank - Est. % Wire Loss

W.O. 568-01

Date 9-27-85

By JAS

Depth (FT.)

Test No.	1	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
1	-	-	-	5	5	-	-	-	-	-	10	15	15	15	15	-
2	-	-	-	-	5	10	10	10	15	10	15	10	5	5	-	15
3	-	5	5	-	-	-	-	5	10	10	10	-	-	-	15	15
4	-	-	-	-	-	5	-	-	-	5	10	10	-	-	5	10
5	-	-	-	-	-	-	-	-	-	-	10	15	15	15	20	20
6	-	-	-	-	-	-	-	-	-	-	-	-	10	15	20	20
7	-	-	-	-	5	5	5	-	-	-	5	10	15	15	5	5
8	-	-	-	-	5	5	10	5	-	5	15	-	-	15	10	15
9	-	-	5	5	5	5	5	-	-	-	5	10	-	5	-	-
10	-	-	-	-	-	-	5	10	10	10	10	-	5	5	5	5
11	-	-	-	5	5	5	5	-	-	5	5	10	10	15	15	15
12	-	-	5	10	10	15	10	-	-	-	-	5	15	20	20	15
13	-	-	-	5	5	5	-	10	10	5	10	5	15	20	25	20
14	-	-	-	5	10	15	15	15	20	5	5	-	15	25	20	5
15	-	-	-	-	5	5	10	10	10	5	15	-	5	5	15	15
16	-	-	-	5	10	10	15	15	20	20	10	-	-	-	-	-
17	-	-	5	10	10	10	15	20	20	25	-	-	-	-	-	5
18	-	-	5	-	5	10	20	25	20	15	-	-	-	5	10	-
19	-	-	5	5	10	10	10	10	5	-	-	-	-	-	5	10
20	-	-	-	-	-	-	5	10	10	-	-	-	5	5	-	-
21	-	-	-	-	15	-	-	15	15	20	-	-	-	5	-	5
22	-	-	-	5	10	-	5	5	5	5	-	-	-	-	-	-
23	-	-	-	5	-	-	5	10	10	15	15	-	-	-	-	5
24	-	-	-	-	-	-	-	5	10	5	10	-	-	-	5	10
μ	-	5	5	5.9	7.5	8.2	9.4	11.3	12.7	10.3	10.0	10.0	10.8	11.9	13.1	11.7

Form 10-CS

CAMARGO ASSOCIATES LIMITED

ARCHITECTS—ENGINEERS—PLANNERS

3667

Client NLO

Location FERNALD, OHIO

Subject FOOTING CONCRETE QUALITY

W.O. 568-01

Date

By BC

TEST POINT	Q
1	1.5
2	2
3	2
4	2.5
5	2.5
6	2.5
7	2
8	2
9	1.5
10	2
11	3.5
12	3
13	3
14	3
15	3
16	1
17	2
18	2.5
19	2
20	2
21	2.5
22	2
23	2
24	2

$Q_{AVG} = 2.2$

WITH $Q_{AVG} = 2.2$, ESTIMATE FROM APPENDIX C PAGES C

Pulse velocity ≈ 13000

AND $f'_c \approx 3000$ psi

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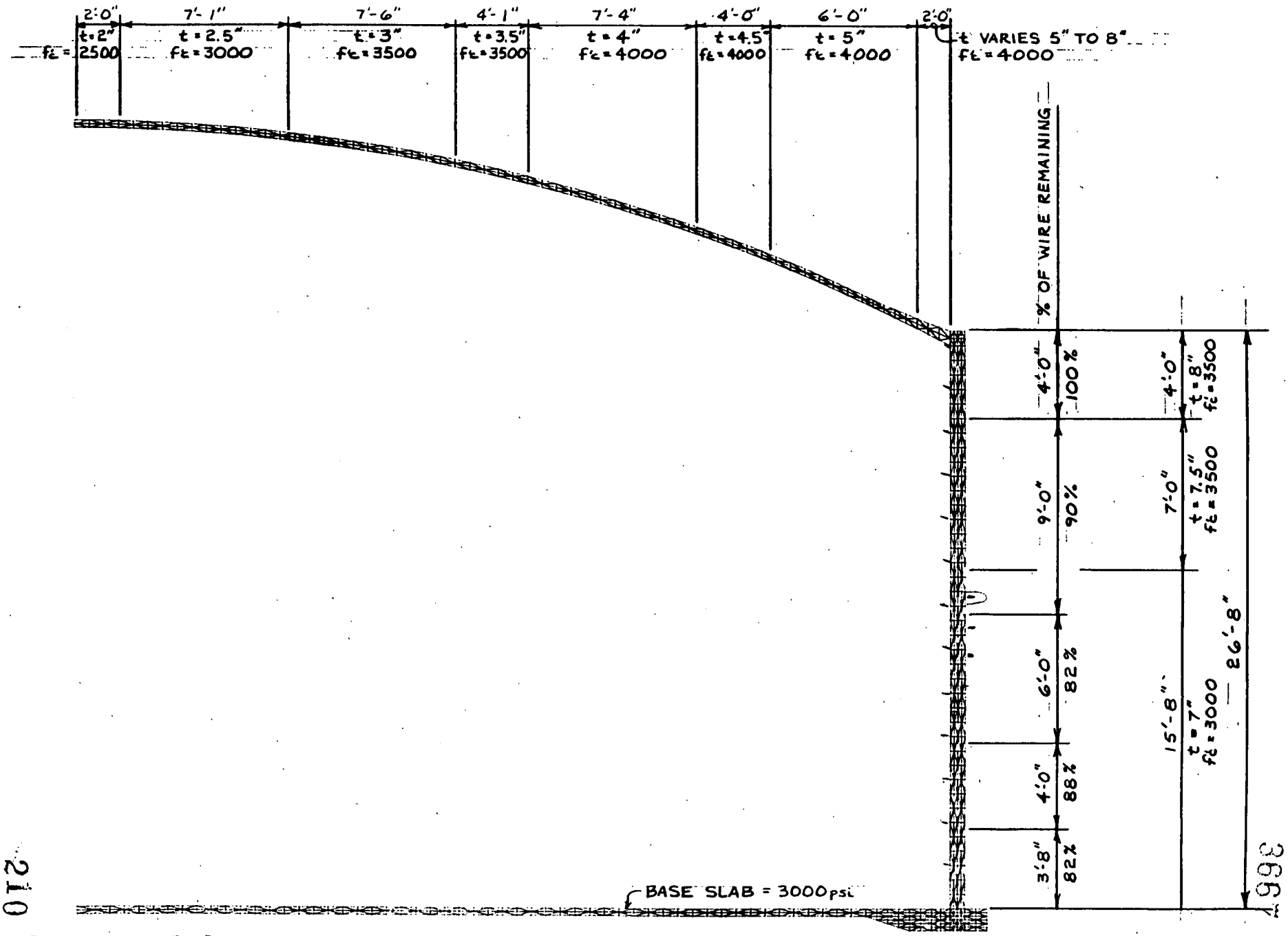

FIGURE E-2
NORTH TANK - 568 TANK 7

CAMARGO ASSOCIATES LIMITED

ARCHITECTS—ENGINEERS—PLANNERS

Client NLO

Location FERNALD, OHIO

Subject FIELD RESULTS – SOUTH TANK

W.O. 568-01

Date

By BC

DOME THICKNESS				CONCRETE QUALITY	
TEST POINTS	t_{AVG}	σ	USE t	Q_{AVG}	σ
A/X	5.07	.61	5.0	1.08	.28
B/W	4.90	.62	5.0	1.25	.52
C/V	4.34	.54	4.5	1.25	.52
D/U	3.71	.51	3.5	1.67	.69
E/T	3.43	.34	3.5	1.83	.80
F/S	3.39	.38	3.5	1.92	.95
G/R	3.14	.37	3.0	2.46	.82
H/P	3.10	.32	3.0	2.33	.80
J/N	3.00	.38	3.0	2.33	.94
K/M	2.73	.22	2.5	2.88	.83
L	2.40	0	2.5	4.0	0

Form 10-CS

CAMARGO ASSOCIATES LIMITED

ARCHITECTS—ENGINEERS—PLANNERS

3667

Client NLO

Location FERNALD

Subject DOME THICKNESS – SOUTH TANK

W.O. 568-01

Date 9/25/85

By BC

	1	2	3	4	5	6	7	8	9	10	11	12
A	5.6	5.6	5.5	4.3	4.6	4.9	4.6	4.7	5.1	5.5	5.5	5.5
X	5.7	5.6	5.9	4.1	4.4	3.4	4.9	5.0	5.5	5.1	—	5.6
B	5.7	5.9	5.4	4.0	4.5	4.9	4.7	4.9	5.1	5.6	4.9	5.1
W	5.1	4.9	5.7	4.0	3.9	3.3	4.9	4.9	5.0	4.5	5.6	5.1
C	4.1	4.6	3.9	3.9	4.4	4.4	5.0	4.6	4.8	4.9	3.9	5.0
V	5.0	4.6	4.5	3.9	3.4	3.4	3.1	4.4	4.5	4.0	5.0	4.8
D	3.9	3.6	4.0	3.6	4.3	3.7	4.1	3.4	3.4	3.6	3.4	4.6
U	4.5	3.0	4.0	3.4	3.0	3.4	3.1	3.6	4.0	2.9	4.9	3.6
E	4.0	3.4	3.7	3.4	3.4	3.6	3.9	3.1	3.1	3.7	3.1	3.4
T	3.0	2.7	3.9	3.6	3.4	3.6	3.1	3.5	3.3	3.0	4.1	3.4
F	4.0	3.7	3.6	3.0	3.1	3.4	3.6	3.0	2.9	3.1	3.9	2.9
S	2.9	2.9	4.1	3.4	3.6	3.7	3.4	3.4	3.1	3.6	4.0	3.1
G	3.7	3.1	3.4	3.1	2.6	2.9	3.3	2.9	2.7	2.9	2.9	2.8
R	2.9	3.1	4.0	3.0	3.5	4.0	3.1	3.0	2.8	3.4	3.4	2.9
H	3.4	3.0	3.0	2.9	2.4	2.9	3.1	3.4	2.6	3.0	4.0	3.0
P	3.0	3.0	3.6	2.9	3.0	3.4	3.0	2.9	2.9	3.2	3.4	3.4
J	2.9	2.9	2.7	2.7	2.2	2.2	2.9	3.4	3.1	3.4	3.9	3.4
N	3.1	2.9	3.4	2.7	2.9	3.4	2.7	2.9	3.1	3.1	3.1	3.1
K	2.6	2.6	2.4	2.6	2.3	2.3	2.8	2.6	3.0	2.9	2.9	2.7
M	2.9	2.6	2.6	2.6	2.7	3.1	2.6	3.0	3.0	2.9	2.9	3.0
L	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4

Form 10-CS

CAMARGO ASSOCIATES LIMITED

ARCHITECTS—ENGINEERS—PLANNERS

3667

Client NLO

Location FERNALD, OHIO

Subject SOUTH TANK – f'c (DOME)

W.O. 568-01

Date 9/26/85

By BC

TEST LINE # (CONCRETE QUALITY)

	1	2	3	4	5	6	7	8	9	10	11	12
A	1	1	1	2	1	1	1	1	1	1	1	1
X	1	1	1	1	1	2	1	1	1	1	1	1
B	2	1	1	2	2	1	1	1	1	1	1	1
W	1	1	1	2	1	3	1	1	1	1	1	1
C	1	1	2	2	2	1	1	1	1	1	1	1
V	1	1	1	1	1	3	2	1	1	1	1	1
D	3	2	2	3	2	2	1	2	2	1	1	1
U	1	2	1	1	2	2	2	1	1	3	1	1
E	1	2	2	3	2	2	1	2	3	1	2	1
T	2	4	1	2	1	2	3	1	1	2	1	2
F	1	1	2	2	2	3	1	3	4	1	1	3
S	3	4	1	2	1	1	2	1	2	1	2	2
G	2	3	2	2	3	3	2	4	4	3	3	3
R	2	3	1	2	1	2	2	3	3	1	2	3
H	3	3	3	2	3	4	3	2	4	2	1	2
P	2	3	1	2	2	2	3	2	2	1	2	2
J	3	4	3	3	3	4	3	2	2	1	1	1
N	1	2	2	2	3	2	4	2	1	2	3	2
K	3	4	4	4	3	4	2	3	2	3	3	2
M	2	4	2	4	2	2	3	2	2	3	4	2
L	4	4	4	4	4	4	4	4	4	4	4	4

Form 10-CS

3667

CAMARGO ASSOCIATES LIMITED

ARCHITECTS—ENGINEERS—PLANNERS

Client NLO

Location FERNALD, OHIO

Subject SOUTH TANK — WALL THICKNESS

W.O. 568-01

Date 9/26/85

By BC

DEPTH (ft.)

NO. \ DEPTH	1 2	4 6	8	10	12	14	16	18	20	22	24	26	28	30
1	8.1 8.2	7.9 7.7	7.6	7.5	7.6	7.8	8.1	8.1	8.1	8.2	8.0	7.7	7.7	7.6
2	8.4 7.6	7.4 7.4	7.9	7.9	8.1	8.3	8.1	8.0	7.9	7.9	7.9	8.0	7.7	7.4
3	8.4 7.9	7.7 7.6	7.7	7.6	7.5	7.5	7.6	7.6	7.7	7.8	7.9	8.1	8.2	7.7
4	8.4 8.0	7.7 7.4	7.5	7.6	7.7	7.9	7.7	7.6	8.0	8.1	7.9	7.9	8.0	7.3
5	8.0 8.0	6.0 6.0	5.5	7.0	6.8	7.2	7.7	8.0	7.9	7.6	7.4	7.3	6.4	7.3
6	8.0 8.1	7.9 7.8	6.9	5.9	6.9	7.0	7.4	7.3	7.4	8.0	6.4	5.9	5.9	7.6
7	8.0 8.0	8.0 7.6	7.7	7.6	6.9	8.0	8.1	8.3	8.1	8.4	7.7	7.6	6.9	6.8
8	8.0 8.0	7.4 7.2	6.9	7.9	8.0	7.7	7.9	7.6	7.7	6.9	6.8	6.9	7.0	8.1
9	8.1 8.2	7.9 7.6	7.4	7.3	7.9	8.1	7.9	7.6	7.6	6.9	6.7	6.4	6.9	7.4
10	8.0 7.7	7.6 7.4	7.3	6.9	7.7	7.6	7.0	6.4	7.7	8.1	7.3	6.9	6.8	6.4
11	8.1 8.3	8.2 7.9	7.9	8.1	7.4	7.0	6.9	6.6	7.4	8.0	6.9	6.4	6.7	6.6
12	8.4 8.3	8.2 8.2	8.0	7.7	7.4	6.9	6.8	7.6	7.7	7.8	7.9	6.6	6.9	7.0
13	8.4 8.5	7.7 7.3	7.0	6.7	7.4	7.9	8.2	8.2	7.9	7.8	7.6	5.9	6.4	6.3
14	8.1 8.2	8.4 7.9	7.4	7.0	6.9	7.7	7.6	7.7	7.7	6.4	6.9	7.0	6.7	6.4
15	8.1 7.9	7.4 8.0	8.1	8.4	8.1	8.3	8.4	7.9	7.7	7.6	7.3	6.8	6.7	6.6
16	8.4 8.3	8.4 7.9	7.4	7.7	7.9	7.9	6.9	6.9	7.4	7.7	7.4	7.0	6.9	7.0
17	8.0 7.9	7.8 7.8	7.9	8.1	8.2	8.3	8.4	7.7	7.6	7.3	7.7	7.9	6.9	6.4
18	8.4 8.4	8.4 8.6	8.3	8.1	7.7	7.7	7.4	7.4	7.3	7.7	7.9	8.0	7.4	6.9
19	8.1 8.1	8.2 8.0	7.9	7.8	7.7	7.6	7.4	7.9	7.4	7.6	6.9	7.1	6.9	6.7
20	8.4 8.4	7.6 7.4	7.7	7.6	7.7	7.9	8.1	8.2	8.4	7.9	7.6	6.7	6.6	6.4
21	8.1 8.4	8.3 8.2	7.9	7.7	7.8	7.9	7.7	7.4	7.5	7.7	7.6	6.9	6.4	6.3
22	8.1 8.1	8.1 7.9	7.8	7.7	7.4	7.9	7.9	8.1	7.9	7.9	7.6	7.9	7.7	7.4
23	7.9 7.7	8.4 8.1	8.0	8.1	8.0	7.9	7.8	7.7	7.6	7.0	6.9	6.5	6.4	7.2
24	8.1 7.6	7.4 7.3	7.4	7.9	8.1	8.1	8.1	8.4	8.0	7.7	7.4	7.3	7.6	7.4
$\bar{x}$	8.17 8.08	7.83 7.68	7.55	7.58	7.62	7.75	7.71	7.68	7.73	7.67	7.40	7.11	6.99	7.01

Form 10-CS

CAMARGO ASSOCIATES LIMITED

ARCHITECTS—ENGINEERS—PLANNERS

3667

Client NLO

Location FERNALD, OHIO

Subject SOUTH TANK - EST. CONC. COMPRESSIVE STRENGTH (WALLS)

W.O. 568-01

Date 9/26/85

By BC

DEPTH (ft)

	1	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
1	14.1	14.4	15.1	15.4	15.1	14.6	14.7	14.8	14.7	13.9	13.9	13.9	14.1	12.9	12.4	13.9
2	13.1	14.4	15.1	15.4	14.4	13.9	13.8	13.7	12.9	12.9	11.9	11.9	12.6	12.4	11.6	11.5
3	15.1	15.2	15.1	14.9	14.9	14.7	14.8	13.9	13.9	12.9	11.9	11.9	12.9	12.9	13.1	11.9
4	14.4	14.1	12.9	12.6	13.7	13.8	13.9	13.9	14.1	11.9	12.9	12.9	12.9	12.9	13.4	11.9
5	13.4	13.1	13.2	14.1	14.1	13.1	12.9	11.9	11.9	12.6	13.4	13.1	12.9	11.8	11.7	12.9
6	13.4	13.6	14.1	12.9	11.8	10.9	10.9	11.9	13.4	14.1	14.1	13.6	11.9	10.9	10.8	14.1
7	13.6	14.1	14.1	13.9	13.9	13.6	12.7	14.1	14.4	14.5	14.5	14.6	13.6	13.4	12.6	12.1
8	13.9	13.9	13.1	12.6	11.9	12.6	12.9	13.4	14.1	13.6	13.6	12.6	11.9	11.9	12.9	14.0
9	13.9	13.9	14.1	14.1	14.0	13.6	14.1	14.1	13.6	12.9	12.6	11.9	11.7	11.6	11.7	12.9
10	13.9	13.9	12.6	12.4	12.2	11.9	12.6	13.4	14.1	12.6	13.4	14.1	14.1	12.6	11.9	11.4
11	13.9	14.1	14.2	14.1	13.6	14.1	13.9	12.9	11.6	11.7	12.9	14.1	11.6	11.4	11.5	11.6
12	14.1	14.1	14.6	14.4	14.5	13.9	13.4	11.7	11.8	13.4	14.1	14.2	14.4	11.6	11.9	13.9
13	13.9	14.6	14.4	14.1	14.2	13.1	12.9	12.9	14.6	14.8	14.9	14.9	15.1	10.4	11.1	11.6
14	13.9	14.1	14.2	14.2	13.9	13.8	13.1	14.4	14.4	14.6	15.0	13.0	12.4	13.1	13.1	11.9
15	14.6	15.1	15.1	15.4	14.7	13.9	13.6	13.6	14.1	12.9	12.9	13.6	14.1	11.6	11.3	10.9
16	14.1	14.1	14.2	14.4	14.5	14.6	14.7	13.9	12.9	12.9	14.1	14.2	13.9	13.9	11.9	12.4
17	14.1	15.1	15.1	14.9	14.7	14.6	13.9	13.8	13.9	14.1	14.4	15.1	15.1	14.0	13.1	12.6
18	13.6	14.1	14.8	14.8	14.9	14.9	15.1	15.1	14.9	14.3	14.1	13.9	13.7	15.1	14.6	12.9
19	14.1	14.8	14.9	13.1	14.1	14.6	15.1	15.1	13.9	14.1	14.1	13.9	12.7	13.4	12.9	12.6
20	13.9	14.1	14.7	14.6	13.9	13.9	14.1	14.1	13.9	13.4	13.6	13.9	14.1	11.9	11.4	11.3
21	14.1	14.6	14.7	14.8	13.9	13.6	13.9	14.1	14.4	12.9	12.9	13.4	13.7	11.6	11.4	11.2
22	14.1	14.4	15.0	13.9	14.4	14.1	14.1	13.7	13.8	14.0	14.1	13.9	12.6	12.4	13.1	12.9
23	13.9	14.1	14.0	14.4	14.1	14.1	14.2	13.9	12.9	13.1	14.1	14.0	11.9	11.8	11.9	12.6
24	13.4	13.6	13.9	14.1	14.1	14.4	15.1	15.2	14.9	14.6	13.9	13.6	12.6	12.4	13.9	14.0
μ	13.9	14.2	14.3	14.2	14.0	13.8	13.8	13.7	13.7	13.4	13.6	13.6	13.2	12.4	12.3	12.5

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CAMARGO ASSOCIATES LIMITED

ARCHITECTS—ENGINEERS—PLANNERS

Client NLO

Location FERNALD, OHIO

Subject SOUTH TANK — EST. % WIRE LOSS

W.O. 568-01

Date 9/26/85

By BC

DEPTH (ft)

	1	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
1					5	5								5	5	5
2			5	5							5				5	10
3					5		5	5			5					5
4					5	5			5					5		10
5					10		15	5			5	5	10	5	10	5
6					10	10	5				5		15	20	15	10
7				5	5	5	10						5	10	15	10
8			5	5	5	5		5		5	5	10	10	10	5	
9				5	5	5						5	10	10	5	
10			5	5		10				10			5	10	15	15
11							5	5	5	10	5		10	15	15	15
12								5	10	5				5	10	10
13					5	10	5							20	15	15
14				5			10	5				10	10	5	15	20
15												5		15	20	20
16						5			10	15					10	5
17												5			5	15
18									5	5					5	15
19					5	5		5	5		5	5	15		10	10
20				5				5					5	10	15	20
21						5						5	5	10	15	15
22							5					5			5	10
23								5	5		5	5	10	10	10	5
24												5		5		5
μ — —			5	5	6	6.36	7.5	5	6.43	8.33	5	5.91	9.17	10	10.71	11.36

TEST 2

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Client NLO

Location FERNALD, OHIO

Subject FOOTING CONCRETE QUALITY - SOUTH TANK

W.O. 568-01

Date

By BC

TEST POINT	Q
1	1.5
2	2.5
3	2.5
4	2
5	2
6	3
7	2
8	2
9	2
10	3
11	3
12	3
13	3.5
14	3.5
15	2.5
16	2
17	2
18	3
19	2.5
20	2.5
21	1.5
22	2
23	2.5
24	1.5

$Q_{AVG} = 2.4$

THIS IS EXTREMELY CLOSE TO THAT OF NORTH TANK — USE THE ORIGINAL DESIGN STRENGTH OF $f'c = 3000$ psi

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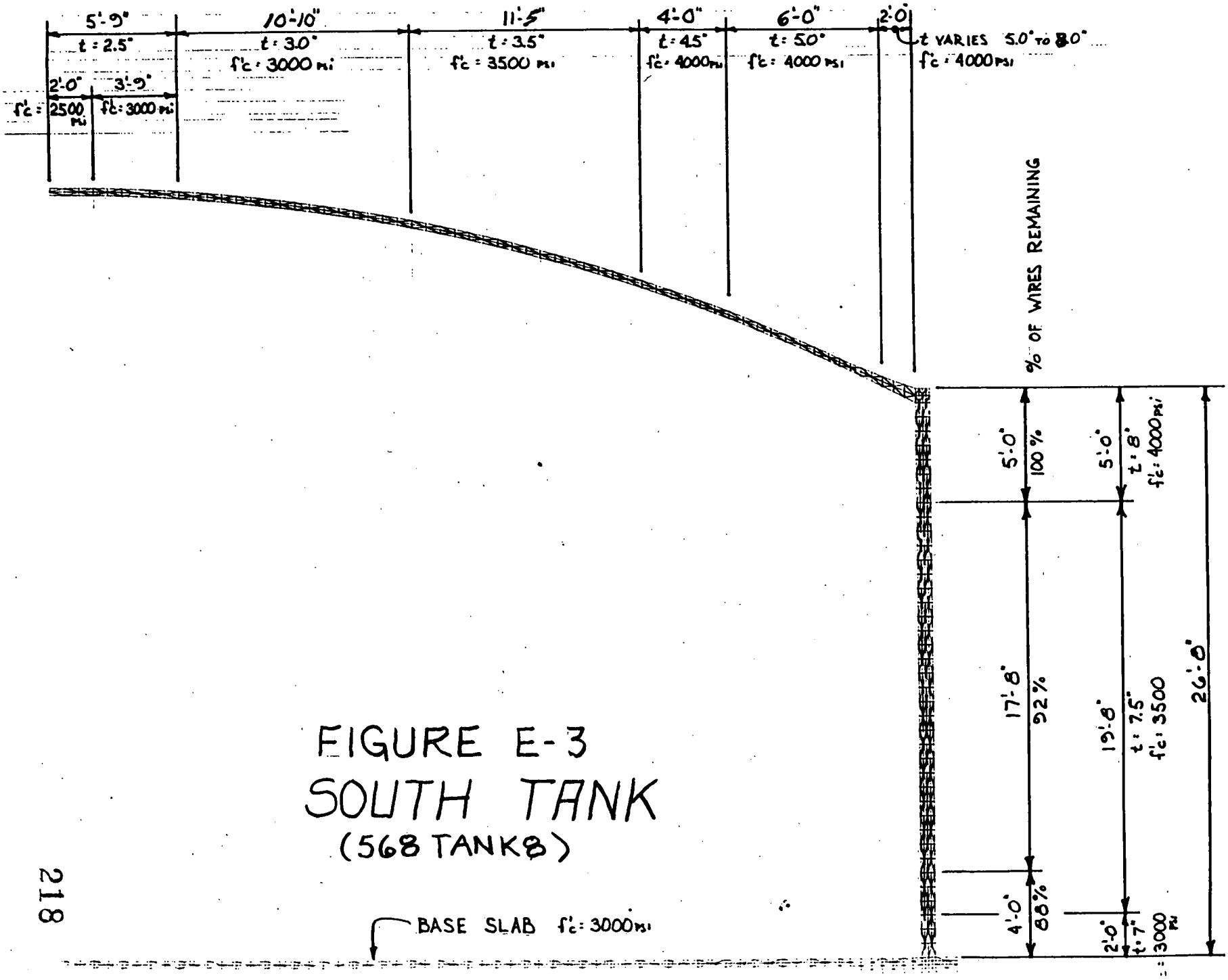

FIGURE E-3
SOUTH TANK
(568 TANKS)

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ARCHITECTS—ENGINEERS—PLANNERS

Client NLO

Location FERNALD, OHIO

Subject FINAL MODEL

W.O. 568-01

Date

By BC

TANK GEOMETRY FOR THE FINAL MODEL WAS BASED ON INTERPRETATION OF FIELD DATA. ONLY MINOR CHANGES WERE MADE TO THE ORIGINAL MODEL, ALL CONCERNING CONCRETE THICKNESS. IN ALL CASES, THE OUTSIDE DIMENSION OF THE TANK WAS MAINTAINED AND THE THICKNESS DEDUCTED FROM THE INSIDE DIMENSION. REDUCED THICKNESS IN THE DOME GREATLY AFFECTED THE ELEMENT ASPECT RATIOS. TO ALLEVIATE THIS PROBLEM, ELEMENT LENGTHS WERE REDUCED AS THICKNESS DECREASED. THE RESULTING CHANGES IN THE DOME OF 568TANK7 ARE SHOWN ON PAGES

orm 10-CS

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Client NLO

Location FERNALD, OHIO

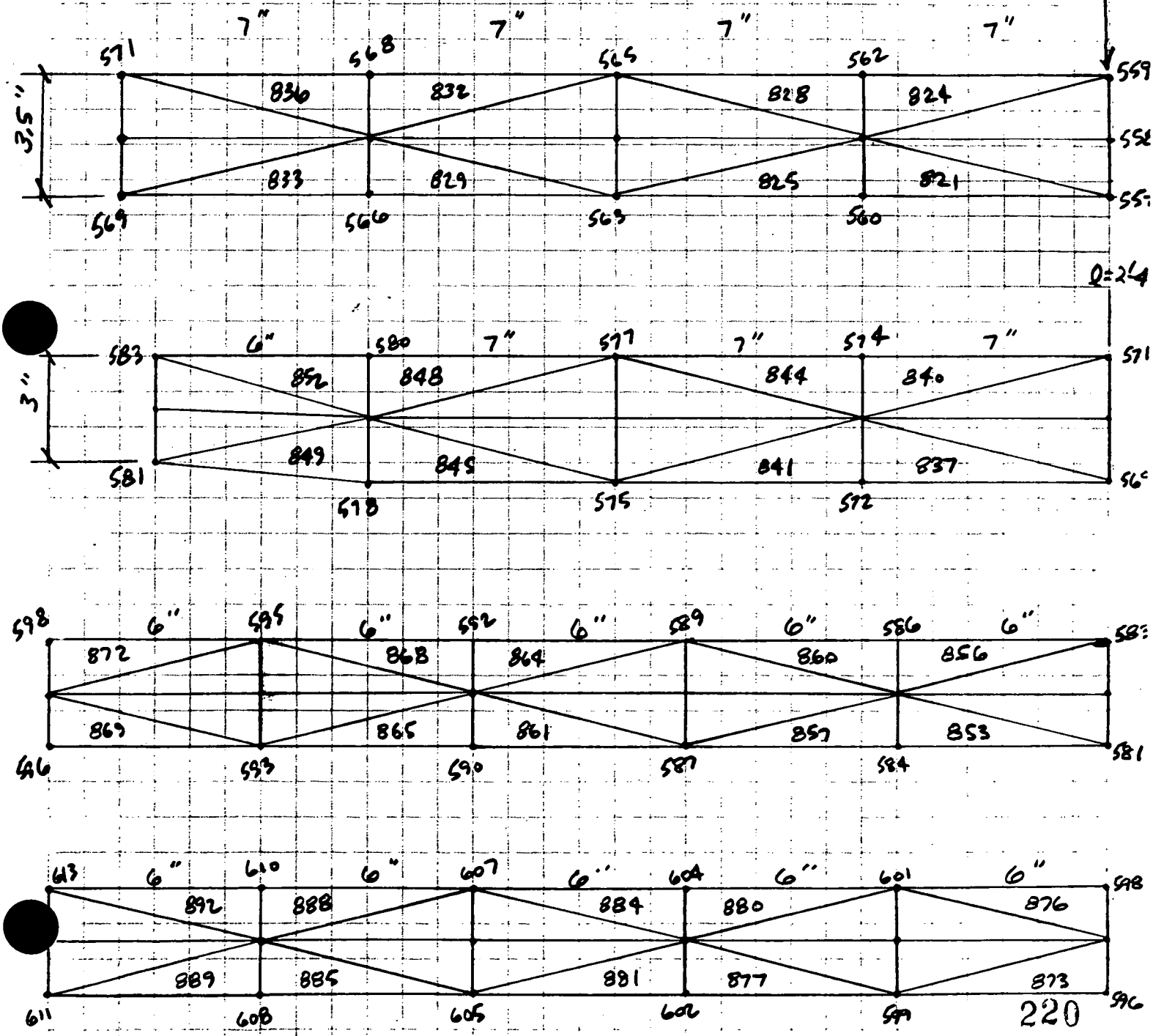
Subject 568 TANK 7 – REVISED DOME SECTION

W.O. 568-01

Date

By BC

NODAL COORDINATE X 20.666 / Y 34.782



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Client NLO

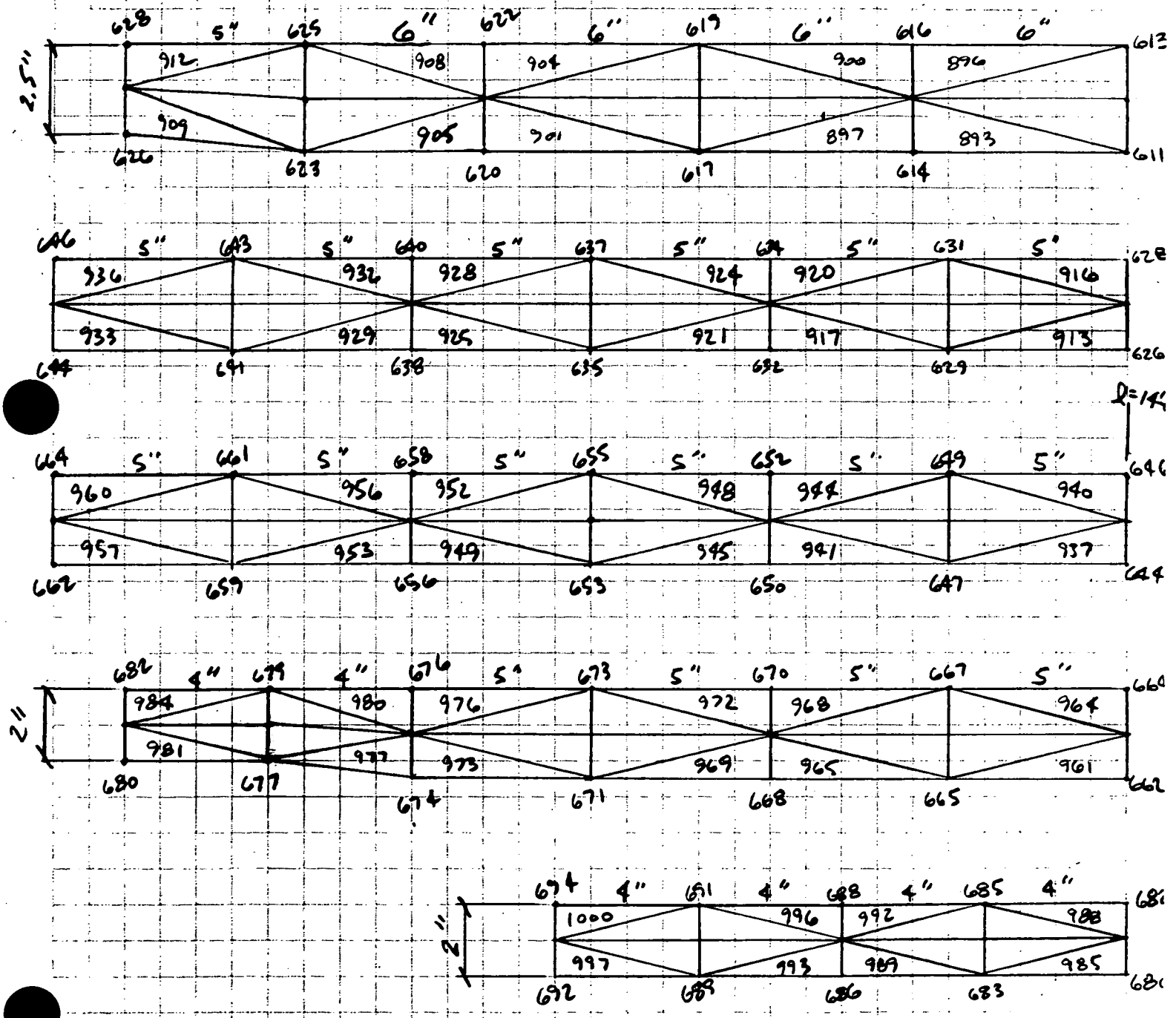
Location FERNALD, OHIO

Subject 568 TANK 7

W.O. 568-01

Date

By BC



℄ TANK

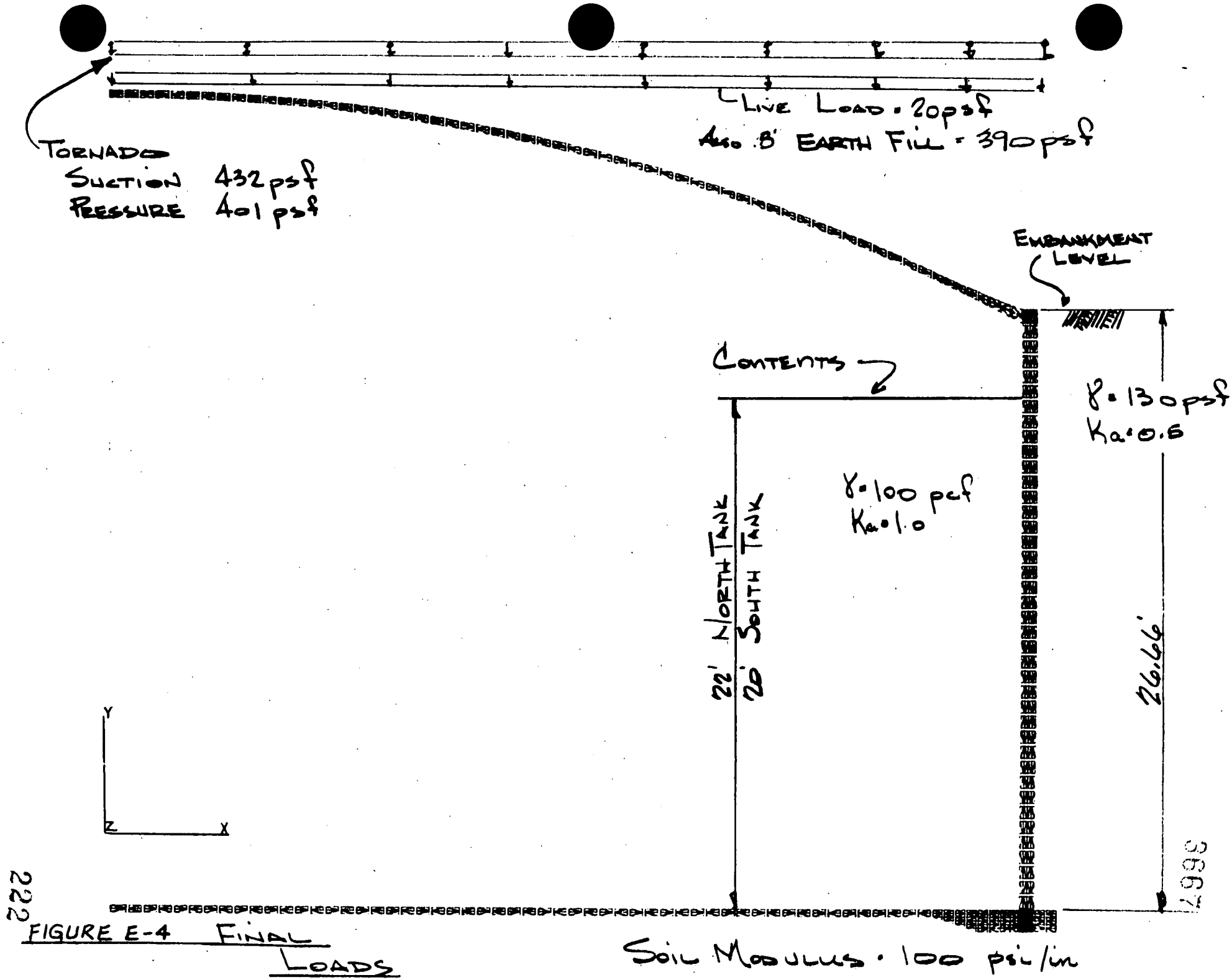


FIGURE E-4 Final Loads

Form 10-CS

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Client NLO

Location FERNALD, OHIO

Subject FINAL MODEL

W.O. 568-01

Date

By BC

REVISED CONTENT LOADS :

LOADS ON FINAL MODELS DIFFER FROM THOSE ON INITIAL MODEL THUS :

1. MAX. HEIGHT OF SOLIDS (INITIALLY 23'-0")
   - A. NORTH TANK (568TANK7) = 22'-0"
   - B. SOUTH TANK (568TANK8) = 20'-0"
2. NO WATER (INITIALLY 2'-0")

1. VERTICAL LOADS ON BASE SLAB (SEE P. A16 FOR INITIAL CALC.)

$P = \gamma_s H_s W \pi D$

@ NODE 9 (568TANK7) $P = 100(22)(8)(18 \times 2)\pi / 144 = 13,823$ lb

2. HORIZONTAL LOADS ON WALL (SEE P. A17 FOR INITIAL CALC.)

$P = \gamma_s (H_s - h) W \pi D$

@ NODE 352 (568 TANK7) $P = 100(22 - 12.667)(8/12)(80)\pi = 156,376$ lb

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ARCHITECTS—ENGINEERS—PLANNERS

Client NLO

Location FERNALD, OHIO

Subject FINAL MODEL

W.O. 568-01

Date

By BC

REVISED BERM LOADS :

1. EXISTING BERM

LOADS DIFFER ON FINAL MODELS FROM THOSE ON INITIAL MODEL THUS :

1. SOIL DENSITY = 130 lb/ft³ (INITIALLY 125 lb/ft³)
2. COEFFICIENT OF LATERAL EARTH PRESSURE OF 0.5 (INITIALLY 0.4)

@ NODE 356 (568 TANK 7) — (SEE P. A18 FOR INITIAL CALC.)

$$P = K_a \gamma_{soil} (H_{soil} - h) W D \pi$$

$$= 0.5(130)(26.667 - 12.667)(8/12)(80)\pi = 152{,}472 \text{ lbs}$$

2. PROPOSED EARTH FILL → 3'-0" OVER DOME SURFACE

A. HORIZONTAL LOADS ON WALL, @ NODE 356 (568 TANK 7)

$$P = K_a \gamma_{soil} (H_{soil} - h) W D \pi \quad , \quad H_s = 29.667 \text{ ft}$$

$$P = 0.5(130)(29.667 - 12.667)(8/12)(80)\pi = 185{,}145 \text{ lbs}$$

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Client NLO

Location FERNALD, OHIO

Subject FINAL MODEL

W.O. 568-01

Date

By BC

B. VERTICAL LOADS ON TANK DOME

LOADS ARE CALCULATED SIMILARLY TO LIVE LOADS ON DOME SURFACE. (SEE P. A19)

$P = \text{PRESSURE} \; W \pi D$

WHERE $\text{PRESSURE} = \gamma_{SOIL} H_{SOIL}$

@ NODE 634 (568 TANK 7)

$P = 130(3)(5/12)(2 \times 7.83)\pi = 7995 \text{ lbs}$

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Client NLO

Location FERNALD, OHIO

Subject FINAL MODEL

W.O. 568-01

Date

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REVISED POST TENSIONING LOADS :

LOADS DIFFERED FROM THOSE ON INITIAL MODEL

BY : 1. A PERCENTAGE OF THE WIRES WERE CONSIDERED MISSING OR CORRODED TO THE POINT OF BEING INEFFECTIVE.

CALCULATE NODAL LOAD (SEE P. A20 FOR INITIAL CALC.)

$$P = \left[\frac{R N_w A_w T}{\left(\frac{D_o - h}{2h}\right)}\right] \pi D$$

WHERE R = PERCENTAGE OF WIRES REMAINING

@ NODE 301,

$N_w = 21.667$

$R = 88\%$

$h = 7''$

$$P = \left[\frac{\frac{.88(21.667)(.0286)(100{,}000)}{(56)}}{\left[\frac{(12)81.333 - 7}{2(7)}\right]}\right] \pi (81.333)(12)(8) = 248571 \text{ lbs}$$

10.1356

10.1139

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Client NLO

Location

Subject

W.O.

Date

By

TORNADO LOADING
FROM ZIMMER NUCLEAR POWER STATION
SARGENT & LUNDY
"PROJECT STRUCTURAL DESIGN CRITERIA"

MAX. TANGENTIAL VELOCITY - 300 MPH
MAX. TRANSLATIONAL VELOCITY - 60 MPH
PRESSURE DROP - 3 PSI (WITHIN 3 SECONDS)

from other ref.

$$v(r) = V_c \frac{r}{R_c} \pm V_t \quad \text{for } \frac{r}{R_c} \le 1$$

$$v(r) = V_c \frac{R_c}{r} \pm V_t \quad \text{for } \frac{r}{R_c} \ge 1$$

$$R_c = \frac{c}{V_c} \quad \text{for } \frac{r}{R_c} = 1$$

r = radius from tornado
V_c = maximum tangential velocity = 300 mph
R_c = radius of maximum tangential velocity
V_t = translational velocity

the distribution of the pressure drop with the radius from the tornado is as follows:

$$p(r) = 3.0\left(1 - .5\left(\frac{r}{R_c}\right)^2\right) \quad \text{for } \frac{r}{R_c} \le 1$$

$$p(r) = 1.5\left(\frac{R_c}{r}\right)^2 \quad \text{for } \frac{r}{R_c} \ge 1$$

$p(r)$ = pressure drop (psi)

velocity + pressure drop = local effect of tornado

windward + leeward - total structure determine max overall effects of shear, overturning moment & torsional moment on the structure.

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Client NLO

Location

Subject

W.O.

Date

By

ROOF- AVERAGE SUCTION = 432 PSF

WALLS- LOCAL EFFECTS 442 PSF SUCTION
824 PSF PRESSURE LOADINGS

FROM TORNADO CONFERENCE
P15 "A PRACT. LOOK AT TORNADO FORCES
Windward, leeward + roof loads

FROM "DESIGN OF NUCLEAR POWER PLANTS FOR TORNADOS

I A. direct wind pressures
300 MPH TANGENTIAL VELOCITY & concurrent
60 MPH TRANSLATIONAL VELOCITY

B. Barometric Pressure Drop
drop 3 psi in 3 seconds

FOR TORNADO
.9 WINDWARD
.5 LEEWARD
GUST FACTOR 1.0
CONSTANT PRESSURE OVER HT.

pressures do not need to be combined

II WIND PRESSURE $q_{psf} = .002558 \times S \times (G \times v)^2$

v → mph
G → gust factor
S → shape coef.

III Pressure Drop
3 psi drop in 3 seconds is equiv. to a uniform suction force of 432 psf.] if no means of venting itself

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3667 (3)

Client NLO

Location

Subject

W.O.

Date

By

CONTI. IN THE central core area
angular velocity assumed constant
$w = v(r)/r = V_c/R_c$
↳ radius of max wind vel. V_c

tangential wind velocity ONLY

$v(r) = V_c \frac{r}{R_c}$ for $r/R_c \le 1$

$v(r) = C/r$ for $r/R_c \ge 1$

$R_c = C/V_c$ for $r/R_c = 1$

$V_c = 300$ MPH $C = 10^5$ F/S $R_c = 227$

P. 6 pressure from drop NOT same as previous ref.

$P_2(r) = \rho' V_c^2 [1 - 0.5(r/R_c)^2]$ for $r/R_c \le 1$

$P_2(r) = .5 \rho' V_c^2 (r/R_c)^2$ for $r/R_c \ge 1$

IV MISSILES MUST RESIST 4" X 12" WOOD PLANT
12' LONG
105#

TRAVELING @ A MAX VEL. OF 250 MPH
STRIKING ON END.

p.8 thk of w

V DESIGN 2/3 INCREASE IN ALLOW. STRESS FOR TORNADO WIND LOADINGS WHEN COMBINE LL + DL + 360 MPH TORNADO WIND LOADING

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Client NLO

Location

Subject

W.O. 568-01

Date

By

"Summary of Group Discussion on Tornado Parameters"

Max wind speed 360 MPH vector sum of rotation, translation + convergence.

I $q = .002558 \times S \times (G \times v)^2$

q → PSF; S → 1; G → 1.1; v → tangential + translational 360 MPH

q = 401 PSF

II Pressure Drop

SUCTION PRESSURE 432 PSF

III MISSILES 4" x 12" x 12' Long wood plank weighing 105# v = 250 mph

Modified Petry Method 11" thk. req'd

[redacted]

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LIMITED

ARCHITECTS—ENGINEERS—PLANNERS

3667

Client NLO

Location FERNALD, OHIO

Subject FINAL MODEL

W.O. 568-01

Date

By BC

TORNADO LOADS:

TORNADO LOADS ARE APPLIED TO THE MODEL AS NODAL LOADS ON THE DOME. CALCULATIONS ARE SIMILAR TO THOSE FOR DOME LIVE LOADS AND THE EARTH FILL COVER. THE TWO CASES OF TORNADO LOADS ARE:

1. TORNADO PRESSURE = 401 psf = F_p
2. TORNADO SUCTION = 432 psf = F_s

@ NODE 634 (568 TANK 7)

A. PRESSURE

$$P = F_p W D \pi = 401 (5/12)(7.83' \times 2)\pi = 8220 \text{ lbs}$$

THIS LOAD APPLIES THUS -8220/Y/634

B. SUCTION

$$P = F_s W D \pi = 432 (5/12)(7.83 \times 2)\pi = 8856 \text{ lbs}$$

THIS LOAD APPLIES THUS 8856/Y/634

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Client NLO

Location FERNALD, OHIO

Subject CALCULATION - WIRE OVERSTRESS

W.O. 568-01

Date

By BC

THIS CALCULATION IS IDENTICAL TO THAT SHOWN IN APPENDIX B, EXCEPT FOR:

1. THINNING IN THE WALL
2. REDUCTION IN THE NUMBER OF POST-TENSIONING WIRES
3. USES LOAD COMB. #9 (DL+C)

$$\sigma_W = \frac{F_\theta (t)(h)}{A_W N_W R}$$ where R = % OF WIRES REMAINING IN WALL

FOR ELEM 393 * 400, $t = 7''$ & $R = 82\%$, $F_{\theta_{AVG}} = 36{,}360$ psi

$$\sigma_W = \frac{36{,}360\,(7)(8)}{0.0206(24.667)(.82)} + 100{,}000 = 104{,}887 \text{ psi}$$

FOR ELEM 561 * 568, $t = 7\frac{1}{2}''$, $R = 90\%$, & $F_{\theta_{AVG}} = -510$ psi

$$\sigma_W = \frac{-51\,(7.5)(8)}{.0206(10)(.90)} + 100{,}000 = 83{,}491 \text{ psi}$$

ALL VALUES ARE COMPUTED SIMILARLY, SEE PAGE E35 FOR GRAPH SHOWING THE AMOUNT OF WIRE OVERSTRESS.

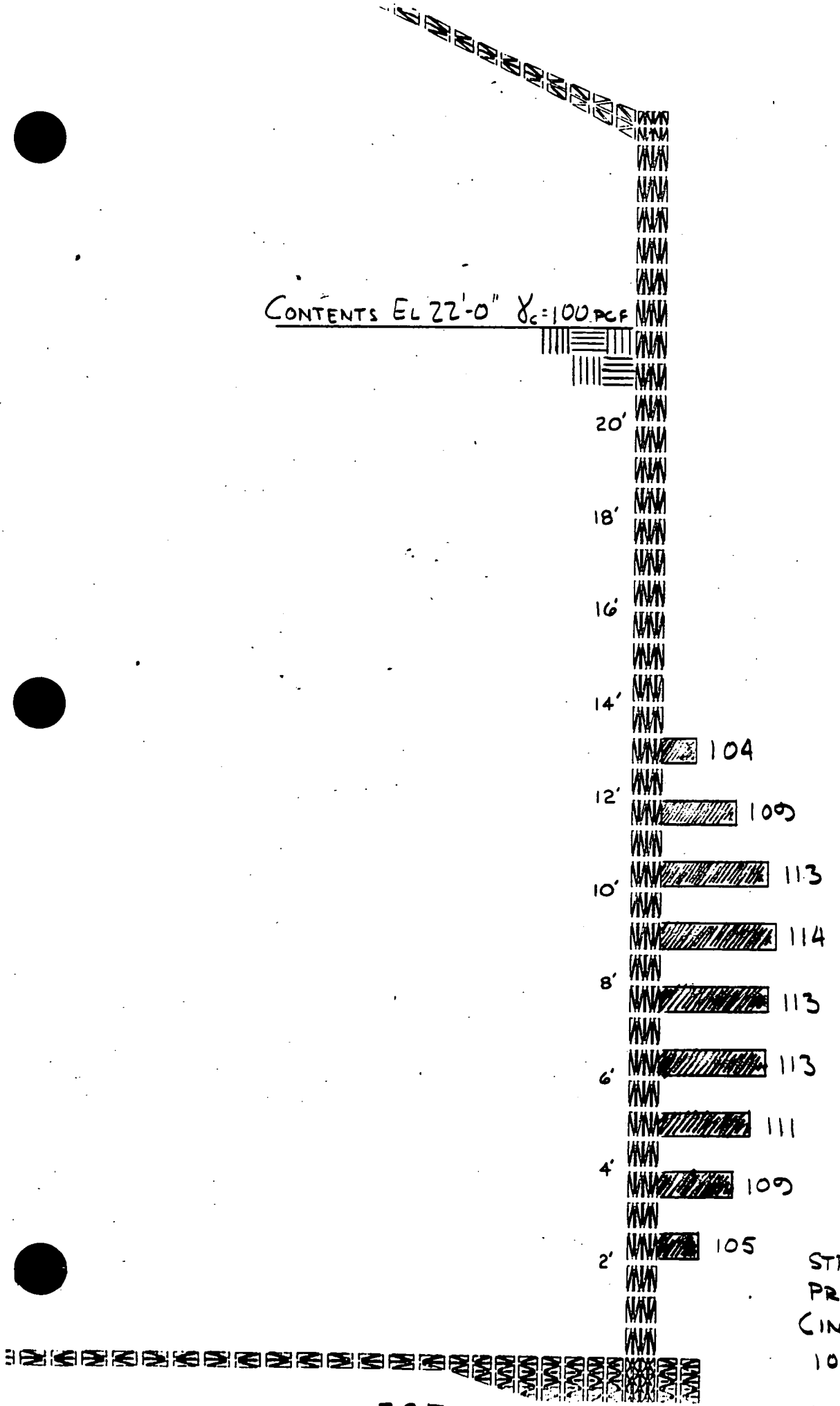

FIGURE E-5

STRESS IN HORIZ. PRELOAD WIRES (IN EXCESS OF 100 KSI)

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Client NLO

Location FERNALD, OHIO

Subject ALLOWABLE BUCKLING LOAD

W.O. 56B-01

Date 11/1/85

By BC

CRITICAL BUCKLING PRESSURE ON A SPHERICAL SHELL

$$q_{cr} = \frac{2E}{\sqrt{3(1-\nu^2)}}\left(\frac{h}{a}\right)^2 \quad \text{OR} \quad CE\left(\frac{h}{a}\right)^2$$

WHERE E = MODULUS OF ELASTICITY = $57000\sqrt{f'_c}$ psi

ν = POISSONS RATIO = 0.2

h = CONCRETE THICKNESS, ft

a = RADIUS OF CURVATURE, ft

$$\frac{2}{\sqrt{3(1-.2^2)}} = 1.18$$

EXPERIMENTS BY BILLINGTON AND SCHMIDT SHOW THAT C IS MUCH SMALLER THAN $\frac{2}{\sqrt{3(1-.2^2)}}$. SCHMIDT SHOWS C VALUES FROM 0.06 TO 0.32, THIS VALUE IS DEPENDENT ON SUCH THINGS AS:

1) CREEP OF THE CONCRETE
2) CHANGES IN GEOMETRY DUE TO LOADING
3) CONSTRUCTION DEVIATIONS FROM THEORETICAL DIMENSIONS
4) EFFECTIVE BENDING THICKNESS AS BENDING IS INITIATED

USING C = 0.32 AS A STRUCTURE IN THE BEST POSSIBLE CONDITION AND C = 0.06 AS A STRUCTURE IN THE WORST, ESTIMATE C FOR THE TWO K-65 SILOS,

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Client NLO

Location FERNALD, OHIO

Subject BUCKLING

W.O. 568-01

Date 11/1/85

By BC

THE TWO K-65 SILOS EXHIBIT:

1) SEVERELY UNDULATING INNER SURFACE OF THE DOME. THIS CAUSES STRESS CONCENTRATIONS TO BUILD UP AND CAN CAUSE LOCAL CHANGES IN GEOMETRY.

2) CRACKING, NON-BONDING OF OR TOTAL LACK OF REINFORCEMENT, AND GENERAL BREAKDOWN OF THE CEMENT MATRIX.

3) GENERAL THINNING OF SHELL THICKNESS, LOCAL DEVIATIONS CAN BE MORE SEVERE.

BASED ON THESE CHARACTERISTICS, USE $C = 0.06$.

AT THE POINT WHERE BENDING IS INITIATED (FIGURE 8-1), $h = 3''$ & $f'_c = 3000$ psi

$$q_{cr} = 0.06\left(57000\sqrt{3000}\right)\left(\frac{3/12}{85}\right)^2(144) = 233 \text{ psf}$$

THE STRUCTURAL STABILITY RESEARCH COUNCIL RECOMMENDS USING A FACTOR OF SAFETY (F.S.) OF 4 FOR STRUCTURES WITH "SLIGHT TO NORMAL IMPERFECTIONS"

THEREFORE THE ALLOWABLE UNIFORM LOAD IS

$$q_a = \frac{q_{cr}}{F.S.} = \frac{233}{4} = 58.3 \text{ psf}$$

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3667

Client NLO

Location FERNALD, OHIO

Subject FINAL MODEL

W.O. 568-01

Date

By BC

ALLOWABLE HOOP STRESS

$F_\theta = 0.18 f'_c$

FINAL MODEL USES 4 MATERIAL STRENGTHS

1. $f'_c = 4000$ psi
2. $f'_c = 3500$ psi
3. $f'_c = 3000$ psi
4. $f'_c = 2500$ psi

SEE FIGURES E-1 AND E-2 FOR MATERIAL TYPE LOCATIONS.

THE CORRESPONDING ALLOWABLE HOOP STRESSES ARE:

1. $F_{\theta 4000} = 0.18(4000) = 720$ psi
2. $F_{\theta 3500} = 630$ psi
3. $F_{\theta 3000} = 540$ psi
4. $F_{\theta 2500} = 450$ psi

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Client NLO

Location FERNALD OHIO

Subject ALLOWABLE LOAD - DOME COVER

W.O. 503-01

Date 2-6-86

By [illegible]

ALLOWABLE UNIFORM LOAD FOR 3" thk DOME: 71 PSF

TOTAL LOAD OVER 30' DIAM. CENTER: $(71-20)\,\pi(30)^2/4(1000) = 36.05^K$

LL

FOR NORTH TANK:

$\frac{2}{12}(150)\pi(2)^2/1000 = .31^K$

$\frac{2.5}{12}(150)\pi(9.08^2-2^2)/1000 = 7.70^K$

$\frac{3}{12}(150)\pi(15^2-9.08^2)/1000 = 16.79$

24.80^K

WT. of DOME DUE TO REDUCED THKN'S

ALLOWABLE LOAD ADDED TO DOME @ 15 RADIUS:

$36.05^K - 24.80^K = 11.25^K$

ALLOWABLE LOAD ON OUTER DOME AREA:

$\pi(40^2 - 15^2)(71) \cong 306{,}000$ lb

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' 3.4 FINITE ELEMENT ANALYSIS 01/30/86 11:03:34
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UNITS DEFINITION *

IT GROUP	UNIT
NGTHS	FEET
EMENT PROPERTIES	INCHES
RCES	LBS
GLES	DEGREES
SPLACEMENTS	INCHES
NAMIC PROPERTIES	FORCE

NORTH TANK

LOAD COMBINATION INFORMATION *

MB	A G	B H	C I	D J	E K	F L
1	1.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000
[illegible]	.000	1.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000
3	1.000	1.000	0.000	1.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000
4	1.000	1.000	0.000	0.000	0.000	1.000
	0.000	0.000	0.000	0.000	0.000	0.000
5	1.000	1.000	0.000	1.000	0.000	1.000
	0.000	0.000	0.000	0.000	0.000	0.000
6	1.000	0.000	0.000	1.000	1.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000
7	1.000	0.000	0.000	1.000	0.000	1.000
	1.000	0.000	0.000	0.000	0.000	0.000
8	1.000	0.000	0.000	1.000	0.000	1.000
	0.000	1.000	0.000	0.000	0.000	0.000
9	1.000	0.000	0.000	1.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000

Ld Case A : DEAD LOAD
(TANK WT. + POST [illegible] FORCE)

LdCase B: SNOW LOAD (20 PSF)

LdCase C : NOT USED

LdCase D: CONTENTS LOAD

LdCase E : EMBANKMENT W/3' COVER

Ld Case F : EXIST. EMBANKMENT

LdCase G: TORNADO PRESSURE (401 PSF)

Ld Case H : TORNADO SUCTION (432 PSF)

UMBER OF LOAD CASES = 8

Comb 1 : DL

Comb 2 : DL+LL

Comb 3 : DL+LL+CONTENTS

Comb 4 : DL+LL+EXIST. EMBANK.

[illegible] 5 : DL+LL+CONTENTS + EXIST. EMBANK.

[illegible] 6 : DL + CONTENTS + EMBANK. W/3' COVER

Comb 7 : DL + CONTENTS + EXIST. EMBANK. + TORNADO PRESSURE

Comb 8 : DL + CONTENTS + EXIST. EMBANK + TORNADO SUCTION

Comb 9 : DL + CONTENTS

RIAL SPECIFICATIONS *

YOUNG'S MODULUS (LONG)	POISSON'S RATIO (LONG)	SHEAR MODULUS (LONG)	YOUNGS MODULUS (TRANS)	POISSON'S RATIO (TRANS)	SHEAR MODULUS (TRANS)	THERMAL COEFFICIENT
2.85E+06	2.00E-01	1.18E+06	2.85E+06	2.00E-01	1.18E+06	0.00E+00
3.12E+06	2.00E-01	1.30E+06	3.12E+06	2.00E-01	1.30E+06	0.00E+00
3.37E+06	2.00E-01	1.40E+06	3.37E+06	2.00E-01	1.40E+06	0.00E+00
3.60E+06	2.00E-01	1.50E+06	3.60E+06	2.00E-01	1.50E+06	0.00E+00
3.82E+06	2.00E-01	1.59E+06	3.82E+06	2.00E-01	1.59E+06	0.00E+00

AL COORDINATES *

	X COORD	Y COORD	COMMENT
	0.0000	0.6667	S/X
	0.0000	0.8333	
	0.0000	1.0000	
	0.8333	0.6667	S/X
1	0.8333	0.8333	
2	0.8333	1.0000	
7	1.5000	0.6667	S/X
8	1.5000	0.8333	
9	1.5000	1.0000	
0	2.1667	0.6667	S/X
1	2.1667	0.8333	
2	2.1667	1.0000	
3	2.8334	0.6667	S/X
4	2.8334	0.8333	
5	2.8334	1.0000	
6	3.5001	0.6667	S/X
7	3.5001	0.8333	
8	3.5001	1.0000	
9	4.1668	0.6667	S/X
0	4.1668	0.8333	
1	4.1668	1.0000	
2	4.8335	0.6667	S/X
3	4.8335	0.8333	
4	4.8335	1.0000	
5	5.5002	0.6667	S/X

ODAL COORDINATES *

DE	X COORD	Y COORD	COMMENT
26	5.5002	0.8333	
27	5.5002	1.0000	
28	6.1669	0.6667	S/X
29	6.1669	0.8333	
30	6.1669	1.0000	
31	6.8336	0.6667	S/X
32	6.8336	0.8333	
33	6.8336	1.0000	
34	7.5003	0.6667	S/X
35	7.5003	0.8333	
36	7.5003	1.0000	
37	8.1670	0.6667	S/X
38	8.1670	0.8333	
39	8.1670	1.0000	
40	8.8337	0.6667	S/X
41	8.8337	0.8333	
42	8.8337	1.0000	
43	9.5004	0.6667	S/X
[illegible]	9.5004	0.8333	
[illegible]	9.5004	1.0000	
46	10.1670	0.6667	S/X
47	10.1670	0.8333	
48	10.1670	1.0000	
49	10.8330	0.6667	S/X
50	10.8330	0.8333	
51	10.8330	1.0000	
52	11.5000	0.6667	S/X
53	11.5000	0.8333	
54	11.5000	1.0000	
55	12.1670	0.6667	S/X
56	12.1670	0.8333	
57	12.1670	1.0000	
58	12.8330	0.6667	S/X
59	12.8330	0.8333	
60	12.8330	1.0000	
61	13.5000	0.6667	S/X
62	13.5000	0.8333	
63	13.5000	1.0000	
64	14.1670	0.6667	S/X
65	14.1670	0.8333	
66	14.1670	1.0000	

AL COORDINATES *

	X COORD	Y COORD	COMMENT
7	14.8330	0.6667	S/X
8	14.8330	0.8333	
9	14.8330	1.0000	
0	15.5000	0.6667	S/X
1	15.5000	0.8333	
2	15.5000	1.0000	
3	16.1670	0.6667	S/X
4	16.1670	0.8333	
5	16.1670	1.0000	
6	16.8330	0.6667	S/X
7	16.8330	0.8333	
8	16.8330	1.0000	
9	17.5000	0.6667	S/X
0	17.5000	0.8333	
1	17.5000	1.0000	
2	18.1670	0.6667	S/X
3	18.1670	0.8333	
4	18.1670	1.0000	
5	18.8330	0.6667	S/X
6	18.8330	0.8333	
7	18.8330	1.0000	
8	19.5000	0.6667	S/X
9	19.5000	0.8333	
0	19.5000	1.0000	
1	20.1670	0.6667	S/X
2	20.1670	0.8333	
3	20.1670	1.0000	
4	20.8330	0.6667	S/X
5	20.8330	0.8333	
6	20.8330	1.0000	
7	21.5000	0.6667	S/X
8	21.5000	0.8333	
9	21.5000	1.0000	
0	22.1670	0.6667	S/X
1	22.1670	0.8333	
2	22.1670	1.0000	
3	22.8330	0.6667	S/X
4	22.8330	0.8333	
5	22.8330	1.0000	
6	23.5000	0.6667	S/X
7	23.5000	0.8333	

FINITE ELEMENT ANALYSIS
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AL COORDINATES *

	X COORD	Y COORD	COMMENT
8	23.5000	1.0000	S/X
9	24.1670	0.6667	
0	24.1670	0.8333	
1	24.1670	1.0000	S/X
2	24.8330	0.6667	
3	24.8330	0.8333	
4	24.8330	1.0000	S/X
5	25.5000	0.6667	
6	25.5000	0.8333	
7	25.5000	1.0000	S/X
8	26.1670	0.6667	
9	26.1670	0.8333	
0	26.1670	1.0000	S/X
1	26.8330	0.6667	
2	26.8330	0.8333	
3	26.8330	1.0000	S/X
24	27.5000	0.6667	
	27.5000	0.8333	
	27.5000	1.0000	S/X
7	28.1670	0.6667	
28	28.1670	0.8333	
29	28.1670	1.0000	S/X
30	28.8330	0.6667	
31	28.8330	0.8333	
32	28.8330	1.0000	S/X
133	29.5000	0.6667	
134	29.5000	0.8333	
135	29.5000	1.0000	S/X
136	30.1670	0.6667	
137	30.1670	0.8333	
138	30.1670	1.0000	S/X
139	30.8330	0.6667	S/X
140	30.8330	0.8333	"
141	30.8330	1.0000	
142	31.5000	0.6667	
143	31.5000	0.8333	
144	31.5000	1.0000	S/X
145	32.1670	0.6667	
146	32.1670	0.8333	
147	32.1670	1.0000	S/X
148	32.8330	0.6667	

COORDINATES *

	X COORD	Y COORD	COMMENT
	32.8330	0.8333	
	32.8330	1.0000	
	33.5000	0.6667	S/X
	33.5000	0.8333	
	33.5000	1.0000	
	34.1670	0.6667	S/X
	34.1670	0.8333	
	34.1670	1.0000	
	34.8330	0.6667	S/X
	34.8330	0.8333	
	34.8330	1.0000	
	35.5000	0.6667	S/X
	35.5000	0.8333	
	35.5000	1.0000	
	36.1670	0.6667	S/X
	36.1670	0.8333	
	36.1670	1.0000	
	36.6660	0.5000	S/X
	36.6660	0.6667	
	36.6660	0.8333	
	36.6660	1.0000	
	37.1660	0.3333	S/X
	37.1660	0.5000	
	37.1660	0.6667	
	37.1660	0.8333	
4	37.1660	1.0000	
5	37.6660	0.1667	S/X
6	37.6660	0.3333	
7	37.6660	0.5000	
8	37.6660	0.6667	
9	37.6660	0.8333	
0	37.6660	1.0000	
1	38.1660	0.0000	S/X
2	38.1660	0.1667	
3	38.1660	0.3333	
4	38.1660	0.5000	
5	38.1660	0.6667	
6	38.1660	0.8333	
7	38.1660	1.0000	
8	38.6660	0.0000	S/X
9	38.6660	0.1667	

DAL COORDINATES *

E	X COORD	Y COORD	COMMENT
90	38.6660	0.3333	
91	38.6660	0.5000	
92	38.6660	0.6667	
93	38.6660	0.8333	
94	38.6660	1.0000	
95	39.1660	0.0000	S/X
96	39.1660	0.1667	
97	39.1660	0.3333	
98	39.1660	0.5000	
99	39.1660	0.6667	
00	39.1660	0.8333	
01	39.1660	1.0000	
02	39.5820	0.0000	S/X
03	39.5820	0.1667	
04	39.5820	0.3333	
05	39.5820	0.5000	
06	39.5820	0.6667	
07	39.5820	0.8333	
	39.5820	1.0000	
	40.0000	0.0000	S/X
210	40.0000	0.1667	
211	40.0000	0.3333	
212	40.0000	0.5000	
213	40.0000	0.6667	
214	40.0000	0.8333	
215	40.0000	1.0000	
216	40.1870	0.0000	S/X
217	40.1870	0.1667	
218	40.1870	0.3333	
219	40.1870	0.5000	
220	40.1870	0.6667	
221	40.1870	0.8333	
222	40.1870	1.0000	
223	40.3750	0.0000	S/X
224	40.3750	0.1667	
225	40.3750	0.3333	
226	40.3750	0.5000	
227	40.3750	0.6667	
228	40.3750	0.8333	
229	40.3750	1.0000	
230	40.5200	0.0000	S/X

AL COORDINATES *

	X COORD	Y COORD	COMMENT
	40.5200	0.1667	
	40.5200	0.3333	
	40.5200	0.5000	
	40.5200	0.6667	
	40.5200	0.8333	
	40.5200	1.0000	
	40.6660	0.0000	S/X
3	40.6660	0.1667	
3	40.6660	0.3333	
0	40.6660	0.5000	
1	40.6660	0.6667	
2	40.6660	0.8333	
3	40.6660	1.0000	
4	41.1660	0.0000	S/X
5	41.1660	0.1667	
6	41.1660	0.3333	
7	41.1660	0.5000	
8	41.1660	0.6667	
9	41.1660	0.8333	
0	41.1660	1.0000	
1	41.6660	0.0000	S/X
2	41.6660	0.1667	
3	41.6660	0.3333	
4	41.6660	0.5000	
5	41.6660	0.6667	
6	41.6660	0.8333	
7	41.6660	1.0000	
8	40.0830	1.0001	
9	40.2290	1.0001	
0	40.3750	1.0001	
1	40.6660	1.0001	
62	40.0830	1.6667	
63	40.2290	1.6667	
64	40.3750	1.6667	
65	40.5200	1.6667	
66	40.6660	1.6667	
67	40.0830	2.3334	
68	40.2290	2.3334	
69	40.3750	2.3334	
70	40.5200	2.3334	
71	40.6660	2.3334	

DAL COORDINATES *

E	X COORD	Y COORD	COMMENT
72	40.0830	3.0001	
73	40.2290	3.0001	
74	40.3750	3.0001	
75	40.5200	3.0001	
76	40.6660	3.0001	
77	40.0830	3.6668	
78	40.2290	3.6668	
79	40.3750	3.6668	
80	40.5200	3.6668	
81	40.6660	3.6668	
82	40.0830	4.3335	
83	40.2290	4.3335	
84	40.3750	4.3335	
85	40.5200	4.3335	
86	40.6660	4.3335	
87	40.0830	5.0002	
88	40.2290	5.0002	
89	40.3750	5.0002	
	40.5200	5.0002	
	40.6660	5.0002	
92	40.0830	5.6669	
93	40.2290	5.6669	
94	40.3750	5.6669	
95	40.5200	5.6669	
96	40.6660	5.6669	
97	40.0830	6.3336	
98	40.2290	6.3336	
99	40.3750	6.3336	
300	40.5200	6.3336	
301	40.6660	6.3336	
302	40.0830	7.0003	
303	40.2290	7.0003	
304	40.3750	7.0003	
305	40.5200	7.0003	
306	40.6660	7.0003	
307	40.0830	7.6670	
308	40.2290	7.6670	
309	40.3750	7.6670	
310	40.5200	7.6670	
311	40.6660	7.6670	
312	40.0830	8.3337	

DAL COORDINATES *

E	X COORD	Y COORD	COMMENT
3	40.2290	8.3337	
4	40.3750	8.3337	
5	40.5200	8.3337	
6	40.6660	8.3337	
7	40.0830	9.0004	
8	40.2290	9.0004	
9	40.3750	9.0004	
0	40.5200	9.0004	
1	40.6660	9.0004	
2	40.0830	9.6671	
3	40.2290	9.6671	
4	40.3750	9.6671	
5	40.5200	9.6671	
6	40.6660	9.6671	
7	40.0830	10.3330	
8	40.2290	10.3330	
9	40.3750	10.3330	
0	40.5200	10.3330	
1	40.6660	10.3330	
2	40.0830	11.0000	
3	40.2290	11.0000	
4	40.3750	11.0000	
5	40.5200	11.0000	
6	40.6660	11.0000	
7	40.0830	11.6670	
8	40.2290	11.6670	
9	40.3750	11.6670	
0	40.5200	11.6670	
1	40.6660	11.6670	
2	40.0830	12.3330	
3	40.2290	12.3330	
4	40.3750	12.3330	
5	40.5200	12.3330	
6	40.6660	12.3330	
7	40.0830	13.0000	
8	40.2290	13.0000	
9	40.3750	13.0000	
0	40.5200	13.0000	
1	40.6660	13.0000	
2	40.0830	13.6670	
3	40.2290	13.6670	

NODAL COORDINATES *

NODE	X COORD	Y COORD	COMMENT
354	40.3750	13.6670	
355	40.5200	13.6670	
356	40.6660	13.6670	
357	40.0830	14.3340	
358	40.2290	14.3340	
359	40.3750	14.3340	
360	40.5200	14.3340	
361	40.6660	14.3340	
362	40.0830	15.0000	
363	40.2290	15.0000	
364	40.3750	15.0000	
365	40.5200	15.0000	
366	40.6660	15.0000	
367	40.0830	15.6670	
368	40.2290	15.6670	
369	40.3750	15.6670	
370	40.5200	15.6670	
371	40.6660	15.6670	
[illegible]	40.0830	16.3340	
[illegible]	40.2290	16.3340	
374	40.3750	16.3340	
375	40.5200	16.3340	
376	40.6660	16.3340	
377	40.0410	17.0000	
378	40.1970	17.0000	
379	40.3530	17.0000	
380	40.5100	17.0000	
381	40.6660	17.0000	
382	40.0410	17.6670	
383	40.1970	17.6670	
384	40.3530	17.6670	
385	40.5100	17.6670	
386	40.6660	17.6670	
387	40.0410	18.3340	
388	40.1970	18.3340	
389	40.3530	18.3340	
390	40.5100	18.3340	
391	40.6660	18.3340	
392	40.0410	19.0000	
393	40.1970	19.0000	
394	40.3530	19.0000	

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ODAL COORDINATES *

DE	X COORD	Y COORD	COMMENT
95	40.5100	19.0000	
96	40.6660	19.0000	
97	40.0410	19.6670	
98	40.1970	19.6670	
99	40.3530	19.6670	
00	40.5100	19.6670	
01	40.6660	19.6670	
02	40.0410	20.3340	
03	40.1970	20.3340	
04	40.3530	20.3340	
05	40.5100	20.3340	
06	40.6660	20.3340	
07	40.0410	21.0000	
08	40.1970	21.0000	
09	40.3530	21.0000	
10	40.5100	21.0000	
11	40.6660	21.0000	
12	40.0410	21.6670	
13	40.1970	21.6670	
14	40.3530	21.6670	
15	40.5100	21.6670	
16	40.6660	21.6670	
17	40.0410	22.3340	
18	40.1970	22.3340	
19	40.3530	22.3340	
20	40.5100	22.3340	
21	40.6660	22.3340	
22	40.0410	23.0000	
23	40.1970	23.0000	
24	40.3530	23.0000	
25	40.5100	23.0000	
26	40.6660	23.0000	
27	40.0410	23.6670	
28	40.1970	23.6670	
29	40.3530	23.6670	
30	40.5100	23.6670	
31	40.6660	23.6670	
32	40.0410	24.3340	
33	40.1970	24.3340	
34	40.3530	24.3340	
35	40.5100	24.3340	

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NODAL COORDINATES *

ODE	X COORD	Y COORD	COMMENT
436	40.6660	24.3340	
437	40.0000	25.0000	
438	40.1660	25.0000	
439	40.3330	25.0000	
440	40.5000	25.0000	
441	40.6660	25.0000	
442	40.0000	25.6660	
443	40.1660	25.6660	
444	40.3330	25.6660	
445	40.5000	25.6660	
446	40.6660	25.6660	
447	40.0000	26.3320	
448	40.1660	26.3320	
449	40.3330	26.3320	
450	40.5000	26.3320	
451	40.6660	26.3320	
452	40.0000	27.0000	
453	40.1660	27.0000	
[illegible]	40.3330	27.0000	
[illegible]	40.5000	27.0000	
[illegible]	40.6660	27.0000	
457	40.0000	27.3330	
458	40.1660	27.3330	
459	40.3330	27.3330	
460	40.5000	27.3330	
461	40.6660	27.3330	
462	40.0000	27.6660	
463	40.1660	27.6660	
464	40.3330	27.6660	
465	40.5000	27.6660	
466	40.6660	27.6660	
467	39.5000	27.2640	
468	39.5000	27.5550	
469	39.5000	27.8470	
470	39.0000	27.5240	
471	39.0000	27.7740	
472	39.0000	28.0240	
473	38.5000	27.7900	
474	38.5000	28.0090	
475	38.5000	28.2380	
476	38.0000	28.0310	

IDAL COORDINATES *

DE	X COORD	Y COORD	COMMENT
77	38.0000	28.2390	
78	38.0000	28.4480	
79	37.5000	28.2380	
80	37.5000	28.4460	
81	37.5000	28.6550	
82	37.0000	28.4400	
83	37.0000	28.6480	
84	37.0000	28.8570	
85	36.5000	28.6800	
86	36.5000	28.8880	
87	36.5000	29.0970	
88	36.0000	28.9160	
89	36.0000	29.1240	
90	36.0000	29.3330	
91	35.3330	29.2240	
92	35.3330	29.4320	
93	35.3330	29.6410	
94	34.6660	29.5250	
95	34.6660	29.7330	
96	34.6660	29.9420	
97	34.0000	29.8190	
98	34.0000	30.0270	
99	34.0000	30.2360	
00	33.3330	30.1070	
01	33.3330	30.3150	
02	33.3330	30.5240	
03	32.6660	30.3880	
04	32.6660	30.5960	
05	32.6660	30.8050	
06	32.0000	30.6620	
07	32.0000	30.8700	
08	32.0000	31.0790	
09	31.3330	30.9720	
10	31.3330	31.1590	
11	31.3330	31.3470	
12	30.6660	31.2330	
13	30.6660	31.4200	
14	30.6660	31.6080	
15	30.0000	31.4870	
16	30.0000	31.6740	
17	30.0000	31.8620	

E53

NODAL COORDINATES *

NODE	X COORD	Y COORD	COMMENT
518	29.3330	31.7390	
519	29.3330	31.9230	
520	29.3330	32.1110	
521	28.6660	31.9780	
522	28.6660	32.1650	
523	28.6660	32.3530	
524	28.0000	32.2130	
525	28.0000	32.4000	
526	28.0000	32.5880	
527	27.3330	32.4840	
528	27.3330	32.6510	
529	27.3330	32.8190	
530	26.6660	32.7070	
531	26.6660	32.8740	
532	26.6660	33.0410	
533	26.0000	32.9240	
534	26.0000	33.0910	
535	26.0000	33.2580	
[illegible]	25.3330	33.1360	
[illegible]	25.3330	33.3030	
[illegible]	25.3330	33.4700	
539	24.6660	33.3410	
540	24.6660	33.5080	
541	24.6660	33.6750	
542	24.0000	33.5400	
543	24.0000	33.7070	
544	24.0000	33.8740	
545	23.3330	33.7330	
546	23.3330	33.9000	
547	23.3330	34.0670	
548	22.6660	33.9210	
549	22.6660	34.0880	
550	22.6660	34.2550	
551	22.0000	34.1020	
552	22.0000	34.2690	
553	22.0000	34.4360	
554	21.3330	34.2780	
555	21.3330	34.4450	
556	21.3330	34.6120	248" 414
557	20.6660	34.4480	
558	20.6660	34.6150	

NO. 10

AL COORDINATES *

	X COORD	Y COORD	COMMENT
	20.6660	34.7820	
	20.0840	34.6340	
	20.0840	34.7800	
	20.0840	34.9260	
	19.5000	34.8000	
	19.5000	34.9540	
	19.5000	35.1000	
	18.9170	34.9430	
7	18.9170	35.0890	
8	18.9170	35.2340	
9	18.3340	35.0730	
0	18.3340	35.2180	
1	18.3340	35.3640	
2	17.7500	35.1980	
3	17.7500	35.3440	
4	17.7500	35.4900	
5	17.1670	35.3200	
6	17.1670	35.4650	
	17.1670	35.6110	
	16.5840	35.4370	
9	16.5840	35.5830	
0	16.5840	35.7280	
1	16.0840	35.5470	
2	16.0840	35.6920	
3	16.0840	35.7970	
84	15.5840	35.6650	
85	15.5840	35.7900	
86	15.5840	35.9150	
87	15.0840	35.7560	
88	15.0840	35.8810	
89	15.0840	36.0060	
90	14.5840	35.8440	
91	14.5840	35.9690	
92	14.5840	36.0940	
93	14.0840	35.9290	
94	14.0840	36.0540	
95	14.0840	36.1790	
96	13.5840	36.0110	
97	13.5840	36.1360	
98	13.5840	36.2610	
99	13.0840	36.0890	

E55

L COORDINATES *

X COORD	Y COORD	COMMENT
13.0840	36.2140	
13.0840	36.3390	
12.5840	36.1650	
12.5840	36.2900	
12.5840	36.4150	
12.0840	36.2370	
12.0840	36.3630	
12.0840	36.4870	
11.5840	36.3070	
11.5840	36.4320	
11.5840	36.5570	
11.0840	36.3740	
11.0840	36.4990	
11.0840	36.6240	
10.5840	36.4370	
10.5840	36.5620	
10.5840	36.6780	
10.0840	36.4980	
10.0840	36.6230	
10.0840	36.7480	
9.5840	36.5550	
9.5840	36.6800	
9.5840	36.8050	
9.0840	36.6100	
9.0840	36.7350	
9.0840	36.8600	
8.6670	36.6820	
8.6670	36.7860	
8.6670	36.8900	
8.2510	36.7360	
8.2510	36.8400	
8.2510	36.9440	
7.8340	36.7750	
7.8340	36.8790	
7.8340	36.9830	
7.4170	36.8120	
7.4170	36.9160	
7.4170	37.0200	
7.0000	36.8470	
7.0000	36.9510	
7.0000	37.0550	

AL COORDINATES *

	X COORD	Y COORD	COMMENT
1	6.5840	36.8790	
2	6.5840	36.9830	
3	6.5840	37.0870	
4	6.1670	36.9030	
5	6.1670	37.0070	
6	6.1670	37.1110	
7	5.7510	36.9390	
8	5.7510	37.0430	
9	5.7510	37.1470	
0	5.3340	36.9650	
1	5.3340	37.0690	
2	5.3340	37.1730	
3	4.9170	36.9900	
4	4.9170	37.0940	
5	4.9170	37.1980	
6	4.5000	37.0120	
7	4.5000	37.1160	
8	4.5000	37.2200	
	4.0840	37.0330	
	4.0840	37.1370	
1	4.0840	37.2410	
2	3.6670	37.0510	
3	3.6670	37.1550	
4	3.6670	37.2590	
5	3.2510	37.0670	
6	3.2510	37.1710	
67	3.2510	37.2750	
68	2.8340	37.0820	
69	2.8340	37.1860	
70	2.8340	37.2900	
71	2.4170	37.0940	
72	2.4170	37.1990	
73	2.4170	37.3020	
74	2.0000	37.1040	
75	2.0000	37.2080	
76	2.0000	37.3120	
77	1.6670	37.1500	
78	1.6670	37.2330	
79	1.6670	37.3170	
80	1.3330	37.1580	
81	1.3330	37.2390	

AL COORDINATES *

:	X COORD	Y COORD	COMMENT
2	1.3330	37.3220	
3	1.0000	37.1610	
4	1.0000	37.2450	
5	1.0000	37.3290	
6	0.6670	37.1640	
7	0.6670	37.2480	
8	0.6670	37.3310	
9	0.3330	37.1660	
0	0.3330	37.2490	
1	0.3330	37.3330	
2	0.0000	37.1660	
3	0.0000	37.2490	
4	0.0000	37.3330	

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EMENT INPUTS *

ENT	NODES			MATL	AREA	REF. ANGLE
1	1/	4/	5	2	0.069413	0.000
2	1/	5/	2	2	0.069413	0.000
3	2/	5/	3	2	0.069455	0.000
4	3/	5/	6	2	0.069455	0.000
5	4/	7/	5	2	0.055536	0.000
6	7/	8/	5	2	0.055536	0.000
7	5/	8/	9	2	0.055569	0.000
8	5/	9/	6	2	0.055569	0.000
9	7/	10/	11	2	0.055536	0.000
10	7/	11/	8	2	0.055536	0.000
11	8/	11/	9	2	0.055569	0.000
12	9/	11/	12	2	0.055569	0.000
13	10/	13/	11	2	0.055536	0.000
14	13/	14/	11	2	0.055536	0.000
15	11/	14/	15	2	0.055569	0.000
16	11/	15/	12	2	0.055569	0.000
17	13/	16/	17	2	0.055536	0.000
[illegible]	13/	17/	14	2	0.055536	0.000
[illegible]	14/	17/	15	2	0.055569	0.000
[illegible]	15/	17/	18	2	0.055569	0.000
21	16/	19/	17	2	0.055536	0.000
22	19/	20/	17	2	0.055536	0.000
23	17/	20/	21	2	0.055569	0.000
24	17/	21/	18	2	0.055569	0.000
25	19/	22/	23	2	0.055536	0.000
26	19/	23/	20	2	0.055536	0.000
27	20/	23/	21	2	0.055569	0.000
28	21/	23/	24	2	0.055569	0.000
29	22/	25/	23	2	0.055536	0.000
30	25/	26/	23	2	0.055536	0.000
31	23/	26/	27	2	0.055569	0.000
32	23/	27/	24	2	0.055569	0.000
33	25/	28/	29	2	0.055536	0.000
34	25/	29/	26	2	0.055536	0.000
35	26/	29/	27	2	0.055569	0.000
36	27/	29/	30	2	0.055569	0.000
37	28/	31/	29	2	0.055536	0.000
38	31/	32/	29	2	0.055536	0.000
39	29/	32/	33	2	0.055569	0.000
40	29/	33/	30	2	0.055569	0.000
41	31/	34/	35	2	0.055536	0.000

ENT INPUTS *

IT	NODES	MATL	AREA	REF. ANGLE
32	31/ 35/ 32	2	0.055536	0.000
33	32/ 35/ 33	2	0.055569	0.000
34	33/ 35/ 36	2	0.055569	0.000
35	34/ 37/ 35	2	0.055536	0.000
36	37/ 38/ 35	2	0.055536	0.000
37	35/ 38/ 39	2	0.055569	0.000
38	35/ 39/ 36	2	0.055569	0.000
39	37/ 40/ 41	2	0.055536	0.000
40	37/ 41/ 38	2	0.055536	0.000
41	38/ 41/ 39	2	0.055569	0.000
42	39/ 41/ 42	2	0.055569	0.000
43	40/ 43/ 41	2	0.055536	0.000
44	43/ 44/ 41	2	0.055536	0.000
45	41/ 44/ 45	2	0.055569	0.000
46	41/ 45/ 42	2	0.055569	0.000
47	43/ 46/ 47	2	0.055527	0.000
48	43/ 47/ 44	2	0.055527	0.000
49	44/ 47/ 45	2	0.055561	0.000
50	45/ 47/ 48	2	0.055561	0.000
51	46/ 49/ 47	2	0.055477	0.000
52	49/ 50/ 47	2	0.055477	0.000
53	47/ 50/ 51	2	0.055511	0.000
54	47/ 51/ 48	2	0.055511	0.000
55	49/ 52/ 53	2	0.055561	0.000
56	49/ 53/ 50	2	0.055561	0.000
57	50/ 53/ 51	2	0.055594	0.000
58	51/ 53/ 54	2	0.055594	0.000
59	52/ 55/ 53	2	0.055561	0.000
70	55/ 56/ 53	2	0.055561	0.000
71	53/ 56/ 57	2	0.055594	0.000
72	53/ 57/ 54	2	0.055594	0.000
73	55/ 58/ 59	2	0.055477	0.000
74	55/ 59/ 56	2	0.055477	0.000
75	56/ 59/ 57	2	0.055511	0.000
76	57/ 59/ 60	2	0.055511	0.000
77	58/ 61/ 59	2	0.055561	0.000
78	61/ 62/ 59	2	0.055561	0.000
79	59/ 62/ 63	2	0.055594	0.000
80	59/ 63/ 60	2	0.055594	0.000
81	61/ 64/ 65	2	0.055561	0.000
82	61/ 65/ 62	2	0.055561	0.000

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EMENT INPUTS *

ENT	NODES	MATL	AREA	REF. ANGLE
83	62/ 65/ 63	2	0.055594	0.000
84	63/ 65/ 66	2	0.055594	0.000
85	64/ 67/ 65	2	0.055477	0.000
86	67/ 68/ 65	2	0.055477	0.000
87	65/ 68/ 69	2	0.055511	0.000
88	65/ 69/ 66	2	0.055511	0.000
89	67/ 70/ 71	2	0.055561	0.000
90	67/ 71/ 68	2	0.055561	0.000
91	68/ 71/ 69	2	0.055594	0.000
92	69/ 71/ 72	2	0.055594	0.000
93	70/ 73/ 71	2	0.055561	0.000
94	73/ 74/ 71	2	0.055561	0.000
95	71/ 74/ 75	2	0.055594	0.000
96	71/ 75/ 72	2	0.055594	0.000
97	73/ 76/ 77	2	0.055477	0.000
98	73/ 77/ 74	2	0.055477	0.000
99	74/ 77/ 75	2	0.055511	0.000
100	75/ 77/ 78	2	0.055511	0.000
[illegible]	76/ 79/ 77	2	0.055561	0.000
[illegible]	79/ 80/ 77	2	0.055561	0.000
103	77/ 80/ 81	2	0.055594	0.000
104	77/ 81/ 78	2	0.055594	0.000
105	79/ 82/ 83	2	0.055561	0.000
106	79/ 83/ 80	2	0.055561	0.000
107	80/ 83/ 81	2	0.055594	0.000
108	81/ 83/ 84	2	0.055594	0.000
109	82/ 85/ 83	2	0.055477	0.000
110	85/ 86/ 83	2	0.055477	0.000
111	83/ 86/ 87	2	0.055511	0.000
112	83/ 87/ 84	2	0.055511	0.000
113	85/ 88/ 89	2	0.055561	0.000
114	85/ 89/ 86	2	0.055561	0.000
115	86/ 89/ 87	2	0.055594	0.000
116	87/ 89/ 90	2	0.055594	0.000
117	88/ 91/ 89	2	0.055561	0.000
118	91/ 92/ 89	2	0.055561	0.000
119	89/ 92/ 93	2	0.055594	0.000
120	89/ 93/ 90	2	0.055594	0.000
121	91/ 94/ 95	2	0.055477	0.000
122	91/ 95/ 92	2	0.055477	0.000
123	92/ 95/ 93	2	0.055511	0.000

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EMENT INPUTS *

ENT	NODES	MATL	AREA	REF. ANGLE
124	93/ 95/ 96	2	0.055511	0.000
125	94/ 97/ 95	2	0.055561	0.000
126	97/ 98/ 95	2	0.055561	0.000
127	95/ 98/ 99	2	0.055594	0.000
128	95/ 99/ 96	2	0.055594	0.000
129	97/ 100/ 101	2	0.055561	0.000
130	97/ 101/ 98	2	0.055561	0.000
131	98/ 101/ 99	2	0.055594	0.000
132	99/ 101/ 102	2	0.055594	0.000
133	100/ 103/ 101	2	0.055477	0.000
134	103/ 104/ 101	2	0.055477	0.000
135	101/ 104/ 105	2	0.055511	0.000
136	101/ 105/ 102	2	0.055511	0.000
137	103/ 106/ 107	2	0.055561	0.000
138	103/ 107/ 104	2	0.055561	0.000
139	104/ 107/ 105	2	0.055594	0.000
140	105/ 107/ 108	2	0.055594	0.000
141	106/ 109/ 107	2	0.055561	0.000
142	109/ 110/ 107	2	0.055561	0.000
143	107/ 110/ 111	2	0.055594	0.000
144	107/ 111/ 108	2	0.055594	0.000
145	109/ 112/ 113	2	0.055477	0.000
146	109/ 113/ 110	2	0.055477	0.000
147	110/ 113/ 111	2	0.055511	0.000
148	111/ 113/ 114	2	0.055511	0.000
149	112/ 115/ 113	2	0.055561	0.000
150	115/ 116/ 113	2	0.055561	0.000
151	113/ 116/ 117	2	0.055594	0.000
152	113/ 117/ 114	2	0.055594	0.000
153	115/ 118/ 119	2	0.055561	0.000
154	115/ 119/ 116	2	0.055561	0.000
155	116/ 119/ 117	2	0.055594	0.000
156	117/ 119/ 120	2	0.055594	0.000
157	118/ 121/ 119	2	0.055477	0.000
158	121/ 122/ 119	2	0.055477	0.000
159	119/ 122/ 123	2	0.055511	0.000
160	119/ 123/ 120	2	0.055511	0.000
161	121/ 124/ 125	2	0.055561	0.000
162	121/ 125/ 122	2	0.055561	0.000
163	122/ 125/ 123	2	0.055594	0.000
164	123/ 125/ 126	2	0.055594	0.000

EMENT INPUTS *

ENT	NODES	MATL	AREA	REF. ANGLE
165	124/ 127/ 125	2	0.055561	0.000
166	127/ 128/ 125	2	0.055561	0.000
167	125/ 128/ 129	2	0.055594	0.000
168	125/ 129/ 126	2	0.055594	0.000
169	127/ 130/ 131	2	0.055477	0.000
170	127/ 131/ 128	2	0.055477	0.000
171	128/ 131/ 129	2	0.055511	0.000
172	129/ 131/ 132	2	0.055511	0.000
173	130/ 133/ 131	2	0.055561	0.000
174	133/ 134/ 131	2	0.055561	0.000
175	131/ 134/ 135	2	0.055594	0.000
176	131/ 135/ 132	2	0.055594	0.000
177	133/ 136/ 137	2	0.055561	0.000
178	133/ 137/ 134	2	0.055561	0.000
179	134/ 137/ 135	2	0.055594	0.000
180	135/ 137/ 138	2	0.055594	0.000
181	136/ 139/ 137	2	0.055477	0.000
[illegible]	139/ 140/ 137	2	0.055477	0.000
[illegible]	137/ 140/ 141	2	0.055511	0.000
[illegible]	137/ 141/ 138	2	0.055511	0.000
185	139/ 142/ 143	2	0.055561	0.000
186	139/ 143/ 140	2	0.055561	0.000
187	140/ 143/ 141	2	0.055594	0.000
188	141/ 143/ 144	2	0.055594	0.000
189	142/ 145/ 143	2	0.055561	0.000
190	145/ 146/ 143	2	0.055561	0.000
191	143/ 146/ 147	2	0.055594	0.000
192	143/ 147/ 144	2	0.055594	0.000
193	145/ 148/ 149	2	0.055477	0.000
194	145/ 149/ 146	2	0.055477	0.000
195	146/ 149/ 147	2	0.055511	0.000
196	147/ 149/ 150	2	0.055511	0.000
197	148/ 151/ 149	2	0.055561	0.000
198	151/ 152/ 149	2	0.055561	0.000
199	149/ 152/ 153	2	0.055594	0.000
200	149/ 153/ 150	2	0.055594	0.000
201	151/ 154/ 155	2	0.055561	0.000
202	151/ 155/ 152	2	0.055561	0.000
203	152/ 155/ 153	2	0.055594	0.000
204	153/ 155/ 156	2	0.055594	0.000
205	154/ 157/ 155	2	0.055477	0.000

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ENT INPUTS *

NT	NODES	MATL	AREA	REF. ANGLE
06	157/ 158/ 155	2	0.055477	0.000
07	155/ 158/ 159	2	0.055511	0.000
08	155/ 159/ 156	2	0.055511	0.000
09	157/ 160/ 161	2	0.055561	0.000
10	157/ 161/ 158	2	0.055561	0.000
11	158/ 161/ 159	2	0.055594	0.000
12	159/ 161/ 162	2	0.055594	0.000
13	160/ 163/ 161	2	0.055561	0.000
14	163/ 164/ 161	2	0.055561	0.000
15	161/ 164/ 165	2	0.055594	0.000
16	161/ 165/ 162	2	0.055594	0.000
17	163/ 166/ 167	2	0.041591	0.000
18	163/ 167/ 168	2	0.041566	0.000
19	163/ 168/ 164	2	0.041566	0.000
20	164/ 168/ 165	2	0.041591	0.000
21	165/ 168/ 169	2	0.041591	0.000
22	166/ 170/ 171	2	0.041675	0.000
23	166/ 171/ 172	2	0.041675	0.000
24	166/ 172/ 167	2	0.041675	0.000
25	167/ 172/ 168	2	0.041650	0.000
26	168/ 172/ 173	2	0.041650	0.000
27	168/ 173/ 174	2	0.041675	0.000
28	168/ 174/ 169	2	0.041675	0.000
29	170/ 175/ 176	2	0.041650	0.000
30	170/ 176/ 177	2	0.041675	0.000
31	170/ 177/ 171	2	0.041675	0.000
32	171/ 177/ 172	2	0.041675	0.000
33	172/ 177/ 178	2	0.041675	0.000
34	172/ 178/ 179	2	0.041650	0.000
35	172/ 179/ 173	2	0.041650	0.000
36	173/ 179/ 174	2	0.041675	0.000
37	174/ 179/ 180	2	0.041675	0.000
38	175/ 181/ 182	2	0.041675	0.000
39	175/ 182/ 183	2	0.041650	0.000
40	175/ 183/ 176	2	0.041650	0.000
41	176/ 183/ 177	2	0.041675	0.000
42	177/ 183/ 184	2	0.041675	0.000
43	177/ 184/ 185	2	0.041675	0.000
44	177/ 185/ 178	2	0.041675	0.000
45	178/ 185/ 179	2	0.041650	0.000
46	179/ 185/ 186	2	0.041650	0.000

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EMENT INPUTS *

ENT	NODES	MATL	AREA	REF. ANGLE
247	179/ 186/ 187	2	0.041675	0.000
248	179/ 187/ 180	2	0.041675	0.000
249	181/ 188/ 189	2	0.041675	0.000
250	181/ 189/ 182	2	0.041675	0.000
251	182/ 189/ 183	2	0.041650	0.000
252	183/ 189/ 190	2	0.041650	0.000
253	183/ 190/ 191	2	0.041675	0.000
254	184/ 183/ 191	2	0.041675	0.000
255	184/ 191/ 185	2	0.041675	0.000
256	185/ 191/ 192	2	0.041675	0.000
257	185/ 192/ 193	2	0.041650	0.000
258	185/ 193/ 186	2	0.041650	0.000
259	186/ 193/ 187	2	0.041675	0.000
260	187/ 193/ 194	2	0.041675	0.000
261	188/ 195/ 189	2	0.041675	0.000
262	189/ 195/ 196	2	0.041675	0.000
263	189/ 196/ 197	2	0.041650	0.000
[illegible]	189/ 197/ 190	2	0.041650	0.000
[illegible]	190/ 197/ 191	2	0.041675	0.000
[illegible]	191/ 197/ 198	2	0.041675	0.000
267	191/ 198/ 199	2	0.041675	0.000
268	191/ 199/ 192	2	0.041675	0.000
269	192/ 199/ 193	2	0.041650	0.000
270	193/ 199/ 200	2	0.041650	0.000
271	193/ 200/ 201	2	0.041675	0.000
272	193/ 201/ 194	2	0.041675	0.000
273	195/ 202/ 203	2	0.034673	0.000
274	195/ 203/ 196	2	0.034673	0.000
275	196/ 203/ 197	2	0.034652	0.000
276	197/ 203/ 204	2	0.034652	0.000
277	197/ 204/ 205	2	0.034673	0.000
278	198/ 197/ 205	2	0.034673	0.000
279	198/ 205/ 199	2	0.034673	0.000
280	199/ 205/ 206	2	0.034673	0.000
281	199/ 206/ 207	2	0.034652	0.000
282	199/ 207/ 200	2	0.034652	0.000
283	200/ 207/ 201	2	0.034673	0.000
284	201/ 207/ 208	2	0.034673	0.000
285	202/ 209/ 203	2	0.034840	0.000
286	203/ 209/ 210	2	0.034840	0.000
287	203/ 210/ 211	2	0.034819	0.000

MENT INPUTS *

NT	NODES	MATL	AREA	REF. ANGLE
288	203/ 211/ 204	2	0.034819	0.000
289	204/ 211/ 205	2	0.034840	0.000
290	205/ 211/ 212	2	0.034840	0.000
291	205/ 212/ 213	2	0.034840	0.000
292	205/ 213/ 206	2	0.034840	0.000
293	206/ 213/ 207	2	0.034819	0.000
294	207/ 213/ 214	2	0.034819	0.000
295	207/ 214/ 215	2	0.034840	0.000
296	207/ 215/ 208	2	0.034840	0.000
297	209/ 216/ 217	2	0.015586	0.000
298	209/ 217/ 210	2	0.015586	0.000
299	210/ 217/ 211	2	0.015577	0.000
300	211/ 217/ 218	2	0.015577	0.000
301	211/ 218/ 219	2	0.015586	0.000
302	212/ 211/ 219	2	0.015586	0.000
303	212/ 219/ 213	2	0.015586	0.000
304	213/ 219/ 220	2	0.015586	0.000
305	213/ 220/ 221	2	0.015577	0.000
306	213/ 221/ 214	2	0.015577	0.000
307	214/ 221/ 215	2	0.015586	0.000
308	215/ 221/ 222	2	0.015586	0.000
309	216/ 223/ 217	2	0.015669	0.000
310	217/ 223/ 224	2	0.015669	0.000
311	217/ 224/ 225	2	0.015660	0.000
312	217/ 225/ 218	2	0.015660	0.000
313	218/ 225/ 219	2	0.015669	0.000
314	219/ 225/ 226	2	0.015669	0.000
315	219/ 226/ 227	2	0.015669	0.000
316	219/ 227/ 220	2	0.015669	0.000
317	220/ 227/ 221	2	0.015660	0.000
318	221/ 227/ 228	2	0.015660	0.000
319	221/ 228/ 229	2	0.015669	0.000
320	221/ 229/ 222	2	0.015669	0.000
321	223/ 230/ 231	2	0.012085	0.000
322	223/ 231/ 224	2	0.012085	0.000
323	224/ 231/ 225	2	0.012078	0.000
324	225/ 231/ 232	2	0.012078	0.000
325	225/ 232/ 233	2	0.012085	0.000
326	226/ 225/ 233	2	0.012085	0.000
327	226/ 233/ 227	2	0.012085	0.000
328	227/ 233/ 234	2	0.012085	0.000

MENT INPUTS *

ENT	NODES	MATL	AREA	REF. ANGLE
329	227/ 234/ 235	2	0.012078	0.000
330	227/ 235/ 228	2	0.012078	0.000
331	228/ 235/ 229	2	0.012085	0.000
332	229/ 235/ 236	2	0.012085	0.000
333	230/ 237/ 231	2	0.012169	0.000
334	231/ 237/ 238	2	0.012169	0.000
335	231/ 238/ 239	2	0.012161	0.000
336	231/ 239/ 232	2	0.012161	0.000
337	232/ 239/ 233	2	0.012169	0.000
338	233/ 239/ 240	2	0.012169	0.000
339	233/ 240/ 241	2	0.012169	0.000
340	233/ 241/ 234	2	0.012169	0.000
341	234/ 241/ 235	2	0.012161	0.000
342	235/ 241/ 242	2	0.012161	0.000
343	235/ 242/ 243	2	0.012169	0.000
344	235/ 243/ 236	2	0.012169	0.000
345	237/ 244/ 245	2	0.041675	0.000
[illegible]	237/ 245/ 238	2	0.041675	0.000
[illegible]	238/ 245/ 239	2	0.041650	0.000
[illegible]	239/ 245/ 246	2	0.041650	0.000
349	239/ 246/ 247	2	0.041675	0.000
350	240/ 239/ 247	2	0.041675	0.000
351	240/ 247/ 241	2	0.041675	0.000
352	241/ 247/ 248	2	0.041675	0.000
353	241/ 248/ 249	2	0.041650	0.000
354	241/ 249/ 242	2	0.041650	0.000
355	242/ 249/ 243	2	0.041675	0.000
356	243/ 249/ 250	2	0.041675	0.000
357	244/ 251/ 245	2	0.041675	0.000
358	245/ 251/ 252	2	0.041675	0.000
359	245/ 252/ 253	2	0.041650	0.000
360	245/ 253/ 246	2	0.041650	0.000
361	246/ 253/ 247	2	0.041675	0.000
362	247/ 253/ 254	2	0.041675	0.000
363	247/ 254/ 255	2	0.041675	0.000
364	247/ 255/ 248	2	0.041675	0.000
365	248/ 255/ 249	2	0.041650	0.000
366	249/ 255/ 256	2	0.041650	0.000
367	249/ 256/ 257	2	0.041675	0.000
368	249/ 257/ 250	2	0.041675	0.000
369	258/ 263/ 262	2	0.048661	0.000

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EMENT INPUTS *

MENT	NODES	MATL	AREA	REF. ANGLE
370	258/ 259/ 263	2	0.048661	0.000
371	259/ 229/ 263	2	0.048661	0.000
372	229/ 264/ 263	2	0.048669	0.000
373	229/ 265/ 264	2	0.048335	0.000
374	229/ 260/ 265	2	0.048328	0.000
375	260/ 261/ 265	2	0.048661	0.000
376	261/ 266/ 265	2	0.048661	0.000
377	262/ 263/ 267	2	0.048669	0.000
378	263/ 268/ 267	2	0.048669	0.000
379	263/ 269/ 268	2	0.048669	0.000
380	263/ 264/ 269	2	0.048669	0.000
381	264/ 265/ 269	2	0.048335	0.000
382	265/ 270/ 269	2	0.048335	0.000
383	265/ 271/ 270	2	0.048669	0.000
384	265/ 266/ 271	2	0.048669	0.000
385	267/ 273/ 272	2	0.048669	0.000
386	267/ 268/ 273	2	0.048669	0.000
387	268/ 269/ 273	2	0.048669	0.000
388	269/ 274/ 273	2	0.048669	0.000
389	269/ 275/ 274	2	0.048335	0.000
390	269/ 270/ 275	2	0.048335	0.000
391	270/ 271/ 275	2	0.048669	0.000
392	271/ 276/ 275	2	0.048669	0.000
393	272/ 273/ 277	2	0.048669	0.000
394	273/ 278/ 277	2	0.048669	0.000
395	273/ 279/ 278	2	0.048669	0.000
396	273/ 274/ 279	2	0.048669	0.000
397	274/ 275/ 279	2	0.048335	0.000
398	275/ 280/ 279	2	0.048335	0.000
399	275/ 281/ 280	2	0.048669	0.000
400	275/ 276/ 281	2	0.048669	0.000
401	277/ 283/ 282	2	0.048669	0.000
402	277/ 278/ 283	2	0.048669	0.000
403	278/ 279/ 283	2	0.048669	0.000
404	279/ 284/ 283	2	0.048669	0.000
405	279/ 285/ 284	2	0.048335	0.000
406	279/ 280/ 285	2	0.048335	0.000
407	280/ 281/ 285	2	0.048669	0.000
408	281/ 286/ 285	2	0.048669	0.000
409	282/ 283/ 287	2	0.048669	0.000
410	283/ 288/ 287	2	0.048669	0.000

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EMENT INPUTS *

ENT	NODES	MATL	AREA	REF. ANGLE
411	283/ 289/ 288	2	0.048669	0.000
412	283/ 284/ 289	2	0.048669	0.000
413	284/ 285/ 289	2	0.048335	0.000
414	285/ 290/ 289	2	0.048335	0.000
415	285/ 291/ 290	2	0.048669	0.000
416	285/ 286/ 291	2	0.048669	0.000
417	287/ 293/ 292	2	0.048669	0.000
418	287/ 288/ 293	2	0.048669	0.000
419	288/ 289/ 293	2	0.048669	0.000
420	289/ 294/ 293	2	0.048669	0.000
421	289/ 295/ 294	2	0.048335	0.000
422	289/ 290/ 295	2	0.048335	0.000
423	290/ 291/ 295	2	0.048669	0.000
424	291/ 296/ 295	2	0.048669	0.000
425	292/ 293/ 297	2	0.048669	0.000
426	293/ 298/ 297	2	0.048669	0.000
427	293/ 299/ 298	2	0.048669	0.000
428	293/ 294/ 299	2	0.048669	0.000
[illegible]	294/ 295/ 299	2	0.048335	0.000
[illegible]	295/ 300/ 299	2	0.048335	0.000
431	295/ 301/ 300	2	0.048669	0.000
432	295/ 296/ 301	2	0.048669	0.000
433	297/ 303/ 302	2	0.048669	0.000
434	297/ 298/ 303	2	0.048669	0.000
435	298/ 299/ 303	2	0.048669	0.000
436	299/ 304/ 303	2	0.048669	0.000
437	299/ 305/ 304	2	0.048335	0.000
438	299/ 300/ 305	2	0.048335	0.000
439	300/ 301/ 305	2	0.048669	0.000
440	301/ 306/ 305	2	0.048669	0.000
441	302/ 303/ 307	2	0.048669	0.000
442	303/ 308/ 307	2	0.048669	0.000
443	303/ 309/ 308	2	0.048669	0.000
444	303/ 304/ 309	2	0.048669	0.000
445	304/ 305/ 309	2	0.048335	0.000
446	305/ 310/ 309	2	0.048335	0.000
447	305/ 311/ 310	2	0.048669	0.000
448	305/ 306/ 311	2	0.048669	0.000
449	307/ 313/ 312	2	0.048669	0.000
450	307/ 308/ 313	2	0.048669	0.000
451	308/ 309/ 313	2	0.048669	0.000

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MENT INPUTS *

ENT	NODES	MATL	AREA	REF. ANGLE
452	309/ 314/ 313	2	0.048669	0.000
453	309/ 315/ 314	2	0.048335	0.000
454	309/ 310/ 315	2	0.048335	0.000
455	310/ 311/ 315	2	0.048669	0.000
456	311/ 316/ 315	2	0.048669	0.000
457	312/ 313/ 317	2	0.048669	0.000
458	313/ 318/ 317	2	0.048669	0.000
459	313/ 319/ 318	2	0.048669	0.000
460	313/ 314/ 319	2	0.048669	0.000
461	314/ 315/ 319	2	0.048335	0.000
462	315/ 320/ 319	2	0.048335	0.000
463	315/ 321/ 320	2	0.048669	0.000
464	315/ 316/ 321	2	0.048669	0.000
465	317/ 323/ 322	2	0.048669	0.000
466	317/ 318/ 323	2	0.048669	0.000
467	318/ 319/ 323	2	0.048669	0.000
468	319/ 324/ 323	2	0.048669	0.000
469	319/ 325/ 324	2	0.048335	0.000
470	319/ 320/ 325	2	0.048335	0.000
471	320/ 321/ 325	2	0.048669	0.000
472	321/ 326/ 325	2	0.048669	0.000
473	322/ 323/ 327	2	0.048610	0.000
474	323/ 328/ 327	2	0.048610	0.000
475	323/ 329/ 328	2	0.048610	0.000
476	327/ 324/ 329	2	0.048610	0.000
477	324/ 325/ 329	2	0.048277	0.000
478	325/ 330/ 329	2	0.048277	0.000
479	325/ 331/ 330	2	0.048610	0.000
480	325/ 326/ 331	2	0.048610	0.000
481	327/ 332/ 332	2	0.048691	0.000
482	327/ 328/ 333	2	0.048691	0.000
483	328/ 329/ 333	2	0.048691	0.000
484	329/ 334/ 333	2	0.048691	0.000
485	329/ 335/ 334	2	0.048357	0.000
486	329/ 330/ 335	2	0.048357	0.000
487	330/ 331/ 335	2	0.048691	0.000
488	331/ 336/ 335	2	0.048691	0.000
489	332/ 333/ 337	2	0.048691	0.000
490	333/ 338/ 337	2	0.048691	0.000
491	333/ 339/ 338	2	0.048691	0.000
492	333/ 334/ 339	2	0.048691	0.000

MENT INPUTS *

ENT	NODES	MATL	AREA	REF. ANGLE
493	334/ 335/ 339	2	0.048357	0.000
494	335/ 340/ 339	2	0.048357	0.000
495	335/ 341/ 340	2	0.048691	0.000
496	335/ 336/ 341	2	0.048691	0.000
497	337/ 343/ 342	2	0.048618	0.000
498	337/ 338/ 343	2	0.048618	0.000
499	338/ 339/ 343	2	0.048618	0.000
500	339/ 344/ 343	2	0.048618	0.000
501	339/ 345/ 344	2	0.048285	0.000
502	339/ 340/ 345	2	0.048285	0.000
503	340/ 341/ 345	2	0.048618	0.000
504	341/ 346/ 345	2	0.048618	0.000
505	342/ 343/ 347	2	0.048691	0.000
506	343/ 348/ 347	2	0.048691	0.000
507	343/ 349/ 348	2	0.048691	0.000
508	343/ 344/ 349	2	0.048691	0.000
509	344/ 345/ 349	2	0.048357	0.000
[illegible]	345/ 350/ 349	2	0.048357	0.000
[illegible]	345/ 351/ 350	2	0.048691	0.000
512	345/ 346/ 351	2	0.048691	0.000
513	347/ 353/ 352	2	0.048691	0.000
514	347/ 348/ 353	2	0.048691	0.000
515	348/ 349/ 353	2	0.048691	0.000
516	349/ 354/ 353	2	0.048691	0.000
517	349/ 355/ 354	2	0.048357	0.000
518	349/ 350/ 355	2	0.048357	0.000
519	350/ 351/ 355	2	0.048691	0.000
520	351/ 356/ 355	2	0.048691	0.000
521	352/ 353/ 357	2	0.048691	0.000
522	353/ 358/ 357	2	0.048691	0.000
523	353/ 359/ 358	2	0.048691	0.000
524	353/ 354/ 359	2	0.048691	0.000
525	354/ 355/ 359	2	0.048357	0.000
526	355/ 360/ 359	2	0.048357	0.000
527	355/ 361/ 360	2	0.048691	0.000
528	355/ 356/ 361	2	0.048691	0.000
529	357/ 363/ 362	2	0.048618	0.000
530	357/ 358/ 363	2	0.048618	0.000
531	358/ 359/ 363	2	0.048618	0.000
532	359/ 364/ 363	2	0.048618	0.000
533	359/ 365/ 364	2	0.048285	0.000

NT INPUTS *

	NODES	MATL	AREA	REF. ANGLE
4	359/ 360/ 365	2	0.048285	0.000
5	360/ 361/ 365	2	0.048618	0.000
6	361/ 366/ 365	2	0.048618	0.000
7	362/ 363/ 367	3	0.048691	0.000
8	363/ 368/ 367	3	0.048691	0.000
9	363/ 369/ 368	3	0.048691	0.000
0	363/ 364/ 369	3	0.048691	0.000
1	364/ 365/ 369	3	0.048357	0.000
2	365/ 370/ 369	3	0.048357	0.000
3	365/ 371/ 370	3	0.048691	0.000
4	365/ 366/ 371	3	0.048691	0.000
5	367/ 373/ 372	3	0.048691	0.000
6	367/ 368/ 373	3	0.048691	0.000
7	368/ 369/ 373	3	0.048691	0.000
8	369/ 374/ 373	3	0.048691	0.000
9	369/ 375/ 374	3	0.048357	0.000
0	369/ 370/ 375	3	0.048357	0.000
1	370/ 371/ 375	3	0.048691	0.000
2	371/ 376/ 375	3	0.048691	0.000
3	372/ 373/ 377	3	0.048618	0.000
4	373/ 378/ 377	3	0.051948	0.000
5	373/ 379/ 378	3	0.051948	0.000
6	373/ 374/ 379	3	0.048618	0.000
7	374/ 375/ 379	3	0.048285	0.000
8	375/ 380/ 379	3	0.052281	0.000
9	375/ 381/ 380	3	0.051948	0.000
0	375/ 376/ 381	3	0.048618	0.000
1	377/ 383/ 382	3	0.052026	0.000
2	377/ 378/ 383	3	0.052026	0.000
3	378/ 379/ 383	3	0.052026	0.000
4	379/ 384/ 383	3	0.052026	0.000
5	379/ 385/ 384	3	0.052359	0.000
6	379/ 380/ 385	3	0.052359	0.000
7	380/ 381/ 385	3	0.052026	0.000
8	381/ 386/ 385	3	0.052026	0.000
9	382/ 383/ 387	3	0.052026	0.000
0	383/ 388/ 387	3	0.052026	0.000
1	383/ 389/ 388	3	0.052026	0.000
2	383/ 384/ 389	3	0.052026	0.000
3	384/ 385/ 389	3	0.052359	0.000
4	385/ 390/ 389	3	0.052359	0.000

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NO. 10

ENT INPUTS *

T	NODES	MAT'L	AREA	REF. ANGLE
5	385/ 391/ 390	3	0.052026	0.000
6	385/ 386/ 391	3	0.052026	0.000
7	387/ 393/ 392	3	0.051948	0.000
8	387/ 388/ 393	3	0.051948	0.000
9	388/ 389/ 393	3	0.051948	0.000
0	389/ 394/ 393	3	0.051948	0.000
1	389/ 395/ 394	3	0.052281	0.000
2	389/ 390/ 395	3	0.052281	0.000
3	390/ 391/ 395	3	0.051948	0.000
4	391/ 396/ 395	3	0.051948	0.000
5	392/ 393/ 397	3	0.052026	0.000
6	393/ 398/ 397	3	0.052026	0.000
7	393/ 399/ 398	3	0.052026	0.000
8	393/ 394/ 399	3	0.052026	0.000
9	394/ 395/ 399	3	0.052359	0.000
0	395/ 400/ 399	3	0.052359	0.000
1	395/ 401/ 400	3	0.052026	0.000
2	395/ 396/ 401	3	0.052026	0.000
	397/ 403/ 402	3	0.052026	0.000
	397/ 398/ 403	3	0.052026	0.000
5	398/ 399/ 403	3	0.052026	0.000
6	399/ 404/ 403	3	0.052026	0.000
7	399/ 405/ 404	3	0.052359	0.000
8	399/ 400/ 405	3	0.052359	0.000
9	400/ 401/ 405	3	0.052026	0.000
0	401/ 406/ 405	3	0.052026	0.000
1	402/ 407/ 407	3	0.051948	0.000
02	403/ 408/ 407	3	0.051948	0.000
03	403/ 409/ 408	3	0.051948	0.000
04	403/ 404/ 409	3	0.051948	0.000
05	404/ 405/ 409	3	0.052281	0.000
06	405/ 410/ 409	3	0.052281	0.000
07	405/ 411/ 410	3	0.051948	0.000
08	405/ 406/ 411	3	0.051948	0.000
09	407/ 413/ 412	3	0.052026	0.000
10	407/ 408/ 413	3	0.052026	0.000
11	408/ 409/ 413	3	0.052026	0.000
12	409/ 414/ 413	3	0.052026	0.000
13	409/ 415/ 414	3	0.052359	0.000
14	409/ 410/ 415	3	0.052359	0.000
15	410/ 411/ 415	3	0.052026	0.000

EMENT INPUTS *

ENT	NODES	MATL	AREA	REF. ANGLE
616	411/ 416/ 415	3	0.052026	0.000
617	412/ 413/ 417	3	0.052026	0.000
618	413/ 418/ 417	3	0.052026	0.000
619	413/ 419/ 418	3	0.052026	0.000
620	413/ 414/ 419	3	0.052026	0.000
621	414/ 415/ 419	3	0.052359	0.000
622	415/ 420/ 419	3	0.052359	0.000
623	415/ 421/ 420	3	0.052026	0.000
624	415/ 416/ 421	3	0.052026	0.000
625	417/ 423/ 422	3	0.051948	0.000
626	417/ 418/ 423	3	0.051948	0.000
627	418/ 419/ 423	3	0.051948	0.000
628	419/ 424/ 423	3	0.051948	0.000
629	419/ 425/ 424	3	0.052281	0.000
630	419/ 420/ 425	3	0.052281	0.000
631	420/ 421/ 425	3	0.051948	0.000
632	421/ 426/ 425	3	0.051948	0.000
633	422/ 423/ 427	3	0.052026	0.000
[illegible]	423/ 428/ 427	3	0.052026	0.000
[illegible]	423/ 429/ 428	3	0.052026	0.000
636	423/ 424/ 429	3	0.052026	0.000
637	424/ 425/ 429	3	0.052359	0.000
638	425/ 430/ 429	3	0.052359	0.000
639	425/ 431/ 430	3	0.052026	0.000
640	425/ 426/ 431	3	0.052026	0.000
641	427/ 433/ 432	3	0.052026	0.000
642	427/ 428/ 433	3	0.052026	0.000
643	428/ 429/ 433	3	0.052026	0.000
644	429/ 434/ 433	3	0.052026	0.000
645	429/ 435/ 434	3	0.052359	0.000
646	429/ 430/ 435	3	0.052359	0.000
647	430/ 431/ 435	3	0.052026	0.000
648	431/ 436/ 435	3	0.052026	0.000
649	432/ 433/ 437	3	0.051948	0.000
650	433/ 438/ 437	3	0.055278	0.000
651	433/ 439/ 438	3	0.055611	0.000
652	433/ 434/ 439	3	0.051948	0.000
653	434/ 435/ 439	3	0.052281	0.000
654	435/ 440/ 439	3	0.055611	0.000
655	435/ 441/ 440	3	0.055278	0.000
656	435/ 436/ 441	3	0.051948	0.000

MENT INPUTS *

NT	NODES	MATL	AREA	REF. ANGLE
57	437/ 443/ 442	3	0.055278	0.000
58	437/ 438/ 443	3	0.055278	0.000
59	438/ 439/ 443	3	0.055611	0.000
60	439/ 444/ 443	3	0.055611	0.000
61	439/ 445/ 444	3	0.055611	0.000
62	439/ 440/ 445	3	0.055611	0.000
63	440/ 441/ 445	3	0.055278	0.000
64	441/ 446/ 445	3	0.055278	0.000
65	442/ 443/ 447	3	0.055278	0.000
66	443/ 448/ 447	3	0.055278	0.000
67	443/ 449/ 448	3	0.055611	0.000
68	443/ 444/ 449	3	0.055611	0.000
69	444/ 445/ 449	3	0.055611	0.000
70	445/ 450/ 449	3	0.055611	0.000
71	445/ 451/ 450	3	0.055278	0.000
72	445/ 446/ 451	3	0.055278	0.000
73	447/ 453/ 452	3	0.055444	0.000
74	447/ 448/ 453	3	0.055444	0.000
75	448/ 449/ 453	3	0.055778	0.000
76	449/ 454/ 453	3	0.055778	0.000
77	449/ 455/ 454	3	0.055778	0.000
78	449/ 450/ 455	3	0.055778	0.000
79	450/ 451/ 455	3	0.055444	0.000
80	451/ 456/ 455	3	0.055444	0.000
81	452/ 453/ 457	3	0.027639	0.000
82	453/ 458/ 457	3	0.027639	0.000
83	453/ 459/ 458	3	0.027805	0.000
84	453/ 454/ 459	3	0.027805	0.000
85	454/ 455/ 459	3	0.027805	0.000
86	455/ 460/ 459	3	0.027805	0.000
87	455/ 461/ 460	3	0.027639	0.000
88	455/ 456/ 461	3	0.027639	0.000
89	457/ 463/ 462	3	0.027639	0.000
90	457/ 458/ 463	3	0.027639	0.000
91	458/ 459/ 463	3	0.027805	0.000
92	459/ 464/ 463	3	0.027805	0.000
93	459/ 465/ 464	3	0.027805	0.000
94	459/ 460/ 465	3	0.027805	0.000
95	460/ 461/ 465	3	0.027639	0.000
96	461/ 466/ 465	3	0.027639	0.000
97	467/ 452/ 457	4	0.083250	0.000

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MENT INPUTS *

NT	NODES	MATL	AREA	REF. ANGLE
98	467/ 457/ 468	4	0.072750	0.000
99	468/ 457/ 469	4	0.073000	0.000
00	469/ 457/ 462	4	0.083250	0.000
01	470/ 467/ 471	4	0.062500	0.000
02	471/ 467/ 468	4	0.072750	0.000
03	471/ 468/ 469	4	0.073000	0.000
04	471/ 469/ 472	4	0.062500	0.000
05	473/ 470/ 471	4	0.062500	0.000
06	473/ 471/ 474	4	0.057250	0.000
07	474/ 471/ 475	4	0.057250	0.000
08	475/ 471/ 472	4	0.062500	0.000
09	476/ 473/ 477	4	0.052000	0.000
10	477/ 473/ 474	4	0.057250	0.000
11	477/ 474/ 475	4	0.057250	0.000
12	477/ 475/ 478	4	0.052250	0.000
13	479/ 476/ 477	4	0.052000	0.000
14	479/ 477/ 480	4	0.052000	0.000
15	480/ 477/ 481	4	0.052250	0.000
[illegible]	481/ 477/ 478	4	0.052250	0.000
[illegible]	482/ 479/ 483	4	0.052000	0.000
18	483/ 479/ 480	4	0.052000	0.000
19	483/ 480/ 481	4	0.052250	0.000
20	483/ 481/ 484	4	0.052250	0.000
21	485/ 482/ 483	4	0.052000	0.000
22	485/ 483/ 486	4	0.052000	0.000
23	486/ 483/ 487	4	0.052250	0.000
24	487 483/ 484	4	0.052250	0.000
25	488/ 485/ 489	4	0.052000	0.000
26	489/ 485/ 486	4	0.052000	0.000
27	489/ 486/ 487	4	0.052250	0.000
28	487 487/ 490	4	0.052250	0.000
29	491/ 488/ 489	4	0.069368	0.000
30	491/ 489/ 492	4	0.069368	0.000
31	492/ 489/ 493	4	0.069701	0.000
32	493/ 489/ 490	4	0.069701	0.000
33	494/ 491/ 495	4	0.069368	0.000
34	495/ 491/ 492	4	0.069368	0.000
35	495/ 492/ 493	4	0.069701	0.000
36	495/ 493/ 496	4	0.069701	0.000
37	497/ 494/ 495	4	0.069264	0.000
38	497/ 495/ 498	4	0.069264	0.000

EMENT INPUTS *

ENT	NODES	MATL	AREA	REF. ANGLE
739	498/ 495/ 499	4	0.069597	0.000
740	499/ 495/ 496	4	0.069597	0.000
741	500/ 497/ 501	4	0.069368	0.000
742	501/ 497/ 498	4	0.069368	0.000
743	501/ 498/ 499	4	0.069701	0.000
744	501/ 499/ 502	4	0.069701	0.000
745	503/ 500/ 501	4	0.069368	0.000
746	503/ 501/ 504	4	0.069368	0.000
747	504/ 501/ 505	4	0.069701	0.000
748	505/ 501/ 502	4	0.069701	0.000
749	506/ 503/ 507	4	0.069264	0.000
750	507/ 503/ 504	4	0.069264	0.000
751	507/ 504/ 505	4	0.069597	0.000
752	507/ 505/ 508	4	0.069597	0.000
753	509/ 506/ 507	4	0.069368	0.000
754	509/ 507/ 510	4	0.062364	0.000
755	510/ 507/ 511	4	0.062698	0.000
756	511/ 507/ 508	4	0.069701	0.000
757	512/ 509/ 513	4	0.062364	0.000
758	513/ 509/ 510	4	0.062364	0.000
759	513/ 510/ 511	4	0.062698	0.000
760	513/ 511/ 514	4	0.062698	0.000
761	515/ 512/ 513	4	0.062271	0.000
762	515/ 513/ 516	4	0.062271	0.000
763	516/ 513/ 517	4	0.062604	0.000
764	517/ 513/ 514	4	0.062604	0.000
765	518/ 515/ 519	4	0.062364	0.000
766	519/ 515/ 516	4	0.062364	0.000
767	519/ 516/ 517	4	0.062698	0.000
768	519/ 517/ 520	4	0.062698	0.000
769	521/ 518/ 519	4	0.062364	0.000
770	521/ 519/ 522	4	0.062364	0.000
771	522/ 519/ 523	4	0.062698	0.000
772	523/ 519/ 520	4	0.062698	0.000
773	524/ 521/ 525	4	0.062271	0.000
774	525/ 521/ 522	4	0.062271	0.000
775	525/ 522/ 523	4	0.062604	0.000
776	525/ 523/ 526	4	0.062604	0.000
777	527/ 524/ 525	4	0.062314	0.000
778	527/ 525/ 528	4	0.055694	0.000
779	528/ 525/ 529	4	0.055694	0.000

LEMENT INPUTS *

MENT	NODES	MATL	AREA	REF. ANGLE
780	529/ 525/ 526	4	0.062698	0.000
781	530/ 527/ 531	4	0.055694	0.000
782	531/ 527/ 528	4	0.055694	0.000
783	531/ 528/ 529	4	0.055694	0.000
784	531/ 529/ 532	4	0.055694	0.000
785	533/ 530/ 531	4	0.055611	0.000
786	533/ 531/ 534	4	0.055611	0.000
787	534/ 531/ 535	4	0.055611	0.000
788	535/ 531/ 532	4	0.055611	0.000
789	536/ 533/ 537	4	0.055694	0.000
790	537/ 533/ 534	4	0.055694	0.000
791	537/ 534/ 535	4	0.055694	0.000
792	537/ 535/ 538	4	0.055694	0.000
793	539/ 536/ 537	4	0.055694	0.000
794	539/ 537/ 540	4	0.055694	0.000
795	540/ 537/ 541	4	0.055694	0.000
796	541/ 537/ 538	4	0.055694	0.000
797	542/ 539/ 543	4	0.055611	0.000
[illegible]	543/ 539/ 540	4	0.055611	0.000
[illegible]	543/ 540/ 541	4	0.055611	0.000
800	543/ 541/ 544	4	0.055611	0.000
801	545/ 542/ 543	4	0.055694	0.000
802	545/ 543/ 546	4	0.055694	0.000
803	546/ 543/ 547	4	0.055694	0.000
804	547/ 543/ 544	4	0.055694	0.000
805	548/ 545/ 549	4	0.055694	0.000
806	549/ 545/ 546	4	0.055694	0.000
807	549/ 546/ 547	4	0.055694	0.000
808	549/ 547/ 550	4	0.055694	0.000
809	551/ 548/ 549	4	0.055611	0.000
810	551/ 549/ 552	4	0.055611	0.000
811	552/ 549/ 553	4	0.055611	0.000
812	553/ 549/ 550	4	0.055611	0.000
813	554/ 551/ 555	4	0.055694	0.000
814	555/ 551/ 552	4	0.055694	0.000
815	555/ 552/ 553	4	0.055694	0.000
816	555/ 553/ 556	4	0.055694	0.000
817	557/ 554/ 555	4	0.055694	0.000
818	557/ 555/ 558	4	0.055694	0.000
819	558/ 555/ 559	4	0.055694	0.000
820	559/ 555/ 556	4	0.055694	0.000

EMENT INPUTS *

ENT	NODES	MATL	AREA	REF. ANGLE
821	560/ 557/ 561	3	0.042486	0.000
822	561/ 557/ 558	3	0.048597	0.000
823	561/ 558/ 559	3	0.048597	0.000
824	561/ 559/ 562	3	0.042486	0.000
825	563/ 560/ 561	3	0.042632	0.000
826	563/ 561/ 564	3	0.044968	0.000
827	564/ 561/ 565	3	0.042632	0.000
828	565/ 561/ 562	3	0.042632	0.000
829	566/ 563/ 567	3	0.042559	0.000
830	567/ 563/ 564	3	0.044891	0.000
831	567/ 564/ 565	3	0.042559	0.000
832	567/ 565/ 568	3	0.042267	0.000
833	569/ 566/ 567	3	0.042559	0.000
834	569/ 567/ 570	3	0.042267	0.000
835	570/ 567/ 571	3	0.042559	0.000
836	571/ 567/ 568	3	0.042267	0.000
837	572/ 569/ 573	3	0.042632	0.000
838	573/ 569/ 570	3	0.042340	0.000
839	573/ 570/ 571	3	0.042632	0.000
840	573/ 571/ 574	3	0.042632	0.000
841	575/ 572/ 573	3	0.042559	0.000
842	575/ 573/ 576	3	0.042267	0.000
843	576/ 573/ 577	3	0.042559	0.000
844	577/ 573/ 574	3	0.042559	0.000
845	578/ 575/ 579	3	0.042559	0.000
846	579/ 575/ 576	3	0.042267	0.000
847	579/ 576/ 577	3	0.042559	0.000
848	579/ 577/ 580	3	0.042267	0.000
849	581/ 578/ 579	3	0.036500	0.000
850	581/ 579/ 582	3	0.031250	0.000
851	582/ 579/ 583	3	0.031250	0.000
852	583/ 579/ 580	3	0.036250	0.000
853	584/ 581/ 585	3	0.031250	0.000
854	585/ 581/ 582	3	0.031250	0.000
855	585/ 582/ 583	3	0.031250	0.000
856	585/ 583/ 586	3	0.031250	0.000
857	587/ 584/ 585	3	0.031250	0.000
858	587/ 585/ 588	3	0.031250	0.000
859	588/ 585/ 589	3	0.031250	0.000
860	589/ 585/ 586	3	0.031250	0.000
861	590/ 587/ 591	3	0.031250	0.000

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ELEMENT INPUTS *

MENT	NODES	MATL	AREA	REF. ANGLE
862	591/ 587/ 588	3	0.031250	0.000
863	591/ 588/ 589	3	0.031250	0.000
864	591/ 589/ 592	3	0.031250	0.000
865	593/ 590/ 591	3	0.031250	0.000
866	593/ 591/ 594	3	0.031250	0.000
867	594/ 591/ 595	3	0.031250	0.000
868	595/ 591/ 592	3	0.031250	0.000
869	596/ 593/ 597	3	0.031250	0.000
870	597/ 593/ 594	3	0.031250	0.000
871	597/ 594/ 595	3	0.031250	0.000
872	597/ 595/ 598	3	0.031250	0.000
873	599/ 596/ 597	3	0.031250	0.000
874	599/ 597/ 600	3	0.031250	0.000
875	600/ 597/ 601	3	0.031250	0.000
876	601/ 597/ 598	3	0.031250	0.000
877	602/ 599/ 603	3	0.031250	0.000
878	603/ 599/ 600	3	0.031250	0.000
879	603/ 600/ 601	3	0.031250	0.000
[illegible]	603/ 601/ 604	3	0.031250	0.000
[illegible]	605/ 602/ 603	3	0.031250	0.000
882	605/ 603/ 606	3	0.031500	0.000
883	606/ 603/ 607	3	0.031000	0.000
884	607/ 603/ 604	3	0.031250	0.000
885	608/ 605/ 609	3	0.031250	0.000
886	609/ 605/ 606	3	0.031500	0.000
887	609/ 606/ 607	3	0.031000	0.000
888	609/ 607/ 610	3	0.031250	0.000
889	611/ 608/ 609	3	0.031250	0.000
890	611/ 609/ 612	3	0.031250	0.000
891	612/ 609/ 613	3	0.031250	0.000
892	613/ 609/ 610	3	0.031250	0.000
893	614/ 611/ 615	3	0.031250	0.000
894	615/ 611/ 612	3	0.031250	0.000
895	615/ 612/ 613	3	0.031250	0.000
896	615/ 613/ 616	3	0.029000	0.000
897	617/ 614/ 615	3	0.031250	0.000
898	617/ 615/ 618	3	0.031250	0.000
899	618/ 615/ 619	3	0.031250	0.000
900	619/ 615/ 616	3	0.029000	0.000
901	620/ 617/ 621	3	0.031250	0.000
902	621/ 617/ 618	3	0.031250	0.000

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EMENT INPUTS *

ENT	NODES	MATL	AREA	REF. ANGLE
903	621/ 618/ 619	3	0.031250	0.000
904	621/ 619/ 622	3	0.031250	0.000
905	623/ 620/ 621	3	0.031250	0.000
906	623/ 621/ 624	3	0.031250	0.000
907	624/ 621/ 625	3	0.031250	0.000
908	625/ 621/ 622	3	0.031250	0.000
909	626/ 623/ 627	2	0.021684	0.000
910	627/ 623/ 624	2	0.026062	0.000
911	627/ 624/ 625	2	0.026062	0.000
912	627/ 625/ 628	2	0.021684	0.000
913	629/ 626/ 627	2	0.021632	0.000
914	629/ 627/ 630	2	0.021632	0.000
915	630/ 627/ 631	2	0.021632	0.000
916	631/ 627/ 628	2	0.021632	0.000
917	632/ 629/ 633	2	0.021684	0.000
918	633/ 629/ 630	2	0.021684	0.000
919	633/ 630/ 631	2	0.021684	0.000
920	633/ 631/ 634	2	0.021684	0.000
921	635/ 632/ 633	2	0.021684	0.000
922	635/ 633/ 636	2	0.021684	0.000
923	636/ 633/ 637	2	0.021684	0.000
924	637/ 633/ 634	2	0.021684	0.000
925	638/ 635/ 639	2	0.021684	0.000
926	639/ 635/ 636	2	0.021684	0.000
927	639/ 636/ 637	2	0.021684	0.000
928	639/ 637/ 640	2	0.021684	0.000
929	641/ 638/ 639	2	0.021632	0.000
930	641/ 639/ 642	2	0.021632	0.000
931	642/ 639/ 643	2	0.021632	0.000
932	643/ 639/ 640	2	0.021632	0.000
933	644/ 641/ 645	2	0.021684	0.000
934	645/ 641/ 642	2	0.021684	0.000
935	645/ 642/ 643	2	0.021684	0.000
936	645/ 643/ 646	2	0.021684	0.000
937	647/ 644/ 645	2	0.021632	0.000
938	647/ 645/ 648	2	0.021632	0.000
939	648/ 645/ 649	2	0.021632	0.000
940	649/ 645/ 646	2	0.021632	0.000
941	650/ 647/ 651	2	0.021684	0.000
942	651/ 647/ 648	2	0.021684	0.000
943	651/ 648/ 649	2	0.021684	0.000

ELEMENT INPUTS *

EMENT	NODES	MATL	AREA	REF. ANGLE
944	651/ 649/ 652	2	0.021684	0.000
945	653/ 650/ 651	2	0.021684	0.000
946	653/ 651/ 654	2	0.021684	0.000
947	654/ 651/ 655	2	0.021684	0.000
948	655/ 651/ 652	2	0.021684	0.000
949	656/ 653/ 657	2	0.021684	0.000
950	657/ 653/ 654	2	0.021684	0.000
951	657/ 654/ 655	2	0.021684	0.000
952	657/ 655/ 658	2	0.021684	0.000
953	659/ 656/ 657	2	0.021632	0.000
954	659/ 657/ 660	2	0.021632	0.000
955	660/ 657/ 661	2	0.021632	0.000
956	661/ 657/ 658	2	0.021632	0.000
957	662/ 659/ 663	2	0.021684	0.000
958	663/ 659/ 660	2	0.021684	0.000
959	663/ 660/ 661	2	0.021684	0.000
960	663/ 661/ 664	2	0.021684	0.000
961	665/ 662/ 663	2	0.021632	0.000
[illegible]	665/ 663/ 666	2	0.021632	0.000
[illegible]	666/ 663/ 667	2	0.021632	0.000
964	667/ 663/ 664	2	0.021632	0.000
965	668/ 665/ 669	2	0.021684	0.000
966	669/ 665/ 666	2	0.021684	0.000
967	669/ 666/ 667	2	0.021684	0.000
968	669/ 667/ 670	2	0.021684	0.000
969	671/ 668/ 669	2	0.021684	0.000
970	671/ 669/ 672	2	0.021684	0.000
971	672/ 669/ 673	2	0.021684	0.000
972	673/ 669/ 670	2	0.021684	0.000
973	674/ 671/ 675	2	0.021684	0.000
974	675/ 671/ 672	2	0.021684	0.000
975	675/ 672/ 673	2	0.021684	0.000
976	675/ 673/ 676	2	0.021684	0.000
977	677/ 674/ 675	1	0.017316	0.000
978	677/ 675/ 678	1	0.013819	0.000
979	678/ 675/ 679	1	0.013986	0.000
980	679/ 675/ 676	1	0.017316	0.000
981	680/ 677/ 681	1	0.013841	0.000
982	681/ 677/ 678	1	0.013841	0.000
983	681/ 678/ 679	1	0.014028	0.000
984	681/ 679/ 682	1	0.013841	0.000

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LEMENT INPUTS *

MENT	NODES	MATL	AREA	REF. ANGLE
985	683/ 680/ 681	1	0.013819	0.000
986	683/ 681/ 684	1	0.013986	0.000
987	684/ 681/ 685	1	0.013819	0.000
988	685/ 681/ 682	1	0.013819	0.000
989	686/ 683/ 687	1	0.013986	0.000
990	687/ 683/ 684	1	0.013986	0.000
991	687/ 684/ 685	1	0.013819	0.000
992	687/ 685/ 688	1	0.013819	0.000
993	689/ 686/ 687	1	0.014028	0.000
994	689/ 687/ 690	1	0.013861	0.000
995	690/ 687/ 691	1	0.014028	0.000
996	691/ 687/ 688	1	0.013861	0.000
997	692/ 689/ 693	1	0.013819	0.000
998	693/ 689/ 690	1	0.013819	0.000
999	693/ 690/ 691	1	0.013986	0.000
1000	693/ 691/ 694	1	0.013986	0.000

ODAL DISPLACEMENTS *

#	TYPE	ELMT/ NODE	DIRECTION	DISPLACEMENT

E

NODAL LOADS *

Q #	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
1	B	1	1	Y	-0.0868000
2	B	2	1	Y	-0.0868000
3	B	3	1	Y	-0.0868000
[illegible]	B	4	1	Y	-0.0868000
[illegible]	B	5	1	Y	-0.0868000
[illegible]	B	6	1	Y	-0.0868000
7	B	7	1	Y	-0.0868000
8	B	8	1	Y	-0.0868000
9	B	9	1	Y	-0.0868000
10	B	10	1	Y	-0.0868000
11	B	11	1	Y	-0.0868000
12	B	12	1	Y	-0.0868000
13	B	13	1	Y	-0.0868000
14	B	14	1	Y	-0.0868000
15	B	15	1	Y	-0.0868000
16	B	16	1	Y	-0.0868000
17	B	17	1	Y	-0.0868000
18	B	18	1	Y	-0.0868000
19	B	19	1	Y	-0.0868000
20	B	20	1	Y	-0.0868000
21	B	21	1	Y	-0.0868000
22	B	22	1	Y	-0.0868000
23	B	23	1	Y	-0.0868000
24	B	24	1	Y	-0.0868000
25	B	25	1	Y	-0.0868000
26	B	26	1	Y	-0.0868000
27	B	27	1	Y	-0.0868000

L LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
B	28	1	Y	-0.0868000
B	29	1	Y	-0.0868000
B	30	1	Y	-0.0868000
B	31	1	Y	-0.0868000
B	32	1	Y	-0.0868000
B	33	1	Y	-0.0868000
B	34	1	Y	-0.0868000
B	35	1	Y	-0.0868000
B	36	1	Y	-0.0868000
B	37	1	Y	-0.0868000
B	38	1	Y	-0.0868000
B	39	1	Y	-0.0868000
B	40	1	Y	-0.0868000
B	41	1	Y	-0.0868000
B	42	1	Y	-0.0868000
B	43	1	Y	-0.0868000
B	44	1	Y	-0.0868000
B	45	1	Y	-0.0868000
B	46	1	Y	-0.0868000
B	47	1	Y	-0.0868000
B	48	1	Y	-0.0868000
B	49	1	Y	-0.0868000
B	50	1	Y	-0.0868000
B	51	1	Y	-0.0868000
B	52	1	Y	-0.0868000
B	53	1	Y	-0.0868000
B	54	1	Y	-0.0868000
B	55	1	Y	-0.0868000
B	56	1	Y	-0.0868000
B	57	1	Y	-0.0868000
B	58	1	Y	-0.0868000
B	59	1	Y	-0.0868000
B	60	1	Y	-0.0868000
B	61	1	Y	-0.0868000
B	62	1	Y	-0.0868000
B	63	1	Y	-0.0868000
B	64	1	Y	-0.0868000
B	65	1	Y	-0.0868000
B	66	1	Y	-0.0868000
B	67	1	Y	-0.0868000

285

NO. 10

AL LOADS *

TYPE	ELMT NODE	LOAD CASE	DIRECTION	LOAD
B	68	1	Y	-0.0868000
B	69	1	Y	-0.0868000
B	70	1	Y	-0.0868000
B	71	1	Y	-0.0868000
B	72	1	Y	-0.0868000
B	73	1	Y	-0.0868000
B	74	1	Y	-0.0868000
B	75	1	Y	-0.0868000
B	76	1	Y	-0.0868000
B	77	1	Y	-0.0868000
B	78	1	Y	-0.0868000
B	79	1	Y	-0.0868000
B	80	1	Y	-0.0868000
B	81	1	Y	-0.0868000
B	82	1	Y	-0.0868000
B	83	1	Y	-0.0868000
B	84	1	Y	-0.0868000
B	85	1	Y	-0.0868000
B	86	1	Y	-0.0868000
B	87	1	Y	-0.0868000
B	88	1	Y	-0.0868000
B	89	1	Y	-0.0868000
B	90	1	Y	-0.0868000
B	91	1	Y	-0.0868000
B	92	1	Y	-0.0868000
B	93	1	Y	-0.0868000
B	94	1	Y	-0.0868000
B	95	1	Y	-0.0868000
B	96	1	Y	-0.0868000
B	97	1	Y	-0.0868000
B	98	1	Y	-0.0868000
B	99	1	Y	-0.0868000
B	100	1	Y	-0.0868000
B	101	1	Y	-0.0868000
B	102	1	Y	-0.0868000
B	103	1	Y	-0.0868000
B	104	1	Y	-0.0868000
B	105	1	Y	-0.0868000
B	106	1	Y	-0.0868000
B	107	1	Y	-0.0868000

AL LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
B	108	1	Y	-0.0868000
B	109	1	Y	-0.0868000
B	110	1	Y	-0.0868000
B	111	1	Y	-0.0868000
B	112	1	Y	-0.0868000
B	113	1	Y	-0.0868000
B	114	1	Y	-0.0868000
B	115	1	Y	-0.0868000
B	116	1	Y	-0.0868000
B	117	1	Y	-0.0868000
B	118	1	Y	-0.0868000
B	119	1	Y	-0.0868000
B	120	1	Y	-0.0868000
B	121	1	Y	-0.0868000
B	122	1	Y	-0.0868000
B	123	1	Y	-0.0868000
B	124	1	Y	-0.0868000
B	125	1	Y	-0.0868000
B	126	1	Y	-0.0868000
B	127	1	Y	-0.0868000
B	128	1	Y	-0.0868000
B	129	1	Y	-0.0868000
B	130	1	Y	-0.0868000
B	131	1	Y	-0.0868000
B	132	1	Y	-0.0868000
B	133	1	Y	-0.0868000
B	134	1	Y	-0.0868000
B	135	1	Y	-0.0868000
B	136	1	Y	-0.0868000
B	137	1	Y	-0.0868000
B	138	1	Y	-0.0868000
B	139	1	Y	-0.0868000
B	140	1	Y	-0.0868000
B	141	1	Y	-0.0868000
B	142	1	Y	-0.0868000
B	143	1	Y	-0.0868000
B	144	1	Y	-0.0868000
B	145	1	Y	-0.0868000
B	146	1	Y	-0.0868000
B	147	1	Y	-0.0868000

DAL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
8	B	148	1	Y	-0.0868000
9	B	149	1	Y	-0.0868000
0	B	150	1	Y	-0.0868000
1	B	151	1	Y	-0.0868000
2	B	152	1	Y	-0.0868000
3	B	153	1	Y	-0.0868000
4	B	154	1	Y	-0.0868000
5	B	155	1	Y	-0.0868000
6	B	156	1	Y	-0.0868000
7	B	157	1	Y	-0.0868000
8	B	158	1	Y	-0.0868000
9	B	159	1	Y	-0.0868000
0	B	160	1	Y	-0.0868000
1	B	161	1	Y	-0.0868000
2	B	162	1	Y	-0.0868000
3	B	163	1	Y	-0.0868000
4	B	164	1	Y	-0.0868000
[illegible]	B	165	1	Y	-0.0868000
[illegible]	B	166	1	Y	-0.0868000
[illegible]	B	167	1	Y	-0.0868000
8	B	168	1	Y	-0.0868000
9	B	169	1	Y	-0.0868000
0	B	170	1	Y	-0.0868000
1	B	171	1	Y	-0.0868000
2	B	172	1	Y	-0.0868000
3	B	173	1	Y	-0.0868000
4	B	174	1	Y	-0.0868000
5	B	175	1	Y	-0.0868000
6	B	176	1	Y	-0.0868000
7	B	177	1	Y	-0.0868000
8	B	178	1	Y	-0.0868000
9	B	179	1	Y	-0.0868000
0	B	180	1	Y	-0.0868000
1	B	181	1	Y	-0.0868000
2	B	182	1	Y	-0.0868000
3	B	183	1	Y	-0.0868000
4	B	184	1	Y	-0.0868000
5	B	185	1	Y	-0.0868000
6	B	186	1	Y	-0.0868000
7	B	187	1	Y	-0.0868000

NL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
8	B	188	1	Y	-0.0868000
9	B	189	1	Y	-0.0868000
0	B	190	1	Y	-0.0868000
1	B	191	1	Y	-0.0868000
2	B	192	1	Y	-0.0868000
3	B	193	1	Y	-0.0868000
4	B	194	1	Y	-0.0868000
5	B	195	1	Y	-0.0868000
6	B	196	1	Y	-0.0868000
7	B	197	1	Y	-0.0868000
8	B	198	1	Y	-0.0868000
9	B	199	1	Y	-0.0868000
0	B	200	1	Y	-0.0868000
1	B	201	1	Y	-0.0868000
2	B	202	1	Y	-0.0868000
3	B	203	1	Y	-0.0868000
4	B	204	1	Y	-0.0868000
5	B	205	1	Y	-0.0868000
6	B	206	1	Y	-0.0868000
7	B	207	1	Y	-0.0868000
8	B	208	1	Y	-0.0868000
9	B	209	1	Y	-0.0868000
0	B	210	1	Y	-0.0868000
1	B	211	1	Y	-0.0868000
2	B	212	1	Y	-0.0868000
3	B	213	1	Y	-0.0868000
14	B	214	1	Y	-0.0868000
15	B	215	1	Y	-0.0868000
16	B	216	1	Y	-0.0868000
17	B	217	1	Y	-0.0868000
18	B	218	1	Y	-0.0868000
19	B	219	1	Y	-0.0868000
20	B	220	1	Y	-0.0868000
21	B	221	1	Y	-0.0868000
22	B	222	1	Y	-0.0868000
23	B	223	1	Y	-0.0868000
24	B	224	1	Y	-0.0868000
25	B	225	1	Y	-0.0868000
26	B	226	1	Y	-0.0868000
27	B	227	1	Y	-0.0868000

AL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
3	B	228	1	Y	-0.0868000
9	B	229	1	Y	-0.0868000
0	B	230	1	Y	-0.0868000
1	B	231	1	Y	-0.0868000
2	B	232	1	Y	-0.0868000
3	B	233	1	Y	-0.0868000
4	B	234	1	Y	-0.0868000
5	B	235	1	Y	-0.0868000
6	B	236	1	Y	-0.0868000
7	B	237	1	Y	-0.0868000
8	B	238	1	Y	-0.0868000
9	B	239	1	Y	-0.0868000
0	B	240	1	Y	-0.0868000
1	B	241	1	Y	-0.0868000
2	B	242	1	Y	-0.0868000
3	B	243	1	Y	-0.0868000
4	B	244	1	Y	-0.0868000
[illegible]	B	245	1	Y	-0.0868000
[illegible]	B	246	1	Y	-0.0868000
7	B	247	1	Y	-0.0868000
8	B	248	1	Y	-0.0868000
9	B	249	1	Y	-0.0868000
0	B	250	1	Y	-0.0868000
1	B	251	1	Y	-0.0868000
2	B	252	1	Y	-0.0868000
3	B	253	1	Y	-0.0868000
4	B	254	1	Y	-0.0868000
5	B	255	1	Y	-0.0868000
6	B	256	1	Y	-0.0868000
7	B	257	1	Y	-0.0868000
8	B	258	1	Y	-0.0868000
9	B	259	1	Y	-0.0868000
0	B	260	1	Y	-0.0868000
1	B	261	1	Y	-0.0868000
2	B	262	1	Y	-0.0868000
3	B	263	1	Y	-0.0868000
4	B	264	1	Y	-0.0868000
5	B	265	1	Y	-0.0868000
6	B	266	1	Y	-0.0868000
7	B	267	1	Y	-0.0868000

AL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
8	B	268	1	Y	-0.0868000
9	B	269	1	Y	-0.0868000
0	B	270	1	Y	-0.0868000
1	B	271	1	Y	-0.0868000
2	B	272	1	Y	-0.0868000
3	B	273	1	Y	-0.0868000
4	B	274	1	Y	-0.0868000
5	B	275	1	Y	-0.0868000
6	B	276	1	Y	-0.0868000
7	B	277	1	Y	-0.0868000
8	B	278	1	Y	-0.0868000
9	B	279	1	Y	-0.0868000
0	B	280	1	Y	-0.0868000
1	B	281	1	Y	-0.0868000
2	B	282	1	Y	-0.0868000
3	B	283	1	Y	-0.0868000
4	B	284	1	Y	-0.0868000
5	B	285	1	Y	-0.0868000
6	B	286	1	Y	-0.0868000
7	B	287	1	Y	-0.0868000
8	B	288	1	Y	-0.0868000
9	B	289	1	Y	-0.0868000
0	B	290	1	Y	-0.0868000
91	B	291	1	Y	-0.0868000
92	B	292	1	Y	-0.0868000
93	B	293	1	Y	-0.0868000
94	B	294	1	Y	-0.0868000
95	B	295	1	Y	-0.0868000
96	B	296	1	Y	-0.0868000
97	B	297	1	Y	-0.0868000
98	B	298	1	Y	-0.0868000
99	B	299	1	Y	-0.0868000
00	B	300	1	Y	-0.0868000
01	B	301	1	Y	-0.0868000
02	B	302	1	Y	-0.0868000
03	B	303	1	Y	-0.0868000
04	B	304	1	Y	-0.0868000
05	B	305	1	Y	-0.0868000
06	B	306	1	Y	-0.0868000
07	B	307	1	Y	-0.0868000

NODAL LOADS *

D #	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
308	B	308	1	Y	-0.0868000
309	B	309	1	Y	-0.0868000
310	B	310	1	Y	-0.0868000
311	B	311	1	Y	-0.0868000
312	B	312	1	Y	-0.0868000
313	B	313	1	Y	-0.0868000
314	B	314	1	Y	-0.0868000
315	B	315	1	Y	-0.0868000
316	B	316	1	Y	-0.0868000
317	B	317	1	Y	-0.0868000
318	B	318	1	Y	-0.0868000
319	B	319	1	Y	-0.0868000
320	B	320	1	Y	-0.0868000
321	B	321	1	Y	-0.0868000
322	B	322	1	Y	-0.0868000
323	B	323	1	Y	-0.0868000
324	B	324	1	Y	-0.0868000
325	B	325	1	Y	-0.0868000
[illegible]	B	326	1	Y	-0.0868000
[illegible]	B	327	1	Y	-0.0868000
328	B	328	1	Y	-0.0868000
329	B	329	1	Y	-0.0868000
330	B	330	1	Y	-0.0868000
331	B	331	1	Y	-0.0868000
332	B	332	1	Y	-0.0868000
[illegible]	B	333	1	Y	-0.0868000
334	B	334	1	Y	-0.0868000
335	B	335	1	Y	-0.0868000
336	B	336	1	Y	-0.0868000
337	B	337	1	Y	-0.0868000
338	B	338	1	Y	-0.0868000
339	B	339	1	Y	-0.0868000
340	B	340	1	Y	-0.0868000
341	B	341	1	Y	-0.0868000
342	B	342	1	Y	-0.0868000
343	B	343	1	Y	-0.0868000
344	B	344	1	Y	-0.0868000
345	B	345	1	Y	-0.0868000
346	B	346	1	Y	-0.0868000
347	B	347	1	Y	-0.0868000

AL LOADS *

	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
8	B	348	1	Y	-0.0868000
9	B	349	1	Y	-0.0868000
0	B	350	1	Y	-0.0868000
.	B	351	1	Y	-0.0868000
2	B	352	1	Y	-0.0868000
3	B	353	1	Y	-0.0868000
4	B	354	1	Y	-0.0868000
5	B	355	1	Y	-0.0868000
6	B	356	1	Y	-0.0868000
7	B	357	1	Y	-0.0868000
8	B	358	1	Y	-0.0868000
9	B	359	1	Y	-0.0868000
0	B	360	1	Y	-0.0868000
1	B	361	1	Y	-0.0868000
2	B	362	1	Y	-0.0868000
3	B	363	1	Y	-0.0868000
4	B	364	1	Y	-0.0868000
5	B	365	1	Y	-0.0868000
.	B	366	1	Y	-0.0868000
7	B	367	1	Y	-0.0868000
8	B	368	1	Y	-0.0868000
9	B	369	1	Y	-0.0868000
0	B	370	1	Y	-0.0868000
1	B	371	1	Y	-0.0868000
2	B	372	1	Y	-0.0868000
3	B	373	1	Y	-0.0868000
4	B	374	1	Y	-0.0868000
5	B	375	1	Y	-0.0868000
6	B	376	1	Y	-0.0868000
7	B	377	1	Y	-0.0868000
8	B	378	1	Y	-0.0868000
9	B	379	1	Y	-0.0868000
0	B	380	1	Y	-0.0868000
1	B	381	1	Y	-0.0868000
2	B	382	1	Y	-0.0868000
3	B	383	1	Y	-0.0868000
4	B	384	1	Y	-0.0868000
5	B	385	1	Y	-0.0868000
6	B	386	1	Y	-0.0868000
7	B	387	1	Y	-0.0868000

DAL LOADS *

#	TYPE	ELMT NODE	LOAD CASE	DIRECTION	LOAD
8	B	388	1	Y	-0.0868000
9	B	389	1	Y	-0.0868000
0	B	390	1	Y	-0.0868000
1	B	391	1	Y	-0.0868000
2	B	392	1	Y	-0.0868000
3	B	393	1	Y	-0.0868000
4	B	394	1	Y	-0.0868000
5	B	395	1	Y	-0.0868000
6	B	396	1	Y	-0.0868000
7	B	397	1	Y	-0.0868000
8	B	398	1	Y	-0.0868000
9	B	399	1	Y	-0.0868000
0	B	400	1	Y	-0.0868000
1	B	401	1	Y	-0.0868000
2	B	402	1	Y	-0.0868000
3	B	403	1	Y	-0.0868000
4	B	404	1	Y	-0.0868000
[illegible]	B	405	1	Y	-0.0868000
[illegible]	B	406	1	Y	-0.0868000
[illegible]	B	407	1	Y	-0.0868000
8	B	408	1	Y	-0.0868000
9	B	409	1	Y	-0.0868000
10	B	410	1	Y	-0.0868000
11	B	411	1	Y	-0.0868000
12	B	412	1	Y	-0.0868000
13	B	413	1	Y	-0.0868000
14	B	414	1	Y	-0.0868000
15	B	415	1	Y	-0.0868000
16	B	416	1	Y	-0.0868000
17	B	417	1	Y	-0.0868000
18	B	418	1	Y	-0.0868000
19	B	419	1	Y	-0.0868000
20	B	420	1	Y	-0.0868000
21	B	421	1	Y	-0.0868000
22	B	422	1	Y	-0.0868000
23	B	423	1	Y	-0.0868000
24	B	424	1	Y	-0.0868000
25	B	425	1	Y	-0.0868000
26	B	426	1	Y	-0.0868000
27	B	427	1	Y	-0.0868000

AL LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
B	428	1	Y	-0.0868000
B	429	1	Y	-0.0868000
B	430	1	Y	-0.0868000
B	431	1	Y	-0.0868000
B	432	1	Y	-0.0868000
B	433	1	Y	-0.0868000
B	434	1	Y	-0.0868000
B	435	1	Y	-0.0868000
B	436	1	Y	-0.0868000
B	437	1	Y	-0.0868000
B	438	1	Y	-0.0868000
B	439	1	Y	-0.0868000
B	440	1	Y	-0.0868000
B	441	1	Y	-0.0868000
B	442	1	Y	-0.0868000
B	443	1	Y	-0.0868000
B	444	1	Y	-0.0868000
B	445	1	Y	-0.0868000
B	446	1	Y	-0.0868000
B	447	1	Y	-0.0868000
B	448	1	Y	-0.0868000
B	449	1	Y	-0.0868000
B	450	1	Y	-0.0868000
B	451	1	Y	-0.0868000
B	452	1	Y	-0.0868000
B	453	1	Y	-0.0868000
B	454	1	Y	-0.0868000
B	455	1	Y	-0.0868000
B	456	1	Y	-0.0868000
B	457	1	Y	-0.0868000
B	458	1	Y	-0.0868000
B	459	1	Y	-0.0868000
B	460	1	Y	-0.0868000
B	461	1	Y	-0.0868000
B	462	1	Y	-0.0868000
B	463	1	Y	-0.0868000
B	464	1	Y	-0.0868000
B	465	1	Y	-0.0868000
B	466	1	Y	-0.0868000
B	467	1	Y	-0.0868000

NODAL LOADS *

EQ #	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
468	B	468	1	Y	-0.0868000
469	B	469	1	Y	-0.0868000
470	B	470	1	Y	-0.0868000
471	B	471	1	Y	-0.0868000
472	B	472	1	Y	-0.0868000
473	B	473	1	Y	-0.0868000
474	B	474	1	Y	-0.0868000
475	B	475	1	Y	-0.0868000
476	B	476	1	Y	-0.0868000
477	B	477	1	Y	-0.0868000
478	B	478	1	Y	-0.0868000
479	B	479	1	Y	-0.0868000
480	B	480	1	Y	-0.0868000
481	B	481	1	Y	-0.0868000
482	B	482	1	Y	-0.0868000
483	B	483	1	Y	-0.0868000
484	B	484	1	Y	-0.0868000
[illegible]	B	485	1	Y	-0.0868000
[illegible]	B	486	1	Y	-0.0868000
487	B	487	1	Y	-0.0868000
488	B	488	1	Y	-0.0868000
489	B	489	1	Y	-0.0868000
490	B	490	1	Y	-0.0868000
491	B	491	1	Y	-0.0868000
492	B	492	1	Y	-0.0868000
493	B	493	1	Y	-0.0868000
494	B	494	1	Y	-0.0868000
495	B	495	1	Y	-0.0868000
496	B	496	1	Y	-0.0868000
497	B	497	1	Y	-0.0868000
498	B	498	1	Y	-0.0868000
499	B	499	1	Y	-0.0868000
500	B	500	1	Y	-0.0868000
501	B	501	1	Y	-0.0868000
502	B	502	1	Y	-0.0868000
503	B	503	1	Y	-0.0868000
504	B	504	1	Y	-0.0868000
505	B	505	1	Y	-0.0868000
506	B	506	1	Y	-0.0868000
507	B	507	1	Y	-0.0868000

AL LOADS *

I	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
8	B	508	1	Y	-0.0868000
9	B	509	1	Y	-0.0868000
0	B	510	1	Y	-0.0868000
1	B	511	1	Y	-0.0868000
2	B	512	1	Y	-0.0868000
3	B	513	1	Y	-0.0868000
4	B	514	1	Y	-0.0868000
5	B	515	1	Y	-0.0868000
6	B	516	1	Y	-0.0868000
7	B	517	1	Y	-0.0868000
8	B	518	1	Y	-0.0868000
9	B	519	1	Y	-0.0868000
0	B	520	1	Y	-0.0868000
1	B	521	1	Y	-0.0868000
2	B	522	1	Y	-0.0868000
3	B	523	1	Y	-0.0868000
4	B	524	1	Y	-0.0868000
5	B	525	1	Y	-0.0868000
6	B	526	1	Y	-0.0868000
7	B	527	1	Y	-0.0868000
8	B	528	1	Y	-0.0868000
9	B	529	1	Y	-0.0868000
0	B	530	1	Y	-0.0868000
1	B	531	1	Y	-0.0868000
2	B	532	1	Y	-0.0868000
3	B	533	1	Y	-0.0868000
4	B	534	1	Y	-0.0868000
5	B	535	1	Y	-0.0868000
6	B	536	1	Y	-0.0868000
7	B	537	1	Y	-0.0868000
8	B	538	1	Y	-0.0868000
9	B	539	1	Y	-0.0868000
0	B	540	1	Y	-0.0868000
1	B	541	1	Y	-0.0868000
2	B	542	1	Y	-0.0868000
3	B	543	1	Y	-0.0868000
4	B	544	1	Y	-0.0868000
5	B	545	1	Y	-0.0868000
6	B	546	1	Y	-0.0868000
7	B	547	1	Y	-0.0868000

NODAL LOADS *

L #	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
548	B	548	1	Y	-0.0868000
549	B	549	1	Y	-0.0868000
550	B	550	1	Y	-0.0868000
551	B	551	1	Y	-0.0868000
552	B	552	1	Y	-0.0868000
553	B	553	1	Y	-0.0868000
554	B	554	1	Y	-0.0868000
555	B	555	1	Y	-0.0868000
556	B	556	1	Y	-0.0868000
557	B	557	1	Y	-0.0868000
558	B	558	1	Y	-0.0868000
559	B	559	1	Y	-0.0868000
560	B	560	1	Y	-0.0868000
561	B	561	1	Y	-0.0868000
562	B	562	1	Y	-0.0868000
563	B	563	1	Y	-0.0868000
564	B	564	1	Y	-0.0868000
[illegible]	B	565	1	Y	-0.0868000
[illegible]	B	566	1	Y	-0.0868000
567	B	567	1	Y	-0.0868000
568	B	568	1	Y	-0.0868000
569	B	569	1	Y	-0.0868000
570	B	570	1	Y	-0.0868000
571	B	571	1	Y	-0.0868000
572	B	572	1	Y	-0.0868000
573	B	573	1	Y	-0.0868000
574	B	574	1	Y	-0.0868000
575	B	575	1	Y	-0.0868000
576	B	576	1	Y	-0.0868000
577	B	577	1	Y	-0.0868000
578	B	578	1	Y	-0.0868000
579	B	579	1	Y	-0.0868000
580	B	580	1	Y	-0.0868000
581	B	581	1	Y	-0.0868000
582	B	582	1	Y	-0.0868000
583	B	583	1	Y	-0.0868000
584	B	584	1	Y	-0.0868000
585	B	585	1	Y	-0.0868000
586	B	586	1	Y	-0.0868000
587	B	587	1	Y	-0.0868000

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NODAL LOADS *

D #	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
588	B	588	1	Y	-0.0868000
589	B	589	1	Y	-0.0868000
590	B	590	1	Y	-0.0868000
591	B	591	1	Y	-0.0868000
592	B	592	1	Y	-0.0868000
593	B	593	1	Y	-0.0868000
594	B	594	1	Y	-0.0868000
595	B	595	1	Y	-0.0868000
596	B	596	1	Y	-0.0868000
597	B	597	1	Y	-0.0868000
598	B	598	1	Y	-0.0868000
599	B	599	1	Y	-0.0868000
600	B	600	1	Y	-0.0868000
601	B	601	1	Y	-0.0868000
602	B	602	1	Y	-0.0868000
603	B	603	1	Y	-0.0868000
604	B	604	1	Y	-0.0868000
605	B	605	1	Y	-0.0868000
606	B	606	1	Y	-0.0868000
607	B	607	1	Y	-0.0868000
608	B	608	1	Y	-0.0868000
609	B	609	1	Y	-0.0868000
610	B	610	1	Y	-0.0868000
611	B	611	1	Y	-0.0868000
612	B	612	1	Y	-0.0868000
613	B	613	1	Y	-0.0868000
614	B	614	1	Y	-0.0868000
615	B	615	1	Y	-0.0868000
616	B	616	1	Y	-0.0868000
617	B	617	1	Y	-0.0868000
618	B	618	1	Y	-0.0868000
619	B	619	1	Y	-0.0868000
620	B	620	1	Y	-0.0868000
621	B	621	1	Y	-0.0868000
622	B	622	1	Y	-0.0868000
623	B	623	1	Y	-0.0868000
624	B	624	1	Y	-0.0868000
625	B	625	1	Y	-0.0868000
626	B	626	1	Y	-0.0868000
627	B	627	1	Y	-0.0868000

NODAL LOADS *

#	TYPE	ELMT NODE	LOAD CASE	DIRECTION	LOAD
628	B	628	1	Y	-0.0868000
629	B	629	1	Y	-0.0868000
630	B	630	1	Y	-0.0868000
631	B	631	1	Y	-0.0868000
632	B	632	1	Y	-0.0868000
633	B	633	1	Y	-0.0868000
634	B	634	1	Y	-0.0868000
635	B	635	1	Y	-0.0868000
636	B	636	1	Y	-0.0868000
637	B	637	1	Y	-0.0868000
638	B	638	1	Y	-0.0868000
639	B	639	1	Y	-0.0868000
640	B	640	1	Y	-0.0868000
641	B	641	1	Y	-0.0868000
642	B	642	1	Y	-0.0868000
643	B	643	1	Y	-0.0868000
644	B	644	1	Y	-0.0868000
[illegible]	B	645	1	Y	-0.0868000
[illegible]	B	646	1	Y	-0.0868000
[illegible]	B	647	1	Y	-0.0868000
648	B	648	1	Y	-0.0868000
649	B	649	1	Y	-0.0868000
650	B	650	1	Y	-0.0868000
651	B	651	1	Y	-0.0868000
652	B	652	1	Y	-0.0868000
653	B	653	1	Y	-0.0868000
654	B	654	1	Y	-0.0868000
655	B	655	1	Y	-0.0868000
656	B	656	1	Y	-0.0868000
657	B	657	1	Y	-0.0868000
658	B	658	1	Y	-0.0868000
659	B	659	1	Y	-0.0868000
660	B	660	1	Y	-0.0868000
661	B	661	1	Y	-0.0868000
662	B	662	1	Y	-0.0868000
663	B	663	1	Y	-0.0868000
664	B	664	1	Y	-0.0868000
665	B	665	1	Y	-0.0868000
666	B	666	1	Y	-0.0868000
667	B	667	1	Y	-0.0868000

AL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
8	B	668	1	Y	-0.0868000
9	B	669	1	Y	-0.0868000
0	B	670	1	Y	-0.0868000
1	B	671	1	Y	-0.0868000
2	B	672	1	Y	-0.0868000
3	B	673	1	Y	-0.0868000
4	B	674	1	Y	-0.0868000
5	B	675	1	Y	-0.0868000
6	B	676	1	Y	-0.0868000
7	B	677	1	Y	-0.0868000
8	B	678	1	Y	-0.0868000
9	B	679	1	Y	-0.0868000
0	B	680	1	Y	-0.0868000
1	B	681	1	Y	-0.0868000
2	B	682	1	Y	-0.0868000
3	B	683	1	Y	-0.0868000
4	B	684	1	Y	-0.0868000
5	B	685	1	Y	-0.0868000
6	B	686	1	Y	-0.0868000
7	B	687	1	Y	-0.0868000
8	B	688	1	Y	-0.0868000
9	B	689	1	Y	-0.0868000
0	B	690	1	Y	-0.0868000
1	B	691	1	Y	-0.0868000
2	B	692	1	Y	-0.0868000
3	B	693	1	Y	-0.0868000
4	B	694	1	Y	-0.0868000
5	B	695	1	Y	-0.0868000
6	B	696	1	Y	-0.0868000
7	B	697	1	Y	-0.0868000
8	B	698	1	Y	-0.0868000
9	B	699	1	Y	-0.0868000
0	B	700	1	Y	-0.0868000
1	B	701	1	Y	-0.0868000
2	B	702	1	Y	-0.0868000
3	B	703	1	Y	-0.0868000
4	B	704	1	Y	-0.0868000
5	B	705	1	Y	-0.0868000
6	B	706	1	Y	-0.0868000
7	B	707	1	Y	-0.0868000

IDAL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
08	B	708	1	Y	-0.0868000
09	B	709	1	Y	-0.0868000
10	B	710	1	Y	-0.0868000
11	B	711	1	Y	-0.0868000
12	B	712	1	Y	-0.0868000
13	B	713	1	Y	-0.0868000
14	B	714	1	Y	-0.0868000
15	B	715	1	Y	-0.0868000
16	B	716	1	Y	-0.0868000
17	B	717	1	Y	-0.0868000
18	B	718	1	Y	-0.0868000
19	B	719	1	Y	-0.0868000
20	B	720	1	Y	-0.0868000
21	B	721	1	Y	-0.0868000
22	B	722	1	Y	-0.0868000
23	B	723	1	Y	-0.0868000
24	B	724	1	Y	-0.0868000
[illegible]	B	725	1	Y	-0.0868000
[illegible]	B	726	1	Y	-0.0868000
27	B	727	1	Y	-0.0868000
28	B	728	1	Y	-0.0868000
29	B	729	1	Y	-0.0868000
30	B	730	1	Y	-0.0868000
31	B	731	1	Y	-0.0868000
32	B	732	1	Y	-0.0868000
33	B	733	1	Y	-0.0868000
34	B	734	1	Y	-0.0868000
35	B	735	1	Y	-0.0868000
36	B	736	1	Y	-0.0868000
37	B	737	1	Y	-0.0868000
38	B	738	1	Y	-0.0868000
39	B	739	1	Y	-0.0868000
40	B	740	1	Y	-0.0868000
41	B	741	1	Y	-0.0868000
42	B	742	1	Y	-0.0868000
43	B	743	1	Y	-0.0868000
44	B	744	1	Y	-0.0868000
45	B	745	1	Y	-0.0868000
46	B	746	1	Y	-0.0868000
47	B	747	1	Y	-0.0868000

ODAL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
48	B	748	1	Y	-0.0868000
49	B	749	1	Y	-0.0868000
50	B	750	1	Y	-0.0868000
51	B	751	1	Y	-0.0868000
52	B	752	1	Y	-0.0868000
53	B	753	1	Y	-0.0868000
54	B	754	1	Y	-0.0868000
55	B	755	1	Y	-0.0868000
56	B	756	1	Y	-0.0868000
57	B	757	1	Y	-0.0868000
58	B	758	1	Y	-0.0868000
59	B	759	1	Y	-0.0868000
60	B	760	1	Y	-0.0868000
61	B	761	1	Y	-0.0868000
62	B	762	1	Y	-0.0868000
63	B	763	1	Y	-0.0868000
64	B	764	1	Y	-0.0868000
65	B	765	1	Y	-0.0868000
66	B	766	1	Y	-0.0868000
67	B	767	1	Y	-0.0868000
68	B	768	1	Y	-0.0868000
69	B	769	1	Y	-0.0868000
70	B	770	1	Y	-0.0868000
71	B	771	1	Y	-0.0868000
72	B	772	1	Y	-0.0868000
73	B	773	1	Y	-0.0868000
74	B	774	1	Y	-0.0868000
75	B	775	1	Y	-0.0868000
76	B	776	1	Y	-0.0868000
77	B	777	1	Y	-0.0868000
78	B	778	1	Y	-0.0868000
79	B	779	1	Y	-0.0868000
80	B	780	1	Y	-0.0868000
81	B	781	1	Y	-0.0868000
82	B	782	1	Y	-0.0868000
83	B	783	1	Y	-0.0868000
84	B	784	1	Y	-0.0868000
85	B	785	1	Y	-0.0868000
86	B	786	1	Y	-0.0868000
87	B	787	1	Y	-0.0868000

NODAL LOADS -

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
788	B	788	1	Y	-0.0868000
789	B	789	1	Y	-0.0868000
790	B	790	1	Y	-0.0868000
791	B	791	1	Y	-0.0868000
792	B	792	1	Y	-0.0868000
793	B	793	1	Y	-0.0868000
794	B	794	1	Y	-0.0868000
795	B	795	1	Y	-0.0868000
796	B	796	1	Y	-0.0868000
797	B	797	1	Y	-0.0868000
798	B	798	1	Y	-0.0868000
799	B	799	1	Y	-0.0868000
800	B	800	1	Y	-0.0868000
801	B	801	1	Y	-0.0868000
802	B	802	1	Y	-0.0868000
803	B	803	1	Y	-0.0868000
804	B	804	1	Y	-0.0868000
805	B	805	1	Y	-0.0868000
[illegible]	B	806	1	Y	-0.0868000
[illegible]	B	807	1	Y	-0.0868000
[illegible]	B	808	1	Y	-0.0868000
809	B	809	1	Y	-0.0868000
810	B	810	1	Y	-0.0868000
811	B	811	1	Y	-0.0868000
812	B	812	1	Y	-0.0868000
813	B	813	1	Y	-0.0868000
814	B	814	1	Y	-0.0868000
815	B	815	1	Y	-0.0868000
816	B	816	1	Y	-0.0868000
817	B	817	1	Y	-0.0868000
818	B	818	1	Y	-0.0868000
819	B	819	1	Y	-0.0868000
820	B	820	1	Y	-0.0868000
821	B	821	1	Y	-0.0868000
822	B	822	1	Y	-0.0868000
823	B	823	1	Y	-0.0868000
824	B	824	1	Y	-0.0868000
825	B	825	1	Y	-0.0868000
826	B	826	1	Y	-0.0868000
827	B	827	1	Y	-0.0868000

ODAL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
28	B	828	1	Y	-0.0868000
29	B	829	1	Y	-0.0868000
30	B	830	1	Y	-0.0868000
31	B	831	1	Y	-0.0868000
32	B	832	1	Y	-0.0868000
33	B	833	1	Y	-0.0868000
34	B	834	1	Y	-0.0868000
35	B	835	1	Y	-0.0868000
36	B	836	1	Y	-0.0868000
37	B	837	1	Y	-0.0868000
38	B	838	1	Y	-0.0868000
39	B	839	1	Y	-0.0868000
40	B	840	1	Y	-0.0868000
41	B	841	1	Y	-0.0868000
42	B	842	1	Y	-0.0868000
43	B	843	1	Y	-0.0868000
44	B	844	1	Y	-0.0868000
45	B	845	1	Y	-0.0868000
46	B	846	1	Y	-0.0868000
47	B	847	1	Y	-0.0868000
48	B	848	1	Y	-0.0868000
49	B	849	1	Y	-0.0868000
50	B	850	1	Y	-0.0868000
51	B	851	1	Y	-0.0868000
52	B	852	1	Y	-0.0868000
53	B	853	1	Y	-0.0868000
54	B	854	1	Y	-0.0868000
55	B	855	1	Y	-0.0868000
56	B	856	1	Y	-0.0868000
57	B	857	1	Y	-0.0868000
58	B	858	1	Y	-0.0868000
59	B	859	1	Y	-0.0868000
60	B	860	1	Y	-0.0868000
61	B	861	1	Y	-0.0868000
62	B	862	1	Y	-0.0868000
63	B	863	1	Y	-0.0868000
64	B	864	1	Y	-0.0868000
65	B	865	1	Y	-0.0868000
66	B	866	1	Y	-0.0868000
67	B	867	1	Y	-0.0868000

NODAL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
68	B	868	1	Y	-0.0868000
69	B	869	1	Y	-0.0868000
70	B	870	1	Y	-0.0868000
71	B	871	1	Y	-0.0868000
72	B	872	1	Y	-0.0868000
73	B	873	1	Y	-0.0868000
74	B	874	1	Y	-0.0868000
75	B	875	1	Y	-0.0868000
76	B	876	1	Y	-0.0868000
77	B	877	1	Y	-0.0868000
78	B	878	1	Y	-0.0868000
79	B	879	1	Y	-0.0868000
80	B	880	1	Y	-0.0868000
81	B	881	1	Y	-0.0868000
82	B	882	1	Y	-0.0868000
83	B	883	1	Y	-0.0868000
84	B	884	1	Y	-0.0868000
[illegible]	B	885	1	Y	-0.0868000
[illegible]	B	[illegible]	1	Y	-0.0868000
[illegible]	B	887	1	Y	-0.0868000
88	B	888	1	Y	-0.0868000
89	B	889	1	Y	-0.0868000
90	B	890	1	Y	-0.0868000
91	B	891	1	Y	-0.0868000
92	B	892	1	Y	-0.0868000
93	B	893	1	Y	-0.0868000
894	B	894	1	Y	-0.0868000
895	B	895	1	Y	-0.0868000
896	B	896	1	Y	-0.0868000
897	B	897	1	Y	-0.0868000
898	B	898	1	Y	-0.0868000
899	B	899	1	Y	-0.0868000
900	B	900	1	Y	-0.0868000
901	B	901	1	Y	-0.0868000
902	B	902	1	Y	-0.0868000
903	B	903	1	Y	-0.0868000
904	B	904	1	Y	-0.0868000
905	B	905	1	Y	-0.0868000
906	B	906	1	Y	-0.0868000
907	B	907	1	Y	-0.0868000

DAL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
8	B	908	1	Y	-0.0868000
9	B	909	1	Y	-0.0868000
.0	B	910	1	Y	-0.0868000
.1	B	911	1	Y	-0.0868000
.2	B	912	1	Y	-0.0868000
.3	B	913	1	Y	-0.0868000
.4	B	914	1	Y	-0.0868000
.5	B	915	1	Y	-0.0868000
.6	B	916	1	Y	-0.0868000
17	B	917	1	Y	-0.0868000
18	B	918	1	Y	-0.0868000
19	B	919	1	Y	-0.0868000
20	B	920	1	Y	-0.0868000
21	B	921	1	Y	-0.0868000
22	B	922	1	Y	-0.0868000
23	B	923	1	Y	-0.0868000
24	B	924	1	Y	-0.0868000
25	B	925	1	Y	-0.0868000
26	B	926	1	Y	-0.0868000
27	B	927	1	Y	-0.0868000
28	B	928	1	Y	-0.0868000
29	B	929	1	Y	-0.0868000
30	B	930	1	Y	-0.0868000
31	B	931	1	Y	-0.0868000
32	B	932	1	Y	-0.0868000
33	B	933	1	Y	-0.0868000
34	B	934	1	Y	-0.0868000
35	B	935	1	Y	-0.0868000
36	B	936	1	Y	-0.0868000
37	B	937	1	Y	-0.0868000
38	B	938	1	Y	-0.0868000
39	B	939	1	Y	-0.0868000
40	B	940	1	Y	-0.0868000
41	B	941	1	Y	-0.0868000
42	B	942	1	Y	-0.0868000
43	B	943	1	Y	-0.0868000
44	B	944	1	Y	-0.0868000
45	B	945	1	Y	-0.0868000
46	B	946	1	Y	-0.0868000
47	B	947	1	Y	-0.0868000

NODAL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
48	B	948	1	Y	-0.0868000
49	B	949	1	Y	-0.0868000
50	B	950	1	Y	-0.0868000
51	B	951	1	Y	-0.0868000
52	B	952	1	Y	-0.0868000
53	B	953	1	Y	-0.0868000
54	B	954	1	Y	-0.0868000
55	B	955	1	Y	-0.0868000
56	B	956	1	Y	-0.0868000
57	B	957	1	Y	-0.0868000
58	B	958	1	Y	-0.0868000
59	B	959	1	Y	-0.0868000
60	B	960	1	Y	-0.0868000
61	B	961	1	Y	-0.0868000
62	B	962	1	Y	-0.0868000
63	B	963	1	Y	-0.0868000
64	B	964	1	Y	-0.0868000
[illegible]	B	965	1	Y	-0.0868000
[illegible]	B	966	1	Y	-0.0868000
[illegible]	B	967	1	Y	-0.0868000
[illegible]	B	968	1	Y	-0.0868000
[illegible]	B	969	1	Y	-0.0868000
[illegible]	B	970	1	Y	-0.0868000
[illegible]	B	971	1	Y	-0.0868000
[illegible]	B	972	1	Y	-0.0868000
[illegible]	B	973	1	Y	-0.0868000
[illegible]	B	974	1	Y	-0.0868000
[illegible]	B	975	1	Y	-0.0868000
[illegible]	B	976	1	Y	-0.0868000
[illegible]	B	977	1	Y	-0.0868000
[illegible]	B	978	1	Y	-0.0868000
[illegible]	B	979	1	Y	-0.0868000
[illegible]	B	980	1	Y	-0.0868000
[illegible]	B	981	1	Y	-0.0868000
[illegible]	B	982	1	Y	-0.0868000
[illegible]	B	983	1	Y	-0.0868000
[illegible]	B	984	1	Y	-0.0868000
[illegible]	B	985	1	Y	-0.0868000
[illegible]	B	986	1	Y	-0.0868000
[illegible]	B	987	1	Y	-0.0868000

DAL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
88	B	988	1	Y	-0.0868000
89	B	989	1	Y	-0.0868000
90	B	990	1	Y	-0.0868000
91	B	991	1	Y	-0.0868000
92	B	992	1	Y	-0.0868000
93	B	993	1	Y	-0.0868000
94	B	994	1	Y	-0.0868000
95	B	995	1	Y	-0.0868000
96	B	996	1	Y	-0.0868000
97	B	997	1	Y	-0.0868000
98	B	998	1	Y	-0.0868000
99	B	999	1	Y	-0.0868000
00	B	1000	1	Y	-0.0868000
01	N	261	1	X	-142,760.0000000
02	N	266	1	X	-283,740.0000000
03	N	271	1	X	-280,170.0000000
04	N	276	1	X	-271,240.0000000
05	N	281	1	X	-262,720.0000000
06	N	286	1	X	-258,750.0000000
07	N	291	1	X	-258,970.0000000
08	N	296	1	X	-256,620.0000000
09	N	301	1	X	-248,970.0000000
10	N	306	1	X	-241,300.0000000
11	N	311	1	X	-233,640.0000000
12	N	316	1	X	-225,990.0000000
13	N	321	1	X	-207,180.0000000
14	N	326	1	X	-190,950.0000000
15	N	331	1	X	-187,380.0000000
16	N	336	1	X	-178,450.0000000
17	N	341	1	X	-169,530.0000000
18	N	346	1	X	-165,960.0000000
19	N	351	1	X	-157,050.0000000
20	N	356	1	X	-146,330.0000000
21	N	361	1	X	-139,180.0000000
22	N	366	1	X	-138,490.0000000
23	N	371	1	X	-137,100.0000000
24	N	376	1	X	-129,260.0000000
25	N	381	1	X	-121,430.0000000
26	N	386	1	X	-113,600.0000000
27	N	391	1	X	-105,760.0000000

NODAL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
028	N	396	1	X	-94,017.0000000
029	N	401	1	X	-84,223.0000000
030	N	406	1	X	-80,305.0000000
031	N	411	1	X	-70,515.0000000
032	N	416	1	X	-62,684.0000000
033	N	421	1	X	-62,684.0000000
034	N	426	1	X	-62,684.0000000
035	N	431	1	X	-66,165.0000000
036	N	436	1	X	-69,648.0000000
037	N	441	1	X	-69,648.0000000
038	N	446	1	X	-69,648.0000000
039	N	451	1	X	-339,410.0000000
040	N	456	1	X	-455,390.0000000
041	N	461	1	X	-303,580.0000000
042	N	466	1	X	-151,800.0000000
043	N	259	1	Y	1,456,000.0000000
044	N	229	1	Y	1,456,000.0000000
[illegible]	N	260	1	Y	1,456,000.0000000
[illegible]	N	463	1	Y	-1,456,000.0000000
047	N	464	1	Y	-1,456,000.0000000
048	N	465	1	Y	-1,456,000.0000000
1	N	466	2	Y	-409.0000000
2	N	465	2	Y	-837.0000000
3	N	464	2	Y	-845.0000000
4	N	463	2	Y	-841.0000000
5	N	462	2	Y	-1,676.0000000
6	N	469	2	Y	-2,482.0000000
7	N	472	2	Y	-2,450.0000000
8	N	475	2	Y	-2,419.0000000
9	N	478	2	Y	-2,388.0000000
10	N	481	2	Y	-2,356.0000000
11	N	484	2	Y	-2,325.0000000
12	N	487	2	Y	-2,293.0000000
13	N	490	2	Y	-3,016.0000000
14	N	493	2	Y	-2,960.0000000
15	N	496	2	Y	-2,904.0000000
16	N	499	2	Y	-2,848.0000000
17	N	502	2	Y	-2,792.0000000
18	N	505	2	Y	-2,737.0000000

IDAL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
19	N	508	2	Y	-2,681.0000000
20	N	511	2	Y	-2,625.0000000
21	N	514	2	Y	-2,569.0000000
22	N	517	2	Y	-2,513.0000000
23	N	520	2	Y	-2,457.0000000
24	N	523	2	Y	-2,402.0000000
25	N	526	2	Y	-2,346.0000000
26	N	529	2	Y	-2,290.0000000
27	N	532	2	Y	-2,234.0000000
28	N	535	2	Y	-2,178.0000000
29	N	538	2	Y	-2,122.0000000
30	N	541	2	Y	-2,066.0000000
31	N	544	2	Y	-2,011.0000000
32	N	547	2	Y	-1,955.0000000
33	N	550	2	Y	-1,899.0000000
34	N	553	2	Y	-1,843.0000000
35	N	556	2	Y	-1,797.0000000
36	N	559	2	Y	-1,614.0000000
37	N	562	2	Y	-1,464.0000000
38	N	565	2	Y	-1,421.0000000
39	N	568	2	Y	-1,379.0000000
40	N	571	2	Y	-1,336.0000000
41	N	574	2	Y	-1,294.0000000
42	N	577	2	Y	-1,251.0000000
43	N	580	2	Y	-1,058.0000000
44	N	583	2	Y	-1,011.0000000
45	N	586	2	Y	-979.0000000
46	N	589	2	Y	-948.0000000
47	N	592	2	Y	-916.0000000
48	N	595	2	Y	-885.0000000
49	N	598	2	Y	-854.0000000
50	N	601	2	Y	-822.0000000
51	N	604	2	Y	-791.0000000
52	N	607	2	Y	-759.0000000
53	N	610	2	Y	-728.0000000
54	N	613	2	Y	-696.0000000
55	N	616	2	Y	-665.0000000
56	N	619	2	Y	-634.0000000
57	N	622	2	Y	-602.0000000
58	N	625	2	Y	-523.0000000

NODAL LOADS *

[illegible] #	TYPE	ELMT NODE	LOAD CASE	DIRECTION	LOAD
59	N	628	2	Y	-454.0000000
60	N	631	2	Y	-432.0000000
61	N	634	2	Y	-410.0000000
62	N	637	2	Y	-388.0000000
63	N	640	2	Y	-367.0000000
64	N	643	2	Y	-345.0000000
65	N	646	2	Y	-323.0000000
66	N	649	2	Y	-301.0000000
67	N	652	2	Y	-279.0000000
68	N	655	2	Y	-257.0000000
69	N	658	2	Y	-236.0000000
70	N	661	2	Y	-214.0000000
71	N	664	2	Y	-192.0000000
72	N	667	2	Y	-170.0000000
73	N	670	2	Y	-148.0000000
74	N	673	2	Y	-127.0000000
75	N	676	2	Y	-94.0000000
76	N	679	2	Y	-70.0000000
[illegible]	N	682	2	Y	-56.0000000
[illegible]	N	685	2	Y	-42.0000000
79	N	688	2	Y	-28.0000000
80	N	691	2	Y	-14.0000000
81	N	694	2	Y	-2.0000000
1	N	3	4	Y	-1,189.0000000
2	N	6	4	Y	-7,649.0000000
3	N	9	4	Y	-13,630.0000000
4	N	12	4	Y	-19,970.0000000
5	N	15	4	Y	-26,110.0000000
6	N	18	4	Y	-32,260.0000000
7	N	21	4	Y	-38,400.0000000
8	N	24	4	Y	-44,540.0000000
9	N	27	4	Y	-50,680.0000000
10	N	30	4	Y	-56,820.0000000
11	N	33	4	Y	-62,970.0000000
12	N	36	4	Y	-69,120.0000000
13	N	39	4	Y	-75,260.0000000
14	N	42	4	Y	-81,400.0000000
15	N	45	4	Y	-87,550.0000000
16	N	48	4	Y	-93,720.0000000

NODAL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
17	N	51	4	Y	-79,800.0000000
18	N	54	4	Y	-105,970.0000000
19	N	57	4	Y	-112,140.0000000
20	N	60	4	Y	-118,220.0000000
21	N	63	4	Y	-124,390.0000000
22	N	66	4	Y	-130,560.0000000
23	N	69	4	Y	-136,730.0000000
24	N	72	4	Y	-142,810.0000000
25	N	75	4	Y	-148,980.0000000
26	N	78	4	Y	-155,150.0000000
27	N	81	4	Y	-161,230.0000000
28	N	84	4	Y	-167,400.0000000
29	N	87	4	Y	-173,570.0000000
30	N	90	4	Y	-179,650.0000000
31	N	93	4	Y	-185,810.0000000
32	N	96	4	Y	-191,990.0000000
33	N	99	4	Y	-198,130.0000000
34	N	102	4	Y	-204,230.0000000
35	N	105	4	Y	-210,400.0000000
36	N	108	4	Y	-216,570.0000000
37	N	111	4	Y	-222,740.0000000
38	N	114	4	Y	-228,910.0000000
39	N	117	4	Y	-234,990.0000000
40	N	120	4	Y	-241,160.0000000
41	N	123	4	Y	-247,280.0000000
42	N	126	4	Y	-253,410.0000000
43	N	129	4	Y	-259,580.0000000
44	N	132	4	Y	-265,750.0000000
45	N	135	4	Y	-271,830.0000000
46	N	138	4	Y	-278,000.0000000
47	N	141	4	Y	-284,170.0000000
48	N	144	4	Y	-290,250.0000000
49	N	147	4	Y	-296,420.0000000
50	N	150	4	Y	-302,590.0000000
51	N	153	4	Y	-308,660.0000000
52	N	156	4	Y	-314,830.0000000
53	N	159	4	Y	-321,000.0000000
54	N	162	4	Y	-327,170.0000000
55	N	165	4	Y	-331,610.0000000
56	N	168	4	Y	-253,410.0000000

NODAL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
57	N	174	4	Y	-258,860.000000
58	N	180	4	Y	-260,300.000000
59	N	187	4	Y	-263,750.000000
60	N	194	4	Y	-267,200.000000
61	N	201	4	Y	-248,150.000000
62	N	208	4	Y	-229,820.000000
63	N	215	4	Y	-57,450.000000
64	N	258	4	X	182,880.000000
65	N	262	4	X	357,440.000000
66	N	267	4	X	346,270.000000
67	N	272	4	X	335,100.000000
68	N	277	4	X	323,930.000000
69	N	282	4	X	312,760.000000
70	N	287	4	X	301,950.000000
71	N	292	4	X	290,420.000000
72	N	297	4	X	279,250.000000
73	N	302	4	X	268,080.000000
[illegible]	N	307	4	X	256,910.000000
[illegible]	N	312	4	X	245,740.000000
[illegible]	N	317	4	X	234,570.000000
[illegible]	N	322	4	X	223,400.000000
78	N	327	4	X	212,240.000000
79	N	332	4	X	201,060.000000
80	N	337	4	Y	189,900.000000
81	N	342	4	X	178,730.000000
82	N	347	4	X	167,550.000000
83	N	352	4	X	156,390.000000
84	N	357	4	X	145,220.000000
85	N	362	4	X	134,040.000000
86	N	367	4	X	122,880.000000
87	N	372	4	X	111,710.000000
88	N	377	4	X	100,530.000000
89	N	382	4	X	89,370.000000
90	N	387	4	X	78,200.000000
91	N	392	4	X	67,020.000000
92	N	397	4	Y	55,860.000000
93	N	402	4	X	44,686.000000
94	N	407	4	X	33,510.000000
95	N	412	4	X	22,350.000000
96	N	417	4	X	11,180.000000

DAL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
7	N	422	4	X	1,396.0000000
1	N	261	5	X	-14,240.0000000
2	N	266	5	X	-321,100.0000000
3	N	271	5	X	-313,720.0000000
4	N	276	5	X	-306,340.0000000
5	N	281	5	X	-298,950.0000000
6	N	286	5	X	-291,570.0000000
7	N	291	5	X	-284,190.0000000
8	N	296	5	X	-276,810.0000000
9	N	301	5	X	-269,430.0000000
10	N	306	5	X	-262,050.0000000
11	N	311	5	X	-254,660.0000000
12	N	316	5	X	-247,280.0000000
13	N	321	5	X	-239,900.0000000
14	N	326	5	X	-232,520.0000000
15	N	331	5	X	-225,140.0000000
16	N	336	5	X	-217,760.0000000
17	N	341	5	X	-210,380.0000000
18	N	346	5	X	-202,990.0000000
19	N	351	5	X	-195,610.0000000
20	N	356	5	X	-188,230.0000000
21	N	361	5	X	-180,850.0000000
22	N	366	5	X	-173,470.0000000
23	N	371	5	X	-166,090.0000000
24	N	376	5	X	-158,700.0000000
25	N	381	5	X	-151,320.0000000
26	N	386	5	X	-143,940.0000000
27	N	391	5	X	-136,560.0000000
28	N	396	5	X	-129,180.0000000
29	N	401	5	X	-121,800.0000000
30	N	406	5	X	-114,410.0000000
31	N	411	5	X	-107,030.0000000
32	N	416	5	X	-99,651.0000000
33	N	421	5	X	-92,270.0000000
34	N	426	5	X	-84,888.0000000
35	N	431	5	X	-77,507.0000000
36	N	436	5	X	-70,125.0000000
37	N	441	5	X	-62,743.0000000
38	N	446	5	X	-55,362.0000000

NODAL LOADS *

D #	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
39	N	451	5	X	-47,990.0000000
40	N	456	5	X	-30,449.0000000
41	N	461	5	X	-13,454.0000000
42	N	466	5	X	-8,304.0000000
43	N	466	5	Y	-7,576.0000000
44	N	465	5	Y	-16,556.0000000
45	N	464	5	Y	-16,478.0000000
46	N	463	5	Y	-16,400.0000000
47	N	462	5	Y	-32,682.0000000
48	N	469	5	Y	-48,399.0000000
49	N	472	5	Y	-47,775.0000000
50	N	475	5	Y	-47,171.0000000
51	N	478	5	Y	-46,566.0000000
52	N	481	5	Y	-45,942.0000000
53	N	484	5	Y	-45,338.0000000
54	N	487	5	Y	-44,714.0000000
55	N	490	5	Y	-58,812.0000000
[illegible]	N	493	5	Y	-57,720.0000000
[illegible]	N	496	5	Y	-56,628.0000000
58	N	499	5	Y	-55,536.0000000
59	N	502	5	Y	-54,464.0000000
60	N	505	5	Y	-53,372.0000000
61	N	508	5	Y	-52,280.0000000
62	N	511	5	Y	-51,188.0000000
63	N	514	5	Y	-50,096.0000000
64	N	517	5	Y	-49,004.0000000
65	N	520	5	Y	-47,912.0000000
66	N	523	5	Y	-46,839.0000000
67	N	526	5	Y	-45,747.0000000
68	N	529	5	Y	-44,655.0000000
69	N	532	5	Y	-43,563.0000000
70	N	535	5	Y	-42,374.0000000
71	N	538	5	Y	-41,379.0000000
72	N	541	5	Y	-40,287.0000000
73	N	544	5	Y	-39,215.0000000
74	N	547	5	Y	-38,123.0000000
75	N	550	5	Y	-37,031.0000000
76	N	553	5	Y	-35,939.0000000
77	N	556	5	Y	-34,847.0000000
78	N	559	5	Y	-31,473.0000000

AL LOADS *

	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
	N	562	5	Y	-28,548.0000000
	N	565	5	Y	-27,710.0000000
	N	568	5	Y	-26,891.0000000
2	N	571	5	Y	-26,052.0000000
3	N	574	5	Y	-25,273.0000000
4	N	577	5	Y	-24,395.0000000
5	N	580	5	Y	-20,631.0000000
6	N	583	5	Y	-19,715.0000000
7	N	586	5	Y	-19,091.0000000
8	N	589	5	Y	-18,486.0000000
9	N	592	5	Y	-17,862.0000000
0	N	595	5	Y	-17,258.0000000
1	N	598	5	Y	-16,653.0000000
2	N	601	5	Y	-16,029.0000000
3	N	604	5	Y	-15,425.0000000
4	N	607	5	Y	-14,801.0000000
5	N	610	5	Y	-14,196.0000000
6	N	613	5	Y	-13,572.0000000
7	N	616	5	Y	-12,968.0000000
8	N	619	5	Y	-12,363.0000000
9	N	622	5	Y	-11,739.0000000
0	N	625	5	Y	-10,199.0000000
1	N	628	5	Y	-8,853.0000000
2	N	631	5	Y	-8,428.0000000
03	N	634	5	Y	-7,995.0000000
04	N	637	5	Y	-7,566.0000000
05	N	640	5	Y	-7,157.0000000
06	N	643	5	Y	-6,728.0000000
07	N	646	5	Y	-6,299.0000000
08	N	649	5	Y	-5,870.0000000
.09	N	652	5	Y	-5,441.0000000
.10	N	655	5	Y	-5,012.0000000
.11	N	658	5	Y	-4,602.0000000
112	N	661	5	Y	-4,173.0000000
113	N	664	5	Y	-3,744.0000000
114	N	667	5	Y	-3,315.0000000
115	N	670	5	Y	-2,886.0000000
116	N	673	5	Y	-2,477.0000000
117	N	676	5	Y	-1,833.0000000
118	N	679	5	Y	-1,365.0000000

NODAL LOADS *

Q #	TYPE	ELMT-NODE	LOAD CASE	DIRECTION	LOAD
119	N	682	5	Y	-1,092.0000000
120	N	685	5	Y	-819.0000000
121	N	688	5	Y	-546.0000000
122	N	691	5	Y	-273.0000000
123	N	694	5	Y	-39.0000000
1	N	461	6	X	-1,846.0000000
2	N	456	6	X	-5,537.0000000
3	N	451	6	X	-14,744.0000000
4	N	446	6	X	-22,146.0000000
5	N	441	6	X	-29,527.0000000
6	N	436	6	X	-36,909.0000000
7	N	431	6	X	-44,291.0000000
8	N	426	6	X	-51,672.0000000
9	N	421	6	X	-59,054.0000000
10	N	416	6	X	-66,435.0000000
11	N	411	6	X	-73,814.0000000
12	N	406	6	X	-81,191.0000000
[illegible]	N	401	6	X	-88,584.0000000
[illegible]	N	396	6	X	-95,964.0000000
15	N	391	6	X	-103,340.0000000
16	N	386	6	X	-110,720.0000000
17	N	381	6	X	-118,100.0000000
18	N	376	6	X	-125,480.0000000
19	N	371	6	X	-132,870.0000000
20	N	366	6	X	-140,250.0000000
21	N	361	6	X	-147,630.0000000
22	N	356	6	X	-155,010.0000000
23	N	351	6	X	-162,390.0000000
24	N	346	6	X	-169,770.0000000
25	N	341	6	X	-177,160.0000000
26	N	336	6	X	-184,540.0000000
27	N	331	6	X	-191,920.0000000
28	N	326	6	X	-199,300.0000000
29	N	321	6	X	-206,680.0000000
30	N	316	6	X	-214,060.0000000
31	N	311	6	X	-221,440.0000000
32	N	306	6	X	-228,830.0000000
33	N	301	6	X	-236,210.0000000
34	N	296	6	X	-243,590.0000000

NODAL LOADS *

EQ #	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
35	N	291	6	X	-250,970.0000000
36	N	286	6	X	-258,350.0000000
37	N	281	6	X	-265,730.0000000
38	N	276	6	X	-273,120.0000000
39	N	271	6	X	-280,500.0000000
40	N	266	6	X	-287,880.0000000
41	N	261	6	X	-147,630.0000000
1	N	466	7	Y	-8,201.0000000
2	N	465	7	Y	-17,022.0000000
3	N	464	7	Y	-16,942.0000000
4	N	463	7	Y	-16,862.0000000
5	N	462	7	Y	-33,604.0000000
6	N	469	7	Y	-49,764.0000000
7	N	472	7	Y	-49,123.0000000
8	N	475	7	Y	-48,501.0000000
9	N	478	7	Y	-47,879.0000000
[illegible]	N	481	7	Y	-47,238.0000000
[illegible]	N	484	7	Y	-46,616.0000000
[illegible]	N	487	7	Y	-45,975.0000000
13	N	490	7	Y	-60,471.0000000
14	N	493	7	Y	-59,348.0000000
15	N	496	7	Y	-58,225.0000000
16	N	499	7	Y	-57,102.0000000
17	N	502	7	Y	-56,000.0000000
18	N	505	7	Y	-54,877.0000000
19	N	508	7	Y	-53,754.0000000
20	N	511	7	Y	-52,631.0000000
21	N	514	7	Y	-51,508.0000000
22	N	517	7	Y	-50,386.0000000
23	N	520	7	Y	-49,263.0000000
24	N	523	7	Y	-48,190.0000000
25	N	526	7	Y	-47,037.0000000
26	N	529	7	Y	-45,915.0000000
27	N	532	7	Y	-44,792.0000000
28	N	535	7	Y	-43,669.0000000
29	N	538	7	Y	-42,546.0000000
30	N	541	7	Y	-41,423.0000000
31	N	544	7	Y	-40,321.0000000
32	N	547	7	Y	-39,198.0000000

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NODAL LOADS =

D #	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
33	N	550	7	Y	-38,075.0000000
34	N	553	7	Y	-36,952.0000000
35	N	556	7	Y	-35,829.0000000
36	N	559	7	Y	-32,360.0000000
37	N	562	7	Y	-29,353.0000000
38	N	565	7	Y	-28,491.0000000
39	N	568	7	Y	-27,649.0000000
40	N	571	7	Y	-26,787.0000000
41	N	574	7	Y	-25,945.0000000
42	N	577	7	Y	-25,083.0000000
43	N	580	7	Y	-21,213.0000000
44	N	583	7	Y	-20,271.0000000
45	N	586	7	Y	-19,629.0000000
46	N	589	7	Y	-19,007.0000000
47	N	592	7	Y	-18,366.0000000
48	N	595	7	Y	-17,744.0000000
49	N	598	7	Y	-17,123.0000000
50	N	601	7	Y	-16,481.0000000
51	N	604	7	Y	-15,860.0000000
52	N	607	7	Y	-15,218.0000000
53	N	610	7	Y	-14,596.0000000
54	N	613	7	Y	-13,955.0000000
55	N	616	7	Y	-13,333.0000000
56	N	619	7	Y	-12,712.0000000
57	N	622	7	Y	-12,070.0000000
58	N	625	7	Y	-10,486.0000000
59	N	628	7	Y	-9,102.0000000
60	N	631	7	Y	-8,662.0000000
61	N	634	7	Y	-8,221.0000000
62	N	637	7	Y	-7,790.0000000
63	N	640	7	Y	-7,358.0000000
64	N	643	7	Y	-6,917.0000000
65	N	646	7	Y	-6,476.0000000
66	N	649	7	Y	-6,035.0000000
67	N	652	7	Y	-5,594.0000000
68	N	655	7	Y	-5,153.0000000
69	N	658	7	Y	-4,732.0000000
70	N	661	7	Y	-4,291.0000000
71	N	664	7	Y	-3,850.0000000
72	N	667	7	Y	-3,409.0000000

* NODAL LOADS *

SEQ #	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
73	N	670	7	Y	-2,967.0000000
74	N	673	7	Y	-2,546.0000000
75	N	676	7	Y	-1,885.0000000
76	N	679	7	Y	-1,404.0000000
77	N	682	7	Y	-1,123.0000000
78	N	685	7	Y	-842.0000000
79	N	688	7	Y	-561.0000000
80	N	691	7	Y	-281.0000000
81	N	694	7	Y	-40.0000000
1	N	466	8	Y	8,834.0000000
2	N	465	8	Y	18,338.0000000
3	N	464	8	Y	18,252.0000000
4	N	463	8	Y	18,166.0000000
5	N	462	8	Y	36,202.0000000
6	N	469	8	Y	53,611.0000000
7	N	472	8	Y	52,920.0000000
8	N	475	8	Y	52,250.0000000
9	N	478	8	Y	51,581.0000000
10	N	481	8	Y	50,890.0000000
11	N	484	8	Y	50,220.0000000
12	N	487	8	Y	49,529.0000000
13	N	490	8	Y	65,146.0000000
14	N	493	8	Y	63,936.0000000
15	N	496	8	Y	62,726.0000000
16	N	499	8	Y	61,517.0000000
17	N	502	8	Y	60,329.0000000
18	N	505	8	Y	59,119.0000000
19	N	508	8	Y	57,910.0000000
20	N	511	8	Y	56,700.0000000
21	N	514	8	Y	55,490.0000000
22	N	517	8	Y	54,281.0000000
23	N	520	8	Y	53,071.0000000
24	N	523	8	Y	51,883.0000000
25	N	526	8	Y	50,674.0000000
26	N	529	8	Y	49,464.0000000
27	N	532	8	Y	48,254.0000000
28	N	535	8	Y	47,045.0000000
29	N	538	8	Y	45,835.0000000
30	N	541	8	Y	44,626.0000000

NODAL LOADS =

ID #	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
31	N	544	8	Y	43,438.0000000
32	N	547	8	Y	42,228.0000000
33	N	550	8	Y	41,018.0000000
34	N	553	8	Y	39,809.0000000
35	N	556	8	Y	38,599.0000000
36	N	559	8	Y	34,862.0000000
37	N	562	8	Y	31,622.0000000
38	N	565	8	Y	30,694.0000000
39	N	568	8	Y	29,766.0000000
40	N	571	8	Y	28,858.0000000
41	N	574	8	Y	27,950.0000000
42	N	577	8	Y	27,021.0000000
43	N	580	8	Y	22,853.0000000
44	N	583	8	Y	21,838.0000000
45	N	586	8	Y	21,146.0000000
46	N	589	8	Y	20,477.0000000
47	N	592	8	Y	19,786.0000000
48	N	595	8	Y	19,116.0000000
49	N	598	8	Y	18,446.0000000
50	N	601	8	Y	17,755.0000000
51	N	604	8	Y	17,086.0000000
52	N	607	8	Y	16,374.0000000
53	N	610	8	Y	15,725.0000000
54	N	613	8	Y	15,034.0000000
55	N	616	8	Y	14,334.0000000
56	N	619	8	Y	13,634.0000000
57	N	622	8	Y	13,003.0000000
58	N	625	8	Y	11,297.0000000
59	N	628	8	Y	9,806.0000000
60	N	631	8	Y	9,331.0000000
61	N	634	8	Y	8,856.0000000
62	N	637	8	Y	8,381.0000000
63	N	640	8	Y	7,927.0000000
64	N	643	8	Y	7,452.0000000
65	N	646	8	Y	6,977.0000000
66	N	649	8	Y	6,502.0000000
67	N	652	8	Y	6,026.0000000
68	N	655	8	Y	5,551.0000000
69	N	658	8	Y	5,096.0000000
70	N	661	8	Y	4,622.0000000

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NODAL LOADS *

EQ #	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
71	N	664	8	Y	4,147.0000000
72	N	667	8	Y	3,672.0000000
73	N	670	8	Y	3,197.0000000
74	N	673	8	Y	2,743.0000000
75	N	676	8	Y	2,030.0000000
76	N	679	8	Y	1,512.0000000
77	N	682	8	Y	1,210.0000000
78	N	685	8	Y	907.0000000
79	N	688	8	Y	605.0000000
80	N	691	8	Y	302.0000000
81	N	694	8	Y	44.0000000

* MASSES *

	TYPE	ELMT/ NODE	DIRECTION(S)	MASS

****

568TANK7

****

S REV 3.4 FINITE ELEMENT ANALYSIS
SYMETRIC 01/30/86 21:11:19

****
SPLACEMENTS *
****

E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
1	1	-2.354E-06	0.000E+00
1	2	-2.349E-06	0.000E+00
1	3	2.144E-07	0.000E+00
1	4	-4.851E-06	0.000E+00
1	5	-2.287E-06	0.000E+00
1	6	-2.122E-06	0.000E+00
1	7	-2.194E-06	0.000E+00
1	8	-2.396E-06	0.000E+00
1	9	2.096E-07	0.000E+00
2	1	-4.326E-06	1.593E-05
2	2	-4.318E-06	1.590E-05
2	3	1.304E-06	-1.227E-05
2	4	-8.920E-06	3.302E-05
2	5	-3.297E-06	4.843E-06
2	6	-2.993E-06	3.712E-06
2	7	-3.127E-06	4.209E-06
2	8	-3.498E-06	5.590E-06
2	9	1.295E-06	-1.224E-05
3	1	-2.389E-06	3.194E-05
3	2	-2.384E-06	3.188E-05
3	3	9.067E-07	-2.451E-05
3	4	-4.931E-06	6.614E-05
3	5	-1.640E-06	9.740E-06
3	6	-1.472E-06	7.479E-06
3	7	-1.546E-06	8.472E-06
3	8	-1.751E-06	1.123E-05
3	9	9.018E-07	-2.444E-05
4	1	-1.612E-04	0.000E+00
4	2	-1.609E-04	0.000E+00
4	3	6.145E-05	0.000E+00
4	4	-3.324E-04	0.000E+00
4	5	-1.101E-04	0.000E+00
4	6	-9.880E-05	0.000E+00
4	7	-1.037E-04	0.000E+00

LOAD COMB		X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
	8	-1.176E-04	0.000E+00
	9	6.112E-05	0.000E+00
	1	-1.608E-04	1.607E-05
	2	-1.605E-04	1.603E-05
	3	6.124E-05	-1.472E-05
5	4	-3.316E-04	3.331E-05
5	5	-1.099E-04	2.550E-06
5	6	-9.861E-05	1.409E-06
5	7	-1.035E-04	1.910E-06
5	8	-1.173E-04	3.304E-06
5	9	6.091E-05	-1.469E-05
5	1	-1.613E-04	3.227E-05
5	2	-1.609E-04	3.221E-05
5	3	6.196E-05	-2.932E-05
5	4	-3.326E-04	6.676E-05
5	5	-1.096E-04	5.233E-06
5	6	-9.836E-05	2.952E-06
5	7	-1.033E-04	3.954E-06
5	8	-1.171E-04	6.742E-06
5	9	6.163E-05	-2.925E-05
7	1	-2.935E-04	0.000E+00
7	2	-2.929E-04	0.000E+00
7	3	1.126E-04	0.000E+00
7	4	-6.053E-04	0.000E+00
	5	-1.997E-04	0.000E+00
	6	-1.790E-04	0.000E+00
7	7	-1.881E-04	0.000E+00
7	8	-2.133E-04	0.000E+00
7	9	1.120E-04	0.000E+00
8	1	-2.935E-04	1.627E-05
8	2	-2.929E-04	1.624E-05
8	3	1.127E-04	-1.527E-05
8	4	-6.053E-04	3.370E-05
8	5	-1.996E-04	2.188E-06
8	6	-1.790E-04	1.035E-06
8	7	-1.880E-04	1.541E-06
8	8	-2.132E-04	2.951E-06
8	9	1.121E-04	-1.524E-05
9	1	-2.935E-04	3.263E-05
9	2	-2.929E-04	3.257E-05
9	3	1.127E-04	-3.050E-05
9	4	-6.053E-04	6.751E-05
9	5	-1.996E-04	4.436E-06
9	6	-1.789E-04	2.129E-06
9	7	-1.880E-04	3.142E-06
9	8	-2.132E-04	5.962E-06
9	9	1.121E-04	-3.044E-05
	1	-4.253E-04	0.000E+00

LOAD COMB		X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
	2	-4.244E-04	0.000E+00
	3	1.637E-04	0.000E+00
	4	-8.770E-04	0.000E+00
	5	-2.888E-04	0.000E+00
	6	-2.589E-04	0.000E+00
	7	-2.721E-04	0.000E+00
	8	-3.086E-04	0.000E+00
	9	1.629E-04	0.000E+00
	1	-4.253E-04	1.623E-05
	2	-4.244E-04	1.620E-05
	3	1.637E-04	-1.531E-05
	4	-8.770E-04	3.365E-05
	5	-2.888E-04	2.141E-06
1	6	-2.589E-04	9.891E-07
1	7	-2.721E-04	1.495E-06
1	8	-3.086E-04	2.903E-06
1	9	1.628E-04	-1.527E-05
2	1	-4.253E-04	3.261E-05
2	2	-4.244E-04	3.254E-05
2	3	1.637E-04	-3.049E-05
2	4	-8.770E-04	6.745E-05
2	5	-2.888E-04	4.421E-06
2	6	-2.589E-04	2.116E-06
2	7	-2.721E-04	3.129E-06
2	8	-3.086E-04	5.946E-06
2	9	1.628E-04	-3.042E-05
3	1	-5.568E-04	0.000E+00
3	2	-5.557E-04	0.000E+00
3	3	2.145E-04	0.000E+00
3	4	-1.148E-03	0.000E+00
3	5	-3.779E-04	0.000E+00
13	6	-3.388E-04	0.000E+00
13	7	-3.560E-04	0.000E+00
13	8	-4.038E-04	0.000E+00
13	9	2.134E-04	0.000E+00
14	1	-5.568E-04	1.626E-05
14	2	-5.557E-04	1.623E-05
14	3	2.145E-04	-1.527E-05
14	4	-1.148E-03	3.368E-05
14	5	-3.779E-04	2.177E-06
14	6	-3.388E-04	1.025E-06
14	7	-3.560E-04	1.531E-06
14	8	-4.038E-04	2.939E-06
14	9	2.134E-04	-1.523E-05
15	1	-5.568E-04	3.260E-05
15	2	-5.557E-04	3.253E-05
15	3	2.145E-04	-3.048E-05
15	4	-1.148E-03	6.744E-05
15	5	-3.779E-04	4.424E-06

LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
6	-3.388E-04	2.119E-06
7	-3.560E-04	3.131E-06
8	-4.038E-04	5.949E-06
9	2.134E-04	-3.041E-05
1	-6.882E-04	0.000E+00
2	-6.868E-04	0.000E+00
3	2.653E-04	0.000E+00
4	-1.419E-03	0.000E+00
5	-4.670E-04	0.000E+00
6	-4.187E-04	0.000E+00
7	-4.399E-04	0.000E+00
8	-4.990E-04	0.000E+00
9	2.639E-04	0.000E+00
1	-6.882E-04	1.623E-05
2	-6.868E-04	1.619E-05
3	2.653E-04	-1.530E-05
4	-1.419E-03	3.364E-05
5	-4.670E-04	2.145E-06
6	-4.187E-04	9.935E-07
7	-4.399E-04	1.499E-06
8	-4.990E-04	2.907E-06
9	2.639E-04	-1.527E-05
1	-6.882E-04	3.260E-05
2	-6.868E-04	3.254E-05
3	2.653E-04	-3.048E-05
4	-1.419E-03	6.745E-05
5	-4.670E-04	4.424E-06
6	-4.187E-04	2.119E-06
7	-4.399E-04	3.131E-06
8	-4.990E-04	5.949E-06
9	2.639E-04	-3.041E-05
1	-8.196E-04	0.000E+00
2	-8.179E-04	0.000E+00
3	3.160E-04	0.000E+00
4	-1.690E-03	0.000E+00
5	-5.561E-04	0.000E+00
6	-4.985E-04	0.000E+00
7	-5.238E-04	0.000E+00
8	-5.942E-04	0.000E+00
9	3.144E-04	0.000E+00
1	-8.196E-04	1.626E-05
2	-8.179E-04	1.623E-05
3	3.160E-04	-1.527E-05
4	-1.690E-03	3.368E-05
5	-5.561E-04	2.177E-06
6	-4.985E-04	1.025E-06
7	-5.238E-04	1.531E-06
8	-5.942E-04	2.939E-06
9	3.144E-04	-1.523E-05

LOAD COMB	X-DISPLACEMENT (RADIAL)	Z-DISPLACEMENT (AXIAL)
1	-8.195E-04	3.260E-05
2	-8.179E-04	3.253E-05
3	3.160E-04	-3.048E-05
4	-1.690E-03	6.744E-05
5	-5.561E-04	4.423E-06
6	-4.985E-04	2.119E-06
7	-5.238E-04	3.131E-06
8	-5.942E-04	5.948E-06
9	3.144E-04	-3.042E-05
1	-9.509E-04	0.000E+00
2	-9.490E-04	0.000E+00
3	3.668E-04	0.000E+00
4	-1.961E-03	0.000E+00
5	-6.451E-04	0.000E+00
6	-5.783E-04	0.000E+00
7	-6.077E-04	0.000E+00
8	-6.893E-04	0.000E+00
9	3.648E-04	0.000E+00
1	-9.509E-04	1.623E-05
2	-9.490E-04	1.619E-05
3	3.668E-04	-1.530E-05
4	-1.961E-03	3.364E-05
5	-6.451E-04	2.147E-06
6	-5.783E-04	9.954E-07
7	-6.077E-04	1.501E-06
8	-6.893E-04	2.909E-06
9	3.648E-04	-1.526E-05
1	-9.509E-04	3.260E-05
2	-9.490E-04	3.254E-05
3	3.668E-04	-3.048E-05
4	-1.961E-03	6.745E-05
5	-6.451E-04	4.428E-06
6	-5.783E-04	2.123E-06
7	-6.077E-04	3.135E-06
8	-6.893E-04	5.952E-06
9	3.648E-04	-3.041E-05
1	-1.082E-03	0.000E+00
2	-1.080E-03	0.000E+00
3	4.174E-04	0.000E+00
4	-2.231E-03	0.000E+00
5	-7.342E-04	0.000E+00
6	-6.582E-04	0.000E+00
7	-6.915E-04	0.000E+00
8	-7.845E-04	0.000E+00
9	4.152E-04	0.000E+00
1	-1.082E-03	1.626E-05
2	-1.080E-03	1.623E-05
3	4.174E-04	-1.527E-05
4	-2.231E-03	3.368E-05

E	LOAD CASE	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
6	5	-7.342E-04	2.178E-06
6	6	-6.582E-04	1.026E-06
[illegible]	7	-6.915E-04	1.532E-06
[illegible]	8	-7.845E-04	2.940E-06
6	9	4.152E-04	-1.523E-05
7	1	-1.082E-03	3.260E-05
7	2	-1.080E-03	3.253E-05
7	3	4.174E-04	-3.048E-05
7	4	-2.231E-03	6.744E-05
7	5	-7.342E-04	4.426E-06
7	6	-6.582E-04	2.122E-06
7	7	-6.915E-04	3.134E-06
7	8	-7.845E-04	5.951E-06
7	9	4.152E-04	-3.041E-05
8	1	-1.213E-03	0.000E+00
8	2	-1.211E-03	0.000E+00
8	3	4.681E-04	0.000E+00
8	4	-2.502E-03	0.000E+00
8	5	-8.232E-04	0.000E+00
8	6	-7.380E-04	0.000E+00
8	7	-7.754E-04	0.000E+00
8	8	-8.796E-04	0.000E+00
8	9	4.656E-04	0.000E+00
9	1	-1.213E-03	1.623E-05
[illegible]	2	-1.211E-03	1.619E-05
[illegible]	3	4.681E-04	-1.530E-05
[illegible]	4	-2.502E-03	3.364E-05
9	5	-8.232E-04	2.148E-06
9	6	-7.380E-04	9.965E-07
9	7	-7.754E-04	1.502E-06
9	8	-8.796E-04	2.910E-06
9	9	4.656E-04	-1.526E-05
0	1	-1.213E-03	3.260E-05
0	2	-1.211E-03	3.254E-05
0	3	4.681E-04	-3.048E-05
0	4	-2.502E-03	6.745E-05
0	5	-8.232E-04	4.430E-06
0	6	-7.380E-04	2.125E-06
0	7	-7.754E-04	3.137E-06
0	8	-8.796E-04	5.955E-06
0	9	4.656E-04	-3.041E-05
1	1	-1.344E-03	0.000E+00
1	2	-1.342E-03	0.000E+00
1	3	5.188E-04	0.000E+00
1	4	-2.773E-03	0.000E+00
1	5	-9.123E-04	0.000E+00
1	6	-8.178E-04	0.000E+00
1	7	-8.593E-04	0.000E+00
[illegible]	8	-9.748E-04	0.000E+00

LOAD ZONE	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
9	5.160E-04	0.000E+00
1	-1.344E-03	1.626E-05
2	-1.342E-03	1.623E-05
3	5.188E-04	-1.527E-05
4	-2.773E-03	3.368E-05
5	-9.123E-04	2.178E-06
6	-8.178E-04	1.026E-06
7	-8.593E-04	1.532E-06
8	-9.748E-04	2.940E-06
9	5.160E-04	-1.523E-05
1	-1.344E-03	3.260E-05
2	-1.342E-03	3.253E-05
3	5.188E-04	-3.048E-05
4	-2.773E-03	6.744E-05
5	-9.123E-04	4.425E-06
6	-8.178E-04	2.121E-06
7	-8.593E-04	3.133E-06
8	-9.748E-04	5.950E-06
9	5.160E-04	-3.041E-05
1	-1.476E-03	0.000E+00
2	-1.473E-03	0.000E+00
3	5.695E-04	0.000E+00
4	-3.044E-03	0.000E+00
5	-1.001E-03	0.000E+00
6	-8.976E-04	0.000E+00
7	-9.431E-04	0.000E+00
8	-1.069E-03	0.000E+00
9	5.664E-04	0.000E+00
1	-1.476E-03	1.623E-05
2	-1.473E-03	1.619E-05
3	5.695E-04	-1.530E-05
4	-3.044E-03	3.364E-05
5	-1.001E-03	2.146E-06
6	-8.976E-04	9.946E-07
7	-9.431E-04	1.500E-06
8	-1.069E-03	2.908E-06
9	5.664E-04	-1.527E-05
1	-1.476E-03	3.260E-05
2	-1.473E-03	3.254E-05
3	5.695E-04	-3.048E-05
4	-3.044E-03	6.745E-05
5	-1.001E-03	4.426E-06
6	-8.976E-04	2.122E-06
7	-9.431E-04	3.134E-06
8	-1.069E-03	5.951E-06
9	5.664E-04	-3.041E-05
1	-1.607E-03	0.000E+00
2	-1.604E-03	0.000E+00

E	LOAD CONE	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
7	3	6.201E-04	0.000E+00
7	4	-3.314E-03	0.000E+00
[illegible]	5	-1.090E-03	0.000E+00
[illegible]	6	-9.774E-04	0.000E+00
7	7	-1.027E-03	0.000E+00
7	8	-1.165E-03	0.000E+00
7	9	6.168E-04	0.000E+00
8	1	-1.607E-03	1.626E-05
8	2	-1.604E-03	1.623E-05
8	3	6.201E-04	-1.527E-05
8	4	-3.314E-03	3.368E-05
8	5	-1.090E-03	2.177E-06
8	6	-9.774E-04	1.025E-06
8	7	-1.027E-03	1.531E-06
8	8	-1.165E-03	2.939E-06
8	9	6.168E-04	-1.523E-05
9	1	-1.607E-03	3.260E-05
9	2	-1.604E-03	3.253E-05
9	3	6.201E-04	-3.048E-05
9	4	-3.314E-03	6.744E-05
9	5	-1.090E-03	4.425E-06
9	6	-9.774E-04	2.120E-06
9	7	-1.027E-03	3.132E-06
9	8	-1.165E-03	5.949E-06
9	9	6.168E-04	-3.041E-05
[illegible]	1	-1.738E-03	0.000E+00
10	2	-1.735E-03	0.000E+00
10	3	6.708E-04	0.000E+00
10	4	-3.585E-03	0.000E+00
10	5	-1.179E-03	0.000E+00
10	6	-1.057E-03	0.000E+00
10	7	-1.110E-03	0.000E+00
10	8	-1.260E-03	0.000E+00
10	9	6.672E-04	0.000E+00
11	1	-1.738E-03	1.623E-05
11	2	-1.735E-03	1.619E-05
11	3	6.708E-04	-1.530E-05
11	4	-3.585E-03	3.364E-05
11	5	-1.179E-03	2.147E-06
11	6	-1.057E-03	9.955E-07
11	7	-1.110E-03	1.501E-06
11	8	-1.260E-03	2.909E-06
11	9	6.672E-04	-1.526E-05
12	1	-1.738E-03	3.260E-05
12	2	-1.735E-03	3.254E-05
12	3	6.708E-04	-3.048E-05
12	4	-3.585E-03	6.745E-05
[illegible]	5	-1.179E-03	4.428E-06
[illegible]	6	-1.057E-03	2.123E-06

LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
7	-1.110E-03	3.135E-06
8	-1.260E-03	5.953E-06
9	6.672E-04	-3.041E-05
1	-1.870E-03	0.000E+00
2	-1.866E-03	0.000E+00
3	7.215E-04	0.000E+00
4	-3.856E-03	0.000E+00
5	-1.268E-03	0.000E+00
6	-1.137E-03	0.000E+00
7	-1.194E-03	0.000E+00
8	-1.355E-03	0.000E+00
9	7.176E-04	0.000E+00
1	-1.870E-03	1.626E-05
2	-1.866E-03	1.623E-05
3	7.215E-04	-1.527E-05
4	-3.856E-03	3.368E-05
5	-1.268E-03	2.176E-06
6	-1.137E-03	1.024E-06
7	-1.194E-03	1.530E-06
8	-1.355E-03	2.938E-06
9	7.176E-04	-1.524E-05
1	-1.870E-03	3.260E-05
2	-1.866E-03	3.253E-05
3	7.215E-04	-3.048E-05
4	-3.856E-03	6.744E-05
5	-1.268E-03	4.422E-06
6	-1.137E-03	2.117E-06
7	-1.194E-03	3.129E-06
8	-1.355E-03	5.947E-06
9	7.176E-04	-3.042E-05
1	-2.001E-03	0.000E+00
2	-1.997E-03	0.000E+00
3	7.721E-04	0.000E+00
4	-4.126E-03	0.000E+00
5	-1.357E-03	0.000E+00
6	-1.216E-03	0.000E+00
7	-1.278E-03	0.000E+00
8	-1.450E-03	0.000E+00
9	7.680E-04	0.000E+00
1	-2.001E-03	1.623E-05
2	-1.997E-03	1.619E-05
3	7.721E-04	-1.531E-05
4	-4.126E-03	3.364E-05
5	-1.357E-03	2.139E-06
6	-1.216E-03	9.870E-07
7	-1.278E-03	1.492E-06
8	-1.450E-03	2.901E-06
9	7.680E-04	-1.527E-05

E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Z-DISPLACEMENT (AXIAL)
48	1	-2.001E-03	3.260E-05
48	2	-1.997E-03	3.254E-05
[illegible]	3	7.721E-04	-3.049E-05
[illegible]	4	-4.126E-03	6.745E-05
48	5	-1.357E-03	4.411E-06
48	6	-1.216E-03	2.106E-06
48	7	-1.278E-03	3.118E-06
48	8	-1.450E-03	5.936E-06
48	9	7.680E-04	-3.043E-05
49	1	-2.132E-03	0.000E+00
49	2	-2.127E-03	0.000E+00
49	3	8.227E-04	0.000E+00
49	4	-4.397E-03	0.000E+00
49	5	-1.446E-03	0.000E+00
49	6	-1.296E-03	0.000E+00
49	7	-1.362E-03	0.000E+00
49	8	-1.545E-03	0.000E+00
49	9	8.183E-04	0.000E+00
50	1	-2.132E-03	1.626E-05
50	2	-2.127E-03	1.623E-05
50	3	8.227E-04	-1.527E-05
50	4	-4.397E-03	3.368E-05
50	5	-1.446E-03	2.177E-06
50	6	-1.296E-03	1.025E-06
50	7	-1.362E-03	1.531E-06
[illegible]	8	-1.545E-03	2.939E-06
[illegible]	9	8.183E-04	-1.523E-05
51	1	-2.132E-03	3.260E-05
51	2	-2.127E-03	3.253E-05
51	3	8.227E-04	-3.048E-05
51	4	-4.397E-03	5.744E-05
51	5	-1.446E-03	4.424E-06
51	6	-1.296E-03	2.120E-06
51	7	-1.362E-03	3.132E-06
51	8	-1.545E-03	5.949E-06
51	9	8.183E-04	-3.041E-05
52	1	-2.263E-03	0.000E+00
52	2	-2.259E-03	0.000E+00
52	3	8.734E-04	0.000E+00
52	4	-4.667E-03	0.000E+00
52	5	-1.535E-03	0.000E+00
52	6	-1.376E-03	0.000E+00
52	7	-1.446E-03	0.000E+00
52	8	-1.640E-03	0.000E+00
52	9	8.687E-04	0.000E+00
53	1	-2.263E-03	1.623E-05
53	2	-2.259E-03	1.619E-05
53	3	8.734E-04	-1.529E-05
[illegible]	4	-4.667E-03	3.364E-05

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E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
3	5	-1.535E-03	2.151E-06
3	6	-1.376E-03	9.991E-07
3	7	-1.446E-03	1.505E-06
3	8	-1.640E-03	2.913E-06
3	9	8.687E-04	-1.526E-05
4	1	-2.263E-03	3.260E-05
4	2	-2.259E-03	3.254E-05
4	3	8.734E-04	-3.047E-05
4	4	-4.667E-03	6.745E-05
4	5	-1.535E-03	4.435E-06
4	6	-1.376E-03	2.131E-06
4	7	-1.446E-03	3.143E-06
4	8	-1.640E-03	5.960E-06
4	9	8.687E-04	-3.040E-05
55	1	-2.395E-03	0.000E+00
55	2	-2.390E-03	0.000E+00
55	3	9.241E-04	0.000E+00
55	4	-4.938E-03	0.000E+00
55	5	-1.624E-03	0.000E+00
55	6	-1.456E-03	0.000E+00
55	7	-1.530E-03	0.000E+00
55	8	-1.735E-03	0.000E+00
55	9	9.191E-04	0.000E+00
56	1	-2.395E-03	1.526E-05
56	2	-2.390E-03	1.623E-05
56	3	9.241E-04	-1.527E-05
56	4	-4.938E-03	3.368E-05
56	5	-1.624E-03	2.173E-06
56	6	-1.456E-03	1.021E-06
56	7	-1.530E-03	1.527E-06
56	8	-1.735E-03	2.935E-06
56	9	9.191E-04	-1.524E-05
57	1	-2.395E-03	3.260E-05
57	2	-2.390E-03	3.253E-05
57	3	9.241E-04	-3.049E-05
57	4	-4.938E-03	6.744E-05
57	5	-1.624E-03	4.416E-06
57	6	-1.456E-03	2.111E-06
57	7	-1.530E-03	3.124E-06
57	8	-1.735E-03	5.941E-06
57	9	9.191E-04	-3.042E-05
58	1	-2.526E-03	0.000E+00
58	2	-2.520E-03	0.000E+00
58	3	9.747E-04	0.000E+00
58	4	-5.209E-03	0.000E+00
58	5	-1.713E-03	0.000E+00
58	6	-1.535E-03	0.000E+00
58	7	-1.613E-03	0.000E+00
58	8	-1.830E-03	0.000E+00

I	LOAD CASE	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
8	9	9.695E-04	0.000E+00
	1	-2.526E-03	1.623E-05
	2	-2.520E-03	1.619E-05
9	3	9.747E-04	-1.530E-05
9	4	-5.209E-03	3.364E-05
9	5	-1.713E-03	2.147E-06
9	6	-1.535E-03	9.956E-07
9	7	-1.613E-03	1.501E-06
9	8	-1.830E-03	2.909E-06
9	9	9.695E-04	-1.526E-05
0	1	-2.526E-03	3.260E-05
0	2	-2.520E-03	3.254E-05
0	3	9.747E-04	-3.048E-05
0	4	-5.209E-03	6.745E-05
0	5	-1.713E-03	4.428E-06
0	6	-1.535E-03	2.123E-06
0	7	-1.613E-03	3.136E-06
0	8	-1.830E-03	5.953E-06
0	9	9.695E-04	-3.041E-05
1	1	-2.657E-03	0.000E+00
1	2	-2.651E-03	0.000E+00
1	3	1.025E-03	0.000E+00
1	4	-5.479E-03	0.000E+00
1	5	-1.802E-03	0.000E+00
1	6	-1.615E-03	0.000E+00
1	7	-1.697E-03	0.000E+00
1	8	-1.926E-03	0.000E+00
1	9	1.019E-03	0.000E+00
2	1	-2.657E-03	1.626E-05
2	2	-2.651E-03	1.623E-05
2	3	1.025E-03	-1.526E-05
2	4	-5.479E-03	3.368E-05
2	5	-1.802E-03	2.182E-06
2	6	-1.615E-03	1.030E-06
2	7	-1.697E-03	1.536E-06
2	8	-1.925E-03	2.944E-06
2	9	1.019E-03	-1.523E-05
3	1	-2.657E-03	3.260E-05
3	2	-2.651E-03	3.253E-05
3	3	1.025E-03	-3.047E-05
3	4	-5.479E-03	6.744E-05
3	5	-1.802E-03	4.434E-06
3	6	-1.615E-03	2.130E-06
3	7	-1.697E-03	3.142E-06
3	8	-1.925E-03	5.959E-06
3	9	1.019E-03	-3.040E-05
4	1	-2.788E-03	0.000E+00
	2	-2.783E-03	0.000E+00

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	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
4	3	1.076E-03	0.000E+00
4	4	-5.750E-03	0.000E+00
4	5	-1.891E-03	0.000E+00
4	6	-1.695E-03	0.000E+00
4	7	-1.781E-03	0.000E+00
4	8	-2.021E-03	0.000E+00
4	9	1.070E-03	0.000E+00
5	1	-2.788E-03	1.623E-05
5	2	-2.783E-03	1.619E-05
5	3	1.076E-03	-1.530E-05
5	4	-5.750E-03	3.364E-05
5	5	-1.891E-03	2.143E-06
5	6	-1.695E-03	9.917E-07
5	7	-1.781E-03	1.497E-06
5	8	-2.021E-03	2.905E-06
5	9	1.070E-03	-1.527E-05
56	1	-2.788E-03	3.260E-05
56	2	-2.783E-03	3.254E-05
56	3	1.076E-03	-3.049E-05
56	4	-5.750E-03	6.745E-05
56	5	-1.891E-03	4.420E-06
56	6	-1.695E-03	2.116E-06
56	7	-1.781E-03	3.128E-06
56	8	-2.021E-03	5.945E-06
56	9	1.070E-03	-3.042E-05
67	1	-2.919E-03	0.000E+00
67	2	-2.913E-03	0.000E+00
67	3	1.126E-03	0.000E+00
67	4	-6.021E-03	0.000E+00
67	5	-1.980E-03	0.000E+00
67	6	-1.775E-03	0.000E+00
67	7	-1.865E-03	0.000E+00
67	8	-2.116E-03	0.000E+00
67	9	1.120E-03	0.000E+00
68	1	-2.919E-03	1.626E-05
68	2	-2.913E-03	1.623E-05
68	3	1.126E-03	-1.527E-05
68	4	-6.021E-03	3.368E-05
68	5	-1.980E-03	2.172E-06
68	6	-1.775E-03	1.020E-06
68	7	-1.865E-03	1.526E-06
68	8	-2.116E-03	2.934E-06
68	9	1.120E-03	-1.524E-05
69	1	-2.919E-03	3.260E-05
69	2	-2.913E-03	3.253E-05
69	3	1.126E-03	-3.049E-05
69	4	-6.021E-03	6.744E-05
69	5	-1.980E-03	4.414E-06
69	6	-1.775E-03	2.110E-06

DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
69	7	-1.365E-03	3.122E-06
[illegible]	8	-2.115E-03	5.939E-06
[illegible]	9	1.120E-03	-3.042E-05
70	1	-3.051E-03	0.000E+00
70	2	-3.044E-03	0.000E+00
70	3	1.177E-03	0.000E+00
70	4	-6.291E-03	0.000E+00
70	5	-2.069E-03	0.000E+00
70	6	-1.855E-03	0.000E+00
70	7	-1.949E-03	0.000E+00
70	8	-2.211E-03	0.000E+00
70	9	1.171E-03	0.000E+00
71	1	-3.051E-03	1.623E-05
71	2	-3.044E-03	1.619E-05
71	3	1.177E-03	-1.529E-05
71	4	-6.291E-03	3.364E-05
71	5	-2.069E-03	2.152E-06
71	6	-1.855E-03	1.000E-06
71	7	-1.949E-03	1.505E-06
71	8	-2.211E-03	2.914E-06
71	9	1.171E-03	-1.526E-05
72	1	-3.051E-03	3.260E-05
72	2	-3.044E-03	3.254E-05
72	3	1.177E-03	-3.047E-05
[illegible]	4	-6.291E-03	6.745E-05
[illegible]	5	-2.069E-03	4.437E-06
72	6	-1.855E-03	2.133E-06
72	7	-1.949E-03	3.145E-06
72	8	-2.211E-03	5.962E-06
72	9	1.171E-03	-3.040E-05
73	1	-3.182E-03	0.000E+00
73	2	-3.175E-03	0.000E+00
73	3	1.228E-03	0.000E+00
73	4	-6.562E-03	0.000E+00
73	5	-2.158E-03	0.000E+00
73	6	-1.935E-03	0.000E+00
73	7	-2.033E-03	0.000E+00
73	8	-2.306E-03	0.000E+00
73	9	1.221E-03	0.000E+00
74	1	-3.182E-03	1.626E-05
74	2	-3.175E-03	1.623E-05
74	3	1.228E-03	-1.527E-05
74	4	-6.562E-03	3.368E-05
74	5	-2.158E-03	2.175E-06
74	6	-1.935E-03	1.023E-06
74	7	-2.033E-03	1.529E-06
74	8	-2.306E-03	2.937E-06
[illegible]	9	1.221E-03	-1.524E-05

E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
75	1	-3.182E-03	3.260E-05
75	2	-3.175E-03	3.253E-05
75	3	1.228E-03	-3.049E-05
75	4	-6.562E-03	6.744E-05
75	5	-2.158E-03	4.419E-06
75	6	-1.935E-03	2.114E-06
75	7	-2.033E-03	3.127E-06
75	8	-2.306E-03	5.944E-06
75	9	1.221E-03	-3.042E-05
76	1	-3.313E-03	0.000E+00
76	2	-3.306E-03	0.000E+00
76	3	1.278E-03	0.000E+00
76	4	-6.832E-03	0.000E+00
76	5	-2.247E-03	0.000E+00
76	6	-2.014E-03	0.000E+00
76	7	-2.116E-03	0.000E+00
76	8	-2.401E-03	0.000E+00
76	9	1.271E-03	0.000E+00
77	1	-3.313E-03	1.623E-05
77	2	-3.306E-03	1.619E-05
77	3	1.278E-03	-1.530E-05
77	4	-6.832E-03	3.364E-05
77	5	-2.247E-03	2.143E-06
77	6	-2.014E-03	9.912E-07
77	7	-2.116E-03	1.497E-06
77	8	-2.401E-03	2.905E-06
77	9	1.271E-03	-1.527E-05
78	1	-3.313E-03	3.260E-05
78	2	-3.306E-03	3.254E-05
78	3	1.278E-03	-3.049E-05
78	4	-6.832E-03	6.745E-05
78	5	-2.247E-03	4.419E-06
78	6	-2.014E-03	2.115E-06
78	7	-2.116E-03	3.127E-06
78	8	-2.401E-03	5.944E-06
78	9	1.271E-03	-3.042E-05
79	1	-3.444E-03	0.000E+00
79	2	-3.437E-03	0.000E+00
79	3	1.329E-03	0.000E+00
79	4	-7.103E-03	0.000E+00
79	5	-2.336E-03	0.000E+00
79	6	-2.094E-03	0.000E+00
79	7	-2.200E-03	0.000E+00
79	8	-2.496E-03	0.000E+00
79	9	1.322E-03	0.000E+00
80	1	-3.444E-03	1.626E-05
80	2	-3.437E-03	1.623E-05
80	3	1.329E-03	-1.525E-05
80	4	-7.103E-03	3.368E-05

LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
5	-2.336E-03	2.183E-06
6	-2.094E-03	1.031E-06
7	-2.200E-03	1.537E-06
8	-2.496E-03	2.945E-06
9	1.322E-03	-1.523E-05
1	-3.444E-03	3.260E-05
2	-3.437E-03	3.253E-05
3	1.329E-03	-3.047E-05
4	-7.103E-03	6.744E-05
5	-2.336E-03	4.436E-06
6	-2.094E-03	2.131E-06
7	-2.200E-03	3.143E-06
8	-2.496E-03	5.960E-06
9	1.322E-03	-3.040E-05
1	-3.576E-03	0.000E+00
2	-3.568E-03	0.000E+00
3	1.379E-03	0.000E+00
4	-7.374E-03	0.000E+00
5	-2.425E-03	0.000E+00
6	-2.174E-03	0.000E+00
7	-2.284E-03	0.000E+00
8	-2.591E-03	0.000E+00
9	1.372E-03	0.000E+00
1	-3.576E-03	1.623E-05
2	-3.568E-03	1.619E-05
3	1.379E-03	-1.530E-05
4	-7.374E-03	3.364E-05
5	-2.425E-03	2.145E-06
6	-2.174E-03	9.931E-07
7	-2.284E-03	1.499E-06
8	-2.591E-03	2.907E-06
9	1.372E-03	-1.527E-05
1	-3.576E-03	3.260E-05
2	-3.568E-03	3.254E-05
3	1.379E-03	-3.048E-05
4	-7.374E-03	6.745E-05
5	-2.425E-03	4.423E-06
6	-2.174E-03	2.118E-06
7	-2.284E-03	3.131E-06
8	-2.591E-03	5.948E-06
9	1.372E-03	-3.042E-05
1	-3.707E-03	0.000E+00
2	-3.699E-03	0.000E+00
3	1.430E-03	0.000E+00
4	-7.644E-03	0.000E+00
5	-2.514E-03	0.000E+00
6	-2.254E-03	0.000E+00
7	-2.368E-03	0.000E+00
8	-2.686E-03	0.000E+00

LOAD COMB		X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
[illegible]	9	1.422E-03	0.000E+00
5	1	-3.707E-03	1.626E-05
5	2	-3.699E-03	1.623E-05
5	3	1.430E-03	-1.527E-05
5	4	-7.644E-03	3.368E-05
5	5	-2.514E-03	2.174E-06
5	6	-2.254E-03	1.022E-06
5	7	-2.368E-03	1.528E-06
5	8	-2.686E-03	2.936E-06
5	9	1.422E-03	-1.524E-05
7	1	-3.707E-03	3.260E-05
7	2	-3.699E-03	3.253E-05
7	3	1.430E-03	-3.049E-05
7	4	-7.644E-03	6.744E-05
7	5	-2.514E-03	4.418E-06
7	6	-2.254E-03	2.113E-06
7	7	-2.368E-03	3.125E-06
7	8	-2.686E-03	5.942E-06
7	9	1.422E-03	-3.042E-05
8	1	-3.838E-03	0.000E+00
8	2	-3.830E-03	0.000E+00
8	3	1.481E-03	0.000E+00
8	4	-7.915E-03	0.000E+00
8	5	-2.603E-03	0.000E+00
8	6	-2.333E-03	0.000E+00
8	7	-2.452E-03	0.000E+00
8	8	-2.782E-03	0.000E+00
8	9	1.473E-03	0.000E+00
89	1	-3.838E-03	1.623E-05
89	2	-3.830E-03	1.619E-05
89	3	1.481E-03	-1.529E-05
89	4	-7.915E-03	3.364E-05
89	5	-2.603E-03	2.152E-06
89	6	-2.333E-03	1.000E-06
89	7	-2.452E-03	1.506E-06
89	8	-2.782E-03	2.915E-06
89	9	1.473E-03	-1.526E-05
90	1	-3.838E-03	3.260E-05
90	2	-3.830E-03	3.254E-05
90	3	1.481E-03	-3.047E-05
90	4	-7.915E-03	6.745E-05
90	5	-2.603E-03	4.439E-06
90	6	-2.333E-03	2.134E-06
90	7	-2.452E-03	3.146E-06
90	8	-2.782E-03	5.964E-06
90	9	1.473E-03	-3.040E-05
91	1	-3.970E-03	0.000E+00
91	2	-3.961E-03	0.000E+00

E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
1	3	1.531E-03	0.000E-00
	4	-8.186E-03	0.000E+00
	5	-2.692E-03	0.000E+00
	6	-2.413E-03	0.000E+00
1	7	-2.536E-03	0.000E+00
1	8	-2.877E-03	0.000E+00
1	9	1.523E-03	0.000E+00
92	1	-3.970E-03	1.626E-05
92	2	-3.961E-03	1.623E-05
92	3	1.531E-03	-1.527E-05
92	4	-8.186E-03	3.368E-05
92	5	-2.692E-03	2.176E-06
92	6	-2.413E-03	1.024E-06
92	7	-2.536E-03	1.530E-06
92	8	-2.877E-03	2.938E-06
92	9	1.523E-03	-1.523E-05
93	1	-3.970E-03	3.260E-05
93	2	-3.961E-03	3.253E-05
93	3	1.531E-03	-3.048E-05
93	4	-8.186E-03	6.744E-05
93	5	-2.692E-03	4.422E-06
93	6	-2.413E-03	2.118E-06
93	7	-2.536E-03	3.130E-06
93	8	-2.877E-03	5.947E-06
93	9	1.523E-03	-3.042E-05
	1	-4.101E-03	0.000E+00
94	2	-4.092E-03	0.000E+00
94	3	1.582E-03	0.000E+00
94	4	-8.456E-03	0.000E+00
94	5	-2.781E-03	0.000E+00
94	6	-2.493E-03	0.000E+00
94	7	-2.620E-03	0.000E+00
94	8	-2.972E-03	0.000E+00
94	9	1.574E-03	0.000E+00
95	1	-4.101E-03	1.623E-05
95	2	-4.092E-03	1.619E-05
95	3	1.582E-03	-1.530E-05
95	4	-8.456E-03	3.364E-05
95	5	-2.781E-03	2.144E-06
95	6	-2.493E-03	9.923E-07
95	7	-2.620E-03	1.498E-06
95	8	-2.972E-03	2.906E-06
95	9	1.574E-03	-1.527E-05
96	1	-4.101E-03	3.260E-05
96	2	-4.092E-03	3.254E-05
96	3	1.582E-03	-3.048E-05
96	4	-8.456E-03	6.745E-05
	5	-2.781E-03	4.422E-06
	6	-2.493E-03	2.117E-06

E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Z-DISPLACEMENT (AXIAL)
6	7	-2.620E-03	3.129E-06
6	8	-2.972E-03	5.946E-06
6	9	1.574E-03	-3.042E-05
7	1	-4.232E-03	0.000E+00
7	2	-4.223E-03	0.000E+00
7	3	1.633E-03	0.000E+00
7	4	-8.727E-03	0.000E+00
7	5	-2.870E-03	0.000E+00
7	6	-2.573E-03	0.000E+00
7	7	-2.703E-03	0.000E+00
7	8	-3.067E-03	0.000E+00
7	9	1.624E-03	0.000E+00
98	1	-4.232E-03	1.626E-05
98	2	-4.223E-03	1.623E-05
98	3	1.633E-03	-1.526E-05
98	4	-8.727E-03	3.368E-05
98	5	-2.870E-03	2.181E-06
98	6	-2.573E-03	1.029E-06
98	7	-2.703E-03	1.535E-06
98	8	-3.067E-03	2.943E-06
98	9	1.624E-03	-1.523E-05
99	1	-4.232E-03	3.260E-05
99	2	-4.223E-03	3.253E-05
99	3	1.633E-03	-3.047E-05
99	4	-8.727E-03	6.744E-05
99	5	-2.870E-03	4.432E-06
99	6	-2.573E-03	2.127E-06
99	7	-2.703E-03	3.139E-06
99	8	-3.067E-03	5.956E-06
99	9	1.624E-03	-3.041E-05
100	1	-4.363E-03	0.000E+00
100	2	-4.354E-03	0.000E+00
100	3	1.683E-03	0.000E+00
100	4	-8.998E-03	0.000E+00
100	5	-2.959E-03	0.000E+00
100	6	-2.653E-03	0.000E+00
100	7	-2.787E-03	0.000E+00
100	8	-3.162E-03	0.000E+00
100	9	1.674E-03	0.000E+00
101	1	-4.363E-03	1.623E-05
101	2	-4.354E-03	1.619E-05
101	3	1.683E-03	-1.530E-05
101	4	-8.998E-03	3.364E-05
101	5	-2.959E-03	2.146E-06
101	6	-2.653E-03	9.943E-07
101	7	-2.787E-03	1.500E-06
101	8	-3.162E-03	2.909E-06
101	9	1.674E-03	-1.527E-05

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LOAD COMB		X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
2	1	-4.363E-03	3.260E-05
	2	-4.354E-03	3.254E-05
	3	1.683E-03	-3.048E-05
	4	-8.998E-03	6.745E-05
2	5	-2.959E-03	4.425E-06
2	6	-2.653E-03	2.121E-06
2	7	-2.787E-03	3.133E-06
2	8	-3.162E-03	5.950E-06
2	9	1.674E-03	-3.041E-05
3	1	-4.494E-03	0.000E+00
3	2	-4.485E-03	0.000E+00
3	3	1.734E-03	0.000E+00
3	4	-9.268E-03	0.000E+00
3	5	-3.048E-03	0.000E+00
3	6	-2.732E-03	0.000E+00
3	7	-2.871E-03	0.000E+00
3	8	-3.257E-03	0.000E+00
3	9	1.725E-03	0.000E+00
04	1	-4.494E-03	1.626E-05
04	2	-4.485E-03	1.623E-05
04	3	1.734E-03	-1.527E-05
04	4	-9.268E-03	3.368E-05
04	5	-3.048E-03	2.175E-06
04	6	-2.732E-03	1.023E-06
04	7	-2.871E-03	1.529E-06
	8	-3.257E-03	2.937E-06
	9	1.725E-03	-1.524E-05
05	1	-4.494E-03	3.250E-05
05	2	-4.485E-03	3.253E-05
05	3	1.734E-03	-3.049E-05
05	4	-9.268E-03	6.744E-05
05	5	-3.048E-03	4.421E-06
05	6	-2.732E-03	2.116E-06
05	7	-2.871E-03	3.128E-06
05	8	-3.257E-03	5.945E-06
05	9	1.725E-03	-3.042E-05
06	1	-4.626E-03	0.000E+00
06	2	-4.616E-03	0.000E+00
06	3	1.785E-03	0.000E+00
06	4	-9.539E-03	0.000E+00
06	5	-3.137E-03	0.000E+00
06	6	-2.812E-03	0.000E+00
06	7	-2.955E-03	0.000E+00
06	8	-3.352E-03	0.000E+00
06	9	1.775E-03	0.000E+00
07	1	-4.626E-03	1.623E-05
07	2	-4.616E-03	1.619E-05
	3	1.785E-03	-1.530E-05
	4	-9.539E-03	3.364E-05

E143

E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
97	5	-3.137E-03	2.150E-06
97	6	-2.812E-03	9.981E-07
97	7	-2.955E-03	1.504E-06
97	8	-3.352E-03	2.912E-06
97	9	1.775E-03	-1.526E-05
98	1	-4.626E-03	3.260E-05
98	2	-4.616E-03	3.254E-05
98	3	1.785E-03	-3.047E-05
98	4	-9.539E-03	6.745E-05
98	5	-3.137E-03	4.433E-06
98	6	-2.812E-03	2.129E-06
98	7	-2.955E-03	3.141E-06
98	8	-3.352E-03	5.958E-06
98	9	1.775E-03	-3.041E-05
99	1	-4.757E-03	0.000E+00
99	2	-4.747E-03	0.000E+00
99	3	1.835E-03	0.000E+00
99	4	-9.810E-03	0.000E+00
99	5	-3.226E-03	0.000E+00
99	6	-2.892E-03	0.000E+00
99	7	-3.039E-03	0.000E+00
99	8	-3.447E-03	0.000E+00
99	9	1.825E-03	0.000E+00
100	1	-4.757E-03	1.526E-05
100	2	-4.747E-03	1.623E-05
100	3	1.835E-03	-1.527E-05
100	4	-9.810E-03	3.368E-05
100	5	-3.226E-03	2.173E-06
100	6	-2.892E-03	1.021E-06
100	7	-3.039E-03	1.527E-06
100	8	-3.447E-03	2.935E-06
100	9	1.825E-03	-1.524E-05
111	1	-4.757E-03	3.260E-05
111	2	-4.747E-03	3.253E-05
111	3	1.835E-03	-3.049E-05
111	4	-9.810E-03	6.744E-05
111	5	-3.226E-03	4.416E-06
111	6	-2.892E-03	2.111E-06
111	7	-3.039E-03	3.123E-06
111	8	-3.447E-03	5.941E-06
111	9	1.825E-03	-3.042E-05
112	1	-4.888E-03	0.000E+00
112	2	-4.878E-03	0.000E+00
112	3	1.886E-03	0.000E+00
112	4	-1.008E-02	0.000E+00
112	5	-3.315E-03	0.000E+00
112	6	-2.972E-03	0.000E+00
112	7	-3.123E-03	0.000E+00
112	8	-3.542E-03	0.000E+00

.DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
112	9	1.876E-03	0.000E+00
[illegible]	1	-4.888E-03	1.623E-05
[illegible]	2	-4.878E-03	1.619E-05
113	3	1.886E-03	-1.530E-05
113	4	-1.008E-02	3.364E-05
113	5	-3.315E-03	2.142E-06
113	6	-2.972E-03	9.900E-07
113	7	-3.123E-03	1.495E-06
113	8	-3.542E-03	2.904E-06
113	9	1.876E-03	-1.527E-05
114	1	-4.888E-03	3.260E-05
114	2	-4.878E-03	3.254E-05
114	3	1.886E-03	-3.049E-05
114	4	-1.008E-02	6.745E-05
114	5	-3.315E-03	4.417E-06
114	6	-2.972E-03	2.112E-06
114	7	-3.123E-03	3.124E-06
114	8	-3.542E-03	5.942E-06
114	9	1.876E-03	-3.042E-05
115	1	-5.019E-03	0.000E+00
115	2	-5.009E-03	0.000E+00
115	3	1.937E-03	0.000E+00
115	4	-1.035E-02	0.000E+00
115	5	-3.404E-03	0.000E+00
[illegible]	6	-3.052E-03	0.000E+00
[illegible]	7	-3.207E-03	0.000E+00
115	8	-3.638E-03	0.000E+00
115	9	1.926E-03	0.000E+00
116	1	-5.019E-03	1.626E-05
116	2	-5.009E-03	1.623E-05
116	3	1.937E-03	-1.526E-05
116	4	-1.035E-02	3.368E-05
116	5	-3.404E-03	2.181E-06
116	6	-3.052E-03	1.029E-06
116	7	-3.207E-03	1.534E-06
116	8	-3.638E-03	2.943E-06
116	9	1.926E-03	-1.523E-05
117	1	-5.019E-03	3.260E-05
117	2	-5.009E-03	3.253E-05
117	3	1.937E-03	-3.047E-05
117	4	-1.035E-02	6.744E-05
117	5	-3.404E-03	4.431E-06
117	6	-3.052E-03	2.1[illegible]E-06
117	7	-3.207E-03	3.139E-06
117	8	-3.638E-03	5.956E-06
117	9	1.926E-03	-3.041E-05
[illegible]	1	-5.151E-03	0.000E+00
[illegible]	2	-5.140E-03	0.000E+00

E145

E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
3	3	-1.987E-03	0.000E+00
3	4	-1.062E-02	0.000E+00
3	5	-3.493E-03	0.000E+00
3	6	-3.132E-03	0.000E+00
3	7	-3.290E-03	0.000E+00
3	8	-3.733E-03	0.000E+00
3	9	1.977E-03	0.000E+00
9	1	-5.151E-03	1.623E-05
9	2	-5.140E-03	1.619E-05
9	3	1.987E-03	-1.530E-05
9	4	-1.062E-02	3.364E-05
9	5	-3.493E-03	2.143E-06
9	6	-3.132E-03	9.915E-07
9	7	-3.290E-03	1.497E-06
9	8	-3.733E-03	2.905E-06
9	9	1.977E-03	-1.527E-05
0	1	-5.151E-03	3.260E-05
0	2	-5.140E-03	3.254E-05
0	3	1.987E-03	-3.049E-05
0	4	-1.062E-02	6.745E-05
0	5	-3.493E-03	4.420E-06
0	6	-3.132E-03	2.115E-06
0	7	-3.290E-03	3.127E-06
0	8	-3.733E-03	5.945E-06
0	9	1.977E-03	-3.042E-05
1	1	-5.282E-03	0.000E+00
1	2	-5.271E-03	0.000E+00
1	3	2.038E-03	0.000E+00
1	4	-1.089E-02	0.000E+00
1	5	-3.582E-03	0.000E+00
1	6	-3.211E-03	0.000E+00
1	7	-3.374E-03	0.000E+00
11	8	-3.828E-03	0.000E+00
11	9	2.027E-03	0.000E+00
12	1	-5.282E-03	1.626E-05
12	2	-5.271E-03	1.623E-05
2	3	2.038E-03	-1.527E-05
2	4	-1.089E-02	3.368E-05
2	5	-3.582E-03	2.175E-06
2	6	-3.211E-03	1.023E-06
2	7	-3.374E-03	1.528E-06
2	8	-3.828E-03	2.937E-06
2	9	2.027E-03	-1.524E-05
3	1	-5.282E-03	3.260E-05
3	2	-5.271E-03	3.253E-05
3	3	2.038E-03	-3.049E-05
3	4	-1.089E-02	6.744E-05
3	5	-3.582E-03	4.419E-06
3	6	-3.211E-03	2.114E-06

E146

ODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
123	7	-3.374E-03	3.126E-06
[illegible]	8	-3.828E-03	5.944E-06
[illegible]	9	2.027E-03	-3.042E-05
124	1	-5.413E-03	0.000E+00
124	2	-5.402E-03	0.000E+00
124	3	2.088E-03	0.000E+00
124	4	-1.116E-02	0.000E+00
124	5	-3.671E-03	0.000E+00
124	6	-3.291E-03	0.000E+00
124	7	-3.458E-03	0.000E+00
124	8	-3.923E-03	0.000E+00
124	9	2.077E-03	0.000E+00
125	1	-5.413E-03	1.623E-05
125	2	-5.402E-03	1.619E-05
125	3	2.088E-03	-1.529E-05
125	4	-1.116E-02	3.364E-05
125	5	-3.671E-03	2.150E-06
125	6	-3.291E-03	9.988E-07
125	7	-3.458E-03	1.504E-06
125	8	-3.923E-03	2.912E-06
125	9	2.077E-03	-1.526E-05
126	1	-5.413E-03	3.260E-05
126	2	-5.402E-03	3.254E-05
126	3	2.088E-03	-3.047E-05
[illegible]	4	-1.116E-02	6.745E-05
[illegible]	5	-3.671E-03	4.435E-06
126	6	-3.291E-03	2.130E-06
126	7	-3.458E-03	3.142E-06
126	8	-3.923E-03	5.959E-06
126	9	2.077E-03	-3.040E-05
127	1	-5.544E-03	0.000E+00
127	2	-5.533E-03	0.000E+00
127	3	2.139E-03	0.000E+00
127	4	-1.143E-02	0.000E+00
127	5	-3.760E-03	0.000E+00
127	6	-3.371E-03	0.000E+00
127	7	-3.542E-03	0.000E+00
127	8	-4.018E-03	0.000E+00
127	9	2.128E-03	0.000E+00
128	1	-5.544E-03	1.626E-05
128	2	-5.533E-03	1.623E-05
128	3	2.139E-03	-1.527E-05
128	4	-1.143E-02	3.368E-05
128	5	-3.760E-03	2.172E-06
128	6	-3.371E-03	1.020E-06
128	7	-3.542E-03	1.525E-06
128	8	-4.018E-03	2.934E-06
[illegible]	9	2.128E-03	-1.524E-05

LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
1	-5.544E-03	3.260E-05
2	-5.533E-03	3.253E-05
3	2.139E-03	-3.049E-05
4	-1.143E-02	6.744E-05
5	-3.760E-03	4.413E-06
6	-3.371E-03	2.108E-06
7	-3.542E-03	3.121E-06
8	-4.018E-03	5.938E-06
9	2.128E-03	-3.042E-05
1	-5.676E-03	0.000E+00
2	-5.664E-03	0.000E+00
3	2.190E-03	0.000E+00
4	-1.170E-02	0.000E+00
5	-3.849E-03	0.000E+00
6	-3.451E-03	0.000E+00
7	-3.626E-03	0.000E+00
8	-4.113E-03	0.000E+00
9	2.178E-03	0.000E+00
1	-5.676E-03	1.625E-05
2	-5.664E-03	1.622E-05
3	2.190E-03	-1.534E-05
4	-1.170E-02	3.369E-05
5	-3.849E-03	2.129E-06
6	-3.451E-03	9.761E-07
7	-3.626E-03	1.482E-06
8	-4.113E-03	2.893E-06
9	2.178E-03	-1.531E-05
1	-5.676E-03	3.263E-05
2	-5.664E-03	3.256E-05
3	2.190E-03	-3.051E-05
4	-1.170E-02	6.749E-05
5	-3.849E-03	4.415E-06
6	-3.451E-03	2.109E-06
7	-3.626E-03	3.121E-06
8	-4.113E-03	5.941E-06
9	2.178E-03	-3.045E-05
1	-5.807E-03	0.000E+00
2	-5.795E-03	0.000E+00
3	2.241E-03	0.000E+00
4	-1.197E-02	0.000E+00
5	-3.938E-03	0.000E+00
6	-3.530E-03	0.000E+00
7	-3.709E-03	0.000E+00
8	-4.208E-03	0.000E+00
9	2.229E-03	0.000E+00
1	-5.807E-03	1.635E-05
2	-5.795E-03	1.632E-05
3	2.240E-03	-1.523E-05
4	-1.197E-02	3.387E-05

E148

	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
4	5	-3.938E-03	2.309E-06
4	6	-3.531E-03	1.151E-06
	7	-3.710E-03	1.660E-06
4	8	-4.208E-03	3.076E-06
4	9	2.228E-03	-1.520E-05
5	1	-5.807E-03	3.281E-05
5	2	-5.795E-03	3.274E-05
5	3	2.240E-03	-3.046E-05
5	4	-1.197E-02	6.787E-05
5	5	-3.939E-03	4.659E-06
5	6	-3.531E-03	2.340E-06
5	7	-3.710E-03	3.358E-06
5	8	-4.208E-03	6.193E-06
5	9	2.228E-03	-3.040E-05
6	1	-5.938E-03	0.000E+00
6	2	-5.926E-03	0.000E+00
6	3	2.290E-03	0.000E+00
6	4	-1.224E-02	0.000E+00
6	5	-4.029E-03	0.000E+00
6	6	-3.612E-03	0.000E+00
6	7	-3.795E-03	0.000E+00
6	8	-4.305E-03	0.000E+00
6	9	2.278E-03	0.000E+00
7	1	-5.939E-03	1.567E-05
	2	-5.927E-03	1.564E-05
	3	2.291E-03	-1.309E-05
7	4	-1.224E-02	3.246E-05
7	5	-4.028E-03	3.725E-06
7	6	-3.611E-03	2.615E-06
7	7	-3.794E-03	3.103E-06
7	8	-4.304E-03	4.460E-06
7	9	2.279E-03	-1.305E-05
8	1	-5.936E-03	3.171E-05
8	2	-5.924E-03	3.164E-05
8	3	2.290E-03	-2.843E-05
8	4	-1.224E-02	6.556E-05
8	5	-4.026E-03	5.482E-06
8	6	-3.609E-03	3.243E-06
8	7	-3.793E-03	4.226E-06
8	8	-4.302E-03	6.964E-06
8	9	2.278E-03	-2.837E-05
9	1	-6.066E-03	0.000E+00
9	2	-6.053E-03	0.000E+00
9	3	2.324E-03	0.000E+00
9	4	-1.250E-02	0.000E+00
9	5	-4.130E-03	0.000E+00
9	6	-3.704E-03	0.000E+00
9	7	-3.891E-03	0.000E+00
	8	-4.412E-03	0.000E+00

3667

F149

LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
9	2.312E-03	0.000E+00
1	-6.065E-03	0.000E+00
2	-6.052E-03	0.000E+00
3	2.337E-03	0.000E+00
4	-1.250E-02	0.000E+00
5	-4.116E-03	0.000E+00
6	-3.690E-03	0.000E+00
7	-3.877E-03	0.000E+00
8	-4.398E-03	0.000E+00
9	2.325E-03	0.000E+00
1	-6.064E-03	1.607E-05
2	-6.051E-03	1.604E-05
3	2.350E-03	-1.637E-05
4	-1.250E-02	3.325E-05
5	-4.102E-03	8.318E-07
6	-3.676E-03	-3.042E-07
7	-3.863E-03	1.946E-07
8	-4.384E-03	1.583E-06
9	2.338E-03	-1.634E-05
1	-6.192E-03	-1.040E-05
2	-6.179E-03	-1.038E-05
3	2.382E-03	-1.232E-04
4	-1.276E-02	-1.846E-05
5	-4.206E-03	-1.312E-04
6	-3.771E-03	-1.307E-04
7	-3.962E-03	-1.309E-04
8	-4.494E-03	-1.316E-04
9	2.369E-03	-1.232E-04
1	-6.192E-03	5.580E-06
2	-6.179E-03	5.562E-06
3	2.381E-03	-1.329E-04
4	-1.276E-02	1.454E-05
5	-4.207E-03	-1.239E-04
6	-3.772E-03	-1.245E-04
7	-3.963E-03	-1.243E-04
8	-4.494E-03	-1.235E-04
9	2.369E-03	-1.329E-04
1	-6.194E-03	2.194E-05
2	-6.181E-03	2.189E-05
3	2.384E-03	-1.443E-04
4	-1.277E-02	4.824E-05
5	-4.207E-03	-1.180E-04
6	-3.771E-03	-1.197E-04
7	-3.962E-03	-1.189E-04
8	-4.494E-03	-1.168E-04
9	2.371E-03	-1.443E-04
1	-6.322E-03	0.000E+00
2	-6.309E-03	0.000E+00

E150

DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Z-DISPLACEMENT (AXIAL)
145	3	2.445E-03	0.000E+00
145	4	-1.303E-02	0.000E+00
[illegible]	5	-4.283E-03	0.000E+00
[illegible]	6	-3.839E-[illegible]	0.000E+00
145	7	-4.034E-[illegible]	0.000E+00
145	8	-4.577E-[illegible]	0.000E+00
145	9	2.432E-03	0.000E+00
146	1	-6.323E-03	1.601E-05
146	2	-6.310E-03	1.598E-05
146	3	2.432E-03	-1.921E-05
146	4	-1.304E-02	3.327E-05
146	5	-4.296E-03	-1.935E-06
146	6	-3.852E-03	-3.076E-06
146	7	-4.047E-03	-2.575E-06
146	8	-4.590E-03	-1.180E-06
146	9	2.419E-03	-1.918E-05
147	1	-6.325E-03	3.235E-05
147	2	-6.312E-03	3.228E-05
147	3	2.419E-03	-3.583E-05
147	4	-1.304E-02	6.705E-05
147	5	-4.310E-03	-1.065E-06
147	6	-3.866E-03	-3.360E-06
147	7	-4.061E-03	-2.352E-06
147	8	-4.604E-03	4.532E-07
147	9	2.406E-03	-3.576E-05
[illegible]	1	-6.455E-03	0.000E+00
[illegible]	2	-6.441E-03	0.000E+00
148	3	2.485E-03	0.000E+00
148	4	-1.331E-02	0.000E+00
148	5	-4.383E-03	0.000E+00
148	6	-3.930E-03	0.000E+00
148	7	-4.129E-03	0.000E+00
148	8	-4.683E-03	0.000E+00
148	9	2.472E-03	0.000E+00
149	1	-6.455E-03	1.636E-05
149	2	-6.441E-03	1.633E-05
149	3	2.484E-03	-1.398E-05
149	4	-1.331E-02	3.389E-05
149	5	-4.384E-03	3.579E-06
149	6	-3.930E-[illegible]	2.420E-06
149	7	-4.130E-03	2.929E-06
149	8	-4.684E-03	4.346E-06
149	9	2.471E-03	-1.394E-05
150	1	-6.455E-03	3.269E-05
150	2	-6.442E-03	3.263E-05
150	3	2.483E-03	-2.967E-05
150	4	-1.331E-02	6.762E-05
150	5	-4.386E-03	5.318E-06
[illegible]	6	-3.932E-03	3.008E-06

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LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
7	-4.131E-03	4.022E-06
8	-4.686E-03	6.846E-06
9	2.469E-03	-2.960E-05
1	-6.586E-03	0.000E+00
2	-6.573E-03	0.000E+00
3	2.534E-03	0.000E+00
4	-1.358E-02	0.000E+00
5	-4.474E-03	0.000E+00
6	-4.011E-03	0.000E+00
7	-4.214E-03	0.000E+00
8	-4.780E-03	0.000E+00
9	2.521E-03	0.000E+00
1	-6.586E-03	1.627E-05
2	-6.573E-03	1.623E-05
3	2.535E-03	-1.514E-05
4	-1.358E-02	3.369E-05
5	-4.473E-03	2.312E-06
6	-4.011E-03	1.160E-06
7	-4.214E-03	1.666E-06
8	-4.780E-03	3.075E-06
9	2.521E-03	-1.511E-05
1	-6.586E-03	3.262E-05
2	-6.573E-03	3.255E-05
3	2.535E-03	-3.025E-05
4	-1.358E-02	6.747E-05
5	-4.473E-03	4.668E-06
6	-4.011E-03	2.362E-06
7	-4.214E-03	3.374E-06
8	-4.779E-03	6.193E-06
9	2.521E-03	-3.018E-05
1	-6.718E-03	0.000E+00
2	-6.704E-03	0.000E+00
3	2.585E-03	0.000E+00
4	-1.385E-02	0.000E+00
5	-4.563E-03	0.000E+00
6	-4.091E-03	0.000E+00
7	-4.298E-03	0.000E+00
8	-4.875E-03	0.000E+00
9	2.572E-03	0.000E+00
1	-6.718E-03	1.622E-05
2	-6.704E-03	1.619E-05
3	2.585E-03	-1.531E-05
4	-1.385E-02	3.363E-05
5	-4.563E-03	2.130E-06
6	-4.091E-03	9.791E-07
7	-4.298E-03	1.484E-06
8	-4.875E-03	2.892E-06
9	2.572E-03	-1.527E-05

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DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
56	1	-6.718E-03	3.260E-05
[illegible]	2	-6.704E-03	3.253E-05
[illegible]	3	2.585E-03	-3.048E-05
[illegible]	4	-1.385E-02	6.744E-05
56	5	-4.563E-03	4.420E-06
56	6	-4.091E-03	2.116E-06
56	7	-4.298E-03	3.128E-06
56	8	-4.875E-03	5.945E-06
56	9	2.572E-03	-3.042E-05
57	1	-6.849E-03	0.000E+00
57	2	-6.835E-03	0.000E+00
57	3	2.636E-03	0.000E+00
57	4	-1.412E-02	0.000E+00
57	5	-4.651E-03	0.000E+00
57	6	-4.170E-03	0.000E+00
57	7	-4.382E-03	0.000E+00
57	8	-4.970E-03	0.000E+00
157	9	2.622E-03	0.000E+00
158	1	-6.849E-03	1.629E-05
158	2	-6.835E-03	1.626E-05
158	3	2.636E-03	-1.527E-05
158	4	-1.412E-02	3.375E-05
158	5	-4.651E-03	2.211E-06
158	6	-4.170E-03	1.057E-06
158	7	-4.382E-03	1.564E-06
[illegible]	8	-4.970E-03	2.975E-06
[illegible]	9	2.622E-03	-1.524E-05
159	1	-6.849E-03	3.266E-05
159	2	-6.835E-03	3.259E-05
159	3	2.636E-03	-3.048E-05
159	4	-1.412E-02	6.756E-05
159	5	-4.652E-03	4.481E-06
159	6	-4.170E-03	2.173E-06
159	7	-4.382E-03	3.187E-06
159	8	-4.970E-03	6.009E-06
159	9	2.622E-03	-3.042E-05
160	1	-6.981E-03	0.000E+00
160	2	-6.967E-03	0.000E+00
160	3	2.687E-03	0.000E+00
160	4	-1.439E-02	0.000E+00
160	5	-4.741E-03	0.000E+00
160	6	-4.251E-03	0.000E+00
160	7	-4.466E-03	0.000E+00
160	8	-5.065E-03	0.000E+00
160	9	2.673E-03	0.000E+00
161	1	-6.981E-03	1.675E-05
161	2	-6.966E-03	1.672E-05
[illegible]	3	2.687E-03	-1.529E-05
[illegible]	4	-1.439E-02	3.472E-05

E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
1	5	-4.741E-03	2.708E-06
1	6	-4.250E-03	1.519E-06
1	7	-4.466E-03	2.041E-06
1	8	-5.065E-03	3.495E-06
1	9	2.673E-03	-1.526E-05
2	1	-6.980E-03	3.302E-05
2	2	-6.966E-03	3.295E-05
2	3	2.687E-03	-3.049E-05
2	4	-1.439E-02	6.830E-05
2	5	-4.740E-03	4.854E-06
2	6	-4.250E-03	2.520E-06
2	7	-4.465E-03	3.545E-06
2	8	-5.065E-03	6.398E-06
2	9	2.673E-03	-3.042E-05
53	1	-7.117E-03	0.000E+00
53	2	-7.103E-03	0.000E+00
53	3	2.738E-03	0.000E+00
53	4	-1.467E-02	0.000E+00
53	5	-4.835E-03	0.000E+00
53	6	-4.335E-03	0.000E+00
53	7	-4.555E-03	0.000E+00
53	8	-5.166E-03	0.000E+00
53	9	2.723E-03	0.000E+00
54	1	-7.110E-03	1.592E-05
54	2	-7.096E-03	1.589E-05
54	3	2.737E-03	-1.552E-05
54	4	-1.466E-02	3.299E-05
54	5	-4.828E-03	1.576E-06
54	6	-4.329E-03	4.464E-07
54	7	-4.548E-03	9.422E-07
54	8	-5.159E-03	2.325E-06
54	9	2.723E-03	-1.549E-05
165	1	-7.109E-03	3.157E-05
165	2	-7.094E-03	3.150E-05
165	3	2.739E-03	-3.055E-05
165	4	-1.466E-02	6.532E-05
165	5	-4.826E-03	3.267E-06
165	6	-4.327E-03	1.031E-06
165	7	-4.546E-03	2.012E-06
165	8	-5.156E-03	4.748E-06
165	9	2.724E-03	-3.048E-05
166	1	-7.206E-03	0.000E+00
166	2	-7.191E-03	0.000E+00
166	3	2.768E-03	0.000E+00
166	4	-1.485E-02	0.000E+00
166	5	-4.899E-03	0.000E+00
166	6	-4.393E-03	0.000E+00
166	7	-4.615E-03	0.000E+00
166	8	-5.234E-03	0.000E+00

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LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
9	2.753E-03	0.000E+00
1	-7.192E-03	1.245E-05
2	-7.177E-03	1.243E-05
3	2.767E-03	-1.401E-05
4	-1.483E-02	2.594E-05
5	-4.885E-03	-5.043E-07
6	-4.380E-03	-1.393E-06
7	-4.602E-03	-1.001E-06
8	-5.219E-03	8.240E-08
9	2.752E-03	-1.398E-05
1	-7.185E-03	2.516E-05
2	-7.170E-03	2.511E-05
3	2.768E-03	-2.799E-05
4	-1.481E-02	5.232E-05
5	-4.877E-03	-7.822E-07
6	-4.373E-03	-2.578E-06
7	-4.594E-03	-1.789E-06
8	-5.211E-03	4.061E-07
9	2.753E-03	-2.794E-05
1	-7.184E-03	3.854E-05
2	-7.169E-03	3.846E-05
3	2.771E-03	-4.231E-05
4	-1.481E-02	7.995E-05
5	-4.873E-03	-8.272E-07
6	-4.369E-03	-3.558E-06
7	-4.590E-03	-2.354E-06
8	-5.207E-03	9.747E-07
9	2.756E-03	-4.224E-05
1	-7.258E-03	0.000E+00
2	-7.243E-03	0.000E+00
3	2.788E-03	0.000E+00
4	-1.496E-02	0.000E+00
5	-4.935E-03	0.000E+00
6	-4.425E-03	0.000E+00
7	-4.649E-03	0.000E+00
8	-5.272E-03	0.000E+00
9	2.774E-03	0.000E+00
1	-7.248E-03	9.853E-06
2	-7.233E-03	9.836E-06
3	2.788E-03	-1.353E-05
4	-1.494E-02	2.066E-05
5	-4.924E-03	-2.714E-06
6	-4.415E-03	-3.351E-06
7	-4.638E-03	-3.034E-06
8	-5.261E-03	-2.336E-06
9	2.773E-03	-1.352E-05
1	-7.241E-03	1.985E-05
2	-7.226E-03	1.982E-05

DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
72	3	2.789E-03	-2.703E-05
72	4	-1.493E-02	4.156E-05
72	5	-4.915E-03	-5.295E-06
72	6	-4.407E-03	-6.593E-06
72	7	-4.630E-03	-5.958E-06
72	8	-5.252E-03	-4.513E-06
72	9	2.774E-03	-2.700E-05
73	1	-7.236E-03	3.141E-05
73	2	-7.221E-03	3.135E-05
73	3	2.791E-03	-4.074E-05
73	4	-1.492E-02	6.554E-05
73	5	-4.909E-03	-6.549E-06
73	6	-4.401E-03	-8.651E-06
73	7	-4.624E-03	-7.655E-06
73	8	-5.245E-03	-5.244E-06
73	9	2.776E-03	-4.068E-05
74	1	-7.236E-03	4.304E-05
74	2	-7.221E-03	4.296E-05
74	3	2.794E-03	-5.440E-05
74	4	-1.492E-02	8.962E-05
74	5	-4.906E-03	-7.754E-06
74	6	-4.398E-03	-1.068E-05
74	7	-4.621E-03	-9.323E-06
74	8	-5.242E-03	-5.903E-06
74	9	2.779E-03	-5.432E-05
75	1	-7.294E-03	0.000E+00
75	2	-7.279E-03	0.000E-00
75	3	2.805E-03	0.000E+00
75	4	-1.504E-02	0.000E+00
75	5	-4.957E-03	0.000E+00
75	6	-4.444E-03	0.000E+00
175	7	-4.669E-03	0.000E+00
175	8	-5.295E-03	0.000E+00
175	9	2.790E-03	0.000E+00
176	1	-7.286E-03	8.516E-06
176	2	-7.271E-03	8.515E-06
176	3	2.805E-03	-1.314E-05
176	4	-1.502E-02	1.791E-05
176	5	-4.948E-03	-3.746E-06
176	6	-4.436E-03	-4.052E-06
176	7	-4.661E-03	-3.769E-06
176	8	-5.286E-03	-3.720E-06
176	9	2.790E-03	-1.314E-05
177	1	-7.280E-03	1.719E-05
177	2	-7.265E-03	1.718E-05
177	3	2.805E-03	-2.631E-05
177	4	-1.501E-02	3.609E-05
177	5	-4.941E-03	-7.416E-06
177	6	-4.430E-03	-8.061E-06

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E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
7	7	-4.654E-03	-7.493E-06
	8	-5.279E-03	-7.325E-06
	9	2.790E-03	-2.631E-05
8	1	-7.275E-03	2.728E-05
8	2	-7.260E-03	2.726E-05
8	3	2.806E-03	-3.961E-05
8	4	-1.500E-02	5.711E-05
8	5	-4.935E-03	-9.764E-06
78	6	-4.424E-03	-1.103E-05
78	7	-4.649E-03	-1.014E-05
78	8	-5.274E-03	-9.316E-06
78	9	2.791E-03	-3.959E-05
79	1	-7.273E-03	3.750E-05
79	2	-7.258E-03	3.746E-05
79	3	2.808E-03	-5.295E-05
79	4	-1.499E-02	7.835E-05
79	5	-4.931E-03	-1.206E-05
79	6	-4.420E-03	-1.399E-05
79	7	-4.645E-03	-1.278E-05
79	8	-5.269E-03	-1.122E-05
79	9	2.793E-03	-5.291E-05
80	1	-7.273E-03	4.821E-05
80	2	-7.259E-03	4.815E-05
80	3	2.811E-03	-6.610E-05
	4	-1.499E-02	1.004E-04
	5	-4.929E-03	-1.375E-05
80	6	-4.418E-03	-1.647E-05
80	7	-4.642E-03	-1.493E-05
80	8	-5.267E-03	-1.237E-05
180	9	2.796E-03	-6.603E-05
181	1	-7.316E-03	0.000E+00
181	2	-7.301E-03	0.000E+00
181	3	2.818E-03	0.000E+00
181	4	-1.508E-02	0.000E+00
181	5	-4.966E-03	0.000E+00
181	6	-4.454E-03	0.000E+00
181	7	-4.679E-03	0.000E+00
181	8	-5.303E-03	0.000E+00
181	9	2.803E-03	0.000E+00
182	1	-7.312E-03	7.097E-06
182	2	-7.297E-03	7.116E-06
182	3	2.818E-03	-1.179E-05
182	4	-1.507E-02	1.489E-05
182	5	-4.962E-03	-4.020E-06
182	6	-4.450E-03	-3.900E-06
182	7	-4.675E-03	-3.653E-06
182	8	-5.299E-03	-4.453E-06
	9	2.803E-03	-1.181E-05

LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
1	-7.308E-03	1.452E-05
2	-7.293E-03	1.456E-05
3	2.819E-03	-2.395E-05
4	-1.507E-02	3.041E-05
5	-4.957E-03	-8.113E-06
6	-4.445E-03	-7.876E-06
7	-4.671E-03	-7.374E-06
8	-5.296E-03	-8.985E-06
9	2.804E-03	-2.399E-05
1	-7.305E-03	2.347E-05
2	-7.290E-03	2.350E-05
3	2.820E-03	-3.649E-05
4	-1.506E-02	4.903E-05
5	-4.954E-03	-1.096E-05
6	-4.441E-03	-1.101E-05
7	-4.666E-03	-1.022E-05
8	-5.293E-03	-1.184E-05
9	2.805E-03	-3.653E-05
1	-7.303E-03	3.269E-05
2	-7.288E-03	3.273E-05
3	2.821E-03	-4.928E-05
4	-1.506E-02	6.817E-05
5	-4.950E-03	-1.384E-05
6	-4.437E-03	-1.419E-05
7	-4.662E-03	-1.309E-05
8	-5.290E-03	-1.472E-05
9	2.806E-03	-4.932E-05
1	-7.301E-03	4.250E-05
2	-7.286E-03	4.251E-05
3	2.822E-03	-6.214E-05
4	-1.505E-02	8.857E-05
5	-4.948E-03	-1.608E-05
6	-4.434E-03	-1.720E-05
7	-4.659E-03	-1.580E-05
8	-5.288E-03	-1.642E-05
9	2.807E-03	-6.215E-05
1	-7.301E-03	5.254E-05
2	-7.286E-03	5.253E-05
3	2.824E-03	-7.521E-05
4	-1.505E-02	1.093E-04
5	-4.946E-03	-1.835E-05
6	-4.432E-03	-2.024E-05
7	-4.657E-03	-1.853E-05
8	-5.287E-03	-1.814E-05
9	2.809E-03	-7.520E-05
1	-7.332E-03	0.000E+00
2	-7.317E-03	0.000E+00
3	2.831E-03	0.000E+00
4	-1.511E-02	0.000E+00

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3	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
8	5	-4.969E-03	0.000E+00
8	6	-4.459E-03	0.000E+00
	7	-4.685E-03	0.000E+00
	8	-5.303E-03	0.000E+00
8	9	2.816E-03	0.000E+00
9	1	-7.331E-03	7.454E-06
9	2	-7.317E-03	7.485E-06
9	3	2.831E-03	-1.294E-05
9	4	-1.511E-02	1.562E-05
9	5	-4.968E-03	-4.807E-06
9	6	-4.458E-03	-4.486E-06
9	7	-4.684E-03	-4.221E-06
9	8	-5.303E-03	-5.499E-06
9	9	2.816E-03	-1.297E-05
0	1	-7.330E-03	1.584E-05
0	2	-7.315E-03	1.589E-05
0	3	2.832E-03	-2.584E-05
0	4	-1.511E-02	3.310E-05
0	5	-4.966E-03	-8.639E-06
0	6	-4.455E-03	-8.239E-06
0	7	-4.681E-03	-7.689E-06
0	8	-5.303E-03	-9.761E-06
0	9	2.817E-03	-2.589E-05
1	1	-7.328E-03	2.450E-05
	2	-7.313E-03	2.457E-05
	3	2.833E-03	-3.876E-05
1	4	-1.511E-02	5.100E-05
1	5	-4.965E-03	-1.234E-05
1	6	-4.451E-03	-1.175E-05
1	7	-4.677E-03	-1.090E-05
1	8	-5.304E-03	-1.403E-05
1	9	2.818E-03	-3.883E-05
92	1	-7.326E-03	3.382E-05
92	2	-7.311E-03	3.388E-05
92	3	2.834E-03	-5.179E-05
92	4	-1.510E-02	7.042E-05
2	5	-4.963E-03	-1.525E-05
2	6	-4.447E-03	-1.521E-05
2	7	-4.673E-03	-1.407E-05
2	8	-5.305E-03	-1.665E-05
92	9	2.819E-03	-5.185E-05
93	1	-7.325E-03	4.347E-05
93	2	-7.309E-03	4.352E-05
93	3	2.835E-03	-6.486E-05
93	4	-1.510E-02	9.038E-05
93	5	-4.961E-03	-1.801E-05
93	6	-4.443E-03	-1.836E-05
93	7	-4.669E-03	-1.691E-05
	8	-5.306E-03	-1.930E-05

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NE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
93	9	2.820E-03	-6.492E-05
94	1	-7.323E-03	5.293E-05
94	2	-7.308E-03	5.293E-05
94	3	2.836E-03	-7.780E-05
94	4	-1.510E-02	1.102E-04
94	5	-4.960E-03	-2.049E-05
94	6	-4.440E-03	-2.220E-05
94	7	-4.666E-03	-2.047E-05
94	8	-5.306E-03	-2.053E-05
94	9	2.820E-03	-7.780E-05
95	1	-7.353E-03	0.000E+00
95	2	-7.339E-03	0.000E+00
95	3	2.843E-03	0.000E+00
95	4	-1.515E-02	0.000E+00
95	5	-4.976E-03	0.000E+00
95	6	-4.470E-03	0.000E+00
95	7	-4.697E-03	0.000E+00
95	8	-5.305E-03	0.000E+00
95	9	2.829E-03	0.000E+00
96	1	-7.352E-03	6.107E-06
96	2	-7.338E-03	6.056E-06
96	3	2.844E-03	-1.296E-05
96	4	-1.515E-02	1.351E-05
96	5	-4.976E-03	-5.507E-06
96	6	-4.468E-03	-6.678E-06
96	7	-4.695E-03	-6.485E-06
96	8	-5.307E-03	-4.353E-06
96	9	2.829E-03	-1.291E-05
197	1	-7.353E-03	1.249E-05
197	2	-7.338E-03	1.240E-05
197	3	2.845E-03	-2.581E-05
197	4	-1.516E-02	2.740E-05
197	5	-4.976E-03	-1.081E-05
197	6	-4.467E-03	-1.291E-05
197	7	-4.694E-03	-1.251E-05
197	8	-5.309E-03	-8.804E-06
197	9	2.830E-03	-2.572E-05
198	1	-7.351E-03	2.012E-05
198	2	-7.336E-03	1.999E-05
198	3	2.846E-03	-3.869E-05
198	4	-1.515E-02	4.367E-05
198	5	-4.975E-03	-1.501E-05
198	6	-4.462E-03	-1.803E-05
198	7	-4.688E-03	-1.739E-05
198	8	-5.314E-03	-1.220E-05
198	9	2.831E-03	-3.857E-05
199	1	-7.350E-03	2.937E-05
199	2	-7.335E-03	2.825E-05

E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
9	3	2.848E-03	-5.146E-05
9	4	-1.515E-02	6.087E-05
[illegible]	5	-4.975E-03	-1.883E-05
[illegible]	6	-4.456E-03	-2.214E-05
9	7	-4.682E-03	-2.123E-05
9	8	-5.320E-03	-1.600E-05
9	9	2.833E-03	-5.133E-05
10	1	-7.347E-03	3.750E-05
10	2	-7.331E-03	3.732E-05
10	3	2.850E-03	-6.465E-05
10	4	-1.515E-02	8.021E-05
10	5	-4.973E-03	-2.176E-05
10	6	-4.448E-03	-2.652E-05
10	7	-4.674E-03	-2.534E-05
10	8	-5.326E-03	-1.754E-05
10	9	2.834E-03	-6.447E-05
11	1	-7.343E-03	4.738E-05
11	2	-7.327E-03	4.717E-05
11	3	2.850E-03	-7.782E-05
11	4	-1.514E-02	1.006E-04
11	5	-4.971E-03	-2.432E-05
11	6	-4.440E-03	-2.980E-05
11	7	-4.667E-03	-2.832E-05
11	8	-5.331E-03	-1.959E-05
11	9	2.834E-03	-7.761E-05
[illegible]	1	-7.366E-03	0.000E+00
12	2	-7.351E-03	0.000E+00
12	3	2.853E-03	0.000E+00
12	4	-1.518E-02	0.000E+00
12	5	-4.980E-03	0.000E+00
12	6	-4.473E-03	0.000E+00
12	7	-4.701E-03	0.000E+00
12	8	-5.309E-03	0.000E+00
12	9	2.839E-03	0.000E+00
13	1	-7.368E-03	1.082E-06
13	2	-7.353E-03	7.221E-07
13	3	2.853E-03	-1.355E-05
13	4	-1.518E-02	5.822E-06
13	5	-4.981E-03	-8.453E-06
13	6	-4.476E-03	-1.528E-05
13	7	-4.704E-03	-1.535E-05
13	8	-5.308E-03	-3.068E-07
13	9	2.839E-03	-1.319E-05
14	1	-7.368E-03	3.402E-06
14	2	-7.353E-03	2.731E-06
14	3	2.855E-03	-2.674E-05
14	4	-1.519E-02	1.362E-05
[illegible]	5	-4.982E-03	-1.584E-05
[illegible]	6	-4.473E-03	-2.861E-05

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LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
7	-4.700E-03	-2.870E-05
8	-5.315E-03	-6.753E-07
9	2.840E-03	-2.607E-05
1	-7.371E-03	6.238E-06
2	-7.356E-03	5.308E-06
3	2.857E-03	-3.957E-05
4	-1.519E-02	2.197E-05
5	-4.985E-03	-2.290E-05
6	-4.473E-03	-4.063E-05
7	-4.700E-03	-4.071E-05
8	-5.321E-03	-1.885E-06
9	2.842E-03	-3.864E-05
1	-7.371E-03	1.263E-05
2	-7.355E-03	1.155E-05
3	2.860E-03	-5.208E-05
4	-1.520E-02	3.655E-05
5	-4.986E-03	-2.708E-05
6	-4.464E-03	-4.782E-05
7	-4.691E-03	-4.774E-05
8	-5.333E-03	-2.707E-06
9	2.844E-03	-5.100E-05
1	-7.369E-03	2.021E-05
2	-7.353E-03	1.909E-05
3	2.864E-03	-6.402E-05
4	-1.520E-02	5.257E-05
5	-4.985E-03	-3.055E-05
6	-4.452E-03	-5.226E-05
7	-4.679E-03	-5.194E-05
8	-5.347E-03	-5.307E-06
9	2.848E-03	-6.291E-05
1	-7.361E-03	2.985E-05
2	-7.344E-03	2.855E-05
3	2.866E-03	-7.808E-05
4	-1.519E-02	7.384E-05
5	-4.983E-03	-3.279E-05
6	-4.433E-03	-5.823E-05
7	-4.660E-03	-5.767E-05
8	-5.364E-03	-3.426E-06
9	2.849E-03	-7.678E-05
1	-7.369E-03	0.000E+00
2	-7.354E-03	0.000E+00
3	2.863E-03	0.000E+00
4	-1.519E-02	0.000E+00
5	-4.977E-03	0.000E+00
6	-4.462E-03	0.000E+00
7	-4.690E-03	0.000E+00
8	-5.315E-03	0.000E+00
9	2.848E-03	0.000E+00

	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
0	1	-7.369E-03	-6.459E-06
0	2	-7.354E-03	-7.532E-06
[illegible]	3	2.864E-03	-1.651E-05
[illegible]	4	-1.519E-02	-3.733E-06
0	5	-4.977E-03	-1.271E-05
0	6	-4.461E-03	-3.270E-05
0	7	-4.688E-03	-3.325E-05
0	8	-5.319E-03	1.152E-05
0	9	2.849E-03	-1.544E-05
1	1	-7.376E-03	-1.307E-05
1	2	-7.361E-03	-1.520E-05
1	3	2.864E-03	-3.270E-05
1	4	-1.520E-02	-7.957E-06
1	5	-4.983E-03	-2.545E-05
1	6	-4.469E-03	-6.519E-05
1	7	-4.697E-03	-6.630E-05
1	8	-5.321E-03	2.276E-05
1	9	2.849E-03	-3.056E-05
2	1	-7.382E-03	-1.757E-05
2	2	-7.367E-03	-2.063E-05
2	3	2.866E-03	-4.757E-05
2	4	-1.522E-02	-9.108E-06
2	5	-4.990E-03	-3.604E-05
2	6	-4.472E-03	-9.309E-05
2	7	-4.699E-03	-9.465E-05
[illegible]	8	-5.332E-03	3.311E-05
[illegible]	9	2.851E-03	-4.451E-05
3	1	-7.395E-03	-2.189E-05
3	2	-7.380E-03	-2.577E-05
3	3	2.869E-03	-6.102E-05
3	4	-1.525E-02	-1.080E-05
13	5	-5.001E-03	-4.604E-05
13	6	-4.481E-03	-1.184E-04
13	7	-4.709E-03	-1.204E-04
13	8	-5.345E-03	4.174E-05
13	9	2.854E-03	-5.713E-05
14	1	-7.401E-03	-1.740E-05
14	2	-7.385E-03	-2.169E-05
14	3	2.877E-03	-7.154E-05
14	4	-1.527E-02	1.922E-06
14	5	-5.008E-03	-4.792E-05
14	6	-4.471E-03	-1.281E-04
14	7	-4.699E-03	-1.301E-04
14	8	-5.372E-03	4.910E-05
14	9	2.861E-03	-6.725E-05
15	1	-7.394E-03	-8.634E-06
15	2	-7.376E-03	-1.291E-05
[illegible]	3	2.893E-03	-7.785E-05
[illegible]	4	-1.527E-02	1.983E-05

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LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
5	-5.002E-03	-4.510E-05
6	-4.429E-03	-1.253E-04
7	-4.656E-03	-1.270E-04
8	-5.411E-03	5.162E-05
9	2.875E-03	-7.357E-05
1	-7.363E-03	0.000E+00
2	-7.347E-03	0.000E+00
3	2.870E-03	0.000E+00
4	-1.518E-02	0.000E+00
5	-4.970E-03	0.000E+00
6	-4.442E-03	0.000E+00
7	-4.669E-03	0.000E+00
8	-5.325E-03	0.000E+00
9	2.855E-03	0.000E+00
1	-7.365E-03	-8.561E-06
2	-7.349E-03	-1.001E-05
3	2.870E-03	-1.919E-05
4	-1.519E-02	-4.891E-06
5	-4.972E-03	-1.407E-05
6	-4.446E-03	-4.108E-05
7	-4.673E-03	-4.183E-05
8	-5.325E-03	1.867E-05
9	2.854E-03	-1.774E-05
1	-7.371E-03	-1.773E-05
2	-7.355E-03	-2.068E-05
3	2.871E-03	-3.859E-05
4	-1.520E-02	-1.072E-05
5	-4.978E-03	-2.863E-05
6	-4.450E-03	-8.361E-05
7	-4.678E-03	-8.515E-05
8	-5.331E-03	3.807E-05
9	2.855E-03	-3.564E-05
1	-7.383E-03	-2.872E-05
2	-7.367E-03	-3.329E-05
3	2.870E-03	-5.851E-05
4	-1.522E-02	-1.944E-05
5	-4.988E-03	-4.466E-05
6	-4.466E-03	-1.296E-04
7	-4.693E-03	-1.320E-04
8	-5.336E-03	5.849E-05
9	2.855E-03	-5.395E-05
1	-7.397E-03	-4.067E-05
2	-7.381E-03	-4.691E-05
3	2.875E-03	-7.844E-05
4	-1.525E-02	-2.973E-05
5	-5.001E-03	-6.126E-05
6	-4.473E-03	-1.773E-04
7	-4.701E-03	-1.807E-04
8	-5.356E-03	7.973E-05

LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
9	2.859E-03	-7.220E-05
1	-7.426E-03	-5.693E-05
2	-7.411E-03	-6.493E-05
3	2.876E-03	-9.748E-05
4	-1.531E-02	-4.817E-05
5	-5.028E-03	-8.072E-05
6	-4.505E-03	-2.295E-04
7	-4.734E-03	-2.339E-04
8	-5.374E-03	1.001E-04
9	2.860E-03	-8.947E-05
1	-7.431E-03	-4.276E-05
2	-7.412E-03	-5.155E-05
3	2.915E-03	-1.133E-04
4	-1.535E-02	-1.266E-05
5	-5.025E-03	-7.445E-05
6	-4.436E-03	-2.384E-04
7	-4.664E-03	-2.427E-04
8	-5.452E-03	1.241E-04
9	2.897E-03	-1.045E-04
1	-7.355E-03	0.000E+00
2	-7.339E-03	0.000E+00
3	2.878E-03	0.000E+00
4	-1.518E-02	0.000E+00
5	-4.962E-03	0.000E+00
6	-4.419E-03	0.000E+00
7	-4.646E-03	0.000E+00
8	-5.336E-03	0.000E+00
9	2.862E-03	0.000E+00
1	-7.358E-03	-7.528E-06
2	-7.341E-03	-9.172E-06
3	2.878E-03	-2.079E-05
4	-1.518E-02	-1.189E-06
5	-4.965E-03	-1.281E-05
6	-4.422E-03	-4.350E-05
7	-4.648E-03	-4.429E-05
8	-5.338E-03	2.433E-05
9	2.862E-03	-1.915E-05
1	-7.363E-03	-1.599E-05
2	-7.347E-03	-1.939E-05
3	2.879E-03	-4.253E-05
4	-1.519E-02	-3.440E-06
5	-4.969E-03	-2.657E-05
6	-4.427E-03	-9.006E-05
7	-4.653E-03	-9.170E-05
8	-5.342E-03	5.028E-05
9	2.863E-03	-3.913E-05
1	-7.375E-03	-2.754E-05
2	-7.358E-03	-3.308E-05

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	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
5	3	2.881E-03	-6.777E-05
5	4	-1.522E-02	-8.977E-06
5	5	-4.980E-03	-4.367E-05
5	6	-4.437E-03	-1.470E-04
5	7	-4.664E-03	-1.497E-04
5	8	-5.353E-03	8.151E-05
5	9	2.864E-03	-6.223E-05
7	1	-7.392E-03	-4.454E-05
7	2	-7.375E-03	-5.283E-05
7	3	2.883E-03	-9.863E-05
7	4	-1.525E-02	-2.066E-05
7	5	-4.995E-03	-6.647E-05
7	6	-4.452E-03	-2.210E-04
7	7	-4.680E-03	-2.252E-04
7	8	-5.366E-03	1.208E-04
7	9	2.867E-03	-9.034E-05
8	1	-7.429E-03	-7.354E-05
8	2	-7.412E-03	-8.600E-05
8	3	2.893E-03	-1.436E-04
8	4	-1.533E-02	-4.527E-05
8	5	-5.025E-03	-1.028E-04
8	6	-4.479E-03	-3.349E-04
8	7	-4.708E-03	-3.415E-04
8	8	-5.399E-03	1.787E-04
8	9	2.876E-03	-1.311E-04
29	1	-7.523E-03	-1.305E-04
29	2	-7.507E-03	-1.501E-04
29	3	2.917E-03	-2.175E-04
29	4	-1.552E-02	-1.021E-04
29	5	-5.099E-03	-1.694E-04
29	6	-4.550E-03	-5.350E-04
29	7	-4.782E-03	-5.458E-04
29	8	-5.473E-03	2.747E-04
29	9	2.900E-03	-1.978E-04
30	1	-7.350E-03	0.000E+00
30	2	-7.333E-03	0.000E+00
30	3	2.885E-03	0.000E+00
30	4	-1.517E-02	0.000E+00
30	5	-4.957E-03	0.000E+00
30	6	-4.402E-03	0.000E+00
30	7	-4.628E-03	0.000E+00
30	8	-5.346E-03	0.000E+00
30	9	2.867E-03	0.000E+00
231	1	-7.352E-03	-4.382E-06
231	2	-7.334E-03	-5.910E-06
231	3	2.885E-03	-1.968E-05
231	4	-1.517E-02	4.301E-06
231	5	-4.958E-03	-9.475E-06
231	6	-4.402E-03	-3.809E-05

	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
	7	-4.629E-03	-3.873E-05
	8	-5.347E-03	2.506E-05
	9	2.868E-03	-1.816E-05
2	1	-7.358E-03	-8.882E-06
2	2	-7.341E-03	-1.201E-05
2	3	2.886E-03	-4.002E-05
2	4	-1.519E-02	8.829E-06
2	5	-4.964E-03	-1.918E-05
2	6	-4.409E-03	-7.775E-05
2	7	-4.635E-03	-7.907E-05
2	8	-5.353E-03	5.150E-05
2	9	2.869E-03	-3.689E-05
3	1	-7.367E-03	-1.381E-05
3	2	-7.350E-03	-1.868E-05
3	3	2.889E-03	-6.175E-05
3	4	-1.521E-02	1.358E-05
3	5	-4.972E-03	-2.949E-05
3	6	-4.413E-03	-1.207E-04
3	7	-4.639E-03	-1.227E-04
3	8	-5.364E-03	8.060E-05
3	9	2.872E-03	-5.688E-05
4	1	-7.387E-03	-1.871E-05
4	2	-7.370E-03	-2.549E-05
4	3	2.890E-03	-8.535E-05
	4	-1.525E-02	1.961E-05
	5	-4.990E-03	-4.024E-05
4	6	-4.435E-03	-1.671E-04
4	7	-4.662E-03	-1.700E-04
4	8	-5.376E-03	1.129E-04
4	9	2.873E-03	-7.857E-05
5	1	-7.412E-03	-2.125E-05
35	2	-7.394E-03	-3.016E-05
35	3	2.901E-03	-1.120E-04
35	4	-1.530E-02	3.225E-05
35	5	-5.009E-03	-4.964E-05
35	6	-4.444E-03	-2.166E-04
35	7	-4.672E-03	-2.202E-04
35	8	-5.406E-03	1.517E-04
35	9	2.883E-03	-1.031E-04
36	1	-7.484E-03	-3.672E-05
36	2	-7.470E-03	-4.669E-05
36	3	2.878E-03	-1.216E-04
36	4	-1.542E-02	9.383E-06
36	5	-5.076E-03	-6.560E-05
36	6	-4.572E-03	-2.518E-04
36	7	-4.803E-03	-2.563E-04
36	8	-5.399E-03	1.595E-04
	9	2.864E-03	-1.117E-04

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E167

ODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
237	1	-7.345E-03	0.000E+00
237	2	-7.327E-03	0.000E+00
237	3	2.891E-03	0.000E+00
237	4	-1.517E-02	0.000E+00
237	5	-4.952E-03	0.000E+00
237	6	-4.384E-03	0.000E+00
237	7	-4.610E-03	0.000E+00
237	8	-5.355E-03	0.000E+00
237	9	2.873E-03	0.000E+00
238	1	-7.348E-03	-5.597E-07
238	2	-7.331E-03	-1.839E-06
238	3	2.889E-03	-1.726E-05
238	4	-1.517E-02	1.004E-05
238	5	-4.955E-03	-5.384E-06
238	6	-4.390E-03	-2.945E-05
238	7	-4.616E-03	-2.988E-05
238	8	-5.355E-03	2.353E-05
238	9	2.872E-03	-1.598E-05
239	1	-7.353E-03	-6.990E-07
239	2	-7.335E-03	-3.261E-06
239	3	2.892E-03	-3.454E-05
239	4	-1.518E-02	2.089E-05
239	5	-4.959E-03	-1.038E-05
239	6	-4.391E-03	-5.858E-05
239	7	-4.617E-03	-5.944E-05
239	8	-5.362E-03	4.752E-05
239	9	2.874E-03	-3.198E-05
240	1	-7.365E-03	9.443E-08
240	2	-7.347E-03	-3.624E-06
240	3	2.891E-03	-5.036E-05
240	4	-1.520E-02	3.247E-05
240	5	-4.970E-03	-1.426E-05
240	6	-4.406E-03	-8.425E-05
240	7	-4.632E-03	-8.548E-05
240	8	-5.368E-03	6.978E-05
240	9	2.873E-03	-4.664E-05
241	1	-7.381E-03	2.632E-06
241	2	-7.364E-03	-2.165E-06
241	3	2.894E-03	-6.549E-05
241	4	-1.524E-02	4.689E-05
241	5	-4.984E-03	-1.642E-05
241	6	-4.420E-03	-1.068E-04
241	7	-4.647E-03	-1.083E-04
241	8	-5.381E-03	9.291E-05
241	9	2.876E-03	-6.069E-05
242	1	-7.407E-03	5.282E-06
242	2	-7.390E-03	-1.125E-07
242	3	2.889E-03	-7.460E-05
242	4	-1.528E-02	5.741E-05

E168

LOAD COMB		X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
	5	-5.008E-03	-1.707E-05
	6	-4.459E-03	-1.187E-04
	7	-4.687E-03	-1.203E-04
	8	-5.386E-03	1.048E-04
	9	2.872E-03	-6.920E-05
	1	-7.440E-03	1.188E-05
	2	-7.426E-03	6.400E-06
	3	2.872E-03	-7.830E-05
	4	-1.533E-02	7.176E-05
	5	-5.041E-03	-1.293E-05
	6	-4.529E-03	-1.165E-04
	7	-4.758E-03	-1.180E-04
	8	-5.373E-03	1.110E-04
	9	2.857E-03	-7.281E-05
4	1	-7.334E-03	0.000E+00
4	2	-7.315E-03	0.000E+00
4	3	2.895E-03	0.000E+00
4	4	-1.515E-02	0.000E+00
4	5	-4.943E-03	0.000E+00
4	6	-4.362E-03	0.000E+00
4	7	-4.587E-03	0.000E+00
4	8	-5.364E-03	0.000E+00
4	9	2.876E-03	0.000E+00
5	1	-7.334E-03	7.094E-06
	2	-7.316E-03	6.717E-06
	3	2.896E-03	-7.759E-06
5	4	-1.515E-02	1.825E-05
5	5	-4.944E-03	3.778E-06
5	6	-4.360E-03	-3.561E-06
5	7	-4.586E-03	-3.448E-06
5	8	-5.366E-03	1.230E-05
5	9	2.877E-03	-7.382E-06
46	1	-7.341E-03	1.432E-05
46	2	-7.323E-03	1.362E-05
46	3	2.893E-03	-1.474E-05
46	4	-1.516E-02	3.620E-05
6	5	-4.951E-03	7.826E-06
6	6	-4.374E-03	-5.843E-06
6	7	-4.600E-03	-5.598E-06
6	8	-5.365E-03	2.367E-05
46	9	2.874E-03	-1.404E-05
47	1	-7.350E-03	2.188E-05
47	2	-7.331E-03	2.089E-05
47	3	2.891E-03	-2.128E-05
47	4	-1.518E-02	5.443E-05
47	5	-4.958E-03	1.225E-05
47	6	-4.386E-03	-7.064E-06
	7	-4.612E-03	-6.667E-06
	8	-5.367E-03	3.459E-05

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NODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
247	9	2.873E-03	-2.029E-05
248	1	-7.362E-03	2.880E-05
248	2	-7.345E-03	2.767E-05
248	3	2.884E-03	-2.580E-05
248	4	-1.520E-02	7.004E-05
248	5	-4.971E-03	1.657E-05
248	6	-4.413E-03	-5.705E-06
248	7	-4.639E-03	-5.132E-06
248	8	-5.363E-03	4.218E-05
248	9	2.867E-03	-2.467E-05
249	1	-7.375E-03	3.628E-05
249	2	-7.359E-03	3.508E-05
249	3	2.877E-03	-2.936E-05
249	4	-1.522E-02	8.605E-05
249	5	-4.984E-03	2.160E-05
249	6	-4.440E-03	-2.099E-06
249	7	-4.668E-03	-1.305E-06
249	8	-5.358E-03	4.863E-05
249	9	2.861E-03	-2.817E-05
250	1	-7.386E-03	4.013E-05
250	2	-7.371E-03	3.883E-05
250	3	2.866E-03	-3.241E-05
250	4	-1.523E-02	9.487E-05
250	5	-4.997E-03	2.362E-05
250	6	-4.473E-03	-2.215E-06
250	7	-4.701E-03	-1.335E-06
250	8	-5.346E-03	5.307E-05
250	9	2.851E-03	-3.111E-05
251	1	-7.320E-03	0.000E+00
251	2	-7.302E-03	0.000E+00
251	3	2.891E-03	0.000E+00
251	4	-1.512E-02	0.000E+00
251	5	-4.934E-03	0.000E+00
251	6	-4.350E-03	0.000E+00
251	7	-4.575E-03	0.000E+00
251	8	-5.358E-03	0.000E+00
251	9	2.873E-03	0.000E+00
252	1	-7.323E-03	1.201E-05
252	2	-7.305E-03	1.216E-05
252	3	2.889E-03	-2.276E-06
252	4	-1.513E-02	2.393E-05
252	5	-4.937E-03	9.498E-06
252	6	-4.357E-03	1.179E-05
252	7	-4.582E-03	1.223E-05
252	8	-5.357E-03	6.267E-06
252	9	2.871E-03	-2.419E-06
253	1	-7.327E-03	2.365E-05
253	2	-7.309E-03	2.393E-05

DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
253	3	2.888E-03	-4.439E-06
253	4	-1.513E-02	4.704E-05
[illegible]	5	-4.941E-03	1.867E-05
[illegible]	6	-4.364E-03	2.322E-05
253	7	-4.589E-03	2.409E-05
253	8	-5.357E-03	1.227E-05
253	9	2.870E-03	-4.723E-06
254	1	-7.335E-03	3.410E-05
254	2	-7.318E-03	3.453E-05
254	3	2.883E-03	-6.051E-06
254	4	-1.515E-02	6.747E-05
254	5	-4.950E-03	2.688E-05
254	6	-4.382E-03	3.399E-05
254	7	-4.608E-03	3.525E-05
254	8	-5.353E-03	1.701E-05
254	9	2.865E-03	-6.488E-06
255	1	-7.344E-03	4.350E-05
255	2	-7.327E-03	4.407E-05
255	3	2.878E-03	-7.629E-06
255	4	-1.516E-02	8.588E-05
255	5	-4.959E-03	3.417E-05
255	6	-4.402E-03	4.349E-05
255	7	-4.628E-03	4.511E-05
255	8	-5.349E-03	2.127E-05
255	9	2.860E-03	-8.200E-06
[illegible]	1	-7.353E-03	5.045E-05
256	2	-7.337E-03	5.109E-05
256	3	2.870E-03	-9.346E-06
256	4	-1.517E-02	9.969E-05
256	5	-4.969E-03	3.925E-05
256	6	-4.426E-03	4.959E-05
256	7	-4.652E-03	5.146E-05
256	8	-5.342E-03	2.484E-05
256	9	2.853E-03	-9.984E-06
257	1	-7.360E-03	5.670E-05
257	2	-7.344E-03	5.737E-05
257	3	2.862E-03	-1.120E-05
257	4	-1.518E-02	1.122E-04
257	5	-4.977E-03	4.366E-05
257	6	-4.447E-03	5.449E-05
257	7	-4.674E-03	5.657E-05
257	8	-5.334E-03	2.842E-05
257	9	2.847E-03	-1.188E-05
258	1	-7.608E-03	-5.966E-03
258	2	-7.592E-03	-5.986E-03
258	3	2.885E-03	1.128E-03
258	4	-1.563E-02	-1.200E-02
[illegible]	5	-5.161E-03	-4.893E-03
[illegible]	6	-4.628E-03	-6.182E-03

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LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
7	-4.858E-03	-5.276E-03
8	-5.518E-03	-4.440E-03
9	2.869E-03	1.148E-03
1	-7.563E-03	-3.032E-03
2	-7.547E-03	-3.053E-03
3	2.907E-03	4.582E-04
4	-1.558E-02	-6.030E-03
5	-5.127E-03	-2.518E-03
6	-4.583E-03	-3.370E-03
7	-4.813E-03	-2.924E-03
8	-5.497E-03	-2.040E-03
9	2.890E-03	4.794E-04
1	-7.506E-03	2.640E-03
2	-7.489E-03	2.614E-03
3	2.934E-03	-1.005E-03
4	-1.551E-02	5.665E-03
5	-5.088E-03	2.045E-03
6	-4.532E-03	2.017E-03
7	-4.768E-03	1.547E-03
8	-5.466E-03	2.633E-03
9	2.917E-03	-9.793E-04
1	-7.474E-03	5.432E-03
2	-7.456E-03	5.403E-03
3	2.960E-03	-1.814E-03
4	-1.548E-02	1.149E-02
5	-5.063E-03	4.275E-03
6	-4.490E-03	4.637E-03
7	-4.732E-03	3.705E-03
8	-5.455E-03	4.949E-03
9	2.942E-03	-1.784E-03
1	-2.074E-02	-6.341E-03
2	-2.072E-02	-6.371E-03
3	6.262E-03	5.277E-04
4	-4.271E-02	-1.221E-02
5	-1.572E-02	-5.314E-03
6	-1.710E-02	-6.770E-03
7	-1.522E-02	-5.888E-03
8	-1.632E-02	-4.635E-03
9	6.236E-03	5.577E-04
1	-2.071E-02	-3.535E-03
2	-2.069E-02	-3.568E-03
3	6.287E-03	-1.862E-04
4	-4.268E-02	-6.434E-03
5	-1.570E-02	-3.052E-03
6	-1.706E-02	-4.098E-03
7	-1.518E-02	-3.668E-03
8	-1.631E-02	-2.324E-03
9	6.260E-03	-1.540E-04

E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
4	1	-2.066E-02	-7.422E-04
4	2	-2.063E-02	-7.766E-04
[illegible]	3	6.314E-03	-8.991E-04
[illegible]	4	-4.261E-02	-6.775E-04
4	5	-1.566E-02	-7.999E-04
4	6	-1.700E-02	-1.436E-03
4	7	-1.512E-02	-1.457E-03
4	8	-1.629E-02	-2.343E-05
4	9	6.286E-03	-8.647E-04
5	1	-2.061E-02	2.024E-03
5	2	-2.058E-02	1.988E-03
5	3	6.344E-03	-1.613E-03
5	4	-4.255E-02	5.030E-03
5	5	-1.562E-02	1.429E-03
5	6	-1.695E-02	1.193E-03
5	7	-1.507E-02	7.237E-04
5	8	-1.627E-02	2.262E-03
5	9	6.316E-03	-1.576E-03
6	1	-2.055E-02	4.814E-03
6	2	-2.053E-02	4.775E-03
6	3	6.360E-03	-2.335E-03
6	4	-4.247E-02	1.078E-02
6	5	-1.558E-02	3.676E-03
6	6	-1.689E-02	3.845E-03
6	7	-1.501E-02	2.922E-03
[illegible]	8	-1.624E-02	4.566E-03
[illegible]	9	6.330E-03	-2.296E-03
7	1	-3.331E-02	-6.519E-03
7	2	-3.328E-02	-6.562E-03
7	3	9.479E-03	-2.082E-04
7	4	-6.863E-02	-1.195E-02
7	5	-2.587E-02	-5.604E-03
67	6	-2.908E-02	-7.234E-03
67	7	-2.516E-02	-6.411E-03
67	8	-2.671E-02	-4.653E-03
67	9	9.442E-03	-1.661E-04
3	1	-3.326E-02	-3.884E-03
3	2	-3.322E-02	-3.928E-03
3	3	9.500E-03	-8.756E-04
3	4	-6.855E-02	-6.522E-03
3	5	-2.583E-02	-3.469E-03
3	6	-2.902E-02	-4.707E-03
3	7	-2.511E-02	-4.316E-03
3	8	-2.668E-02	-2.470E-03
3	9	9.462E-03	-8.314E-04
3	1	-3.322E-02	-1.260E-03
3	2	-3.319E-02	-1.306E-03
3	3	9.526E-03	-1.540E-03
[illegible]	4	-6.852E-02	-1.108E-03

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E173

E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
69	5	-2.580E-02	-1.342E-03
69	6	-2.898E-02	-2.190E-03
69	7	-2.506E-02	-2.229E-03
69	8	-2.666E-02	-2.955E-04
69	9	9.488E-03	-1.494E-03
70	1	-3.315E-02	1.345E-03
70	2	-3.311E-02	1.297E-03
70	3	9.541E-03	-2.198E-03
70	4	-6.840E-02	4.264E-03
70	5	-2.574E-02	7.692E-04
70	6	-2.891E-02	3.094E-04
70	7	-2.500E-02	-1.564E-04
70	8	-2.662E-02	1.861E-03
70	9	9.502E-03	-2.149E-03
71	1	-3.310E-02	3.976E-03
71	2	-3.306E-02	3.926E-03
71	3	9.561E-03	-2.863E-03
71	4	-6.832E-02	9.691E-03
71	5	-2.570E-02	2.901E-03
71	6	-2.885E-02	2.833E-03
71	7	-2.494E-02	1.936E-03
71	8	-2.659E-02	4.040E-03
71	9	9.521E-03	-2.812E-03
72	1	-4.488E-02	-6.506E-03
72	2	-4.483E-02	-6.560E-03
72	3	1.237E-02	-1.003E-03
72	4	-9.249E-02	-1.130E-02
72	5	-3.527E-02	-5.751E-03
72	6	-4.023E-02	-7.535E-03
72	7	-3.440E-02	-6.799E-03
72	8	-3.631E-02	-4.515E-03
72	9	1.233E-02	-9.486E-04
273	1	-4.485E-02	-4.115E-03
273	2	-4.481E-02	-4.171E-03
273	3	1.240E-02	-1.594E-03
273	4	-9.247E-02	-6.373E-03
273	5	-3.525E-02	-3.796E-03
273	6	-4.019E-02	-5.212E-03
273	7	-3.436E-02	-4.875E-03
273	8	-3.630E-02	-2.522E-03
273	9	1.235E-02	-1.538E-03
274	1	-4.478E-02	-1.731E-03
274	2	-4.473E-02	-1.789E-03
274	3	1.242E-02	-2.183E-03
274	4	-9.235E-02	-1.451E-03
274	5	-3.519E-02	-1.845E-03
274	6	-4.012E-02	-2.894E-03
274	7	-3.429E-02	-2.957E-03
274	8	-3.626E-02	-5.343E-04

ODE	LOAD COMB	Y-DISPLACEMENT (RADIAL)	Z-DISPLACEMENT (AXIAL)
274	9	1.237E-02	-2.125E-03
	1	-4.473E-02	6.357E-04
	2	-4.468E-02	5.760E-04
275	3	1.244E-02	-2.768E-03
275	4	-9.228E-02	3.434E-03
275	5	-3.515E-02	9.039E-05
275	6	-4.007E-02	-5.930E-04
275	7	-3.424E-02	-1.052E-03
275	8	-3.623E-02	1.439E-03
275	9	1.239E-02	-2.708E-03
276	1	-4.463E-02	3.020E-03
276	2	-4.458E-02	2.959E-03
276	3	1.244E-02	-3.357E-03
276	4	-9.211E-02	8.358E-03
276	5	-3.508E-02	2.041E-03
276	6	-3.997E-02	1.725E-03
276	7	-3.415E-02	8.666E-04
276	8	-3.617E-02	3.427E-03
276	9	1.239E-02	-3.296E-03
277	1	-5.521E-02	-6.356E-03
277	2	-5.516E-02	-6.423E-03
277	3	1.489E-02	-1.831E-03
277	4	-1.138E-01	-1.038E-02
277	5	-4.378E-02	-5.794E-03
277	6	-5.035E-02	-7.719E-03
	7	-4.277E-02	-7.086E-03
277	8	-4.496E-02	-4.269E-03
277	9	1.484E-02	-1.764E-03
278	1	-5.514E-02	-4.258E-03
278	2	-5.509E-02	-4.326E-03
278	3	1.491E-02	-2.333E-03
278	4	-1.137E-01	-6.047E-03
278	5	-4.372E-02	-4.054E-03
278	6	-5.028E-02	-5.638E-03
278	7	-4.271E-02	-5.368E-03
278	8	-4.492E-02	-2.503E-03
278	9	1.485E-02	-2.265E-03
279	1	-5.510E-02	-2.164E-03
279	2	-5.505E-02	-2.234E-03
279	3	1.493E-02	-2.834E-03
279	4	-1.136E-01	-1.717E-03
279	5	-4.369E-02	-2.317E-03
279	6	-5.024E-02	-3.561E-03
279	7	-4.266E-02	-3.654E-03
279	8	-4.490E-02	-7.409E-04
279	9	1.488E-02	-2.765E-03
280	1	-5.500E-02	-8.689E-05
	2	-5.495E-02	-1.578E-04

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DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
80	3	1.494E-02	-3.332E-03
80	4	-1.135E-01	2.579E-03
80	5	-4.361E-02	-5.952E-04
80	6	-5.014E-02	-1.501E-03
80	7	-4.257E-02	-1.953E-03
80	8	-4.484E-02	1.007E-03
80	9	1.488E-02	-3.261E-03
81	1	-5.493E-02	2.007E-03
81	2	-5.488E-02	1.935E-03
81	3	1.495E-02	-3.833E-03
81	4	-1.134E-01	6.910E-03
81	5	-4.355E-02	1.141E-03
81	6	-5.007E-02	5.758E-04
81	7	-4.250E-02	-2.387E-04
81	8	-4.479E-02	2.770E-03
81	9	1.490E-02	-3.761E-03
82	1	-6.407E-02	-6.113E-03
82	2	-6.401E-02	-6.194E-03
82	3	1.696E-02	-2.677E-03
82	4	-1.321E-01	-9.280E-03
82	5	-5.119E-02	-5.764E-03
82	6	-5.926E-02	-7.819E-03
82	7	-5.011E-02	-7.303E-03
82	8	-5.246E-02	-3.947E-03
82	9	1.691E-02	-2.597E-03
83	1	-6.404E-02	-4.337E-03
83	2	-6.398E-02	-4.418E-03
83	3	1.699E-02	-3.085E-03
83	4	-1.321E-01	-5.595E-03
83	5	-5.116E-02	-4.262E-03
83	6	-5.922E-02	-6.006E-03
83	7	-5.007E-02	-5.812E-03
83	8	-5.245E-02	-2.432E-03
83	9	1.693E-02	-3.004E-03
84	1	-6.395E-02	-2.564E-03
84	2	-6.389E-02	-2.646E-03
84	3	1.700E-02	-3.492E-03
84	4	-1.320E-01	-1.916E-03
84	5	-5.109E-02	-2.763E-03
84	6	-5.913E-02	-4.196E-03
84	7	-4.999E-02	-4.324E-03
84	8	-5.239E-02	-9.201E-04
84	9	1.695E-02	-3.410E-03
85	1	-6.389E-02	-8.044E-04
85	2	-6.383E-02	-8.865E-04
85	3	1.702E-02	-3.896E-03
85	4	-1.319E-01	1.735E-03
85	5	-5.104E-02	-1.274E-03
85	6	-5.906E-02	-2.399E-03

NODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
285	7	-4.992E-02	-2.846E-03
285	8	-5.236E-02	5.813E-04
[illegible]	9	1.696E-02	-3.814E-03
286	1	-6.377E-02	9.671E-04
286	2	-6.371E-02	8.844E-04
286	3	1.702E-02	-4.302E-03
286	4	-1.316E-01	5.410E-03
286	5	-5.094E-02	2.234E-04
286	6	-5.894E-02	-5.909E-04
286	7	-4.982E-02	-1.359E-03
286	8	-5.227E-02	2.092E-03
286	9	1.696E-02	-4.220E-03
287	1	-7.145E-02	-5.817E-03
287	2	-7.139E-02	-5.910E-03
287	3	1.861E-02	-3.528E-03
287	4	-1.475E-01	-8.072E-03
287	5	-5.751E-02	-5.689E-03
287	6	-6.693E-02	-7.870E-03
287	7	-5.640E-02	-7.478E-03
287	8	-5.881E-02	-3.579E-03
287	9	1.855E-02	-3.434E-03
288	1	-7.137E-02	-4.376E-03
288	2	-7.131E-02	-4.469E-03
288	3	1.862E-02	-3.841E-03
[illegible]	4	-1.473E-01	-5.065E-03
[illegible]	5	-5.744E-02	-4.436E-03
288	6	-6.685E-02	-6.336E-03
288	7	-5.633E-02	-6.224E-03
288	8	-5.876E-02	-2.326E-03
288	9	1.857E-02	-3.747E-03
289	1	-7.132E-02	-2.936E-03
289	2	-7.126E-02	-3.029E-03
289	3	1.865E-02	-4.154E-03
289	4	-1.473E-01	-2.058E-03
289	5	-5.740E-02	-3.183E-03
289	6	-6.679E-02	-4.802E-03
289	7	-5.627E-02	-4.970E-03
289	8	-5.873E-02	-1.074E-03
289	9	1.859E-02	-4.061E-03
290	1	-7.121E-02	-1.507E-03
290	2	-7.115E-02	-1.600E-03
290	3	1.865E-02	-4.465E-03
290	4	-1.471E-01	9.242E-04
290	5	-5.731E-02	-1.940E-03
290	6	-6.668E-02	-3.280E-03
290	7	-5.617E-02	-3.726E-03
290	8	-5.866E-02	1.677E-04
290	9	1.859E-02	-4.371E-03

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DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
91	1	-7.112E-02	-6.894E-05
91	2	-7.106E-02	-1.621E-04
91	3	1.867E-02	-4.777E-03
91	4	-1.469E-01	3.925E-03
91	5	-5.724E-02	-6.894E-04
91	6	-6.659E-02	-1.749E-03
91	7	-5.609E-02	-2.474E-03
91	8	-5.860E-02	1.418E-03
91	9	1.860E-02	-4.684E-03
92	1	-7.723E-02	-5.498E-03
92	2	-7.718E-02	-5.605E-03
92	3	1.982E-02	-4.373E-03
92	4	-1.596E-01	-6.827E-03
92	5	-6.264E-02	-5.594E-03
92	6	-7.328E-02	-7.897E-03
92	7	-6.157E-02	-7.632E-03
92	8	-6.391E-02	-3.190E-03
92	9	1.976E-02	-4.266E-03
93	1	-7.720E-02	-4.391E-03
93	2	-7.714E-02	-4.497E-03
93	3	1.984E-02	-4.596E-03
93	4	-1.596E-01	-4.490E-03
93	5	-6.261E-02	-4.589E-03
93	6	-7.323E-02	-6.640E-03
93	7	-6.152E-02	-6.614E-03
93	8	-6.389E-02	-2.199E-03
93	9	1.979E-02	-4.490E-03
294	1	-7.710E-02	-3.284E-03
294	2	-7.704E-02	-3.389E-03
294	3	1.985E-02	-4.819E-03
294	4	-1.594E-01	-2.154E-03
294	5	-6.253E-02	-3.584E-03
294	6	-7.313E-02	-5.384E-03
294	7	-6.143E-02	-5.596E-03
294	8	-6.382E-02	-1.208E-03
294	9	1.980E-02	-4.714E-03
295	1	-7.703E-02	-2.185E-03
295	2	-7.697E-02	-2.289E-03
295	3	1.987E-02	-5.041E-03
295	4	-1.593E-01	1.652E-04
295	5	-6.247E-02	-2.586E-03
295	6	-7.305E-02	-4.136E-03
295	7	-6.136E-02	-4.586E-03
295	8	-6.378E-02	-2.255E-04
295	9	1.981E-02	-4.936E-03
296	1	-7.689E-02	-1.080E-03
296	2	-7.684E-02	-1.184E-03
296	3	1.987E-02	-5.263E-03
296	4	-1.590E-01	2.495E-03

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..E	LOAD STEP	X-DISPLACEMENT (RADIAL)	Z-DISPLACEMENT (AXIAL)
296	5	-6.236E-02	-1.583E-03
296	6	-7.292E-02	-2.882E-03
[illegible]	7	-6.125E-02	-3.570E-03
[illegible]	8	-6.369E-02	7.626E-04
296	9	1.981E-02	-5.159E-03
297	1	-8.155E-02	-5.184E-03
297	2	-8.150E-02	-5.304E-03
297	3	2.064E-02	-5.207E-03
297	4	-1.688E-01	-5.594E-03
297	5	-6.668E-02	-5.498E-03
97	6	-7.840E-02	-7.922E-03
97	7	-6.569E-02	-7.784E-03
97	8	-6.785E-02	-2.801E-03
97	9	2.059E-02	-5.088E-03
98	1	-8.146E-02	-4.400E-03
98	2	-8.141E-02	-4.518E-03
98	3	2.065E-02	-5.346E-03
98	4	-1.686E-01	-3.905E-03
98	5	-6.661E-02	-4.733E-03
98	6	-7.831E-02	-6.934E-03
98	7	-6.561E-02	-6.995E-03
98	8	-6.780E-02	-2.064E-03
98	9	2.060E-02	-5.228E-03
99	1	-8.140E-02	-3.614E-03
[illegible]	2	-8.135E-02	-3.731E-03
[illegible]	3	2.067E-02	-5.486E-03
[illegible]	4	-1.685E-01	-2.212E-03
99	5	-6.656E-02	-3.967E-03
99	6	-7.824E-02	-5.945E-03
99	7	-6.555E-02	-6.205E-03
99	8	-6.776E-02	-1.326E-03
99	9	2.062E-02	-5.369E-03
00	1	-8.129E-02	-2.834E-03
00	2	-8.123E-02	-2.949E-03
00	3	2.068E-02	-5.625E-03
00	4	-1.683E-01	-5.322E-04
00	5	-6.647E-02	-3.207E-03
00	6	-7.813E-02	-4.963E-03
00	7	-6.544E-02	-5.421E-03
00	8	-6.768E-02	-5.945E-04
00	9	2.062E-02	-5.509E-03
01	1	-8.120E-02	-2.051E-03
01	2	-8.114E-02	-2.165E-03
01	3	2.069E-02	-5.763E-03
01	4	-1.682E-01	1.153E-03
01	5	-6.639E-02	-2.444E-03
1	6	-7.803E-02	-3.977E-03
1	7	-6.536E-02	-4.634E-03
[illegible]	8	-6.762E-02	1.403E-04

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DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
01	9	2.064E-02	-5.549E-03
02	1	-8.439E-02	-4.899E-03
02	2	-8.434E-02	-5.031E-03
02	3	2.108E-02	-6.028E-03
02	4	-1.750E-01	-4.421E-03
02	5	-6.962E-02	-5.419E-03
02	6	-8.229E-02	-7.964E-03
02	7	-6.877E-02	-7.951E-03
02	8	-7.063E-02	-2.432E-03
02	9	2.104E-02	-5.896E-03
03	1	-8.434E-02	-4.415E-03
03	2	-8.429E-02	-4.546E-03
03	3	2.111E-02	-6.091E-03
03	4	-1.749E-01	-3.334E-03
03	5	-6.957E-02	-4.879E-03
03	6	-8.223E-02	-7.227E-03
03	7	-6.871E-02	-7.376E-03
03	8	-7.060E-02	-1.932E-03
03	9	2.106E-02	-5.960E-03
04	1	-8.423E-02	-3.930E-03
04	2	-8.419E-02	-4.059E-03
04	3	2.111E-02	-6.154E-03
04	4	-1.748E-01	-2.244E-03
04	5	-6.949E-02	-4.338E-03
04	6	-8.213E-02	-6.490E-03
04	7	-6.861E-02	-6.801E-03
04	8	-7.053E-02	-1.432E-03
04	9	2.107E-02	-6.025E-03
305	1	-8.415E-02	-3.449E-03
305	2	-8.411E-02	-3.576E-03
305	3	2.113E-02	-6.216E-03
305	4	-1.746E-01	-1.161E-03
305	5	-6.942E-02	-3.801E-03
305	6	-8.204E-02	-5.757E-03
305	7	-6.854E-02	-6.230E-03
305	8	-7.048E-02	-9.352E-04
305	9	2.108E-02	-6.089E-03
306	1	-8.402E-02	-2.967E-03
306	2	-8.398E-02	-3.092E-03
306	3	2.113E-02	-6.278E-03
306	4	-1.744E-01	-7.744E-05
306	5	-6.932E-02	-3.263E-03
306	6	-8.191E-02	-5.023E-03
306	7	-6.842E-02	-5.657E-03
306	8	-7.038E-02	-4.373E-04
306	9	2.108E-02	-6.153E-03
307	1	-8.593E-02	-4.655E-03
307	2	-8.590E-02	-4.800E-03

NODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
307	3	2.120E-02	-6.836E-03
307	4	-1.787E-01	-3.333E-03
[illegible]	5	-7.159E-02	-5.368E-03
[illegible]	6	-8.511E-02	-8.033E-03
307	7	-7.092E-02	-8.141E-03
307	8	-7.239E-02	-2.096E-03
307	9	2.117E-02	-6.691E-03
308	1	-8.584E-02	-4.449E-03
308	2	-8.581E-02	-4.591E-03
308	3	2.121E-02	-6.828E-03
308	4	-1.785E-01	-2.799E-03
308	5	-7.152E-02	-5.035E-03
308	6	-8.501E-02	-7.529E-03
308	7	-7.083E-02	-7.765E-03
308	8	-7.233E-02	-1.814E-03
308	9	2.118E-02	-6.685E-03
309	1	-8.577E-02	-4.238E-03
309	2	-8.574E-02	-4.378E-03
309	3	2.123E-02	-6.821E-03
309	4	-1.784E-01	-2.258E-03
309	5	-7.146E-02	-4.700E-03
309	6	-8.493E-02	-7.022E-03
309	7	-7.076E-02	-7.387E-03
309	8	-7.228E-02	-1.528E-03
309	9	2.120E-02	-6.680E-03
[illegible]	1	-8.566E-02	-4.029E-03
310	2	-8.562E-02	-4.167E-03
310	3	2.124E-02	-6.813E-03
310	4	-1.782E-01	-1.721E-03
310	5	-7.136E-02	-4.367E-03
310	6	-8.482E-02	-6.519E-03
310	7	-7.066E-02	-7.012E-03
310	8	-7.220E-02	-1.246E-03
310	9	2.120E-02	-6.675E-03
311	1	-8.557E-02	-3.823E-03
311	2	-8.553E-02	-3.959E-03
311	3	2.125E-02	-6.806E-03
311	4	-1.780E-01	-1.188E-03
311	5	-7.129E-02	-4.035E-03
311	6	-8.472E-02	-6.016E-03
311	7	-7.057E-02	-6.636E-03
311	8	-7.214E-02	-9.645E-04
311	9	2.121E-02	-6.670E-03
312	1	-8.625E-02	-4.471E-03
312	2	-8.623E-02	-4.628E-03
312	3	2.101E-02	-7.629E-03
312	4	-1.798E-01	-2.357E-03
312	5	-7.264E-02	-5.358E-03
[illegible]	6	-8.689E-02	-8.143E-03

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E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
2	7	-7.219E-02	-8.367E-03
2	8	-7.319E-02	-1.807E-03
2	9	2.098E-02	-7.472E-03
3	1	-8.619E-02	-4.507E-03
3	2	-8.617E-02	-4.662E-03
3	3	2.103E-02	-7.557E-03
13	4	-1.797E-01	-2.312E-03
13	5	-7.259E-02	-5.208E-03
13	6	-8.681E-02	-7.846E-03
13	7	-7.212E-02	-8.167E-03
13	8	-7.315E-02	-1.714E-03
13	9	2.100E-02	-7.403E-03
14	1	-8.609E-02	-4.541E-03
14	2	-8.607E-02	-4.693E-03
14	3	2.104E-02	-7.486E-03
14	4	-1.796E-01	-2.262E-03
14	5	-7.251E-02	-5.055E-03
14	6	-8.671E-02	-7.546E-03
14	7	-7.203E-02	-7.966E-03
14	8	-7.308E-02	-1.620E-03
14	9	2.101E-02	-7.334E-03
15	1	-8.601E-02	-4.575E-03
15	2	-8.598E-02	-4.724E-03
15	3	2.105E-02	-7.415E-03
15	4	-1.794E-01	-2.213E-03
15	5	-7.244E-02	-4.904E-03
15	6	-8.661E-02	-7.248E-03
315	7	-7.194E-02	-7.766E-03
315	8	-7.302E-02	-1.525E-03
315	9	2.103E-02	-7.266E-03
316	1	-8.589E-02	-4.612E-03
316	2	-8.586E-02	-4.759E-03
316	3	2.106E-02	-7.344E-03
316	4	-1.792E-01	-2.169E-03
316	5	-7.233E-02	-4.754E-03
316	6	-8.649E-02	-6.951E-03
316	7	-7.183E-02	-7.567E-03
316	8	-7.293E-02	-1.433E-03
316	9	2.103E-02	-7.197E-03
317	1	-8.556E-02	-4.350E-03
317	2	-8.555E-02	-4.519E-03
317	3	2.054E-02	-8.411E-03
317	4	-1.790E-01	-1.502E-03
317	5	-7.294E-02	-5.393E-03
317	6	-8.780E-02	-8.298E-03
317	7	-7.272E-02	-8.632E-03
317	8	-7.320E-02	-1.571E-03
317	9	2.053E-02	-8.241E-03

NODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
318	1	-8.547E-02	-4.599E-03
318	2	-8.546E-02	-4.765E-03
[illegible]	3	2.055E-02	-8.279E-03
[illegible]	4	-1.788E-01	-1.887E-03
318	5	-7.286E-02	-5.402E-03
318	6	-8.770E-02	-8.182E-03
318	7	-7.263E-02	-8.588E-03
318	8	-7.314E-02	-1.642E-03
318	9	2.054E-02	-8.113E-03
319	1	-8.539E-02	-4.844E-03
319	2	-8.538E-02	-5.007E-03
319	3	2.057E-02	-8.149E-03
319	4	-1.787E-01	-2.265E-03
319	5	-7.280E-02	-5.407E-03
319	6	-8.761E-02	-8.064E-03
319	7	-7.255E-02	-8.541E-03
319	8	-7.309E-02	-1.708E-03
319	9	2.056E-02	-7.985E-03
320	1	-8.529E-02	-5.086E-03
320	2	-8.527E-02	-5.247E-03
320	3	2.058E-02	-8.020E-03
320	4	-1.785E-01	-2.640E-03
320	5	-7.270E-02	-5.412E-03
320	6	-8.750E-02	-7.946E-03
320	7	-7.245E-02	-8.494E-03
[illegible]	8	-7.301E-02	-1.774E-03
[illegible]	9	2.057E-02	-7.859E-03
321	1	-8.519E-02	-5.335E-03
321	2	-8.518E-02	-5.493E-03
321	3	2.059E-02	-7.889E-03
321	4	-1.784E-01	-3.025E-03
321	5	-7.263E-02	-5.420E-03
321	6	-8.740E-02	-7.831E-03
321	7	-7.236E-02	-8.450E-03
321	8	-7.295E-02	-1.844E-03
321	9	2.058E-02	-7.731E-03
322	1	-8.395E-02	-4.302E-03
322	2	-8.395E-02	-4.483E-03
322	3	1.980E-02	-9.180E-03
322	4	-1.763E-01	-7.830E-04
322	5	-7.255E-02	-5.480E-03
322	6	-8.792E-02	-8.501E-03
322	7	-7.258E-02	-8.939E-03
322	8	-7.253E-02	-1.399E-03
322	9	1.981E-02	-9.000E-03
323	1	-8.388E-02	-4.727E-03
323	2	-8.388E-02	-4.905E-03
323	3	1.983E-02	-8.994E-03
[illegible]	4	-1.762E-01	-1.530E-03

DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
23	5	-7.249E-02	-5.620E-03
23	6	-8.784E-02	-8.541E-03
23	7	-7.250E-02	-9.027E-03
23	8	-7.248E-02	-1.599E-03
23	9	1.983E-02	-8.816E-03
24	1	-8.379E-02	-5.148E-03
24	2	-8.379E-02	-5.323E-03
24	3	1.984E-02	-8.809E-03
24	4	-1.760E-01	-2.272E-03
24	5	-7.240E-02	-5.757E-03
24	6	-8.773E-02	-8.579E-03
24	7	-7.241E-02	-9.113E-03
24	8	-7.241E-02	-1.796E-03
24	9	1.984E-02	-8.633E-03
325	1	-8.370E-02	-5.566E-03
325	2	-8.370E-02	-5.739E-03
325	3	1.985E-02	-8.624E-03
325	4	-1.759E-01	-3.009E-03
325	5	-7.233E-02	-5.894E-03
325	6	-8.764E-02	-8.616E-03
325	7	-7.232E-02	-9.199E-03
325	8	-7.235E-02	-1.993E-03
325	9	1.985E-02	-8.452E-03
326	1	-8.359E-02	-5.990E-03
326	2	-8.359E-02	-6.160E-03
326	3	1.986E-02	-8.439E-03
326	4	-1.757E-01	-3.755E-03
326	5	-7.224E-02	-6.033E-03
326	6	-8.752E-02	-8.656E-03
326	7	-7.222E-02	-9.287E-03
326	8	-7.227E-02	-2.193E-03
326	9	1.986E-02	-8.269E-03
327	1	-8.164E-02	-4.323E-03
327	2	-8.166E-02	-4.514E-03
327	3	1.883E-02	-9.937E-03
327	4	-1.721E-01	-1.932E-04
327	5	-7.164E-02	-5.615E-03
327	6	-8.741E-02	-8.747E-03
327	7	-7.189E-02	-9.284E-03
327	8	-7.134E-02	-1.286E-03
327	9	1.885E-02	-9.745E-03
328	1	-8.156E-02	-4.892E-03
328	2	-8.157E-02	-5.081E-03
328	3	1.885E-02	-9.700E-03
328	4	-1.719E-01	-1.245E-03
328	5	-7.156E-02	-5.863E-03
328	6	-8.731E-02	-8.921E-03
328	7	-7.180E-02	-9.486E-03
328	8	-7.127E-02	-1.588E-03

NODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
328	9	1.886E-02	-9.510E-03
	1	-8.148E-02	-5.457E-03
	2	-8.149E-02	-5.644E-03
329	3	1.887E-02	-9.463E-03
329	4	-1.718E-01	-2.290E-03
329	5	-7.149E-02	-6.109E-03
329	6	-8.722E-02	-9.092E-03
329	7	-7.172E-02	-9.686E-03
329	8	-7.122E-02	-1.887E-03
329	9	1.888E-02	-9.276E-03
330	1	-8.138E-02	-6.018E-03
330	2	-8.139E-02	-6.202E-03
330	3	1.888E-02	-9.228E-03
330	4	-1.716E-01	-3.326E-03
330	5	-7.140E-02	-6.352E-03
330	6	-8.711E-02	-9.262E-03
330	7	-7.163E-02	-9.884E-03
330	8	-7.115E-02	-2.183E-03
330	9	1.889E-02	-9.044E-03
331	1	-8.129E-02	-6.586E-03
331	2	-8.130E-02	-6.768E-03
331	3	1.889E-02	-8.992E-03
331	4	-1.715E-01	-4.376E-03
331	5	-7.133E-02	-6.600E-03
	6	-8.701E-02	-9.436E-03
	7	-7.154E-02	-1.008E-02
331	8	-7.109E-02	-2.484E-03
331	9	1.890E-02	-8.810E-03
332	1	-7.873E-02	-4.414E-03
332	2	-7.875E-02	-4.616E-03
332	3	1.763E-02	-1.068E-02
332	4	-1.566E-01	2.641E-04
332	5	-7.027E-02	-5.799E-03
332	6	-8.632E-02	-9.037E-03
332	7	-7.072E-02	-9.665E-03
332	8	-6.975E-02	-1.237E-03
332	9	1.766E-02	-1.047E-02
333	1	-7.866E-02	-5.096E-03
333	2	-7.868E-02	-5.296E-03
333	3	1.766E-02	-1.039E-02
333	4	-1.665E-01	-1.031E-03
333	5	-7.020E-02	-6.132E-03
333	6	-8.624E-02	-9.323E-03
333	7	-7.064E-02	-9.963E-03
333	8	-6.969E-02	-1.610E-03
333	9	1.768E-02	-1.019E-02
334	1	-7.857E-02	-5.774E-03
	2	-7.859E-02	-5.972E-03

DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
34	3	1.767E-02	-1.011E-02
34	4	-1.663E-01	-2.321E-03
34	5	-7.012E-02	-6.463E-03
34	6	-8.613E-02	-9.608E-03
34	7	-7.055E-02	-1.026E-02
34	8	-6.962E-02	-1.980E-03
34	9	1.769E-02	-9.915E-03
35	1	-7.848E-02	-6.447E-03
35	2	-7.850E-02	-6.644E-03
35	3	1.769E-02	-9.833E-03
35	4	-1.662E-01	-3.602E-03
35	5	-7.005E-02	-6.791E-03
35	6	-8.604E-02	-9.891E-03
35	7	-7.046E-02	-1.055E-02
35	8	-6.957E-02	-2.347E-03
35	9	1.771E-02	-9.636E-03
36	1	-7.838E-02	-7.127E-03
36	2	-7.840E-02	-7.322E-03
36	3	1.770E-02	-9.550E-03
36	4	-1.660E-01	-4.894E-03
36	5	-6.996E-02	-7.123E-03
36	6	-8.592E-02	-1.017E-02
36	7	-7.036E-02	-1.085E-02
36	8	-6.950E-02	-2.719E-03
36	9	1.772E-02	-9.355E-03
37	1	-7.538E-02	-4.570E-03
37	2	-7.541E-02	-4.781E-03
37	3	1.624E-02	-1.140E-02
37	4	-1.602E-01	5.995E-04
37	5	-6.857E-02	-6.027E-03
37	6	-8.477E-02	-9.361E-03
37	7	-6.915E-02	-1.007E-02
37	8	-6.790E-02	-1.249E-03
37	9	1.627E-02	-1.119E-02
38	1	-7.530E-02	-5.336E-03
38	2	-7.533E-02	-5.547E-03
38	3	1.625E-02	-1.108E-02
38	4	-1.600E-01	-8.893E-04
38	5	-6.850E-02	-6.425E-03
38	6	-8.467E-02	-9.745E-03
38	7	-6.906E-02	-1.045E-02
38	8	-6.784E-02	-1.665E-03
38	9	1.628E-02	-1.087E-02
39	1	-7.522E-02	-6.099E-03
39	2	-7.525E-02	-6.309E-03
39	3	1.628E-02	-1.075E-02
39	4	-1.599E-01	-2.371E-03
39	5	-6.842E-02	-6.820E-03
39	6	-8.458E-02	-1.012E-02

NODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
339	7	-6.898E-02	-1.083E-02
339	8	-6.778E-02	-2.078E-03
[illegible]	9	1.630E-02	-1.054E-02
340	1	-7.513E-02	-6.856E-03
340	2	-7.516E-02	-7.066E-03
340	3	1.629E-02	-1.043E-02
340	4	-1.598E-01	-3.842E-03
340	5	-6.834E-02	-7.213E-03
340	6	-8.448E-02	-1.050E-02
340	7	-6.889E-02	-1.121E-02
340	8	-6.772E-02	-2.487E-03
340	9	1.632E-02	-1.022E-02
341	1	-7.505E-02	-7.622E-03
341	2	-7.507E-02	-7.830E-03
341	3	1.630E-02	-1.011E-02
341	4	-1.596E-01	-5.328E-03
341	5	-6.827E-02	-7.610E-03
341	6	-8.438E-02	-1.089E-02
341	7	-6.880E-02	-1.159E-02
341	8	-6.766E-02	-2.903E-03
341	9	1.633E-02	-9.904E-03
342	1	-7.171E-02	-4.788E-03
342	2	-7.174E-02	-5.008E-03
342	3	1.466E-02	-1.211E-02
[illegible]	4	-1.530E-01	8.155E-04
[illegible]	5	-6.662E-02	-6.295E-03
342	6	-8.281E-02	-9.714E-03
342	7	-6.722E-02	-1.051E-02
342	8	-6.592E-02	-1.321E-03
342	9	1.469E-02	-1.189E-02
343	1	-7.163E-02	-5.613E-03
343	2	-7.166E-02	-5.833E-03
343	3	1.468E-02	-1.175E-02
343	4	-1.529E-01	-8.162E-04
343	5	-6.655E-02	-6.740E-03
343	6	-8.272E-02	-1.018E-02
343	7	-6.714E-02	-1.096E-02
343	8	-6.586E-02	-1.752E-03
343	9	1.471E-02	-1.153E-02
344	1	-7.155E-02	-6.434E-03
344	2	-7.158E-02	-6.656E-03
344	3	1.470E-02	-1.139E-02
344	4	-1.527E-01	-2.442E-03
344	5	-6.647E-02	-7.182E-03
344	6	-8.262E-02	-1.064E-02
344	7	-6.705E-02	-1.142E-02
344	8	-6.580E-02	-2.180E-03
344	9	1.473E-02	-1.117E-02

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DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
45	1	-7.147E-02	-7.250E-03
45	2	-7.150E-02	-7.472E-03
45	3	1.472E-02	-1.103E-02
45	4	-1.526E-01	-4.056E-03
45	5	-6.640E-02	-7.622E-03
45	6	-8.252E-02	-1.111E-02
45	7	-6.697E-02	-1.187E-02
45	8	-6.574E-02	-2.605E-03
45	9	1.475E-02	-1.081E-02
46	1	-7.138E-02	-8.072E-03
46	2	-7.141E-02	-8.295E-03
46	3	1.473E-02	-1.067E-02
46	4	-1.524E-01	-5.684E-03
46	5	-6.632E-02	-8.065E-03
46	6	-8.242E-02	-1.158E-02
46	7	-6.687E-02	-1.232E-02
46	8	-6.568E-02	-3.035E-03
46	9	1.476E-02	-1.045E-02
47	1	-6.783E-02	-5.064E-03
47	2	-6.785E-02	-5.292E-03
47	3	1.293E-02	-1.281E-02
47	4	-1.452E-01	9.224E-04
47	5	-6.450E-02	-6.601E-03
47	6	-8.049E-02	-1.009E-02
47	7	-6.498E-02	-1.096E-02
47	8	-6.394E-02	-1.452E-03
47	9	1.295E-02	-1.258E-02
348	1	-6.775E-02	-5.924E-03
348	2	-6.777E-02	-6.154E-03
348	3	1.294E-02	-1.242E-02
348	4	-1.451E-01	-8.099E-04
348	5	-6.442E-02	-7.077E-03
348	6	-8.039E-02	-1.063E-02
348	7	-6.490E-02	-1.148E-02
348	8	-6.387E-02	-1.872E-03
348	9	1.297E-02	-1.219E-02
349	1	-6.767E-02	-6.781E-03
349	2	-6.769E-02	-7.014E-03
349	3	1.297E-02	-1.202E-02
349	4	-1.450E-01	-2.536E-03
349	5	-6.435E-02	-7.550E-03
349	6	-8.030E-02	-1.117E-02
349	7	-6.482E-02	-1.200E-02
349	8	-6.381E-02	-2.288E-03
349	9	1.299E-02	-1.179E-02
350	1	-6.759E-02	-7.631E-03
350	2	-6.761E-02	-7.866E-03
350	3	1.298E-02	-1.163E-02
350	4	-1.448E-01	-4.249E-03

NODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
350	5	-6.428E-02	-8.020E-03
350	6	-8.020E-02	-1.171E-02
[illegible]	7	-6.473E-02	-1.252E-02
[illegible]	8	-6.376E-02	-2.702E-03
350	9	1.301E-02	-1.140E-02
351	1	-6.751E-02	-8.489E-03
351	2	-6.753E-02	-8.727E-03
351	3	1.300E-02	-1.124E-02
351	4	-1.447E-01	-5.979E-03
351	5	-6.420E-02	-8.495E-03
351	6	-8.010E-02	-1.225E-02
351	7	-6.464E-02	-1.304E-02
351	8	-6.370E-02	-3.121E-03
351	9	1.302E-02	-1.100E-02
352	1	-6.383E-02	-5.395E-03
352	2	-6.384E-02	-5.630E-03
352	3	1.105E-02	-1.349E-02
352	4	-1.371E-01	9.236E-04
352	5	-6.226E-02	-6.942E-03
352	6	-7.783E-02	-1.049E-02
352	7	-6.245E-02	-1.143E-02
352	8	-6.207E-02	-1.642E-03
352	9	1.106E-02	-1.326E-02
353	1	-6.376E-02	-6.268E-03
[illegible]	2	-6.376E-02	-6.508E-03
[illegible]	3	1.107E-02	-1.307E-02
353	4	-1.370E-01	-8.684E-04
353	5	-6.219E-02	-7.434E-03
353	6	-7.775E-02	-1.110E-02
353	7	-6.237E-02	-1.201E-02
353	8	-6.200E-02	-2.023E-03
353	9	1.108E-02	-1.283E-02
54	1	-6.368E-02	-7.138E-03
54	2	-6.369E-02	-7.383E-03
54	3	1.109E-02	-1.265E-02
54	4	-1.369E-01	-2.655E-03
54	5	-6.212E-02	-7.924E-03
354	6	-7.765E-02	-1.171E-02
354	7	-6.228E-02	-1.260E-02
354	8	-6.194E-02	-2.401E-03
354	9	1.110E-02	-1.240E-02
355	1	-6.360E-02	-8.002E-03
355	2	-6.361E-02	-8.251E-03
355	3	1.112E-02	-1.223E-02
355	4	-1.367E-01	-4.429E-03
355	5	-6.205E-02	-8.410E-03
355	6	-7.756E-02	-1.232E-02
355	7	-6.220E-02	-1.318E-02
[illegible]	8	-6.188E-02	-2.777E-03

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LOAD COMB		X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
5	9	1.112E-02	-1.198E-02
6	1	-6.353E-02	-8.873E-03
6	2	-6.354E-02	-9.127E-03
6	3	1.113E-02	-1.181E-02
6	4	-1.366E-01	-6.216E-03
6	5	-6.198E-02	-8.901E-03
6	6	-7.746E-02	-1.293E-02
6	7	-6.211E-02	-1.376E-02
6	8	-6.184E-02	-3.157E-03
6	9	1.114E-02	-1.155E-02
7	1	-5.983E-02	-5.777E-03
7	2	-5.981E-02	-6.017E-03
7	3	9.062E-03	-1.416E-02
7	4	-1.288E-01	8.290E-04
57	5	-5.999E-02	-7.313E-03
57	6	-7.488E-02	-1.090E-02
57	7	-5.963E-02	-1.191E-02
57	8	-6.042E-02	-1.887E-03
57	9	9.043E-03	-1.392E-02
58	1	-5.975E-02	-6.644E-03
58	2	-5.973E-02	-6.892E-03
58	3	9.084E-03	-1.371E-02
58	4	-1.287E-01	-9.879E-04
58	5	-5.992E-02	-7.809E-03
58	6	-7.479E-02	-1.157E-02
58	7	-5.955E-02	-1.255E-02
58	8	-6.036E-02	-2.204E-03
58	9	9.065E-03	-1.346E-02
359	1	-5.968E-02	-7.508E-03
359	2	-5.966E-02	-7.764E-03
359	3	9.109E-03	-1.326E-02
359	4	-1.286E-01	-2.800E-03
359	5	-5.985E-02	-8.304E-03
359	6	-7.470E-02	-1.225E-02
359	7	-5.947E-02	-1.320E-02
359	8	-6.030E-02	-2.519E-03
359	9	9.089E-03	-1.301E-02
360	1	-5.961E-02	-8.365E-03
360	2	-5.959E-02	-8.629E-03
360	3	9.129E-03	-1.282E-02
360	4	-1.285E-01	-4.597E-03
360	5	-5.978E-02	-8.794E-03
360	6	-7.461E-02	-1.293E-02
360	7	-5.939E-02	-1.384E-02
360	8	-6.025E-02	-2.831E-03
360	9	9.108E-03	-1.256E-02
361	1	-5.954E-02	-9.230E-03
361	2	-5.951E-02	-9.502E-03

ODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
361	3	9.151E-03	-1.238E-02
361	4	-1.283E-01	-6.411E-03
[illegible]	5	-5.971E-02	-9.289E-03
[illegible]	6	-7.451E-02	-1.360E-02
361	7	-5.931E-02	-1.449E-02
361	8	-6.020E-02	-3.148E-03
361	9	9.129E-03	-1.210E-02
362	1	-5.590E-02	-6.204E-03
362	2	-5.584E-02	-6.449E-03
362	3	6.973E-03	-1.480E-02
362	4	-1.205E-01	6.443E-04
362	5	-5.773E-02	-7.711E-03
362	6	-7.163E-02	-1.131E-02
362	7	-5.654E-02	-1.239E-02
362	8	-5.914E-02	-2.186E-03
362	9	6.911E-03	-1.456E-02
363	1	-5.582E-02	-7.047E-03
363	2	-5.576E-02	-7.303E-03
363	3	6.999E-03	-1.433E-02
363	4	-1.204E-01	-1.165E-03
363	5	-5.766E-02	-8.200E-03
363	6	-7.155E-02	-1.206E-02
363	7	-5.647E-02	-1.310E-02
363	8	-5.907E-02	-2.414E-03
363	9	6.936E-03	-1.408E-02
[illegible]	1	-5.576E-02	-7.887E-03
364	2	-5.569E-02	-8.155E-03
364	3	7.021E-03	-1.387E-02
364	4	-1.203E-01	-2.969E-03
364	5	-5.759E-02	-8.688E-03
364	6	-7.146E-02	-1.280E-02
364	7	-5.638E-02	-1.381E-02
364	8	-5.902E-02	-2.639E-03
364	9	6.957E-03	-1.360E-02
365	1	-5.569E-02	-8.722E-03
365	2	-5.562E-02	-9.001E-03
365	3	7.044E-03	-1.341E-02
365	4	-1.201E-01	-4.760E-03
365	5	-5.752E-02	-9.172E-03
365	6	-7.137E-02	-1.354E-02
365	7	-5.631E-02	-1.451E-02
365	8	-5.896E-02	-2.863E-03
365	9	6.980E-03	-1.313E-02
366	1	-5.562E-02	-9.562E-03
366	2	-5.556E-02	-9.852E-03
366	3	7.064E-03	-1.294E-02
366	4	-1.200E-01	-6.564E-03
366	5	-5.745E-02	-9.660E-03
[illegible]	6	-7.128E-02	-1.429E-02

DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
66	7	-5.622E-02	-1.522E-02
66	8	-5.892E-02	-3.090E-03
66	9	6.999E-03	-1.265E-02
67	1	-5.211E-02	-6.628E-03
67	2	-5.198E-02	-6.876E-03
67	3	4.811E-03	-1.538E-02
67	4	-1.123E-01	4.230E-04
67	5	-5.551E-02	-8.090E-03
67	6	-6.809E-02	-1.169E-02
67	7	-5.316E-02	-1.282E-02
67	8	-5.830E-02	-2.496E-03
67	9	4.687E-03	-1.514E-02
68	1	-5.204E-02	-7.434E-03
68	2	-5.192E-02	-7.697E-03
68	3	4.834E-03	-1.490E-02
68	4	-1.122E-01	-1.351E-03
68	5	-5.544E-02	-8.564E-03
68	6	-6.800E-02	-1.250E-02
68	7	-5.308E-02	-1.360E-02
68	8	-5.824E-02	-2.619E-03
68	9	4.710E-03	-1.464E-02
69	1	-5.197E-02	-8.238E-03
69	2	-5.185E-02	-8.516E-03
69	3	4.859E-03	-1.443E-02
69	4	-1.120E-01	-3.123E-03
69	5	-5.537E-02	-9.037E-03
69	6	-6.792E-02	-1.331E-02
69	7	-5.301E-02	-1.437E-02
69	8	-5.818E-02	-2.739E-03
69	9	4.735E-03	-1.415E-02
70	1	-5.191E-02	-9.035E-03
370	2	-5.178E-02	-9.329E-03
370	3	4.880E-03	-1.395E-02
370	4	-1.119E-01	-4.880E-03
370	5	-5.531E-02	-9.507E-03
370	6	-6.783E-02	-1.411E-02
70	7	-5.293E-02	-1.514E-02
70	8	-5.813E-02	-2.858E-03
70	9	4.756E-03	-1.366E-02
71	1	-5.185E-02	-9.839E-03
71	2	-5.172E-02	-1.014E-02
371	3	4.903E-03	-1.347E-02
371	4	-1.118E-01	-6.652E-03
371	5	-5.525E-02	-9.980E-03
371	6	-6.775E-02	-1.492E-02
71	7	-5.286E-02	-1.591E-02
71	8	-5.808E-02	-2.981E-03
71	9	4.778E-03	-1.316E-02

E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
72	1	-4.852E-02	-7.092E-03
	2	-4.832E-02	-7.341E-03
	3	2.593E-03	-1.595E-02
72	4	-1.043E-01	1.263E-04
72	5	-5.338E-02	-8.491E-03
72	6	-6.423E-02	-1.207E-02
72	7	-4.947E-02	-1.326E-02
72	8	-5.801E-02	-2.854E-03
72	9	2.389E-03	-1.571E-02
73	1	-4.845E-02	-7.843E-03
73	2	-4.824E-02	-8.112E-03
73	3	2.619E-03	-1.546E-02
73	4	-1.041E-01	-1.585E-03
73	5	-5.331E-02	-8.939E-03
73	6	-6.416E-02	-1.294E-02
73	7	-4.941E-02	-1.410E-02
73	8	-5.793E-02	-2.844E-03
73	9	2.414E-03	-1.519E-02
74	1	-4.839E-02	-8.596E-03
74	2	-4.818E-02	-8.886E-03
74	3	2.643E-03	-1.497E-02
74	4	-1.040E-01	-3.299E-03
74	5	-5.325E-02	-9.390E-03
74	6	-6.408E-02	-1.382E-02
74	7	-4.934E-02	-1.494E-02
	8	-5.788E-02	-2.838E-03
	9	2.438E-03	-1.468E-02
375	1	-4.833E-02	-9.345E-03
375	2	-4.812E-02	-9.655E-03
375	3	2.667E-03	-1.449E-02
375	4	-1.039E-01	-5.002E-03
375	5	-5.319E-02	-9.840E-03
375	6	-6.400E-02	-1.469E-02
375	7	-4.927E-02	-1.577E-02
375	8	-5.782E-02	-2.832E-03
375	9	2.462E-03	-1.418E-02
376	1	-4.827E-02	-1.010E-02
376	2	-4.807E-02	-1.043E-02
376	3	2.691E-03	-1.400E-02
376	4	-1.038E-01	-6.718E-03
376	5	-5.313E-02	-1.029E-02
376	6	-6.391E-02	-1.557E-02
376	7	-4.919E-02	-1.661E-02
376	8	-5.779E-02	-2.829E-03
376	9	2.485E-03	-1.367E-02
377	1	-4.518E-02	-7.336E-03
377	2	-4.488E-02	-7.579E-03
	3	3.571E-04	-1.661E-02
	4	-9.660E-02	2.953E-04

E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
7	5	-5.136E-02	-8.740E-03
7	6	-6.007E-02	-1.214E-02
7	7	-4.548E-02	-1.340E-02
7	8	-5.831E-02	-3.238E-03
7	9	4.951E-05	-1.637E-02
8	1	-4.512E-02	-8.086E-03
8	2	-4.481E-02	-8.356E-03
8	3	3.842E-04	-1.609E-02
8	4	-9.649E-02	-1.467E-03
8	5	-5.130E-02	-9.201E-03
8	6	-5.999E-02	-1.316E-02
8	7	-4.541E-02	-1.437E-02
8	8	-5.825E-02	-3.088E-03
8	9	7.640E-05	-1.582E-02
79	1	-4.505E-02	-8.838E-03
79	2	-4.474E-02	-9.135E-03
79	3	4.107E-04	-1.557E-02
79	4	-9.639E-02	-3.230E-03
79	5	-5.123E-02	-9.665E-03
79	6	-5.992E-02	-1.418E-02
79	7	-4.534E-02	-1.536E-02
79	8	-5.818E-02	-2.937E-03
79	9	1.030E-04	-1.527E-02
80	1	-4.499E-02	-9.596E-03
80	2	-4.468E-02	-9.921E-03
80	3	4.388E-04	-1.504E-02
80	4	-9.629E-02	-5.006E-03
80	5	-5.116E-02	-1.013E-02
80	6	-5.982E-02	-1.521E-02
80	7	-4.526E-02	-1.635E-02
80	8	-5.814E-02	-2.789E-03
80	9	1.301E-04	-1.472E-02
81	1	-4.493E-02	-1.035E-02
81	2	-4.462E-02	-1.070E-02
81	3	4.658E-04	-1.453E-02
81	4	-9.619E-02	-6.772E-03
81	5	-5.110E-02	-1.060E-02
81	6	-5.974E-02	-1.624E-02
81	7	-4.519E-02	-1.734E-02
81	8	-5.808E-02	-2.644E-03
81	9	1.567E-04	-1.417E-02
82	1	-4.205E-02	-7.777E-03
82	2	-4.161E-02	-8.020E-03
82	3	-1.839E-03	-1.707E-02
82	4	-8.917E-02	-3.222E-05
82	5	-4.939E-02	-9.091E-03
82	6	-5.548E-02	-1.242E-02
82	7	-4.105E-02	-1.373E-02
82	8	-5.924E-02	-3.604E-03

E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
2	9	-2.275E-03	-1.683E-02
	1	-4.198E-02	-8.482E-03
	2	-4.155E-02	-8.758E-03
3	3	-1.813E-03	-1.657E-02
3	4	-8.906E-02	-1.729E-03
3	5	-4.932E-02	-9.544E-03
3	6	-5.541E-02	-1.355E-02
3	7	-4.100E-02	-1.482E-02
3	8	-5.916E-02	-3.310E-03
3	9	-2.248E-03	-1.629E-02
34	1	-4.192E-02	-9.184E-03
34	2	-4.149E-02	-9.493E-03
34	3	-1.783E-03	-1.606E-02
34	4	-8.897E-02	-3.423E-03
34	5	-4.926E-02	-9.996E-03
34	6	-5.533E-02	-1.467E-02
84	7	-4.092E-02	-1.591E-02
84	8	-5.911E-02	-3.016E-03
84	9	-2.219E-03	-1.575E-02
85	1	-4.186E-02	-9.891E-03
85	2	-4.142E-02	-1.023E-02
85	3	-1.755E-03	-1.555E-02
85	4	-8.887E-02	-5.128E-03
85	5	-4.920E-02	-1.045E-02
	6	-5.526E-02	-1.581E-02
	7	-4.086E-02	-1.700E-02
85	8	-5.904E-02	-2.720E-03
85	9	-2.191E-03	-1.521E-02
386	1	-4.181E-02	-1.059E-02
386	2	-4.137E-02	-1.096E-02
386	3	-1.725E-03	-1.505E-02
386	4	-8.879E-02	-6.821E-03
386	5	-4.914E-02	-1.090E-02
386	6	-5.516E-02	-1.693E-02
386	7	-4.077E-02	-1.808E-02
386	8	-5.901E-02	-2.427E-03
386	9	-2.162E-03	-1.467E-02
387	1	-3.915E-02	-8.248E-03
387	2	-3.856E-02	-8.489E-03
387	3	-3.975E-03	-1.753E-02
387	4	-8.207E-02	-4.111E-04
387	5	-4.748E-02	-9.456E-03
387	6	-5.045E-02	-1.271E-02
387	7	-3.619E-02	-1.408E-02
387	8	-6.081E-02	-3.994E-03
387	9	-4.565E-03	-1.729E-02
	1	-3.909E-02	-8.893E-03
	2	-3.850E-02	-9.174E-03

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DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
38	3	-3.945E-03	-1.704E-02
38	4	-8.197E-02	-2.025E-03
38	5	-4.742E-02	-9.894E-03
38	6	-5.038E-02	-1.395E-02
38	7	-3.612E-02	-1.527E-02
88	8	-6.074E-02	-3.541E-03
88	9	-4.535E-03	-1.676E-02
89	1	-3.902E-02	-9.538E-03
89	2	-3.843E-02	-9.858E-03
89	3	-3.916E-03	-1.655E-02
89	4	-8.187E-02	-3.637E-03
89	5	-4.735E-02	-1.033E-02
89	6	-5.031E-02	-1.518E-02
89	7	-3.607E-02	-1.646E-02
89	8	-6.067E-02	-3.087E-03
89	9	-4.506E-03	-1.623E-02
390	1	-3.897E-02	-1.018E-02
390	2	-3.838E-02	-1.054E-02
390	3	-3.885E-03	-1.605E-02
390	4	-8.179E-02	-5.258E-03
390	5	-4.729E-02	-1.077E-02
390	6	-5.022E-02	-1.642E-02
390	7	-3.599E-02	-1.766E-02
390	8	-6.062E-02	-2.631E-03
390	9	-4.475E-03	-1.569E-02
391	1	-3.892E-02	-1.083E-02
391	2	-3.833E-02	-1.122E-02
391	3	-3.855E-03	-1.556E-02
391	4	-8.170E-02	-6.869E-03
391	5	-4.723E-02	-1.120E-02
391	6	-5.015E-02	-1.765E-02
391	7	-3.593E-02	-1.886E-02
391	8	-6.057E-02	-2.179E-03
391	9	-4.445E-03	-1.516E-02
392	1	-3.652E-02	-8.740E-03
392	2	-3.575E-02	-8.981E-03
392	3	-6.041E-03	-1.798E-02
392	4	-7.536E-02	-8.308E-04
392	5	-4.565E-02	-9.830E-03
392	6	-4.494E-02	-1.301E-02
392	7	-3.084E-02	-1.443E-02
392	8	-6.311E-02	-4.397E-03
392	9	-6.813E-03	-1.774E-02
393	1	-3.646E-02	-9.320E-03
393	2	-3.569E-02	-9.606E-03
393	3	-6.011E-03	-1.750E-02
393	4	-7.526E-02	-2.352E-03
393	5	-4.558E-02	-1.025E-02
393	6	-4.489E-02	-1.435E-02

ODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
193	7	-3.080E-02	-1.573E-02
193	8	-6.302E-02	-3.774E-03
[illegible]	9	-6.783E-03	-1.721E-02
194	1	-3.640E-02	-9.898E-03
194	2	-3.563E-02	-1.023E-02
194	3	-5.979E-03	-1.702E-02
194	4	-7.518E-02	-3.872E-03
194	5	-4.552E-02	-1.067E-02
194	6	-4.481E-02	-1.570E-02
194	7	-3.073E-02	-1.704E-02
194	8	-6.296E-02	-3.151E-03
194	9	-6.750E-03	-1.669E-02
195	1	-3.635E-02	-1.048E-02
195	2	-3.557E-02	-1.085E-02
195	3	-5.947E-03	-1.655E-02
195	4	-7.509E-02	-5.401E-03
195	5	-4.546E-02	-1.109E-02
195	6	-4.475E-02	-1.705E-02
195	7	-3.068E-02	-1.835E-02
195	8	-6.289E-02	-2.525E-03
195	9	-6.719E-03	-1.617E-02
196	1	-3.630E-02	-1.105E-02
196	2	-3.553E-02	-1.148E-02
196	3	-5.913E-03	-1.607E-02
[illegible]	4	-7.502E-02	-6.919E-03
[illegible]	5	-4.540E-02	-1.151E-02
196	6	-4.466E-02	-1.839E-02
196	7	-3.060E-02	-1.965E-02
196	8	-6.286E-02	-1.904E-03
196	9	-6.686E-03	-1.565E-02
197	1	-3.419E-02	-9.251E-03
197	2	-3.320E-02	-9.490E-03
197	3	-8.045E-03	-1.841E-02
197	4	-6.905E-02	-1.284E-03
197	5	-4.389E-02	-1.021E-02
197	6	-3.895E-02	-1.331E-02
197	7	-2.503E-02	-1.479E-02
197	8	-6.613E-02	-4.797E-03
197	9	-9.029E-03	-1.817E-02
198	1	-3.413E-02	-9.758E-03
198	2	-3.315E-02	-1.005E-02
198	3	-8.012E-03	-1.795E-02
198	4	-6.897E-02	-2.706E-03
198	5	-4.382E-02	-1.061E-02
198	6	-3.888E-02	-1.477E-02
198	7	-2.497E-02	-1.621E-02
198	8	-6.606E-02	-4.001E-03
[illegible]	9	-8.995E-03	-1.766E-02

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E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Z-DISPLACEMENT (AXIAL)
9	1	-3.407E-02	-1.026E-02
9	2	-3.309E-02	-1.061E-02
9	3	-7.980E-03	-1.749E-02
9	4	-6.887E-02	-4.128E-03
9	5	-4.376E-02	-1.101E-02
9	6	-3.883E-02	-1.624E-02
9	7	-2.492E-02	-1.763E-02
9	8	-6.598E-02	-3.205E-03
9	9	-8.963E-03	-1.715E-02
0	1	-3.402E-02	-1.077E-02
0	2	-3.304E-02	-1.117E-02
0	3	-7.944E-03	-1.703E-02
0	4	-6.880E-02	-5.556E-03
0	5	-4.370E-02	-1.141E-02
0	6	-3.875E-02	-1.770E-02
0	7	-2.486E-02	-1.905E-02
0	8	-6.593E-02	-2.405E-03
0	9	-8.928E-03	-1.663E-02
01	1	-3.397E-02	-1.128E-02
01	2	-3.299E-02	-1.173E-02
01	3	-7.911E-03	-1.657E-02
01	4	-6.873E-02	-6.976E-03
01	5	-4.364E-02	-1.182E-02
01	6	-3.868E-02	-1.916E-02
01	7	-2.480E-02	-2.047E-02
01	8	-6.587E-02	-1.611E-03
01	9	-8.894E-03	-1.612E-02
02	1	-3.218E-02	-9.772E-03
02	2	-3.095E-02	-1.001E-02
02	3	-9.975E-03	-1.884E-02
02	4	-6.319E-02	-1.763E-03
402	5	-4.221E-02	-1.059E-02
402	6	-3.243E-02	-1.364E-02
402	7	-1.870E-02	-1.518E-02
402	8	-6.992E-02	-5.176E-03
402	9	-1.120E-02	-1.860E-02
403	1	-3.211E-02	-1.020E-02
403	2	-3.089E-02	-1.050E-02
403	3	-9.943E-03	-1.840E-02
403	4	-6.309E-02	-3.083E-03
403	5	-4.215E-02	-1.097E-02
403	6	-3.239E-02	-1.521E-02
403	7	-1.867E-02	-1.671E-02
403	8	-6.983E-02	-4.210E-03
403	9	-1.116E-02	-1.810E-02
404	1	-3.206E-02	-1.063E-02
404	2	-3.084E-02	-1.099E-02
404	3	-9.907E-03	-1.796E-02
404	4	-6.302E-02	-4.402E-03

DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Z-DISPLACEMENT (AXIAL)
104	5	-4.209E-02	-1.136E-02
104	6	-3.232E-02	-1.679E-02
[illegible]	7	-1.861E-02	-1.824E-02
[illegible]	8	-6.977E-02	-3.247E-03
10[illegible]	9	-1.113E-02	-1.760E-02
105	1	-3.201E-02	-1.107E-02
105	2	-3.078E-02	-1.149E-02
105	3	-9.873E-03	-1.751E-02
105	4	-6.294E-02	-5.728E-03
105	5	-4.203E-02	-1.175E-02
105	6	-3.226E-02	-1.838E-02
105	7	-1.856E-02	-1.978E-02
105	8	-6.969E-02	-2.277E-03
105	9	-1.109E-02	-1.709E-02
106	1	-3.197E-02	-1.150E-02
106	2	-3.074E-02	-1.198E-02
106	3	-9.835E-03	-1.707E-02
106	4	-6.289E-02	-7.044E-03
106	5	-4.197E-02	-1.213E-02
106	6	-3.219E-02	-1.996E-02
106	7	-1.849E-02	-2.130E-02
106	8	-6.965E-02	-1.314E-03
106	9	-1.106E-02	-1.659E-02
107	1	-3.048E-02	-1.029E-02
107	2	-2.899E-02	-1.053E-02
[illegible]	3	-1.182E-02	-1.925E-02
1[illegible]	4	-5.777E-02	-2.261E-03
107	5	-4.060E-02	-1.097E-02
107	6	-2.544E-02	-1.399E-02
107	7	-1.193E-02	-1.559E-02
107	8	-7.440E-02	-5.514E-03
107	9	-1.331E-02	-1.901E-02
108	1	-3.043E-02	-1.065E-02
108	2	-2.893E-02	-1.096E-02
108	3	-1.178E-02	-1.883E-02
108	4	-5.769E-02	-3.477E-03
108	5	-4.054E-02	-1.134E-02
8	6	-2.539E-02	-1.568E-02
8	7	-1.188E-02	-1.723E-02
8	8	-7.433E-02	-4.391E-03
8	9	-1.328E-02	-1.852E-02
9	1	-3.037E-02	-1.101E-02
9	2	-2.888E-02	-1.139E-02
9	3	-1.175E-02	-1.841E-02
9	4	-5.761E-02	-4.693E-03
9	5	-4.048E-02	-1.171E-02
9	6	-2.534E-02	-1.737E-02
9	7	-1.185E-02	-1.887E-02
[illegible]	8	-7.424E-02	-3.273E-03

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LOAD COMB		X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
	9	-1.324E-02	-1.804E-02
	1	-3.033E-02	-1.137E-02
	2	-2.883E-02	-1.181E-02
	3	-1.171E-02	-1.799E-02
	4	-5.755E-02	-5.915E-03
	5	-4.043E-02	-1.208E-02
	6	-2.527E-02	-1.907E-02
	7	-1.179E-02	-2.051E-02
	8	-7.418E-02	-2.148E-03
	9	-1.320E-02	-1.755E-02
	1	-3.028E-02	-1.173E-02
	2	-2.878E-02	-1.224E-02
	3	-1.167E-02	-1.757E-02
	4	-5.748E-02	-7.129E-03
	5	-4.037E-02	-1.245E-02
1	6	-2.522E-02	-2.076E-02
1	7	-1.174E-02	-2.214E-02
1	8	-7.412E-02	-1.028E-03
1	9	-1.317E-02	-1.706E-02
2	1	-2.911E-02	-1.082E-02
2	2	-2.732E-02	-1.106E-02
2	3	-1.357E-02	-1.965E-02
2	4	-5.279E-02	-2.769E-03
2	5	-3.905E-02	-1.135E-02
2	6	-1.795E-02	-1.438E-02
2	7	-4.700E-03	-1.606E-02
2	8	-7.954E-02	-5.784E-03
2	9	-1.536E-02	-1.940E-02
13	1	-2.905E-02	-1.110E-02
13	2	-2.726E-02	-1.142E-02
13	3	-1.354E-02	-1.925E-02
13	4	-5.271E-02	-3.885E-03
13	5	-3.899E-02	-1.171E-02
13	6	-1.791E-02	-1.618E-02
13	7	-4.670E-03	-1.779E-02
13	8	-7.945E-02	-4.530E-03
13	9	-1.533E-02	-1.893E-02
14	1	-2.900E-02	-1.139E-02
14	2	-2.721E-02	-1.178E-02
14	3	-1.350E-02	-1.886E-02
14	4	-5.264E-02	-5.000E-03
14	5	-3.893E-02	-1.207E-02
14	6	-1.786E-02	-1.797E-02
14	7	-4.625E-03	-1.952E-02
14	8	-7.938E-02	-3.282E-03
14	9	-1.529E-02	-1.847E-02
415	1	-2.895E-02	-1.168E-02
415	2	-2.716E-02	-1.214E-02

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ODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
415	3	-1.346E-02	-1.846E-02
415	4	-5.257E-02	-6.122E-03
[illegible]	5	-3.888E-02	-1.243E-02
[illegible]	6	-1.781E-[illegible]	-1.977E-02
415	7	-4.587E-03	-2.125E-02
415	8	-7.930E-02	-2.026E-03
415	9	-1.525E-02	-1.800E-02
416	1	-2.891E-02	-1.197E-02
416	2	-2.712E-02	-1.250E-02
416	3	-1.342E-02	-1.806E-02
416	4	-5.252E-02	-7.234E-03
416	5	-3.882E-02	-1.279E-02
416	6	-1.775E-02	-2.157E-02
416	7	-4.533E-03	-2.298E-02
416	8	-7.924E-02	-7.760E-04
416	9	-1.521E-02	-1.753E-02
417	1	-2.802E-02	-1.133E-02
417	2	-2.591E-02	-1.158E-02
417	3	-1.521E-02	-2.003E-02
417	4	-4.823E-02	-3.280E-03
417	5	-3.753E-02	-1.172E-02
417	6	-1.006E-02	-1.484E-02
417	7	2.890E-03	-1.659E-02
417	8	-8.517E-02	-5.961E-03
417	9	-1.732E-02	-1.977E-02
[illegible]	1	-2.797E-02	-1.155E-02
418	2	-2.586E-02	-1.188E-02
418	3	-1.517E-02	-1.966E-02
418	4	-4.816E-02	-4.300E-03
418	5	-3.747E-02	-1.207E-02
418	6	-1.001E-02	-1.672E-02
418	7	2.926E-03	-1.840E-02
418	8	-8.509E-02	-4.612E-03
418	9	-1.728E-02	-1.933E-02
419	1	-2.792E-02	-1.178E-02
419	2	-2.581E-02	-1.218E-02
419	3	-1.514E-02	-1.930E-02
419	4	-4.809E-02	-5.321E-03
419	5	-3.742E-[illegible]	-1.243E-02
419	6	-9.977E-[illegible]	-1.860E-02
419	7	2.957E-03	-2.019E-02
419	8	-8.500E-02	-3.271E-03
419	9	-1.724E-02	-1.889E-02
420	1	-2.787E-02	-1.200E-02
420	2	-2.577E-02	-1.248E-02
420	3	-1.510E-02	-1.893E-02
420	4	-4.803E-02	-6.347E-03
420	5	-3.736E-02	-1.279E-02
[illegible]	6	-9.925E-03	-2.048E-02

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E 201

ODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
420	7	2.998E-03	-2.200E-02
420	8	-8.493E-02	-1.923E-03
420	9	-1.720E-02	-1.845E-02
421	1	-2.783E-02	-1.223E-02
421	2	-2.572E-02	-1.278E-02
421	3	-1.506E-02	-1.856E-02
421	4	-4.797E-02	-7.365E-03
421	5	-3.731E-02	-1.314E-02
421	6	-9.879E-03	-2.236E-02
421	7	3.034E-03	-2.380E-02
421	8	-8.485E-02	-5.775E-04
421	9	-1.716E-02	-1.801E-02
422	1	-2.720E-02	-1.182E-02
422	2	-2.477E-02	-1.209E-02
422	3	-1.671E-02	-2.039E-02
422	4	-4.408E-02	-3.786E-03
422	5	-3.602E-02	-1.208E-02
422	6	-1.847E-03	-1.538E-02
422	7	1.073E-02	-1.722E-02
422	8	-9.112E-02	-6.008E-03
422	9	-1.914E-02	-2.012E-02
423	1	-2.715E-02	-1.199E-02
423	2	-2.471E-02	-1.234E-02
423	3	-1.667E-02	-2.006E-02
423	4	-4.400E-02	-4.720E-03
423	5	-3.596E-02	-1.244E-02
423	6	-1.812E-03	-1.732E-02
423	7	1.076E-02	-1.906E-02
423	8	-9.103E-02	-4.620E-03
423	9	-1.911E-02	-1.971E-02
424	1	-2.710E-02	-1.216E-02
424	2	-2.467E-02	-1.258E-02
424	3	-1.663E-02	-1.973E-02
424	4	-4.395E-02	-5.655E-03
424	5	-3.591E-02	-1.279E-02
424	6	-1.772E-03	-1.925E-02
424	7	1.079E-02	-2.089E-02
424	8	-9.095E-02	-3.240E-03
424	9	-1.906E-02	-1.931E-02
425	1	-2.705E-02	-1.233E-02
425	2	-2.462E-02	-1.283E-02
425	3	-1.659E-02	-1.940E-02
425	4	-4.388E-02	-6.595E-03
425	5	-3.585E-02	-1.315E-02
425	6	-1.734E-03	-2.119E-02
425	7	1.082E-02	-2.274E-02
425	8	-9.086E-02	-1.853E-03
425	9	-1.902E-02	-1.890E-02

LOAD CASE	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
1	-2.701E-02	-1.250E-02
2	-2.458E-02	-1.308E-02
3	-1.654E-02	-1.907E-02
4	-4.383E-02	-7.526E-03
5	-3.580E-02	-1.351E-02
6	-1.691E-03	-2.312E-02
7	1.085E-02	-2.457E-02
8	-9.078E-02	-4.685E-04
9	-1.898E-02	-1.849E-02
1	-2.659E-02	-1.229E-02
2	-2.381E-02	-1.258E-02
3	-1.804E-02	-2.073E-02
4	-4.026E-02	-4.282E-03
5	-3.448E-02	-1.243E-02
6	6.545E-03	-1.603E-02
7	1.868E-02	-1.796E-02
8	-9.712E-02	-5.896E-03
9	-2.081E-02	-2.044E-02
1	-2.654E-02	-1.242E-02
2	-2.377E-02	-1.278E-02
3	-1.800E-02	-2.044E-02
4	-4.020E-02	-5.141E-03
5	-3.443E-02	-1.279E-02
6	6.578E-03	-1.798E-02
7	1.870E-02	-1.979E-02
8	-9.703E-02	-4.535E-03
9	-2.077E-02	-2.007E-02
1	-2.649E-02	-1.255E-02
2	-2.372E-02	-1.299E-02
3	-1.796E-02	-2.015E-02
4	-4.013E-02	-6.000E-03
5	-3.437E-02	-1.316E-02
6	6.613E-03	-1.992E-02
7	1.873E-02	-2.162E-02
8	-9.695E-02	-3.187E-03
9	-2.073E-02	-1.971E-02
1	-2.644E-02	-1.268E-02
2	-2.368E-02	-1.320E-02
3	-1.791E-02	-1.987E-02
4	-4.008E-02	-6.865E-03
5	-3.432E-02	-1.353E-02
6	6.643E-03	-2.187E-02
7	1.875E-02	-2.345E-02
8	-9.685E-02	-1.832E-03
9	-2.068E-02	-1.935E-02
1	-2.640E-02	-1.281E-02
2	-2.363E-02	-1.340E-02
3	-1.787E-02	-1.958E-02
4	-4.003E-02	-7.721E-03

ODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
431	5	-3.427E-02	-1.390E-02
431	6	6.573E-03	-2.382E-02
431	7	1.877E-02	-2.528E-02
431	8	-9.677E-02	-4.733E-04
431	9	-2.064E-02	-1.899E-02
432	1	-2.611E-02	-1.272E-02
432	2	-2.302E-02	-1.304E-02
432	3	-1.916E-02	-2.105E-02
432	4	-3.674E-02	-4.764E-03
432	5	-3.289E-02	-1.277E-02
432	6	1.488E-02	-1.684E-02
432	7	2.648E-02	-1.886E-02
432	8	-1.028E-01	-5.577E-03
432	9	-2.225E-02	-2.073E-02
433	1	-2.606E-02	-1.283E-02
433	2	-2.297E-02	-1.322E-02
433	3	-1.913E-02	-2.081E-02
433	4	-3.668E-02	-5.557E-03
433	5	-3.284E-02	-1.315E-02
433	6	1.492E-02	-1.873E-02
433	7	2.652E-02	-2.061E-02
433	8	-1.027E-01	-4.342E-03
433	9	-2.222E-02	-2.042E-02
434	1	-2.602E-02	-1.293E-02
434	2	-2.293E-02	-1.339E-02
434	3	-1.908E-02	-2.057E-02
434	4	-3.663E-02	-6.355E-03
434	5	-3.278E-02	-1.353E-02
434	6	1.494E-02	-2.062E-02
434	7	2.653E-02	-2.236E-02
434	8	-1.026E-01	-3.112E-03
434	9	-2.217E-02	-2.011E-02
435	1	-2.597E-02	-1.304E-02
435	2	-2.288E-02	-1.357E-02
435	3	-1.904E-02	-2.034E-02
435	4	-3.657E-02	-7.159E-03
435	5	-3.273E-02	-1.392E-02
435	6	1.497E-02	-2.253E-02
435	7	2.655E-02	-2.413E-02
435	8	-1.025E-01	-1.877E-03
435	9	-2.213E-02	-1.980E-02
436	1	-2.593E-02	-1.315E-02
436	2	-2.284E-02	-1.375E-02
436	3	-1.899E-02	-2.010E-02
436	4	-3.652E-02	-7.956E-03
436	5	-3.268E-02	-1.430E-02
436	6	1.498E-02	-2.443E-02
436	7	2.655E-02	-2.589E-02
436	8	-1.024E-01	-6.395E-04

E204

DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
36	9	-2.208E-02	-1.950E-02
[illegible]	1	-2.570E-02	-1.306E-02
[illegible]	2	-2.230E-02	-1.340E-02
37	3	-2.006E-02	-2.138E-02
37	4	-3.345E-02	-4.985E-03
37	5	-3.121E-02	-1.296E-02
37	6	2.291E-02	-1.728E-02
37	7	3.388E-02	-1.943E-02
37	8	-1.078E-01	-5.325E-03
37	9	-2.345E-02	-2.104E-02
38	1	-2.565E-02	-1.317E-02
38	2	-2.226E-02	-1.358E-02
38	3	-2.002E-02	-2.119E-02
38	4	-3.340E-02	-5.790E-03
38	5	-3.116E-02	-1.340E-02
38	6	2.293E-02	-1.919E-02
38	7	3.389E-02	-2.117E-02
38	8	-1.077E-01	-4.231E-03
38	9	-2.341E-02	-2.078E-02
39	1	-2.560E-02	-1.329E-02
39	2	-2.221E-02	-1.376E-02
39	3	-1.998E-02	-2.100E-02
39	4	-3.334E-02	-6.605E-03
39	5	-3.111E-02	-1.384E-02
[illegible]	6	2.297E-02	-2.110E-02
[illegible]	7	3.392E-02	-2.290E-02
39	8	-1.077E-01	-3.154E-03
39	9	-2.337E-02	-2.053E-02
40	1	-2.555E-02	-1.341E-02
40	2	-2.216E-02	-1.395E-02
40	3	-1.993E-02	-2.081E-02
40	4	-3.329E-02	-7.421E-03
40	5	-3.105E-02	-1.428E-02
40	6	2.297E-02	-2.300E-02
40	7	3.391E-02	-2.463E-02
40	8	-1.075E-01	-2.076E-03
40	9	-2.331E-02	-2.027E-02
41	1	-2.550E-02	-1.353E-02
41	2	-2.212E-02	-1.413E-02
41	3	-1.988E-02	-2.063E-02
41	4	-3.323E-02	-8.231E-03
41	5	-3.100E-02	-1.472E-02
41	6	2.299E-02	-2.491E-02
41	7	3.392E-02	-2.637E-02
41	8	-1.074E-01	-9.852E-04
41	9	-2.327E-02	-2.002E-02
42	1	-2.519E-02	-1.334E-02
[illegible]	2	-2.155E-02	-1.373E-02

DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
42	3	-2.066E-02	-2.161E-02
42	4	-3.025E-02	-5.350E-03
42	5	-2.937E-02	-1.322E-02
42	6	3.034E-02	-1.838E-02
42	7	4.057E-02	-2.062E-02
42	8	-1.117E-01	-4.485E-03
42	9	-2.431E-02	-2.122E-02
43	1	-2.515E-02	-1.349E-02
43	2	-2.151E-02	-1.394E-02
43	3	-2.063E-02	-2.150E-02
43	4	-3.020E-02	-6.149E-03
43	5	-2.932E-02	-1.371E-02
43	6	3.040E-02	-2.010E-02
43	7	4.062E-02	-2.214E-02
43	8	-1.117E-01	-3.747E-03
43	9	-2.428E-02	-2.106E-02
44	1	-2.510E-02	-1.365E-02
44	2	-2.146E-02	-1.414E-02
44	3	-2.058E-02	-2.138E-02
44	4	-3.015E-02	-6.951E-03
44	5	-2.927E-02	-1.419E-02
44	6	3.040E-02	-2.181E-02
44	7	4.061E-02	-2.365E-02
44	8	-1.115E-01	-3.027E-03
44	9	-2.423E-02	-2.089E-02
45	1	-2.506E-02	-1.380E-02
45	2	-2.142E-02	-1.435E-02
45	3	-2.054E-02	-2.127E-02
45	4	-3.009E-02	-7.755E-03
45	5	-2.922E-02	-1.468E-02
45	6	3.042E-02	-2.352E-02
45	7	4.063E-02	-2.517E-02
445	8	-1.114E-01	-2.307E-03
445	9	-2.418E-02	-2.073E-02
446	1	-2.500E-02	-1.395E-02
446	2	-2.137E-02	-1.455E-02
446	3	-2.049E-02	-2.116E-02
446	4	-3.005E-02	-8.548E-03
446	5	-2.916E-02	-1.516E-02
446	6	3.039E-02	-2.523E-02
446	7	4.059E-02	-2.668E-02
446	8	-1.113E-01	-1.574E-03
446	9	-2.412E-02	-2.056E-02
447	1	-2.452E-02	-1.359E-02
447	2	-2.069E-02	-1.404E-02
447	3	-2.096E-02	-2.182E-02
447	4	-2.707E-02	-5.697E-03
447	5	-2.734E-02	-1.347E-02
447	6	3.686E-02	-1.973E-02

NODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
447	7	4.625E-02	-2.206E-02
447	8	-1.140E-01	-3.335E-03
[illegible]	9	-2.480E-02	-2.137E-02
448	1	-2.448E-02	-1.379E-02
448	2	-2.064E-02	-1.428E-02
448	3	-2.092E-02	-2.179E-02
448	4	-2.702E-02	-6.497E-03
448	5	-2.729E-02	-1.401E-02
448	6	3.687E-02	-2.114E-02
448	7	4.625E-02	-2.325E-02
448	8	-1.138E-01	-3.103E-03
448	9	-2.475E-02	-2.131E-02
449	1	-2.444E-02	-1.400E-02
449	2	-2.061E-02	-1.452E-02
449	3	-2.089E-02	-2.176E-02
449	4	-2.697E-02	-7.304E-03
449	5	-2.725E-02	-1.454E-02
449	6	3.690E-02	-2.254E-02
449	7	4.628E-02	-2.443E-02
449	8	-1.138E-01	-2.884E-03
449	9	-2.472E-02	-2.125E-02
450	1	-2.439E-02	-1.421E-02
450	2	-2.056E-02	-1.476E-02
450	3	-2.084E-02	-2.173E-02
[illegible]	4	-2.693E-02	-8.108E-03
[illegible]	5	-2.720E-02	-1.508E-02
450	6	3.686E-02	-2.393E-02
450	7	4.622E-02	-2.559E-02
450	8	-1.136E-01	-2.684E-03
450	9	-2.466E-02	-2.118E-02
451	1	-2.435E-02	-1.441E-02
451	2	-2.052E-02	-1.499E-02
451	3	-2.080E-02	-2.170E-02
451	4	-2.689E-02	-8.907E-03
451	5	-2.716E-02	-1.561E-02
451	6	3.685E-02	-2.534E-02
451	7	4.621E-02	-2.677E-02
451	8	-1.135E-01	-2.454E-03
451	9	-2.462E-02	-2.112E-02
452	1	-2.356E-02	-1.383E-02
452	2	-1.962E-02	-1.436E-02
452	3	-2.089E-02	-2.206E-02
452	4	-2.379E-02	-6.058E-03
452	5	-2.506E-02	-1.376E-02
452	6	4.208E-02	-2.144E-02
452	7	5.051E-02	-2.387E-02
452	8	-1.140E-01	-1.821E-03
[illegible]	9	-2.482E-02	-2.153E-02

DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
53	1	-2.352E-02	-1.409E-02
53	2	-1.959E-02	-1.462E-02
53	3	-2.086E-02	-2.209E-02
53	4	-2.376E-02	-6.846E-03
53	5	-2.502E-02	-1.432E-02
53	6	4.202E-02	-2.228E-02
53	7	5.045E-02	-2.445E-02
53	8	-1.138E-01	-2.369E-03
53	9	-2.479E-02	-2.156E-02
54	1	-2.347E-02	-1.436E-02
54	2	-1.955E-02	-1.489E-02
54	3	-2.081E-02	-2.213E-02
54	4	-2.371E-02	-7.654E-03
54	5	-2.498E-02	-1.489E-02
54	6	4.191E-02	-2.320E-02
54	7	5.033E-02	-2.511E-02
54	8	-1.136E-01	-2.844E-03
54	9	-2.473E-02	-2.160E-02
55	1	-2.343E-02	-1.462E-02
55	2	-1.951E-02	-1.517E-02
55	3	-2.077E-02	-2.218E-02
55	4	-2.368E-02	-8.469E-03
55	5	-2.494E-02	-1.547E-02
55	6	4.187E-02	-2.418E-02
55	7	5.028E-02	-2.585E-02
55	8	-1.134E-01	-3.243E-03
55	9	-2.469E-02	-2.163E-02
56	1	-2.338E-02	-1.489E-02
56	2	-1.947E-02	-1.544E-02
56	3	-2.073E-02	-2.222E-02
56	4	-2.364E-02	-9.281E-03
456	5	-2.489E-02	-1.605E-02
456	6	4.177E-02	-2.521E-02
456	7	5.016E-02	-2.662E-02
456	8	-1.132E-01	-3.596E-03
456	9	-2.464E-02	-2.167E-02
57	1	-2.287E-02	-1.385E-02
457	2	-1.896E-02	-1.440E-02
57	3	-2.064E-02	-2.209E-02
457	4	-2.210E-02	-6.103E-03
457	5	-2.378E-02	-1.379E-02
457	6	4.343E-02	-2.184E-02
457	7	5.132E-02	-2.430E-02
457	8	-1.121E-01	-1.379E-03
457	9	-2.455E-02	-2.154E-02
458	1	-2.283E-02	-1.420E-02
458	2	-1.893E-02	-1.474E-02
458	3	-2.061E-02	-2.221E-02
458	4	-2.207E-02	-6.968E-03

NODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
458	5	-2.375E-02	-1.443E-02
458	6	4.336E-02	-2.259E-02
[illegible]	7	5.124E-02	-2.478E-02
[illegible]	8	-1.120E-01	-2.226E-03
458	9	-2.452E-02	-2.167E-02
459	1	-2.281E-02	-1.453E-02
459	2	-1.890E-02	-1.507E-02
459	3	-2.059E-02	-2.232E-02
459	4	-2.204E-02	-7.820E-03
459	5	-2.372E-02	-1.507E-02
459	6	4.333E-02	-2.338E-02
459	7	5.121E-02	-2.530E-02
459	8	-1.119E-01	-2.992E-03
459	9	-2.449E-02	-2.178E-02
460	1	-2.277E-02	-1.483E-02
460	2	-1.887E-02	-1.536E-02
460	3	-2.055E-02	-2.238E-02
460	4	-2.200E-02	-8.641E-03
460	5	-2.368E-02	-1.566E-02
460	6	4.329E-02	-2.422E-02
460	7	5.116E-02	-2.589E-02
460	8	-1.117E-01	-3.605E-03
460	9	-2.445E-02	-2.185E-02
461	1	-2.273E-02	-1.513E-02
[illegible]	2	-1.883E-02	-1.565E-02
[illegible]	3	-2.051E-02	-2.246E-02
461	4	-2.196E-02	-9.452E-03
461	5	-2.364E-02	-1.626E-02
461	6	4.327E-02	-2.496E-02
461	7	5.114E-02	-2.636E-02
461	8	-1.116E-01	-4.354E-03
461	9	-2.441E-02	-2.193E-02
462	1	-2.202E-02	-1.383E-02
462	2	-1.819E-02	-1.440E-02
462	3	-2.025E-02	-2.207E-02
462	4	-2.034E-02	-6.118E-03
462	5	-2.240E-02	-1.379E-02
462	6	4.396E-02	-2.221E-02
462	7	5.127E-02	-2.469E-02
462	8	-1.091E-01	-9.105E-04
462	9	-2.408E-02	-2.150E-02
463	1	-2.207E-02	-1.435E-02
463	2	-1.822E-02	-1.490E-02
463	3	-2.030E-02	-2.236E-02
463	4	-2.035E-02	-7.120E-03
463	5	-2.243E-02	-1.458E-02
463	6	4.424E-02	-2.286E-02
463	7	5.156E-02	-2.506E-02
[illegible]	8	-1.095E-01	-2.215E-03

LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
9	-2.415E-02	-2.182E-02
1	-2.209E-02	-1.471E-02
2	-1.823E-02	-1.525E-02
3	-2.032E-02	-2.249E-02
4	-2.034E-02	-7.997E-03
5	-2.243E-02	-1.524E-02
6	4.439E-02	-2.370E-02
7	5.172E-02	-2.564E-02
8	-1.097E-01	-2.974E-03
9	-2.418E-02	-2.195E-02
1	-2.209E-02	-1.502E-02
2	-1.823E-02	-1.555E-02
3	-2.032E-02	-2.258E-02
4	-2.034E-02	-8.822E-03
5	-2.243E-02	-1.584E-02
6	4.445E-02	-2.442E-02
7	5.178E-02	-2.609E-02
8	-1.097E-01	-3.762E-03
9	-2.419E-02	-2.204E-02
1	-2.209E-02	-1.523E-02
2	-1.822E-02	-1.576E-02
3	-2.032E-02	-2.257E-02
4	-2.033E-02	-9.546E-03
5	-2.243E-02	-1.636E-02
6	4.440E-02	-2.500E-02
7	5.173E-02	-2.641E-02
8	-1.097E-01	-4.512E-03
9	-2.418E-02	-2.205E-02
1	-2.307E-02	-1.268E-02
2	-1.911E-02	-1.336E-02
3	-2.074E-02	-2.161E-02
4	-2.245E-02	-3.603E-03
5	-2.407E-02	-1.184E-02
6	4.387E-02	-2.159E-02
7	5.191E-02	-2.492E-02
8	-1.135E-01	3.617E-03
9	-2.469E-02	-2.092E-02
1	-2.229E-02	-1.263E-02
2	-1.843E-02	-1.333E-02
3	-2.034E-02	-2.156E-02
4	-2.094E-02	-3.570E-03
5	-2.285E-02	-1.180E-02
6	4.374E-02	-2.176E-02
7	5.125E-02	-2.512E-02
8	-1.100E-01	3.931E-03
9	-2.420E-02	-2.087E-02
1	-2.151E-02	-1.260E-02
2	-1.775E-02	-1.330E-02

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ODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
469	3	-1.997E-02	-2.134E-02
469	4	-1.942E-02	-3.537E-03
[illegible]	5	-2.164E-02	-1.177E-02
[illegible]	6	4.366E-02	-2.177E-02
469	7	5.064E-02	-2.514E-02
469	8	-1.067E-01	4.025E-03
469	9	-2.373E-02	-2.084E-02
470	1	-2.240E-02	-1.127E-02
470	2	-1.849E-02	-1.220E-02
470	3	-2.040E-02	-2.090E-02
470	4	-2.108E-02	-1.073E-03
470	5	-2.298E-02	-9.775E-03
470	6	4.441E-02	-2.316E-02
470	7	5.201E-02	-2.747E-02
470	8	-1.112E-01	1.115E-02
470	9	-2.431E-02	-1.997E-02
471	1	-2.168E-02	-1.125E-02
471	2	-1.788E-02	-1.218E-02
471	3	-2.002E-02	-2.088E-02
471	4	-1.979E-02	-1.044E-03
471	5	-2.192E-02	-9.746E-03
471	6	4.386E-02	-2.317E-02
471	7	5.098E-02	-2.749E-02
471	8	-1.077E-01	1.123E-02
471	9	-2.382E-02	-1.995E-02
[illegible]	1	-2.089E-02	-1.121E-02
472	2	-1.724E-02	-1.215E-02
472	3	-1.956E-02	-2.084E-02
472	4	-1.852E-02	-1.020E-03
472	5	-2.084E-02	-9.713E-03
472	6	4.248E-02	-2.333E-02
472	7	4.910E-02	-2.766E-02
472	8	-1.031E-01	1.151E-02
472	9	-2.320E-02	-1.990E-02
473	1	-2.158E-02	-9.707E-03
473	2	-1.785E-02	-1.097E-02
473	3	-2.001E-02	-2.003E-02
73	4	-1.972E-02	1.399E-03
73	5	-2.188E-02	-7.658E-03
73	6	4.445E-02	-2.650E-02
73	7	5.159E-02	-3.185E-02
73	8	-1.083E-01	2.093E-02
73	9	-2.383E-02	-1.876E-02
74	1	-2.089E-02	-9.675E-03
74	2	-1.724E-02	-1.094E-02
74	3	-1.953E-02	-2.000E-02
74	4	-1.858E-02	1.421E-03
74	5	-2.087E-02	-7.630E-03
[illegible]	6	4.266E-02	-2.662E-02

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NDE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
474	7	4.931E-02	-3.198E-02
474	8	-1.034E-01	2.114E-02
474	9	-2.318E-02	-1.872E-02
475	1	-2.012E-02	-9.651E-03
475	2	-1.663E-02	-1.092E-02
475	3	-1.906E-02	-1.997E-02
475	4	-1.744E-02	1.447E-03
475	5	-1.987E-02	-7.603E-03
475	6	4.096E-02	-2.664E-02
475	7	4.714E-02	-3.200E-02
475	8	-9.870E-02	2.123E-02
475	9	-2.255E-02	-1.870E-02
476	1	-2.082E-02	-7.964E-03
476	2	-1.715E-02	-9.674E-03
476	3	-1.947E-02	-1.896E-02
476	4	-1.843E-02	3.786E-03
476	5	-2.075E-02	-5.508E-03
476	6	4.311E-02	-3.177E-02
476	7	4.974E-02	-3.821E-02
476	8	-1.036E-01	3.313E-02
476	9	-2.314E-02	-1.725E-02
477	1	-2.007E-02	-7.944E-03
477	2	-1.658E-02	-9.655E-03
477	3	-1.899E-02	-1.895E-02
477	4	-1.741E-02	3.811E-03
477	5	-1.983E-02	-5.484E-03
477	6	4.108E-02	-3.176E-02
477	7	4.727E-02	-3.822E-02
477	8	-9.877E-02	3.319E-02
477	9	-2.249E-02	-1.723E-02
478	1	-1.928E-02	-7.915E-03
478	2	-1.599E-02	-9.633E-03
478	3	-1.846E-02	-1.892E-02
478	4	-1.642E-02	3.828E-03
478	5	-1.890E-02	-5.459E-03
478	6	3.852E-02	-3.186E-02
478	7	4.425E-02	-3.832E-02
478	8	-9.317E-02	3.336E-02
478	9	-2.175E-02	-1.720E-02
479	1	-2.008E-02	-6.089E-03
479	2	-1.655E-02	-8.325E-03
479	3	-1.898E-02	-1.775E-02
479	4	-1.737E-02	6.074E-03
479	5	-1.980E-02	-3.350E-03
479	6	4.171E-02	-3.856E-02
479	7	4.793E-02	-4.614E-02
479	8	-9.947E-02	4.718E-02
479	9	-2.250E-02	-1.551E-02

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DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
80	1	-1.924E-02	-6.061E-03
80	2	-1.595E-02	-8.303E-03
[illegible]	3	-1.840E-02	-1.772E-02
[illegible]	4	-1.641E-02	6.093E-03
80	5	-1.887E-02	-3.325E-03
80	6	3.876E-02	-3.863E-02
80	7	4.451E-02	-4.622E-02
80	8	-9.341E-02	4.733E-02
80	9	-2.170E-02	-1.548E-02
81	1	-1.842E-02	-6.039E-03
81	2	-1.534E-02	-8.284E-03
81	3	-1.783E-02	-1.770E-02
81	4	-1.544E-02	6.116E-03
81	5	-1.794E-02	-3.301E-03
81	6	3.587E-02	-3.865E-02
81	7	4.114E-02	-4.624E-02
81	8	-8.741E-02	4.741E-02
81	9	-2.091E-02	-1.545E-02
82	1	-1.927E-02	-4.083E-03
82	2	-1.593E-02	-6.916E-03
82	3	-1.840E-02	-1.636E-02
82	4	-1.639E-02	8.261E-03
82	5	-1.886E-02	-1.183E-03
82	6	3.943E-02	-4.667E-02
82	7	4.521E-02	-5.541E-02
[illegible]	8	-9.423E-02	6.283E-02
[illegible]	9	-2.174E-02	-1.352E-02
83	1	-1.841E-02	-4.062E-03
83	2	-1.531E-02	-6.897E-03
83	3	-1.779E-02	-1.634E-02
83	4	-1.545E-02	8.283E-03
83	5	-1.793E-02	-1.160E-03
83	6	3.623E-02	-4.669E-02
83	7	4.154E-02	-5.543E-02
83	8	-8.787E-02	6.291E-02
83	9	-2.088E-02	-1.350E-02
84	1	-1.752E-02	-4.037E-03
84	2	-1.468E-02	-6.877E-03
84	3	-1.713E-02	-1.631E-02
84	4	-1.454E-02	8.299E-03
84	5	-1.700E-02	-1.138E-03
84	6	3.275E-02	-4.675E-02
84	7	3.758E-02	-5.550E-02
84	8	-8.117E-02	6.304E-02
84	9	-1.997E-02	-1.347E-02
85	1	-1.826E-02	-1.984E-03
85	2	-1.518E-02	-5.455E-03
85	3	-1.767E-02	-1.483E-02
[illegible]	4	-1.526E-02	1.036E-02

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LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
5	-1.775E-02	9.842E-04
6	3.621E-02	-5.560E-02
7	4.146E-02	-6.550E-02
8	-8.738E-02	7.944E-02
9	-2.075E-02	-1.136E-02
1	-1.735E-02	-1.960E-03
2	-1.454E-02	-5.436E-03
3	-1.698E-02	-1.481E-02
4	-1.439E-02	1.037E-02
5	-1.683E-02	1.004E-03
6	3.255E-02	-5.565E-02
7	3.733E-02	-6.556E-02
8	-8.051E-02	7.955E-02
9	-1.979E-02	-1.133E-02
1	-1.645E-02	-1.940E-03
2	-1.389E-02	-5.419E-03
3	-1.629E-02	-1.479E-02
4	-1.350E-02	1.039E-02
5	-1.589E-02	1.025E-03
6	2.892E-02	-5.568E-02
7	3.322E-02	-6.559E-02
8	-7.364E-02	7.964E-02
9	-1.884E-02	-1.131E-02
1	-1.722E-02	1.713E-04
2	-1.441E-02	-3.968E-03
3	-1.686E-02	-1.320E-02
4	-1.422E-02	1.235E-02
5	-1.666E-02	3.122E-03
6	3.255E-02	-6.514E-02
7	3.728E-02	-7.618E-02
8	-8.009E-02	9.667E-02
9	-1.966E-02	-9.065E-03
1	-1.630E-02	1.920E-04
2	-1.376E-02	-3.950E-03
3	-1.615E-02	-1.318E-02
4	-1.336E-02	1.237E-02
5	-1.575E-02	3.143E-03
6	2.877E-02	-6.517E-02
7	3.304E-02	-7.621E-02
8	-7.311E-02	9.676E-02
9	-1.868E-02	-9.042E-03
1	-1.538E-02	2.117E-04
2	-1.311E-02	-3.933E-03
3	-1.542E-02	-1.316E-02
4	-1.254E-02	1.239E-02
5	-1.484E-02	3.161E-03
6	2.489E-02	-6.520E-02
7	2.869E-02	-7.625E-02
8	-6.602E-02	9.685E-02

E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
0	9	-1.768E-02	-9.018E-03
	1	-1.583E-02	3.061E-03
	2	-1.340E-02	-1.985E-03
91	3	-1.575E-02	-1.095E-02
91	4	-1.291E-02	1.488E-02
91	5	-1.526E-02	5.906E-03
91	6	2.750E-02	-7.828E-02
91	7	3.157E-02	-9.081E-02
91	8	-7.031E-02	1.199E-01
91	9	-1.819E-02	-5.911E-03
92	1	-1.492E-02	3.080E-03
92	2	-1.276E-02	-1.968E-03
92	3	-1.502E-02	-1.093E-02
92	4	-1.212E-02	1.489E-02
92	5	-1.438E-02	5.924E-03
92	6	2.357E-02	-7.831E-02
92	7	2.719E-02	-9.084E-02
92	8	-6.325E-02	1.200E-01
92	9	-1.718E-02	-5.888E-03
93	1	-1.400E-02	3.100E-03
93	2	-1.211E-02	-1.951E-03
93	3	-1.428E-02	-1.091E-02
93	4	-1.132E-02	1.491E-02
93	5	-1.349E-02	5.944E-03
	6	1.963E-02	-7.833E-02
	7	2.290E-02	-9.087E-02
93	8	-5.614E-02	1.201E-01
93	9	-1.617E-02	-5.867E-03
494	1	-1.448E-02	5.921E-03
494	2	-1.241E-02	-3.253E-05
494	3	-1.464E-02	-8.686E-03
494	4	-1.171E-02	1.724E-02
494	5	-1.393E-02	8.592E-03
494	6	2.238E-02	-9.159E-02
494	7	2.583E-02	-1.055E-01
494	8	-6.066E-02	1.431E-01
494	9	-1.671E-02	-2.731E-03
495	1	-1.357E-02	5.941E-03
495	2	-1.178E-02	-1.529E-05
495	3	-1.390E-02	-8.666E-03
495	4	-1.095E-02	1.726E-02
495	5	-1.307E-02	8.612E-03
495	6	1.843E-02	-9.161E-02
495	7	2.144E-02	-1.055E-01
495	8	-5.363E-02	1.432E-01
495	9	-1.570E-02	-2.710E-03
	1	-1.268E-02	5.957E-03
	2	-1.115E-02	-7.056E-07

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	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
5	3	-1.317E-02	-8.649E-03
5	4	-1.022E-02	1.727E-02
5	5	-1.224E-02	8.627E-03
5	6	1.448E-02	-9.162E-02
5	7	1.705E-02	-1.056E-01
5	8	-4.665E-02	1.432E-01
5	9	-1.469E-02	-2.690E-03
7	1	-1.317E-02	8.711E-03
7	2	-1.146E-02	1.862E-03
7	3	-1.355E-02	-6.434E-03
7	4	-1.058E-02	1.945E-02
7	5	-1.267E-02	1.115E-02
7	6	1.735E-02	-1.048E-01
7	7	2.019E-02	-1.202E-01
7	8	-5.128E-02	1.659E-01
7	9	-1.526E-02	4.146E-04
8	1	-1.230E-02	8.727E-03
8	2	-1.086E-02	1.877E-03
8	3	-1.283E-02	-6.416E-03
8	4	-9.899E-03	1.946E-02
8	5	-1.186E-02	1.117E-02
8	6	1.344E-02	-1.048E-01
3	7	1.587E-02	-1.202E-01
8	8	-4.446E-02	1.659E-01
8	9	-1.427E-02	4.337E-04
9	1	-1.142E-02	8.745E-03
9	2	-1.024E-02	1.893E-03
9	3	-1.210E-02	-6.398E-03
9	4	-9.202E-03	1.948E-02
9	5	-1.105E-02	1.118E-02
9	6	9.510E-03	-1.048E-01
9	7	1.151E-02	-1.202E-01
9	8	-3.758E-02	1.660E-01
9	9	-1.327E-02	4.536E-04
0	1	-1.193E-02	1.140E-02
0	2	-1.056E-02	3.683E-03
0	3	-1.249E-02	-4.227E-03
0	4	-9.569E-03	2.149E-02
0	5	-1.150E-02	1.357E-02
0	6	1.247E-02	-1.178E-01
0	7	1.476E-02	-1.345E-01
0	8	-4.235E-02	1.880E-01
0	9	-1.386E-02	3.494E-03
1	1	-1.108E-02	1.142E-02
1	2	-9.978E-03	3.699E-03
1	3	-1.178E-02	-4.208E-03
1	4	-8.916E-03	2.150E-02
1	5	-1.072E-02	1.359E-02
1	6	8.619E-03	-1.178E-01

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E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Z-DISPLACEMENT (AXIAL)
1	7	1.050E-02	-1.345E-01
1	8	-3.567E-02	1.881E-01
[illegible]	9	-1.289E-02	3.514E-03
2	1	-1.025E-02	1.143E-02
2	2	-9.403E-03	3.712E-03
2	3	-1.108E-02	-4.193E-03
2	4	-8.294E-03	2.151E-02
2	5	-9.979E-03	1.361E-02
2	6	4.810E-03	-1.178E-01
2	7	6.305E-03	-1.345E-01
2	8	-2.911E-02	1.881E-01
2	9	-1.193E-02	3.530E-03
3	1	-1.075E-02	1.398E-02
3	2	-9.712E-03	5.417E-03
3	3	-1.148E-02	-2.090E-03
3	4	-8.626E-03	2.336E-02
3	5	-1.039E-02	1.585E-02
3	6	7.794E-03	-1.305E-01
3	7	9.558E-03	-1.485E-01
3	8	-3.384E-02	2.094E-01
3	9	-1.252E-02	6.473E-03
4	1	-9.954E-03	1.399E-02
4	2	-9.164E-03	5.430E-03
4	3	-1.080E-02	-2.075E-03
[illegible]	4	-8.047E-03	2.337E-02
[illegible]	5	-9.692E-03	1.586E-02
4	6	4.098E-03	-1.305E-01
4	7	5.490E-03	-1.485E-01
4	8	-2.754E-02	2.094E-01
4	9	-1.159E-02	6.489E-03
5	1	-9.148E-03	1.401E-02
5	2	-8.609E-03	5.445E-03
5	3	-1.012E-02	-2.058E-03
5	4	-7.458E-03	2.338E-02
5	5	-8.976E-03	1.588E-02
5	6	3.679E-04	-1.305E-01
5	7	1.382E-03	-1.485E-01
5	8	-2.116E-02	2.094E-01
5	9	-1.066E-02	6.507E-03
6	1	-9.661E-03	1.641E-02
6	2	-8.927E-03	7.047E-03
6	3	-1.053E-02	-5.020E-05
6	4	-7.794E-03	2.505E-02
6	5	-9.403E-03	1.796E-02
6	6	3.425E-03	-1.427E-01
6	7	4.715E-03	-1.619E-01
6	8	-2.600E-02	2.296E-01
6	9	-1.127E-02	9.318E-03

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DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
07	1	-8.893E-03	1.643E-02
07	2	-8.398E-03	7.061E-03
07	3	-9.879E-03	-3.325E-05
07	4	-7.247E-03	2.507E-02
07	5	-8.728E-03	1.797E-02
07	6	-1.717E-04	-1.427E-01
07	7	7.601E-04	-1.619E-01
07	8	-1.990E-02	2.297E-01
07	9	-1.037E-02	9.335E-03
08	1	-8.149E-03	1.644E-02
08	2	-7.889E-03	7.072E-03
08	3	-9.242E-03	-2.038E-05
08	4	-6.731E-03	2.508E-02
08	5	-8.083E-03	1.798E-02
08	6	-3.695E-03	-1.427E-01
08	7	-3.109E-03	-1.618E-01
08	8	-1.396E-02	2.297E-01
08	9	-9.502E-03	9.347E-03
09	1	-8.482E-03	1.870E-02
09	2	-8.078E-03	8.570E-03
09	3	-9.500E-03	1.885E-03
09	4	-6.917E-03	2.659E-02
09	5	-8.339E-03	1.990E-02
09	6	-1.381E-03	-1.545E-01
09	7	-6.038E-04	-1.747E-01
09	8	-1.746E-02	2.489E-01
09	9	-9.904E-03	1.202E-02
10	1	-7.852E-03	1.871E-02
10	2	-7.649E-03	8.580E-03
10	3	-8.957E-03	1.897E-03
10	4	-6.493E-03	2.660E-02
10	5	-7.801E-03	1.991E-02
10	6	-4.414E-03	-1.545E-01
10	7	-3.929E-03	-1.747E-01
10	8	-1.239E-02	2.489E-01
10	9	-9.160E-03	1.203E-02
11	1	-7.214E-03	1.872E-02
11	2	-7.213E-03	8.593E-03
11	3	-8.406E-03	1.912E-03
11	4	-6.061E-03	2.661E-02
11	5	-7.254E-03	1.993E-02
11	6	-7.488E-03	-1.544E-01
11	7	-7.300E-03	-1.747E-01
11	8	-7.264E-03	2.489E-01
11	9	-8.407E-03	1.204E-02
12	1	-7.552E-03	2.080E-02
12	2	-7.403E-03	9.947E-03
12	3	-8.669E-03	3.669E-03
12	4	-6.244E-03	2.792E-02

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DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
512	5	-7.510E-03	2.164E-02
[illegible]	6	-5.071E-03	-1.657E-01
[illegible]	7	-4.686E-03	-1.869E-01
[illegible]	8	-1.088E-02	2.670E-01
512	9	-8.818E-03	1.452E-02
513	1	-6.959E-03	2.081E-02
513	2	-7.001E-03	9.961E-03
513	3	-8.154E-03	3.685E-03
513	4	-5.857E-03	2.793E-02
513	5	-7.010E-03	2.166E-02
513	6	-8.000E-03	-1.656E-01
513	7	-7.892E-03	-1.869E-01
513	8	-6.049E-03	2.670E-01
513	9	-8.112E-03	1.454E-02
514	1	-6.391E-03	2.082E-02
514	2	-6.619E-03	9.970E-03
514	3	-7.660E-03	3.695E-03
514	4	-5.497E-03	2.794E-02
514	5	-6.538E-03	2.166E-02
514	6	-1.085E-02	-1.656E-01
514	7	-1.101E-02	-1.869E-01
514	8	-1.379E-03	2.670E-01
514	9	-7.432E-03	1.455E-02
515	1	-6.699E-03	2.271E-02
[illegible]	2	-6.784E-03	1.118E-02
[illegible]	3	-7.900E-03	5.303E-03
515	4	-5.642E-03	2.907E-02
515	5	-6.758E-03	2.319E-02
515	6	-8.497E-03	-1.762E-01
515	7	-8.472E-03	-1.984E-01
515	8	-4.826E-03	2.938E-01
515	9	-7.815E-03	1.683E-02
516	1	-6.176E-03	2.272E-02
516	2	-6.435E-03	1.119E-02
516	3	-7.443E-03	5.314E-03
516	4	-5.324E-03	2.908E-02
516	5	-6.331E-03	2.320E-02
516	6	-1.119E-02	-1.762E-01
516	7	-1.141E-02	-1.984E-01
516	8	-4.621E-04	2.837E-01
516	9	-7.183E-03	1.684E-02
517	1	-5.643E-03	2.273E-02
517	2	-6.080E-03	1.120E-02
517	3	-6.978E-03	5.328E-03
517	4	-4.998E-03	2.909E-02
517	5	-5.896E-03	2.321E-02
517	6	-1.393E-02	-1.761E-01
[illegible]	7	-1.440E-02	-1.983E-01
[illegible]	8	3.968E-03	2.837E-01

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E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
.7	9	-6.542E-03	1.685E-02
.8	1	-5.947E-03	2.444E-02
.8	2	-6.241E-03	1.228E-02
.8	3	-7.215E-03	6.783E-03
.8	4	-5.134E-03	3.004E-02
.8	5	-6.108E-03	2.454E-02
.8	6	-1.157E-02	-1.861E-01
.8	7	-1.186E-02	-2.092E-01
.8	8	5.351E-04	2.993E-01
.8	9	-6.921E-03	1.894E-02
19	1	-5.459E-03	2.445E-02
19	2	-5.918E-03	1.230E-02
19	3	-6.787E-03	6.798E-03
19	4	-4.848E-03	3.006E-02
19	5	-5.717E-03	2.455E-02
19	6	-1.414E-02	-1.861E-01
19	7	-1.466E-02	-2.091E-01
19	8	4.658E-03	2.993E-01
19	9	-6.328E-03	1.895E-02
20	1	-4.994E-03	2.446E-02
20	2	-5.612E-03	1.231E-02
20	3	-6.379E-03	6.807E-03
20	4	-4.583E-03	3.006E-02
20	5	-5.350E-03	2.456E-02
20	6	-1.663E-02	-1.860E-01
20	7	-1.738E-02	-2.091E-01
20	8	8.619E-03	2.992E-01
20	9	-5.761E-03	1.896E-02
521	1	-5.263E-03	2.600E-02
21	2	-5.747E-03	1.326E-02
21	3	-6.588E-03	8.120E-03
21	4	-4.683E-03	3.087E-02
21	5	-5.524E-03	2.572E-02
21	6	-1.437E-02	-1.953E-01
21	7	-1.495E-02	-2.192E-01
21	8	5.404E-03	3.135E-01
21	9	-6.104E-03	2.085E-02
522	1	-4.840E-03	2.600E-02
522	2	-5.471E-03	1.327E-02
522	3	-6.215E-03	8.130E-03
522	4	-4.454E-03	3.087E-02
522	5	-5.197E-03	2.573E-02
522	6	-1.671E-02	-1.953E-01
522	7	-1.749E-02	-2.191E-01
522	8	9.067E-03	3.135E-01
522	9	-5.584E-03	2.086E-02
523	1	-4.409E-03	2.601E-02
523	2	-5.190E-03	1.328E-02

LE	LOAD LINE	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
23	3	-5.835E-03	8.143E-03
23	4	-4.218E-03	3.088E-02
[illegible]	5	-4.863E-03	2.574E-02
[illegible]	6	-1.907E-02	-1.953E-01
23	7	-2.006E-02	-2.191E-01
23	8	1.278E-02	3.135E-01
23	9	-5.054E-03	2.087E-02
24	1	-4.674E-03	2.737E-02
24	2	-5.321E-03	1.411E-02
24	3	-6.041E-03	9.308E-03
24	4	-4.310E-03	3.154E-02
24	5	-5.030E-03	2.674E-02
24	6	-1.681E-02	-2.039E-01
24	7	-1.763E-02	-2.284E-01
24	8	9.596E-03	3.265E-01
24	9	-5.394E-03	2.257E-02
25	1	-4.282E-03	2.738E-02
25	2	-5.068E-03	1.412E-02
25	3	-5.695E-03	9.321E-03
25	4	-4.106E-03	3.155E-02
25	5	-4.733E-03	2.675E-02
25	6	-1.901E-02	-2.038E-01
25	7	-2.002E-02	-2.284E-01
25	8	1.302E-02	3.265E-01
25	9	-4.909E-03	2.258E-02
[illegible]	1	-3.912E-03	2.739E-02
[illegible]	2	-4.831E-03	1.413E-02
26	3	-5.368E-03	9.330E-03
26	4	-3.921E-03	3.156E-02
26	5	-4.458E-03	2.675E-02
26	6	-2.115E-02	-2.038E-01
26	7	-2.233E-02	-2.283E-01
26	8	1.630E-02	3.264E-01
26	9	-4.449E-03	2.259E-02
27	1	-4.055E-03	2.860E-02
27	2	-4.877E-03	1.484E-02
27	3	-5.465E-03	1.036E-02
27	4	-3.933E-03	3.209E-02
27	5	-4.521E-03	2.760E-02
27	6	-1.944E-02	-2.118E-01
27	7	-2.052E-02	-2.370E-01
27	8	1.405E-02	3.383E-01
27	9	-4.643E-03	2.411E-02
28	1	-3.760E-03	2.860E-02
28	2	-4.691E-03	1.485E-02
28	3	-5.204E-03	1.036E-02
28	4	-3.796E-03	3.209E-02
28	5	-4.309E-03	2.760E-02
[illegible]	6	-2.121E-02	-2.118E-01

LOAD CONE	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
7	-2.243E-02	-2.369E-01
8	1.572E-02	3.383E-01
9	-4.273E-03	2.411E-02
1	-3.461E-03	2.861E-02
2	-4.503E-03	1.486E-02
3	-4.939E-03	1.038E-02
4	-3.656E-03	3.210E-02
5	-4.093E-03	2.761E-02
6	-2.299E-02	-2.117E-01
7	-2.436E-02	-2.369E-01
8	1.944E-02	3.382E-01
9	-3.898E-03	2.412E-02
1	-3.595E-03	2.963E-02
2	-4.537E-03	1.544E-02
3	-5.026E-03	1.124E-02
4	-3.654E-03	3.248E-02
5	-4.142E-03	2.828E-02
6	-2.123E-02	-2.192E-01
7	-2.249E-02	-2.449E-01
8	1.715E-02	3.490E-01
9	-4.084E-03	2.543E-02
1	-3.333E-03	2.964E-02
2	-4.377E-03	1.545E-02
3	-4.795E-03	1.125E-02
4	-3.544E-03	3.249E-02
5	-3.962E-03	2.829E-02
6	-2.289E-02	-2.191E-01
7	-2.428E-02	-2.448E-01
8	1.962E-02	3.490E-01
9	-3.752E-03	2.544E-02
1	-3.090E-03	2.964E-02
2	-4.231E-03	1.546E-02
3	-4.582E-03	1.126E-02
4	-3.448E-03	3.249E-02
5	-3.799E-03	2.830E-02
6	-2.449E-02	-2.190E-01
7	-2.599E-02	-2.448E-01
8	2.197E-02	3.489E-01
9	-3.441E-03	2.545E-02
1	-3.192E-03	3.050E-02
2	-4.240E-03	1.591E-02
3	-4.639E-03	1.197E-02
4	-3.417E-03	3.274E-02
5	-3.815E-03	2.881E-02
6	-2.282E-02	-2.259E-01
7	-2.423E-02	-2.521E-01
8	1.988E-02	3.585E-01
9	-3.590E-03	2.656E-02

ODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
534	1	-2.982E-03	3.050E-02
534	2	-4.119E-03	1.592E-02
[illegible]	3	-4.456E-03	1.198E-02
534	4	-3.347E-03	3.275E-02
534	5	-3.684E-03	2.881E-02
534	6	-2.430E-02	-2.258E-01
534	7	-2.581E-02	-2.520E-01
534	8	2.201E-02	3.585E-01
534	9	-3.319E-03	2.657E-02
535	1	-2.768E-03	3.051E-02
535	2	-3.995E-03	1.593E-02
535	3	-4.269E-03	1.199E-02
535	4	-3.273E-03	3.276E-02
535	5	-3.548E-03	2.882E-02
535	6	-2.580E-02	-2.258E-01
535	7	-2.741E-02	-2.520E-01
535	8	2.416E-02	3.584E-01
535	9	-3.043E-03	2.658E-02
536	1	-2.857E-03	3.121E-02
536	2	-3.994E-03	1.626E-02
536	3	-4.315E-03	1.256E-02
536	4	-3.231E-03	3.289E-02
536	5	-3.552E-03	2.919E-02
536	6	-2.415E-02	-2.321E-01
536	7	-2.568E-02	-2.586E-01
[illegible]	8	2.213E-02	3.670E-01
[illegible]	9	-3.179E-03	2.751E-02
537	1	-2.675E-03	3.122E-02
537	2	-3.893E-03	1.627E-02
537	3	-4.157E-03	1.257E-02
537	4	-3.180E-03	3.290E-02
537	5	-3.445E-03	2.920E-02
537	6	-2.554E-02	-2.320E-01
537	7	-2.714E-02	-2.586E-01
537	8	2.408E-02	3.670E-01
537	9	-2.939E-03	2.752E-02
538	1	-2.506E-03	3.123E-02
538	2	-3.802E-03	1.628E-02
538	3	-4.012E-03	1.258E-02
538	4	-3.140E-03	3.291E-02
538	5	-3.351E-03	2.921E-02
538	6	-2.686E-02	-2.319E-01
538	7	-2.854E-02	-2.585E-01
538	8	2.593E-02	3.669E-01
538	9	-2.717E-03	2.753E-02
539	1	-2.568E-03	3.180E-02
539	2	-3.780E-03	1.652E-02
[illegible]	3	-4.033E-03	1.303E-02
[illegible]	4	-3.074E-03	3.295E-02

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LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
5	-3.327E-03	2.946E-02
6	-2.530E-02	-2.377E-01
7	-2.692E-02	-2.645E-01
8	2.406E-02	3.746E-01
9	-2.820E-03	2.831E-02
1	-2.426E-03	3.180E-02
2	-3.708E-03	1.653E-02
3	-3.912E-03	1.304E-02
4	-3.052E-03	3.296E-02
5	-3.256E-03	2.946E-02
6	-2.652E-02	-2.376E-01
7	-2.819E-02	-2.645E-01
8	2.573E-02	3.745E-01
9	-2.630E-03	2.831E-02
1	-2.281E-03	3.181E-02
2	-3.635E-03	1.654E-02
3	-3.790E-03	1.305E-02
4	-3.029E-03	3.297E-02
5	-3.183E-03	2.947E-02
6	-2.776E-02	-2.376E-01
7	-2.948E-02	-2.644E-01
8	2.741E-02	3.744E-01
9	-2.436E-03	2.832E-02
1	-2.331E-03	3.226E-02
2	-3.604E-03	1.670E-02
3	-3.799E-03	1.339E-02
4	-2.952E-03	3.293E-02
5	-3.147E-03	2.962E-02
6	-2.623E-02	-2.428E-01
7	-2.790E-02	-2.698E-01
8	2.562E-02	3.812E-01
9	-2.526E-03	2.895E-02
1	-2.210E-03	3.227E-02
2	-3.547E-03	1.671E-02
3	-3.698E-03	1.340E-02
4	-2.944E-03	3.294E-02
5	-3.095E-03	2.963E-02
6	-2.736E-02	-2.428E-01
7	-2.907E-02	-2.697E-01
8	2.712E-02	3.811E-01
9	-2.361E-03	2.896E-02
1	-2.099E-03	3.227E-02
2	-3.498E-03	1.672E-02
3	-3.607E-03	1.341E-02
4	-2.942E-03	3.294E-02
5	-3.052E-03	2.964E-02
6	-2.844E-02	-2.427E-01
7	-3.018E-02	-2.697E-01
8	2.854E-02	3.811E-01

	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
4	9	-2.299E-03	2.896E-02
	1	-2.125E-03	3.262E-02
	2	-3.449E-03	1.681E-02
5	3	-3.594E-03	1.366E-02
5	4	-2.849E-03	3.284E-02
5	5	-2.994E-03	2.970E-02
5	6	-2.702E-02	-2.475E-01
5	7	-2.873E-02	-2.746E-01
5	8	2.693E-02	3.870E-01
5	9	-2.270E-03	2.947E-02
6	1	-2.034E-03	3.263E-02
6	2	-3.413E-03	1.682E-02
6	3	-3.521E-03	1.367E-02
46	4	-2.858E-03	3.285E-02
46	5	-2.966E-03	2.970E-02
46	6	-2.800E-02	-2.474E-01
46	7	-2.973E-02	-2.745E-01
46	8	2.820E-02	3.870E-01
46	9	-2.142E-03	2.948E-02
47	1	-1.941E-03	3.263E-02
47	2	-3.375E-03	1.683E-02
47	3	-3.446E-03	1.368E-02
47	4	-2.866E-03	3.286E-02
47	5	-2.937E-03	2.971E-02
	6	-2.900E-02	-2.473E-01
	7	-3.074E-02	-2.744E-01
47	8	2.948E-02	3.869E-01
47	9	-2.012E-03	2.949E-02
48	1	-1.955E-03	3.290E-02
48	2	-3.319E-03	1.686E-02
548	3	-3.423E-03	1.385E-02
548	4	-2.765E-03	3.272E-02
548	5	-2.869E-03	2.971E-02
548	6	-2.762E-02	-2.516E-01
548	7	-2.935E-02	-2.787E-01
548	8	2.795E-02	3.921E-01
548	9	-2.059E-03	2.989E-02
549	1	-1.879E-03	3.291E-02
549	2	-3.292E-03	1.687E-02
549	3	-3.364E-03	1.386E-02
549	4	-2.781E-03	3.273E-02
549	5	-2.853E-03	2.972E-02
549	6	-2.852E-02	-2.516E-01
549	7	-3.025E-02	-2.787E-01
549	8	2.909E-02	3.921E-01
549	9	-1.951E-03	2.990E-02
	1	-1.809E-03	3.291E-02
	2	-3.269E-03	1.688E-02

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:	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
)	3	-3.310E-03	1.387E-02
)	4	-2.801E-03	3.274E-02
)	5	-2.842E-03	2.972E-02
)	6	-2.938E-02	-2.515E-01
)	7	-3.111E-02	-2.786E-01
)	8	3.015E-02	3.920E-01
)	9	-1.850E-03	2.990E-02
1	1	-1.806E-03	3.311E-02
1	2	-3.203E-03	1.688E-02
1	3	-3.272E-03	1.398E-02
1	4	-2.690E-03	3.256E-02
1	5	-2.760E-03	2.967E-02
1	6	-2.811E-02	-2.553E-01
1	7	-2.983E-02	-2.824E-01
1	8	2.879E-02	3.965E-01
1	9	-1.876E-03	3.022E-02
2	1	-1.750E-03	3.312E-02
2	2	-3.187E-03	1.689E-02
2	3	-3.230E-03	1.399E-02
2	4	-2.715E-03	3.257E-02
2	5	-2.758E-03	2.968E-02
2	6	-2.888E-02	-2.552E-01
2	7	-3.059E-02	-2.824E-01
2	8	2.973E-02	3.964E-01
2	9	-1.793E-03	3.022E-02
3	1	-1.691E-03	3.312E-02
3	2	-3.171E-03	1.690E-02
53	3	-3.187E-03	1.400E-02
53	4	-2.739E-03	3.258E-02
53	5	-2.755E-03	2.969E-02
53	6	-2.965E-02	-2.552E-01
53	7	-3.136E-02	-2.823E-01
53	8	3.067E-02	3.964E-01
53	9	-1.708E-03	3.023E-02
54	1	-1.680E-03	3.327E-02
54	2	-3.100E-03	1.687E-02
54	3	-3.142E-03	1.407E-02
54	4	-2.624E-03	3.239E-02
54	5	-2.666E-03	2.960E-02
54	6	-2.844E-02	-2.586E-01
54	7	-3.016E-02	-2.856E-01
54	8	2.941E-02	4.003E-01
54	9	-1.723E-03	3.047E-02
55	1	-1.633E-03	3.328E-02
55	2	-3.088E-03	1.688E-02
55	3	-3.108E-03	1.408E-02
55	4	-2.651E-03	3.240E-02
55	5	-2.670E-03	2.961E-02
55	6	-2.913E-02	-2.585E-01

DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
555	7	-3.082E-02	-2.856E-01
	8	3.023E-02	4.002E-01
	9	-1.652E-03	3.048E-02
556	1	-1.588E-03	3.328E-02
556	2	-3.078E-03	1.689E-02
556	3	-3.076E-03	1.409E-02
556	4	-2.678E-03	3.241E-02
556	5	-2.676E-03	2.962E-02
556	6	-2.978E-02	-2.584E-01
556	7	-3.145E-02	-2.855E-01
556	8	3.099E-02	4.001E-01
556	9	-1.586E-03	3.049E-02
557	1	-1.567E-03	3.339E-02
557	2	-3.004E-03	1.684E-02
557	3	-3.023E-03	1.413E-02
557	4	-2.561E-03	3.222E-02
557	5	-2.580E-03	2.951E-02
557	6	-2.869E-02	-2.614E-01
557	7	-3.038E-02	-2.884E-01
557	8	2.989E-02	4.035E-01
557	9	-1.586E-03	3.068E-02
558	1	-1.529E-03	3.340E-02
558	2	-2.995E-03	1.685E-02
558	3	-2.996E-03	1.414E-02
	4	-2.586E-03	3.223E-02
558	5	-2.588E-03	2.952E-02
558	6	-2.924E-02	-2.613E-01
558	7	-3.090E-02	-2.883E-01
558	8	3.053E-02	4.034E-01
558	9	-1.531E-03	3.068E-02
559	1	-1.492E-03	3.341E-02
559	2	-2.987E-03	1.686E-02
559	3	-2.970E-03	1.415E-02
559	4	-2.613E-03	3.224E-02
559	5	-2.597E-03	2.953E-02
559	6	-2.981E-02	-2.612E-01
559	7	-3.144E-02	-2.882E-01
559	8	3.119E-02	4.033E-01
559	9	-1.475E-03	3.069E-02
560	1	-1.459E-03	3.346E-02
560	2	-2.908E-03	1.681E-02
560	3	-2.908E-03	1.415E-02
560	4	-2.497E-03	3.207E-02
560	5	-2.498E-03	2.941E-02
560	6	-2.884E-02	-2.635E-01
560	7	-3.050E-02	-2.904E-01
560	8	3.025E-02	4.058E-01
	9	-1.459E-03	3.081E-02

DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
61	1	-1.432E-03	3.347E-02
61	2	-2.902E-03	1.682E-02
[illegible]	3	-2.890E-03	1.416E-02
[illegible]	4	-2.520E-03	3.208E-02
61	5	-2.507E-03	2.942E-02
61	6	-2.925E-02	-2.634E-01
61	7	-3.087E-02	-2.903E-01
61	8	3.071E-02	4.057E-01
61	9	-1.420E-03	3.081E-02
62	1	-1.411E-03	3.347E-02
62	2	-2.900E-03	1.683E-02
62	3	-2.876E-03	1.417E-02
62	4	-2.545E-03	3.209E-02
62	5	-2.521E-03	2.943E-02
62	6	-2.963E-02	-2.634E-01
62	7	-3.122E-02	-2.902E-01
62	8	3.113E-02	4.056E-01
62	9	-1.387E-03	3.082E-02
63	1	-1.356E-03	3.349E-02
63	2	-2.807E-03	1.675E-02
63	3	-2.794E-03	1.413E-02
63	4	-2.421E-03	3.190E-02
63	5	-2.408E-03	2.928E-02
63	6	-2.879E-02	-2.653E-01
63	7	-3.040E-02	-2.921E-01
[illegible]	8	3.038E-02	4.076E-01
[illegible]	9	-1.343E-03	3.087E-02
564	1	-1.344E-03	3.350E-02
564	2	-2.812E-03	1.676E-02
564	3	-2.790E-03	1.414E-02
564	4	-2.453E-03	3.191E-02
564	5	-2.431E-03	2.929E-02
564	6	-2.914E-02	-2.652E-01
564	7	-3.072E-02	-2.920E-01
564	8	3.074E-02	4.076E-01
564	9	-1.322E-03	3.088E-02
565	1	-1.332E-03	3.350E-02
565	2	-2.817E-03	1.677E-02
565	3	-2.786E-03	1.415E-02
565	4	-2.483E-03	3.192E-02
565	5	-2.453E-03	2.930E-02
565	6	-2.948E-02	-2.652E-01
565	7	-3.102E-02	-2.919E-01
565	8	3.109E-02	4.075E-01
565	9	-1.301E-03	3.089E-02
566	1	-1.268E-03	3.346E-02
566	2	-2.713E-03	1.664E-02
[illegible]	3	-2.693E-03	1.406E-02
[illegible]	4	-2.345E-03	3.169E-02

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	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
5	5	-2.325E-03	2.910E-02
5	6	-2.860E-02	-2.670E-01
5	7	-3.018E-02	-2.936E-01
5	8	3.033E-02	4.092E-01
5	9	-1.248E-03	3.088E-02
7	1	-1.269E-03	3.347E-02
7	2	-2.729E-03	1.665E-02
7	3	-2.703E-03	1.407E-02
7	4	-2.385E-03	3.170E-02
7	5	-2.358E-03	2.911E-02
7	6	-2.893E-02	-2.669E-01
7	7	-3.046E-02	-2.935E-01
7	8	3.063E-02	4.091E-01
7	9	-1.243E-03	3.088E-02
3	1	-1.275E-03	3.348E-02
3	2	-2.749E-03	1.666E-02
3	3	-2.717E-03	1.407E-02
3	4	-2.428E-03	3.171E-02
3	5	-2.397E-03	2.912E-02
3	6	-2.924E-02	-2.668E-01
3	7	-3.073E-02	-2.934E-01
3	8	3.091E-02	4.090E-01
3	9	-1.243E-03	3.089E-02
	1	-1.190E-03	3.338E-02
	2	-2.627E-03	1.649E-02
	3	-2.602E-03	1.392E-02
	4	-2.272E-03	3.144E-02
	5	-2.247E-03	2.887E-02
	6	-2.838E-02	-2.686E-01
	7	-2.992E-02	-2.950E-01
	8	3.022E-02	4.105E-01
	9	-1.165E-03	3.081E-02
	1	-1.208E-03	3.339E-02
	2	-2.657E-03	1.650E-02
	3	-2.629E-03	1.393E-02
	4	-2.325E-03	3.145E-02
	5	-2.296E-03	2.888E-02
	6	-2.868E-02	-2.685E-01
	7	-3.017E-02	-2.949E-01
	8	3.045E-02	4.104E-01
	9	-1.180E-03	3.082E-02
	1	-1.224E-03	3.339E-02
	2	-2.686E-03	1.651E-02
	3	-2.655E-03	1.394E-02
	4	-2.377E-03	3.146E-02
	5	-2.345E-03	2.889E-02
	6	-2.898E-02	-2.684E-01
	7	-3.042E-02	-2.948E-01
	8	3.069E-02	4.104E-01

NODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
571	9	-1.193E-03	3.082E-02
[illegible]	1	-1.126E-03	3.324E-02
[illegible]	2	-2.553E-03	1.630E-02
572	3	-2.527E-03	1.374E-02
572	4	-2.208E-03	3.115E-02
572	5	-2.182E-03	2.859E-02
572	6	-2.814E-02	-2.700E-01
572	7	-2.964E-02	-2.962E-01
572	8	3.007E-02	4.116E-01
572	9	-1.100E-03	3.069E-02
573	1	-1.153E-03	3.325E-02
573	2	-2.591E-03	1.631E-02
573	3	-2.563E-03	1.375E-02
573	4	-2.269E-03	3.116E-02
573	5	-2.241E-03	2.860E-02
573	6	-2.842E-02	-2.699E-01
573	7	-2.986E-02	-2.962E-01
573	8	3.025E-02	4.115E-01
573	9	-1.126E-03	3.069E-02
574	1	-1.184E-03	3.326E-02
574	2	-2.632E-03	1.632E-02
574	3	-2.603E-03	1.376E-02
574	4	-2.332E-03	3.117E-02
574	5	-2.303E-03	2.861E-02
[illegible]	6	-2.868E-02	-2.699E-01
[illegible]	7	-3.008E-02	-2.961E-01
574	8	3.041E-02	4.114E-01
574	9	-1.155E-03	3.070E-02
575	1	-1.069E-03	3.307E-02
575	2	-2.486E-03	1.607E-02
575	3	-2.460E-03	1.351E-02
575	4	-2.150E-03	3.083E-02
575	5	-2.124E-03	2.828E-02
575	6	-2.790E-02	-2.713E-01
575	7	-2.935E-02	-2.973E-01
575	8	2.989E-02	4.124E-01
575	9	-1.043E-03	3.051E-02
576	1	-1.109E-03	3.307E-02
576	2	-2.533E-03	1.608E-02
576	3	-2.507E-03	1.352E-02
576	4	-2.219E-03	3.084E-02
576	5	-2.193E-03	2.829E-02
576	6	-2.813E-02	-2.713E-01
576	7	-2.953E-02	-2.973E-01
576	8	2.999E-02	4.123E-01
576	9	-1.083E-03	3.052E-02
577	1	-1.148E-03	3.308E-02
[illegible]	2	-2.580E-03	1.609E-02

E 230

LOAD COMB		X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
	3	-2.555E-03	1.353E-02
	4	-2.288E-03	3.085E-02
	5	-2.263E-03	2.830E-02
	6	-2.836E-02	-2.712E-01
	7	-2.971E-02	-2.972E-01
	8	3.009E-02	4.122E-01
	9	-1.123E-03	3.052E-02
	1	-1.021E-03	3.285E-02
	2	-2.425E-03	1.582E-02
	3	-2.402E-03	1.326E-02
	4	-2.096E-03	3.049E-02
	5	-2.073E-03	2.793E-02
	6	-2.763E-02	-2.725E-01
	7	-2.904E-02	-2.982E-01
	8	2.967E-02	4.128E-01
	9	-9.974E-04	3.029E-02
	1	-1.068E-03	3.286E-02
	2	-2.478E-03	1.583E-02
	3	-2.455E-03	1.327E-02
	4	-2.171E-03	3.050E-02
	5	-2.149E-03	2.794E-02
	6	-2.782E-02	-2.724E-01
	7	-2.918E-02	-2.982E-01
	8	2.970E-02	4.128E-01
	9	-1.046E-03	3.030E-02
	1	-1.119E-03	3.286E-02
0	2	-2.532E-03	1.584E-02
0	3	-2.511E-03	1.328E-02
0	4	-2.248E-03	3.051E-02
0	5	-2.227E-03	2.795E-02
0	6	-2.800E-02	-2.723E-01
0	7	-2.930E-02	-2.981E-01
0	8	2.971E-02	4.127E-01
0	9	-1.098E-03	3.030E-02
1	1	-9.810E-04	3.263E-02
1	2	-2.374E-03	1.558E-02
1	3	-2.353E-03	1.302E-02
1	4	-2.051E-03	3.017E-02
1	5	-2.030E-03	2.761E-02
1	6	-2.739E-02	-2.732E-01
1	7	-2.876E-02	-2.988E-01
1	8	2.945E-02	4.129E-01
1	9	-9.601E-04	3.007E-02
32	1	-1.030E-03	3.264E-02
32	2	-2.423E-03	1.559E-02
32	3	-2.404E-03	1.303E-02
32	4	-2.120E-03	3.018E-02
32	5	-2.102E-03	2.762E-02
32	6	-2.747E-02	-2.731E-01

DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
582	7	-2.879E-02	-2.987E-01
582	8	2.936E-02	4.128E-01
[illegible]	9	-1.012E-03	3.007E-02
583	1	-1.081E-03	3.265E-02
583	2	-2.473E-03	1.560E-02
583	3	-2.456E-03	1.304E-02
583	4	-2.190E-03	3.019E-02
583	5	-2.174E-03	2.763E-02
583	6	-2.756E-02	-2.731E-01
583	7	-2.882E-02	-2.986E-01
583	8	2.928E-02	4.128E-01
583	9	-1.064E-03	3.008E-02
584	1	-9.451E-04	3.238E-02
584	2	-2.320E-03	1.533E-02
584	3	-2.304E-03	1.275E-02
584	4	-2.004E-03	2.983E-02
584	5	-1.988E-03	2.725E-02
584	6	-2.702E-02	-2.737E-01
584	7	-2.835E-02	-2.990E-01
584	8	2.909E-02	4.125E-01
584	9	-9.287E-04	2.980E-02
585	1	-1.004E-03	3.238E-02
585	2	-2.375E-03	1.534E-02
585	3	-2.361E-03	1.276E-02
[illegible]	4	-2.080E-03	2.984E-02
[illegible]	5	-2.067E-03	2.726E-02
585	6	-2.705E-02	-2.736E-01
585	7	-2.831E-02	-2.990E-01
585	8	2.891E-02	4.125E-01
585	9	-9.905E-04	2.981E-02
586	1	-1.066E-03	3.239E-02
586	2	-2.431E-03	1.534E-02
586	3	-2.420E-03	1.277E-02
586	4	-2.159E-03	2.985E-02
586	5	-2.148E-03	2.727E-02
586	6	-2.705E-02	-2.735E-01
586	7	-2.826E-02	-2.989E-01
586	8	2.870E-02	4.124E-01
586	9	-1.055E-03	2.981E-02
587	1	-8.995E-04	3.207E-02
587	2	-2.255E-03	1.503E-02
587	3	-2.243E-03	1.245E-02
587	4	-1.941E-03	2.944E-02
587	5	-1.929E-03	2.685E-02
587	6	-2.661E-02	-2.739E-01
587	7	-2.790E-02	-2.990E-01
587	8	2.871E-02	4.118E-01
[illegible]	9	-8.877E-04	2.948E-02

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E232

LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
1	-9.752E-04	3.207E-02
2	-2.321E-03	1.504E-02
3	-2.312E-03	1.246E-02
4	-2.032E-03	2.945E-02
5	-2.023E-03	2.686E-02
6	-2.657E-02	-2.738E-01
7	-2.779E-02	-2.989E-01
8	2.840E-02	4.117E-01
9	-9.661E-04	2.949E-02
1	-1.050E-03	3.208E-02
2	-2.387E-03	1.506E-02
3	-2.381E-03	1.247E-02
4	-2.123E-03	2.946E-02
5	-2.117E-03	2.687E-02
6	-2.653E-02	-2.737E-01
7	-2.769E-02	-2.988E-01
8	2.811E-02	4.116E-01
9	-1.043E-03	2.950E-02
1	-8.631E-04	3.170E-02
2	-2.197E-03	1.470E-02
3	-2.190E-03	1.211E-02
4	-1.886E-03	2.900E-02
5	-1.879E-03	2.640E-02
6	-2.617E-02	-2.738E-01
7	-2.742E-02	-2.987E-01
8	2.827E-02	4.105E-01
9	-8.563E-04	2.911E-02
1	-9.512E-04	3.171E-02
2	-2.272E-03	1.472E-02
3	-2.267E-03	1.212E-02
4	-1.989E-03	2.901E-02
5	-1.984E-03	2.642E-02
6	-2.607E-02	-2.737E-01
7	-2.725E-02	-2.986E-01
8	2.787E-02	4.104E-01
9	-9.469E-04	2.912E-02
1	-1.042E-03	3.172E-02
2	-2.349E-03	1.473E-02
3	-2.347E-03	1.213E-02
4	-2.095E-03	2.902E-02
5	-2.093E-03	2.642E-02
6	-2.595E-02	-2.736E-01
7	-2.706E-02	-2.985E-01
8	2.743E-02	4.104E-01
9	-1.040E-03	2.912E-02
1	-8.312E-04	3.128E-02
2	-2.142E-03	1.434E-02
3	-2.141E-03	1.174E-02
4	-1.835E-03	2.851E-02

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NODE	LOAD CASE	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
593	5	-1.833E-03	2.591E-02
593	6	-2.571E-02	-2.734E-01
[illegible]	7	-2.693E-02	-2.980E-01
[illegible]	8	2.781E-02	4.087E-01
593	9	-8.295E-04	2.868E-02
594	1	-9.360E-04	3.129E-02
594	2	-2.228E-03	1.435E-02
594	3	-2.228E-03	1.175E-02
594	4	-1.953E-03	2.852E-02
594	5	-1.953E-03	2.592E-02
594	6	-2.552E-02	-2.733E-01
594	7	-2.666E-02	-2.979E-01
594	8	2.725E-02	4.087E-01
594	9	-9.361E-04	2.868E-02
595	1	-1.039E-03	3.129E-02
595	2	-2.313E-03	1.436E-02
595	3	-2.315E-03	1.176E-02
595	4	-2.070E-03	2.853E-02
595	5	-2.072E-03	2.593E-02
595	6	-2.533E-02	-2.733E-01
595	7	-2.639E-02	-2.978E-01
595	8	2.670E-02	4.086E-01
595	9	-1.041E-03	2.869E-02
596	1	-8.072E-04	3.080E-02
[illegible]	2	-2.093E-03	1.394E-02
[illegible]	3	-2.097E-03	1.133E-02
596	4	-1.790E-03	2.796E-02
596	5	-1.793E-03	2.535E-02
596	6	-2.522E-02	-2.727E-01
596	7	-2.640E-02	-2.969E-01
596	8	2.728E-02	4.064E-01
596	9	-8.102E-04	2.819E-02
597	1	-9.246E-04	3.081E-02
597	2	-2.186E-03	1.395E-02
597	3	-2.191E-03	1.134E-02
597	4	-1.920E-03	2.797E-02
597	5	-1.924E-03	2.537E-02
597	6	-2.495E-02	-2.726E-01
597	7	-2.604E-02	-2.969E-01
597	8	2.660E-02	4.063E-01
597	9	-9.289E-04	2.820E-02
598	1	-1.045E-03	3.081E-02
598	2	-2.281E-03	1.396E-02
598	3	-2.286E-03	1.135E-02
598	4	-2.053E-03	2.798E-02
598	5	-2.058E-03	2.538E-02
598	6	-2.465E-02	-2.725E-01
598	7	-2.566E-02	-2.968E-01
[illegible]	8	2.588E-02	4.062E-01

E234

LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
9	-1.050E-03	2.821E-02
1	-7.854E-04	3.026E-02
2	-2.046E-03	1.351E-02
3	-2.054E-03	1.090E-02
4	-1.747E-03	2.737E-02
5	-1.755E-03	2.476E-02
6	-2.472E-02	-2.715E-01
7	-2.586E-02	-2.954E-01
8	2.674E-02	4.034E-01
9	-7.932E-04	2.765E-02
1	-9.197E-04	3.027E-02
2	-2.148E-03	1.352E-02
3	-2.156E-03	1.091E-02
4	-1.893E-03	2.738E-02
5	-1.901E-03	2.477E-02
6	-2.432E-02	-2.714E-01
7	-2.537E-02	-2.953E-01
8	2.587E-02	4.033E-01
9	-9.274E-04	2.766E-02
1	-1.053E-03	3.028E-02
2	-2.250E-03	1.353E-02
3	-2.258E-03	1.092E-02
4	-2.038E-03	2.739E-02
5	-2.045E-03	2.478E-02
6	-2.393E-02	-2.714E-01
7	-2.489E-02	-2.953E-01
8	2.501E-02	4.032E-01
9	-1.060E-03	2.767E-02
1	-7.711E-04	2.966E-02
2	-2.003E-03	1.304E-02
3	-2.015E-03	1.044E-02
4	-1.712E-03	2.671E-02
5	-1.723E-03	2.411E-02
6	-2.417E-02	-2.699E-01
7	-2.526E-02	-2.934E-01
8	2.612E-02	3.997E-01
9	-7.830E-04	2.706E-02
1	-9.186E-04	2.967E-02
2	-2.112E-03	1.305E-02
3	-2.122E-03	1.045E-02
4	-1.869E-03	2.673E-02
5	-1.880E-03	2.412E-02
6	-2.367E-02	-2.698E-01
7	-2.466E-02	-2.933E-01
8	2.509E-02	3.996E-01
9	-9.292E-04	2.707E-02
1	-1.069E-03	2.968E-02
2	-2.222E-03	1.307E-02

E235

NODE	LOAD CASE	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
604	3	-2.231E-03	1.046E-02
604	4	-2.029E-03	2.674E-02
[illegible]	5	-2.038E-03	2.413E-02
[illegible]	6	-2.314E-02	-2.697E-01
604	7	-2.404E-02	-2.932E-01
604	8	2.402E-02	3.995E-01
604	9	-1.078E-03	2.707E-02
605	1	-7.576E-04	2.901E-02
605	2	-1.960E-03	1.255E-02
605	3	-1.976E-03	9.964E-03
605	4	-1.676E-03	2.601E-02
605	5	-1.692E-03	2.342E-02
605	6	-2.361E-02	-2.677E-01
605	7	-2.466E-02	-2.908E-01
605	8	2.549E-02	3.952E-01
605	9	-7.734E-04	2.641E-02
606	1	-9.237E-04	2.901E-02
606	2	-2.078E-03	1.256E-02
606	3	-2.091E-03	9.974E-03
606	4	-1.850E-03	2.602E-02
606	5	-1.863E-03	2.343E-02
606	6	-2.295E-02	-2.676E-01
606	7	-2.390E-02	-2.908E-01
606	8	2.423E-02	3.951E-01
606	9	-9.363E-04	2.642E-02
[illegible]	1	-1.086E-03	2.902E-02
607	2	-2.193E-03	1.258E-02
607	3	-2.203E-03	9.985E-03
607	4	-2.021E-03	2.603E-02
607	5	-2.031E-03	2.344E-02
607	6	-2.231E-02	-2.676E-01
607	7	-2.315E-02	-2.907E-01
607	8	2.299E-02	3.951E-01
607	9	-1.096E-03	2.643E-02
608	1	-7.506E-04	2.829E-02
608	2	-1.921E-03	1.204E-02
608	3	-1.939E-03	9.464E-03
608	4	-1.646E-03	2.525E-02
608	5	-1.665E-03	2.267E-02
608	6	-2.300E-02	-2.650E-01
608	7	-2.401E-02	-2.876E-01
608	8	2.478E-02	3.899E-01
608	9	-7.694E-04	2.571E-02
609	1	-9.291E-04	2.830E-02
609	2	-2.043E-03	1.205E-02
609	3	-2.057E-03	9.475E-03
609	4	-1.831E-03	2.526E-02
[illegible]	5	-1.845E-03	2.268E-02
[illegible]	6	-2.222E-02	-2.649E-01

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E236

LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
7	-2.311E-02	-2.876E-01
8	2.334E-02	3.898E-01
9	-9.433E-04	2.572E-02
1	-1.110E-03	2.830E-02
2	-2.167E-03	1.206E-02
3	-2.176E-03	9.486E-03
4	-2.019E-03	2.527E-02
5	-2.028E-03	2.270E-02
6	-2.141E-02	-2.648E-01
7	-2.218E-02	-2.875E-01
8	2.185E-02	3.897E-01
9	-1.119E-03	2.572E-02
1	-7.445E-04	2.751E-02
2	-1.881E-03	1.150E-02
3	-1.903E-03	8.948E-03
4	-1.617E-03	2.444E-02
5	-1.638E-03	2.188E-02
6	-2.237E-02	-2.616E-01
7	-2.334E-02	-2.838E-01
8	2.406E-02	3.836E-01
9	-7.661E-04	2.495E-02
1	-9.408E-04	2.751E-02
2	-2.011E-03	1.151E-02
3	-2.026E-03	8.959E-03
4	-1.818E-03	2.445E-02
5	-1.833E-03	2.189E-02
6	-2.141E-02	-2.615E-01
7	-2.225E-02	-2.837E-01
8	2.236E-02	3.836E-01
9	-9.556E-04	2.496E-02
1	-1.136E-03	2.752E-02
2	-2.141E-03	1.152E-02
3	-2.149E-03	8.971E-03
4	-2.018E-03	2.446E-02
5	-2.026E-03	2.191E-02
6	-2.046E-02	-2.615E-01
7	-2.116E-02	-2.836E-01
8	2.067E-02	3.835E-01
9	-1.144E-03	2.497E-02
1	-7.394E-04	2.666E-02
2	-1.841E-03	1.093E-02
3	-1.864E-03	8.418E-03
4	-1.588E-03	2.357E-02
5	-1.611E-03	2.105E-02
6	-2.170E-02	-2.576E-01
7	-2.263E-02	-2.792E-01
8	2.329E-02	3.764E-01
9	-7.630E-04	2.414E-02

.E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
.5	1	-9.500E-04	2.667E-02
.5	2	-1.975E-03	1.095E-02
[illegible]	3	-1.990E-03	8.430E-03
[illegible]	4	-1.801E-03	2.358E-02
.5	5	-1.816E-03	2.106E-02
5	6	-2.058E-02	-2.575E-01
.5	7	-2.136E-02	-2.791E-01
5	8	2.135E-02	3.764E-01
5	9	-9.649E-04	2.415E-02
6	1	-1.147E-03	2.668E-02
6	2	-2.100E-03	1.096E-02
6	3	-2.107E-03	8.440E-03
6	4	-2.000E-03	2.359E-02
6	5	-2.007E-03	2.107E-02
6	6	-1.951E-02	-2.574E-01
6	7	-2.016E-02	-2.790E-01
6	8	1.952E-02	3.763E-01
6	9	-1.154E-03	2.416E-02
7	1	-7.360E-04	2.575E-02
7	2	-1.800E-03	1.035E-02
7	3	-1.826E-03	7.879E-03
7	4	-1.560E-03	2.265E-02
7	5	-1.585E-03	2.017E-02
7	6	-2.101E-02	-2.527E-01
7	7	-2.189E-02	-2.738E-01
7	8	2.247E-02	3.681E-01
[illegible]	9	-7.613E-04	2.327E-02
8	1	-9.643E-04	2.576E-02
8	2	-1.940E-03	1.037E-02
8	3	-1.954E-03	7.891E-03
8	4	-1.788E-03	2.266E-02
3	5	-1.802E-03	2.018E-02
.8	6	-1.968E-02	-2.527E-01
18	7	-2.040E-02	-2.737E-01
18	8	2.025E-02	3.681E-01
18	9	-9.783E-04	2.328E-02
9	1	-1.191E-03	2.577E-02
9	2	-2.079E-03	1.038E-02
9	3	-2.082E-03	7.903E-03
9	4	-2.015E-03	2.267E-02
9	5	-2.018E-03	2.019E-02
9	6	-1.835E-02	-2.526E-01
9	7	-1.892E-02	-2.736E-01
9	8	1.803E-02	3.680E-01
9	9	-1.194E-03	2.329E-02
0	1	-7.345E-04	2.478E-02
0	2	-1.761E-03	9.761E-03
0	3	-1.787E-03	7.333E-03
[illegible]	4	-1.534E-03	2.167E-02

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E 238

E	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
0	5	-1.560E-03	1.924E-02
0	6	-2.030E-02	-2.471E-01
0	7	-2.113E-02	-2.675E-01
0	8	2.164E-02	3.587E-01
0	9	-7.606E-04	2.235E-02
1	1	-9.777E-04	2.479E-02
1	2	-1.904E-03	9.773E-03
1	3	-1.917E-03	7.344E-03
1	4	-1.774E-03	2.169E-02
1	5	-1.787E-03	1.926E-02
1	6	-1.879E-02	-2.471E-01
1	7	-1.945E-02	-2.674E-01
1	8	1.916E-02	3.587E-01
1	9	-9.905E-04	2.236E-02
2	1	-1.223E-03	2.480E-02
2	2	-2.049E-03	9.785E-03
2	3	-2.048E-03	7.356E-03
2	4	-2.016E-03	2.170E-02
2	5	-2.015E-03	1.927E-02
2	6	-1.725E-02	-2.470E-01
2	7	-1.774E-02	-2.673E-01
2	8	1.665E-02	3.586E-01
2	9	-1.222E-03	2.237E-02
3	1	-7.343E-04	2.374E-02
3	2	-1.722E-03	9.147E-03
3	3	-1.748E-03	6.779E-03
3	4	-1.509E-03	2.065E-02
3	5	-1.536E-03	1.828E-02
3	6	-1.958E-02	-2.407E-01
3	7	-2.036E-02	-2.603E-01
3	8	2.078E-02	3.482E-01
3	9	-7.609E-04	2.138E-02
4	1	-9.947E-04	2.375E-02
4	2	-1.869E-03	9.159E-03
4	3	-1.880E-03	6.791E-03
4	4	-1.763E-03	2.066E-02
4	5	-1.774E-03	1.829E-02
4	6	-1.784E-02	-2.406E-01
4	7	-1.844E-02	-2.602E-01
4	8	1.800E-02	3.481E-01
4	9	-1.005E-03	2.138E-02
5	1	-1.256E-03	2.376E-02
5	2	-2.019E-03	9.173E-03
5	3	-2.013E-03	6.804E-03
5	4	-2.019E-03	2.067E-02
5	5	-2.014E-03	1.830E-02
5	6	-1.612E-02	-2.406E-01
5	7	-1.653E-02	-2.602E-01
5	8	1.522E-02	3.481E-01

DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
25	9	-1.250E-03	2.139E-02
	1	-7.750E-04	2.281E-02
	2	-1.703E-03	8.614E-03
26	3	-1.727E-03	6.305E-03
26	4	-1.523E-03	1.973E-02
26	5	-1.547E-03	1.742E-02
26	6	-1.852E-02	-2.346E-01
26	7	-1.923E-02	-2.535E-01
26	8	1.943E-02	3.383E-01
26	9	-7.989E-04	2.050E-02
27	1	-1.009E-03	2.282E-02
27	2	-1.831E-03	8.626E-03
27	3	-1.840E-03	6.317E-03
27	4	-1.749E-03	1.975E-02
27	5	-1.757E-03	1.744E-02
27	6	-1.688E-02	-2.345E-01
27	7	-1.742E-02	-2.535E-01
27	8	1.682E-02	3.383E-01
27	9	-1.017E-03	2.051E-02
28	1	-1.249E-03	2.283E-02
28	2	-1.963E-03	8.637E-03
28	3	-1.955E-03	6.328E-03
28	4	-1.981E-03	1.976E-02
28	5	-1.973E-03	1.745E-02
28	6	-1.519E-02	-2.344E-01
28	7	-1.556E-02	-2.534E-01
28	8	1.416E-02	3.382E-01
28	9	-1.241E-03	2.052E-02
29	1	-7.696E-04	2.178E-02
29	2	-1.649E-03	8.042E-03
29	3	-1.672E-03	5.805E-03
29	4	-1.486E-03	1.873E-02
29	5	-1.510E-03	1.649E-02
29	6	-1.761E-02	-2.275E-01
29	7	-1.827E-02	-2.457E-01
29	8	1.836E-02	3.271E-01
29	9	-7.931E-04	1.954E-02
30	1	-1.035E-03	2.179E-02
30	2	-1.792E-03	8.053E-03
30	3	-1.796E-03	5.816E-03
30	4	-1.742E-03	1.874E-02
30	5	-1.746E-03	1.651E-02
30	6	-1.568E-02	-2.274E-01
30	7	-1.615E-02	-2.456E-01
30	8	1.535E-02	3.270E-01
30	9	-1.039E-03	1.955E-02
31	1	-1.299E-03	2.180E-02
	2	-1.934E-03	8.066E-03

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E240

ODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
631	3	-1.919E-03	5.828E-03
631	4	-1.996E-03	1.876E-02
631	5	-1.981E-03	1.652E-02
631	6	-1.377E-02	-2.273E-01
631	7	-1.405E-02	-2.456E-01
631	8	1.235E-02	3.270E-01
631	9	-1.284E-03	1.956E-02
632	1	-7.368E-04	2.063E-02
632	2	-1.578E-03	7.408E-03
632	3	-1.602E-03	5.258E-03
632	4	-1.422E-03	1.761E-02
632	5	-1.446E-03	1.546E-02
632	6	-1.684E-02	-2.193E-01
632	7	-1.747E-02	-2.368E-01
632	8	1.756E-02	3.142E-01
632	9	-7.609E-04	1.848E-02
633	1	-1.031E-03	2.064E-02
633	2	-1.735E-03	7.422E-03
633	3	-1.737E-03	5.271E-03
633	4	-1.705E-03	1.763E-02
633	5	-1.707E-03	1.548E-02
633	6	-1.470E-02	-2.193E-01
633	7	-1.512E-02	-2.367E-01
633	8	1.421E-02	3.142E-01
633	9	-1.032E-03	1.849E-02
634	1	-1.329E-03	2.065E-02
634	2	-1.895E-03	7.433E-03
634	3	-1.873E-03	5.282E-03
634	4	-1.992E-03	1.764E-02
634	5	-1.970E-03	1.549E-02
634	6	-1.253E-02	-2.192E-01
634	7	-1.274E-02	-2.366E-01
634	8	1.082E-02	3.142E-01
634	9	-1.307E-03	1.850E-02
635	1	-7.073E-04	1.935E-02
635	2	-1.508E-03	6.715E-03
635	3	-1.533E-03	4.664E-03
635	4	-1.361E-03	1.638E-02
635	5	-1.385E-03	1.433E-02
635	6	-1.606E-02	-2.103E-01
635	7	-1.665E-02	-2.268E-01
635	8	1.672E-02	3.000E-01
635	9	-7.316E-04	1.730E-02
636	1	-1.034E-03	1.936E-02
636	2	-1.683E-03	6.727E-03
636	3	-1.681E-03	4.676E-03
636	4	-1.676E-03	1.639E-02
636	5	-1.674E-03	1.434E-02
636	6	-1.366E-02	-2.102E-01

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DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
36	7	-1.402E-02	-2.267E-01
36	8	1.298E-02	2.999E-01
[illegible]	9	-1.032E-03	1.731E-02
37	1	-1.360E-03	1.937E-02
37	2	-1.857E-03	6.741E-03
37	3	-1.828E-03	4.689E-03
37	4	-1.989E-03	1.641E-02
37	5	-1.961E-03	1.436E-02
37	6	-1.126E-02	-2.101E-01
37	7	-1.139E-02	-2.267E-01
37	8	9.254E-03	2.999E-01
37	9	-1.332E-03	1.732E-02
38	1	-6.835E-04	1.796E-02
38	2	-1.442E-03	5.960E-03
38	3	-1.466E-03	4.023E-03
38	4	-1.306E-03	1.503E-02
38	5	-1.330E-03	1.309E-02
38	6	-1.523E-02	-2.002E-01
38	7	-1.579E-02	-2.158E-01
38	8	1.582E-02	2.842E-01
38	9	-7.072E-04	1.602E-02
39	1	-1.038E-03	1.797E-02
39	2	-1.631E-03	5.974E-03
39	3	-1.625E-03	4.037E-03
[illegible]	4	-1.647E-03	1.505E-02
[illegible]	5	-1.641E-03	1.311E-02
39	6	-1.262E-02	-2.002E-01
39	7	-1.292E-02	-2.157E-01
39	8	1.175E-02	2.842E-01
39	9	-1.032E-03	1.603E-02
40	1	-1.395E-03	1.798E-02
540	2	-1.820E-03	5.986E-03
540	3	-1.785E-03	4.048E-03
540	4	-1.990E-03	1.506E-02
540	5	-1.954E-03	1.312E-02
540	6	-9.983E-03	-2.001E-01
40	7	-1.003E-02	-2.156E-01
40	8	7.657E-03	2.842E-01
40	9	-1.359E-03	1.604E-02
41	1	-6.589E-04	1.645E-02
41	2	-1.376E-03	5.153E-03
41	3	-1.399E-03	3.342E-03
41	4	-1.251E-03	1.358E-02
41	5	-1.273E-03	1.177E-02
41	6	-1.442E-02	-1.893E-01
41	7	-1.494E-02	-2.038E-01
41	8	1.494E-02	2.672E-01
[illegible]	9	-6.818E-04	1.464E-02

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LOAD COMB		X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
2	1	-1.043E-03	1.646E-02
2	2	-1.579E-03	5.165E-03
2	3	-1.569E-03	3.354E-03
2	4	-1.619E-03	1.359E-02
2	5	-1.609E-03	1.178E-02
2	6	-1.156E-02	-1.892E-01
2	7	-1.181E-02	-2.037E-01
2	8	1.050E-02	2.671E-01
2	9	-1.033E-03	1.465E-02
3	1	-1.427E-03	1.647E-02
3	2	-1.782E-03	5.179E-03
3	3	-1.739E-03	3.367E-03
3	4	-1.987E-03	1.361E-02
3	5	-1.944E-03	1.180E-02
3	6	-8.710E-03	-1.892E-01
3	7	-8.690E-03	-2.037E-01
3	8	6.080E-03	2.671E-01
3	9	-1.384E-03	1.466E-02
4	1	-6.158E-04	1.484E-02
4	2	-1.301E-03	4.293E-03
4	3	-1.325E-03	2.621E-03
4	4	-1.178E-03	1.203E-02
4	5	-1.201E-03	1.036E-02
4	6	-1.377E-02	-1.774E-01
4	7	-1.426E-02	-1.908E-01
4	8	1.430E-02	2.487E-01
4	9	-6.392E-04	1.316E-02
5	1	-1.022E-03	1.485E-02
5	2	-1.514E-03	4.307E-03
5	3	-1.502E-03	2.634E-03
5	4	-1.567E-03	1.204E-02
5	5	-1.555E-03	1.037E-02
5	6	-1.070E-02	-1.773E-01
5	7	-1.091E-02	-1.907E-01
5	8	9.563E-03	2.487E-01
5	9	-1.010E-03	1.318E-02
6	1	-1.431E-03	1.486E-02
6	2	-1.728E-03	4.319E-03
6	3	-1.680E-03	2.647E-03
6	4	-1.958E-03	1.206E-02
6	5	-1.910E-03	1.039E-02
6	6	-7.627E-03	-1.772E-01
6	7	-7.551E-03	-1.907E-01
6	8	4.805E-03	2.486E-01
6	9	-1.383E-03	1.319E-02
7	1	-6.288E-04	1.314E-02
7	2	-1.256E-03	3.400E-03
7	3	-1.275E-03	1.877E-03
7	4	-1.159E-03	1.040E-02

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DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
547	5	-1.178E-03	8.884E-03
547	6	-1.268E-02	-1.647E-01
[illegible]	7	-1.312E-02	-1.769E-01
[illegible]	8	1.299E-02	2.290E-01
547	9	-6.477E-04	1.162E-02
548	1	-1.059E-03	1.315E-02
548	2	-1.479E-03	3.412E-03
548	3	-1.459E-03	1.890E-03
548	4	-1.569E-03	1.042E-02
548	5	-1.550E-03	8.898E-03
548	6	-9.401E-03	-1.646E-01
548	7	-9.534E-03	-1.768E-01
548	8	7.937E-03	2.290E-01
548	9	-1.039E-03	1.162E-02
549	1	-1.489E-03	1.316E-02
549	2	-1.701E-03	3.427E-03
549	3	-1.644E-03	1.903E-03
549	4	-1.979E-03	1.043E-02
549	5	-1.921E-03	8.914E-03
549	6	-6.120E-03	-1.646E-01
549	7	-5.950E-03	-1.768E-01
549	8	2.883E-03	2.290E-01
549	9	-1.431E-03	1.164E-02
550	1	-6.078E-04	1.134E-02
550	2	-1.191E-03	2.464E-03
[illegible]	3	-1.208E-03	1.102E-03
550	4	-1.107E-03	8.694E-03
550	5	-1.124E-03	7.333E-03
550	6	-1.184E-02	-1.511E-01
550	7	-1.224E-02	-1.621E-01
550	8	1.207E-02	2.081E-01
550	9	-6.249E-04	9.987E-03
551	1	-1.058E-03	1.136E-02
551	2	-1.424E-03	2.478E-03
551	3	-1.400E-03	1.116E-03
551	4	-1.536E-03	8.711E-03
551	5	-1.512E-03	7.349E-03
551	6	-8.388E-03	-1.511E-01
551	7	-8.470E-03	-1.620E-01
551	8	6.757E-03	2.081E-01
551	9	-1.035E-03	9.999E-03
552	1	-1.510E-03	1.137E-02
552	2	-1.658E-03	2.492E-03
552	3	-1.593E-03	1.129E-03
552	4	-1.966E-03	8.726E-03
552	5	-1.902E-03	7.363E-03
552	6	-4.927E-03	-1.510E-01
552	7	-4.691E-03	-1.620E-01
[illegible]	8	1.432E-03	2.080E-01

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	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
2	9	-1.445E-03	1.001E-02
3	1	-5.919E-04	9.479E-03
3	2	-1.129E-03	1.493E-03
3	3	-1.144E-03	3.009E-04
3	4	-1.060E-03	6.911E-03
3	5	-1.074E-03	5.719E-03
3	6	-1.095E-02	-1.369E-01
3	7	-1.131E-02	-1.465E-01
3	8	1.108E-02	1.862E-01
3	9	-6.066E-04	8.287E-03
4	1	-1.063E-03	9.490E-03
4	2	-1.372E-03	1.506E-03
4	3	-1.343E-03	3.137E-04
4	4	-1.508E-03	6.926E-03
4	5	-1.479E-03	5.734E-03
4	6	-7.319E-03	-1.368E-01
4	7	-7.346E-03	-1.465E-01
4	8	5.497E-03	1.861E-01
4	9	-1.034E-03	8.297E-03
55	1	-1.534E-03	9.503E-03
55	2	-1.613E-03	1.520E-03
55	3	-1.542E-03	3.278E-04
55	4	-1.955E-03	6.944E-03
55	5	-1.883E-03	5.751E-03
55	6	-3.684E-03	-1.368E-01
55	7	-3.380E-03	-1.464E-01
55	8	-8.258E-05	1.861E-01
55	9	-1.462E-03	8.310E-03
56	1	-5.699E-04	7.535E-03
56	2	-1.065E-03	4.888E-04
56	3	-1.078E-03	-5.246E-04
56	4	-1.007E-03	5.061E-03
56	5	-1.020E-03	4.048E-03
56	6	-1.013E-02	-1.220E-01
56	7	-1.045E-02	-1.303E-01
56	8	1.017E-02	1.632E-01
56	9	-5.826E-04	6.521E-03
57	1	-1.057E-03	7.547E-03
57	2	-1.314E-03	5.029E-04
57	3	-1.282E-03	-5.110E-04
57	4	-1.469E-03	5.078E-03
57	5	-1.437E-03	4.064E-03
57	6	-6.354E-03	-1.219E-01
57	7	-6.334E-03	-1.302E-01
57	8	4.388E-03	1.632E-01
57	9	-1.024E-03	6.533E-03
58	1	-1.544E-03	7.560E-03
58	2	-1.564E-03	5.173E-04

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NODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
658	3	-1.487E-03	-4.971E-04
658	4	-1.932E-03	5.094E-03
[illegible]	5	-1.855E-03	4.080E-03
[illegible]	6	-2.584E-03	-1.219E-01
658	7	-2.222E-03	-1.302E-01
658	8	-1.393E-03	1.632E-01
658	9	-1.467E-03	6.545E-03
659	1	-5.527E-04	5.538E-03
659	2	-1.002E-03	-5.385E-04
659	3	-1.012E-03	-1.366E-03
659	4	-9.587E-04	3.163E-03
659	5	-9.688E-04	2.335E-03
659	6	-9.247E-03	-1.066E-01
659	7	-9.529E-03	-1.135E-01
659	8	9.194E-03	1.396E-01
659	9	-5.628E-04	4.709E-03
660	1	-1.054E-03	5.549E-03
660	2	-1.258E-03	-5.248E-04
660	3	-1.221E-03	-1.353E-03
660	4	-1.434E-03	3.179E-03
660	5	-1.397E-03	2.350E-03
660	6	-5.329E-03	-1.065E-01
660	7	-5.258E-03	-1.134E-01
660	8	3.199E-03	1.396E-01
660	9	-1.018E-03	4.720E-03
[illegible]	1	-1.556E-03	5.563E-03
[illegible]	2	-1.514E-03	-5.095E-04
661	3	-1.430E-03	-1.338E-03
661	4	-1.910E-03	3.197E-03
661	5	-1.826E-03	2.368E-03
661	6	-1.411E-03	-1.065E-01
661	7	-9.880E-04	-1.134E-01
661	8	-2.794E-03	1.396E-01
661	9	-1.473E-03	4.734E-03
662	1	-5.273E-04	3.483E-03
662	2	-9.367E-04	-1.588E-03
662	3	-9.449E-04	-2.224E-03
662	4	-9.030E-04	1.215E-03
662	5	-9.112E-04	5.791E-04
662	6	-8.453E-03	-9.063E-02
662	7	-8.703E-03	-9.610E-02
662	8	8.341E-03	1.152E-01
662	9	-5.355E-04	2.847E-03
663	1	-1.040E-03	3.495E-03
663	2	-1.197E-03	-1.574E-03
663	3	-1.157E-03	-2.210E-03
663	4	-1.388E-03	1.231E-03
663	5	-1.348E-03	5.951E-04
[illegible]	6	-4.430E-03	-9.058E-02

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NODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
663	7	-4.319E-03	-9.605E-02
663	8	2.191E-03	1.151E-01
663	9	-1.000E-03	2.859E-03
664	1	-1.554E-03	3.510E-03
664	2	-1.459E-03	-1.558E-03
664	3	-1.370E-03	-2.195E-03
664	4	-1.875E-03	1.250E-03
664	5	-1.787E-03	6.134E-04
664	6	-4.185E-04	-9.054E-02
664	7	5.309E-05	-9.601E-02
664	8	-3.944E-03	1.151E-01
664	9	-1.466E-03	2.873E-03
665	1	-4.998E-04	1.395E-03
665	2	-8.680E-04	-2.651E-03
665	3	-8.745E-04	-3.090E-03
665	4	-8.441E-04	-7.627E-04
665	5	-8.505E-04	-1.201E-03
665	6	-7.642E-03	-7.431E-02
665	7	-7.860E-03	-7.831E-02
665	8	7.472E-03	9.025E-02
665	9	-5.062E-04	9.562E-04
666	1	-1.022E-03	1.407E-03
666	2	-1.131E-03	-2.636E-03
666	3	-1.088E-03	-3.076E-03
666	4	-1.337E-03	-7.460E-04
666	5	-1.294E-03	-1.185E-03
666	6	-3.509E-03	-7.425E-02
666	7	-3.358E-03	-7.825E-02
666	8	1.171E-03	9.021E-02
666	9	-9.791E-04	9.681E-04
667	1	-1.544E-03	1.423E-03
667	2	-1.394E-03	-2.620E-03
667	3	-1.301E-03	-3.060E-03
667	4	-1.830E-03	-7.261E-04
667	5	-1.737E-03	-1.166E-03
667	6	6.267E-04	-7.422E-02
667	7	1.146E-03	-7.823E-02
667	8	-5.134E-03	9.022E-02
667	9	-1.451E-03	9.831E-04
668	1	-4.734E-04	-7.259E-04
668	2	-8.026E-04	-3.720E-03
668	3	-8.072E-04	-3.957E-03
668	4	-7.879E-04	-2.765E-03
668	5	-7.925E-04	-3.002E-03
668	6	-6.870E-03	-5.753E-02
668	7	-7.057E-03	-6.004E-02
668	8	6.647E-03	6.467E-02
668	9	-4.779E-04	-9.629E-04

NODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
669	1	-1.002E-03	-7.134E-04
669	2	-1.067E-03	-3.705E-03
[illegible]	3	-1.021E-03	-3.943E-03
[illegible]	4	-1.286E-03	-2.748E-03
669	5	-1.240E-03	-2.985E-03
669	6	-2.658E-03	-5.747E-02
669	7	-2.471E-03	-5.998E-02
669	8	2.368E-04	6.463E-02
669	9	-9.561E-04	-9.508E-04
670	1	-1.532E-03	-6.954E-04
670	2	-1.334E-03	-3.687E-03
670	3	-1.237E-03	-3.925E-03
670	4	-1.786E-03	-2.726E-03
670	5	-1.690E-03	-2.964E-03
670	6	1.543E-03	-5.744E-02
670	7	2.104E-03	-5.996E-02
670	8	-6.166E-03	6.465E-02
670	9	-1.435E-03	-9.338E-04
671	1	-4.338E-04	-2.865E-03
671	2	-7.273E-04	-4.791E-03
671	3	-7.310E-04	-4.823E-03
671	4	-7.172E-04	-4.781E-03
671	5	-7.209E-04	-4.813E-03
671	6	-6.143E-03	-4.047E-02
671	7	-6.306E-03	-4.146E-02
[illegible]	8	5.912E-03	3.870E-02
[illegible]	9	-4.375E-04	-2.897E-03
672	1	-9.640E-04	-2.851E-03
672	2	-9.896E-04	-4.774E-03
672	3	-9.422E-04	-4.807E-03
672	4	-1.215E-03	-4.762E-03
672	5	-1.167E-03	-4.794E-03
672	6	-1.856E-03	-4.041E-02
672	7	-1.642E-03	-4.141E-02
672	8	-5.884E-04	3.868E-02
672	9	-9.165E-04	-2.883E-03
673	1	-1.494E-03	-2.832E-03
673	2	-1.251E-03	-4.757E-03
673	3	-1.152E-03	-4.790E-03
673	4	-1.712E-03	-4.740E-03
673	5	-1.614E-03	-4.773E-03
673	6	2.438E-03	-4.039E-02
673	7	3.032E-03	-4.139E-02
673	8	-7.101E-03	3.871E-02
673	9	-1.395E-03	-2.866E-03
674	1	-3.942E-04	-4.998E-03
674	2	-6.586E-04	-5.841E-03
[illegible]	3	-6.618E-04	-5.667E-03
[illegible]	4	-6.505E-04	-6.781E-03

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DE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
74	5	-6.537E-04	-6.606E-03
74	6	-5.537E-03	-2.313E-02
74	7	-5.683E-03	-2.260E-02
74	8	5.319E-03	1.244E-02
74	9	-3.975E-04	-4.823E-03
75	1	-9.221E-04	-4.984E-03
675	2	-9.160E-04	-5.825E-03
675	3	-8.679E-04	-5.651E-03
675	4	-1.143E-03	-6.762E-03
675	5	-1.095E-03	-6.588E-03
675	6	-1.201E-03	-2.307E-02
675	7	-9.680E-04	-2.254E-02
675	8	-1.232E-03	1.241E-02
675	9	-8.740E-04	-4.810E-03
676	1	-1.457E-03	-4.960E-03
676	2	-1.180E-03	-5.802E-03
676	3	-1.080E-03	-5.630E-03
676	4	-1.646E-03	-6.733E-03
676	5	-1.546E-03	-6.560E-03
676	6	3.131E-03	-2.307E-02
676	7	3.746E-03	-2.255E-02
676	8	-7.803E-03	1.248E-02
676	9	-1.357E-03	-4.787E-03
677	1	-5.196E-04	-6.689E-03
677	2	-6.605E-04	-6.664E-03
677	3	-6.464E-04	-6.325E-03
677	4	-7.319E-04	-8.361E-03
677	5	-7.178E-04	-8.022E-03
677	6	-3.394E-03	-9.206E-03
677	7	-3.396E-03	-7.454E-03
677	8	2.467E-03	-8.590E-03
677	9	-5.054E-04	-6.350E-03
678	1	-9.296E-04	-6.672E-03
678	2	-8.562E-04	-6.646E-03
678	3	-8.017E-04	-6.308E-03
678	4	-1.112E-03	-8.339E-03
678	5	-1.058E-03	-8.001E-03
678	6	5.372E-05	-9.179E-03
678	7	3.514E-04	-7.432E-03
678	8	-2.715E-03	-8.570E-03
678	9	-8.751E-04	-6.333E-03
679	1	-1.348E-03	-6.652E-03
679	2	-1.057E-03	-6.628E-03
679	3	-9.615E-04	-6.290E-03
679	4	-1.502E-03	-8.315E-03
679	5	-1.406E-03	-7.978E-03
679	6	3.552E-03	-9.178E-03
679	7	4.154E-03	-7.437E-03
679	8	-7.981E-03	-8.514E-03

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NODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
679	9	-1.252E-03	-6.314E-03
[illegible]	1	-4.223E-04	-8.333E-03
[illegible]	2	-5.434E-04	-7.453E-03
680	3	-5.326E-04	-6.952E-03
680	4	-5.989E-04	-9.891E-03
680	5	-5.881E-04	-9.390E-03
680	6	-2.881E-03	4.535E-03
680	7	-2.888E-03	7.482E-03
680	8	2.147E-03	-2.927E-02
680	9	-4.115E-04	-7.832E-03
681	1	-8.270E-04	-8.316E-03
681	2	-7.387E-04	-7.435E-03
681	3	-6.881E-04	-6.935E-03
681	4	-9.762E-04	-9.869E-03
681	5	-9.257E-04	-9.369E-03
681	6	4.819E-04	4.582E-03
681	7	7.683E-04	7.525E-03
681	8	-2.921E-03	-2.927E-02
681	9	-7.765E-04	-7.816E-03
682	1	-1.240E-03	-8.287E-03
682	2	-9.408E-04	-7.411E-03
682	3	-8.499E-04	-6.912E-03
682	4	-1.363E-03	-9.836E-03
682	5	-1.272E-03	-9.337E-03
[illegible]	6	3.870E-03	4.532E-03
[illegible]	7	4.454E-03	7.463E-03
682	8	-8.046E-03	-2.913E-02
682	9	-1.149E-03	-7.788E-03
683	1	-2.832E-04	-9.932E-03
683	2	-3.931E-04	-8.227E-03
683	3	-3.884E-04	-7.569E-03
683	4	-4.189E-04	-1.138E-02
683	5	-4.143E-04	-1.072E-02
683	6	-2.472E-03	1.777E-02
683	7	-2.503E-03	2.188E-02
683	8	2.068E-03	-4.924E-02
683	9	-2.786E-04	-9.273E-03
684	1	-6.649E-04	-9.907E-03
684	2	-5.758E-04	-8.205E-03
684	3	-5.336E-04	-7.548E-03
684	4	-7.740E-04	-1.135E-02
684	5	-7.317E-04	-1.069E-02
684	6	7.278E-04	1.777E-02
684	7	9.748E-04	2.186E-02
684	8	-2.745E-03	-4.917E-02
684	9	-6.227E-04	-9.250E-03
[illegible]	1	-1.041E-03	-9.881E-03
[illegible]	2	-7.549E-04	-8.182E-03

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NODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
685	3	-6.754E-04	-7.527E-03
685	4	-1.123E-03	-1.132E-02
685	5	-1.044E-03	-1.066E-02
685	6	3.906E-03	1.774E-02
685	7	4.429E-03	2.183E-02
685	8	-7.519E-03	-4.906E-02
685	9	-9.620E-04	-9.226E-03
686	1	-1.530E-04	-1.137E-02
686	2	-2.524E-04	-8.915E-03
686	3	-2.536E-04	-8.114E-03
686	4	-2.506E-04	-1.272E-02
686	5	-2.518E-04	-1.192E-02
686	6	-2.089E-03	2.988E-02
686	7	-2.143E-03	3.503E-02
686	8	1.994E-03	-6.744E-02
686	9	-1.542E-04	-1.057E-02
687	1	-4.985E-04	-1.135E-02
687	2	-4.188E-04	-8.896E-03
687	3	-3.859E-04	-8.096E-03
687	4	-5.726E-04	-1.270E-02
687	5	-5.397E-04	-1.190E-02
687	6	7.884E-04	2.995E-02
687	7	9.856E-04	3.510E-02
687	8	-2.341E-03	-6.748E-02
687	9	-4.656E-04	-1.055E-02
688	1	-8.525E-04	-1.131E-02
688	2	-5.920E-04	-8.865E-03
688	3	-5.246E-04	-8.068E-03
688	4	-9.043E-04	-1.265E-02
688	5	-8.368E-04	-1.185E-02
688	6	3.686E-03	2.981E-02
688	7	4.137E-03	3.494E-02
688	8	-5.724E-03	-6.719E-02
688	9	-7.851E-04	-1.051E-02
689	1	1.995E-05	-1.264E-02
689	2	-7.728E-05	-9.526E-03
689	3	-8.713E-05	-8.601E-03
689	4	-3.383E-05	-1.390E-02
689	5	-4.368E-05	-1.298E-02
689	6	-1.801E-03	4.045E-02
689	7	-1.896E-03	4.652E-02
689	8	2.153E-03	-8.336E-02
689	9	1.010E-05	-1.171E-02
690	1	-2.418E-04	-1.261E-02
690	2	-2.010E-04	-9.501E-03
690	3	-1.849E-04	-8.577E-03
690	4	-2.764E-04	-1.387E-02
690	5	-2.603E-04	-1.294E-02
690	6	4.232E-04	4.041E-02

NODE	LOAD COMB	X-DISPLACEMENT (RADIAL)	Y-DISPLACEMENT (AXIAL)
690	7	5.208E-04	4.647E-02
690	8	-1.183E-03	-8.323E-02
[illegible]	9	-2.257E-04	-1.168E-02
691	1	-5.041E-04	-1.257E-02
691	2	-3.233E-04	-9.474E-03
691	3	-2.809E-04	-8.553E-03
691	4	-5.184E-04	-1.383E-02
691	5	-4.760E-04	-1.291E-02
691	6	2.683E-03	4.035E-02
691	7	2.975E-03	4.640E-02
691	8	-4.562E-03	-8.307E-02
691	9	-4.617E-04	-1.165E-02
692	1	1.514E-04	-1.345E-02
692	2	6.779E-05	-9.894E-03
692	3	5.241E-05	-8.885E-03
692	4	1.380E-04	-1.465E-02
692	5	1.226E-04	-1.364E-02
692	6	-1.358E-03	4.777E-02
692	7	-1.473E-03	5.446E-02
692	8	2.013E-03	-9.421E-02
692	9	1.360E-04	-1.245E-02
693	1	1.347E-05	-1.346E-02
693	2	9.360E-06	-9.887E-03
693	3	8.303E-06	-8.877E-03
[illegible]	4	1.434E-05	-1.465E-02
[illegible]	5	1.328E-05	-1.364E-02
693	6	-5.804E-05	4.802E-02
693	7	-6.525E-05	5.473E-02
693	8	1.062E-04	-9.453E-02
693	9	1.241E-05	-1.245E-02
694	1	-8.610E-05	-1.339E-02
694	2	-2.126E-05	-9.841E-03
694	3	-1.090E-05	-8.837E-03
694	4	-6.776E-05	-1.457E-02
694	5	-5.740E-05	-1.357E-02
694	6	1.098E-03	4.764E-02
694	7	1.179E-03	5.430E-02
694	8	-1.522E-03	-9.388E-02
694	9	-7.575E-05	-1.239E-02

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CAS REV 3.4 FINITE ELEMENT ANALYSIS

I-SYMETRIC 01/30/86 22:07:55

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STRESSES *
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ZMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
1	1	-62.174	0.039	-63.040	0.260	0.040	-62.175	89.760
1	2	-62.046	0.038	-62.911	0.260	0.039	-62.047	89.760
1	3	20.168	-14.897	20.227	-0.134	20.169	-14.898	179.779
1	4	-128.137	0.377	-129.923	0.537	0.379	-128.139	89.760
1	5	-45.922	-14.559	-46.784	0.141	-14.558	-45.922	89.740
1	6	-41.559	-14.581	-42.360	0.123	-14.580	-41.560	89.737
1	7	-43.475	-14.571	-44.303	0.131	-14.570	-43.475	89.739
1	8	-48.808	-14.544	-49.710	0.153	-14.543	-48.809	89.742
1	9	20.040	-14.896	20.097	-0.134	20.041	-14.897	179.779
2	1	-61.868	-0.443	-64.730	-1.265	-0.417	-61.894	91.179
2	2	-61.741	-0.443	-64.597	-1.262	-0.417	-61.767	91.179
2	3	20.897	-10.657	21.631	0.391	20.902	-10.662	0.710
2	4	-127.511	-0.638	-133.411	-2.609	-0.584	-127.565	91.177
2	5	-44.872	-10.851	-47.182	-0.954	-10.825	-44.899	91.606
2	6	-40.530	-10.839	-42.639	-0.866	-10.813	-40.555	91.669
2	7	-42.437	-10.844	-44.634	-0.905	-10.818	-42.463	91.639
2	8	-47.745	-10.860	-50.187	-1.013	-10.832	-47.773	91.573
2	9	20.770	-10.657	21.498	0.388	20.774	-10.662	0.708
3	1	-61.845	-0.341	-64.715	1.275	-0.314	-61.871	88.811
3	2	-61.718	-0.340	-64.582	1.273	-0.314	-61.744	88.811
3	3	20.976	-10.509	21.889	-0.576	20.986	-10.520	178.951
3	4	-127.490	-0.537	-133.412	2.629	-0.483	-127.545	88.814
3	5	-44.796	-10.706	-46.939	0.778	-10.688	-44.814	88.691
3	6	-40.454	-10.693	-42.395	0.689	-10.677	-40.470	88.673
3	7	-42.361	-10.699	-44.391	0.728	-10.682	-42.378	88.682
3	8	-47.669	-10.715	-49.945	0.838	-10.696	-47.688	88.701
3	9	20.849	-10.510	21.756	-0.573	20.859	-10.520	178.952
4	1	-62.138	0.247	-63.008	-0.265	0.248	-62.139	90.243
4	2	-62.010	0.247	-62.878	-0.264	0.248	-62.011	90.243
4	3	20.218	-14.628	20.475	-0.157	20.219	-14.629	179.740
4	4	-128.118	0.573	-129.914	-0.551	0.575	-128.120	90.245
4	5	-45.888	-14.302	-46.560	-0.444	-14.296	-45.895	90.806
4	6	-41.524	-14.324	-42.135	-0.425	-14.317	-41.531	90.896
4	7	-43.441	-14.314	-44.078	-0.434	-14.308	-43.447	90.853
4	8	-48.776	-14.288	-49.488	-0.457	-14.282	-48.782	90.759

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
4	9	20.090	-14.627	20.345	-0.158	20.091	-14.628	179.738
5	1	-64.406	-0.505	-63.529	0.260	-0.504	-64.408	89.766
[illegible]	2	-64.274	-0.504	-63.399	0.260	-0.503	-64.275	89.766
[illegible]	3	21.169	-14.616	20.635	-0.134	21.170	-14.617	179.784
[illegible]	4	-132.735	-0.744	-130.929	0.537	-0.742	-132.737	89.767
5	5	-47.291	-14.856	-46.895	0.141	-14.855	-47.291	89.749
5	6	-42.772	-14.840	-42.436	0.123	-14.839	-42.772	89.746
5	7	-44.756	-14.847	-44.394	0.131	-14.846	-44.757	89.748
5	8	-50.281	-14.866	-49.844	0.153	-14.866	-50.281	89.751
5	9	21.037	-14.617	20.504	-0.134	21.038	-14.617	179.784
6	1	-64.536	-0.240	-63.684	0.042	-0.240	-64.536	89.962
6	2	-64.403	-0.240	-63.553	0.042	-0.240	-64.403	89.962
6	3	21.082	-15.513	20.550	-0.050	21.082	-15.513	179.921
6	4	-133.014	-0.246	-131.260	0.081	-0.246	-133.014	89.965
6	5	-47.528	-15.520	-47.156	-0.011	-15.520	-47.528	90.020
6	6	-42.999	-15.520	-42.687	-0.013	-15.520	-42.999	90.029
6	7	-44.988	-15.520	-44.649	-0.012	-15.520	-44.988	90.025
6	8	-50.524	-15.520	-50.113	-0.009	-15.520	-50.525	90.015
6	9	20.949	-15.513	20.419	-0.050	20.950	-15.513	179.921
7	1	-64.505	-0.114	-63.655	0.005	-0.114	-64.505	89.995
7	2	-64.372	-0.114	-63.524	0.005	-0.114	-64.372	89.995
7	3	21.106	-15.418	20.586	-0.041	21.106	-15.418	179.935
7	4	-132.983	-0.113	-131.233	0.005	-0.113	-132.983	89.997
7	5	-47.504	-15.417	-47.121	-0.040	-15.417	-47.504	90.073
7	6	-42.974	-15.417	-42.652	-0.040	-15.417	-42.975	90.085
[illegible]	7	-44.963	-15.417	-44.615	-0.040	-15.417	-44.964	90.079
[illegible]	8	-50.500	-15.417	-50.078	-0.040	-15.417	-50.500	90.067
[illegible]	9	20.973	-15.418	20.455	-0.041	20.973	-15.418	179.935
8	1	-64.336	-0.286	-63.480	-0.249	-0.285	-64.337	90.223
8	2	-64.204	-0.285	-63.350	-0.248	-0.284	-64.205	90.223
8	3	21.080	-14.409	20.712	0.274	21.082	-14.411	0.442
8	4	-132.652	-0.528	-130.887	-0.511	-0.526	-132.654	90.221
8	5	-47.367	-14.651	-46.825	0.011	-14.651	-47.367	89.979
8	6	-42.849	-14.635	-42.366	0.029	-14.635	-42.849	89.941
8	7	-44.833	-14.642	-44.324	0.021	-14.642	-44.833	89.959
8	8	-50.357	-14.662	-49.774	0.000	-14.662	-50.357	89.999
8	9	20.947	-14.410	20.581	0.273	20.950	-14.412	0.443
9	1	-64.231	-0.288	-63.903	-0.004	-0.288	-64.231	90.004
9	2	-64.100	-0.288	-63.772	-0.004	-0.288	-64.100	90.004
9	3	20.941	-15.568	20.693	0.005	20.941	-15.568	0.000
9	4	-132.375	-0.291	-131.697	-0.009	-0.291	-132.375	90.004
9	5	-47.334	-15.570	-47.232	0.000	-15.570	-47.334	89.998
9	6	-42.826	-15.570	-42.748	0.001	-15.570	-42.826	89.997
9	7	-44.806	-15.570	-44.717	0.001	-15.570	-44.806	89.998
9	8	-50.315	-15.570	-50.199	0.000	-15.570	-50.315	89.999
9	9	20.809	-15.568	20.561	0.005	20.809	-15.568	0.000
10	1	-64.208	-0.203	-63.830	0.002	-0.203	-64.208	89.998
10	2	-64.076	-0.203	-63.699	0.002	-0.203	-64.076	89.998
[illegible]	3	20.923	-15.523	20.661	0.033	20.923	-15.523	0.053

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NT	LOAD COMB	R-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	RZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
10	4	-132.340	-0.172	-131.561	0.008	-0.172	-132.340	89.996
10	5	-47.340	-15.491	-47.200	0.039	-15.491	-47.340	89.928
10	6	-42.833	-15.493	-42.720	0.039	-15.493	-42.833	89.917
10	7	-44.812	-15.492	-44.687	0.039	-15.492	-44.812	89.922
10	8	-50.321	-15.490	-50.163	0.040	-15.490	-50.321	89.934
10	9	20.791	-15.523	20.530	0.033	20.791	-15.523	0.053
11	1	-64.177	-0.078	-63.800	-0.034	-0.078	-64.177	90.031
11	2	-64.045	-0.078	-63.669	-0.034	-0.078	-64.045	90.031
11	3	20.954	-15.428	20.691	0.043	20.954	-15.428	0.068
11	4	-132.308	-0.038	-131.532	-0.067	-0.038	-132.308	90.029
11	5	-47.308	-15.388	-47.170	0.010	-15.388	-47.308	89.981
11	6	-42.802	-15.391	-42.690	0.012	-15.391	-42.802	89.974
11	7	-44.780	-15.389	-44.658	0.011	-15.389	-44.780	89.977
11	8	-50.289	-15.386	-50.134	0.008	-15.386	-50.289	89.985
11	9	20.822	-15.428	20.560	0.043	20.822	-15.428	0.068
12	1	-64.163	-0.060	-63.845	0.001	-0.060	-64.163	89.999
12	2	-64.031	-0.060	-63.714	0.001	-0.060	-64.031	89.999
12	3	20.947	-15.337	20.743	0.000	20.947	-15.337	0.000
12	4	-132.292	-0.063	-131.639	0.001	-0.063	-132.292	89.999
12	5	-47.313	-15.339	-47.181	0.001	-15.339	-47.313	89.997
12	6	-42.806	-15.339	-42.697	0.001	-15.339	-42.806	89.996
12	7	-44.785	-15.339	-44.666	0.001	-15.339	-44.785	89.997
12	8	-50.294	-15.340	-50.147	0.001	-15.340	-50.294	89.997
12	9	20.815	-15.337	20.612	0.000	20.815	-15.337	0.000
13	1	-64.142	-0.279	-63.947	-0.004	-0.279	-64.142	90.004
13	2	-64.010	-0.279	-63.816	-0.004	-0.279	-64.010	90.004
13	3	20.857	-15.579	20.718	0.005	20.857	-15.579	0.000
13	4	-132.189	-0.272	-131.789	-0.009	-0.272	-132.189	90.004
13	5	-47.321	-15.571	-47.254	0.000	-15.571	-47.321	89.998
13	6	-42.820	-15.572	-42.767	0.001	-15.572	-42.820	89.997
13	7	-44.797	-15.571	-44.738	0.001	-15.571	-44.797	89.998
13	8	-50.299	-15.571	-50.223	0.000	-15.571	-50.299	89.999
13	9	20.725	-15.579	20.586	0.005	20.725	-15.579	0.000
14	1	-64.130	-0.235	-63.956	0.006	-0.235	-64.130	89.993
14	2	-63.998	-0.235	-63.825	0.006	-0.235	-63.998	89.993
14	3	20.876	-15.509	20.750	0.005	20.876	-15.509	0.000
14	4	-132.180	-0.237	-131.822	0.008	-0.237	-132.180	89.996
14	5	-47.305	-15.511	-47.245	0.006	-15.511	-47.305	89.988
14	6	-42.804	-15.511	-42.756	0.006	-15.511	-42.804	89.986
14	7	-44.780	-15.511	-44.728	0.006	-15.511	-44.780	89.987
14	8	-50.282	-15.511	-50.215	0.006	-15.511	-50.282	89.989
14	9	20.744	-15.509	20.619	0.005	20.744	-15.509	0.000
15	1	-64.101	-0.117	-63.927	0.003	-0.117	-64.101	89.996
15	2	-63.969	-0.117	-63.796	0.003	-0.117	-63.969	89.996
15	3	20.905	-15.390	20.780	0.007	20.905	-15.390	0.000
15	4	-132.151	-0.120	-131.792	0.001	-0.120	-132.151	89.999
15	5	-47.276	-15.392	-47.216	0.005	-15.392	-47.276	89.990
15	6	-42.775	-15.392	-42.727	0.005	-15.392	-42.775	89.988
15	7	-44.752	-15.392	-44.698	0.005	-15.392	-44.752	89.989
15	8	-50.254	-15.393	-50.186	0.005	-15.393	-50.254	89.991

ZMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
15	9	20.773	-15.390	20.648	0.007	20.773	-15.390	0.000
16	1	-64.086	-0.054	-63.891	0.004	-0.054	-64.086	89.996
	2	-63.954	-0.054	-63.760	0.004	-0.054	-63.954	89.996
	3	20.913	-15.337	20.781	-0.000	20.913	-15.337	180.000
	4	-132.134	-0.051	-131.734	0.009	-0.051	-132.134	89.995
16	5	-47.266	-15.333	-47.192	0.004	-15.333	-47.266	89.992
16	6	-42.765	-15.334	-42.705	0.004	-15.334	-42.765	89.991
16	7	-44.742	-15.333	-44.676	0.004	-15.333	-44.742	89.992
16	8	-50.244	-15.333	-50.161	0.004	-15.333	-50.244	89.992
16	9	20.781	-15.337	20.649	-0.000	20.781	-15.337	180.000
17	1	-64.109	-0.287	-63.999	-0.000	-0.287	-64.109	90.000
17	2	-63.977	-0.287	-63.868	-0.000	-0.287	-63.977	90.000
17	3	20.835	-15.565	20.756	0.000	20.835	-15.565	0.000
17	4	-132.121	-0.288	-131.897	-0.001	-0.288	-132.121	90.000
17	5	-47.309	-15.566	-47.272	-0.000	-15.566	-47.309	90.000
17	6	-42.810	-15.566	-42.780	-0.000	-15.566	-42.810	90.000
17	7	-44.786	-15.566	-44.753	-0.000	-15.566	-44.786	90.000
17	8	-50.285	-15.566	-50.243	-0.000	-15.566	-50.285	90.000
17	9	20.703	-15.565	20.624	0.000	20.703	-15.565	0.000
18	1	-64.095	-0.232	-63.976	-0.002	-0.232	-64.095	90.002
18	2	-63.963	-0.232	-63.844	-0.002	-0.232	-63.963	90.002
18	3	20.849	-15.511	20.766	-0.006	20.849	-15.511	180.000
18	4	-132.106	-0.231	-131.862	-0.000	-0.231	-132.106	90.000
18	5	-47.294	-15.510	-47.251	-0.004	-15.510	-47.294	90.007
18	6	-42.795	-15.510	-42.761	-0.004	-15.510	-42.795	90.009
18	7	-44.771	-15.510	-44.732	-0.004	-15.510	-44.771	90.008
	8	-50.270	-15.510	-50.221	-0.004	-15.510	-50.270	90.007
	9	20.717	-15.511	20.634	-0.006	20.717	-15.511	180.000
19	1	-64.065	-0.114	-63.947	-0.005	-0.114	-64.065	90.005
19	2	-63.934	-0.114	-63.815	-0.005	-0.114	-63.934	90.005
19	3	20.878	-15.393	20.795	-0.003	20.878	-15.393	180.000
19	4	-132.078	-0.113	-131.833	-0.007	-0.113	-132.078	90.003
19	5	-47.265	-15.391	-47.222	-0.005	-15.391	-47.265	90.009
19	6	-42.767	-15.391	-42.731	-0.005	-15.391	-42.767	90.011
19	7	-44.742	-15.391	-44.704	-0.005	-15.391	-44.742	90.010
19	8	-50.241	-15.391	-50.193	-0.005	-15.391	-50.241	90.009
19	9	20.746	-15.393	20.663	-0.003	20.746	-15.393	180.000
20	1	-64.052	-0.058	-63.943	0.001	-0.058	-64.052	89.998
20	2	-63.921	-0.058	-63.811	0.001	-0.058	-63.921	89.998
20	3	20.891	-15.336	20.813	-0.000	20.891	-15.336	180.000
20	4	-132.066	-0.059	-131.840	0.002	-0.059	-132.066	89.999
20	5	-47.253	-15.337	-47.215	0.000	-15.337	-47.253	89.999
20	6	-42.754	-15.337	-42.724	0.000	-15.337	-42.754	89.999
20	7	-44.730	-15.337	-44.696	0.000	-15.337	-44.730	89.999
20	8	-50.229	-15.337	-50.186	0.000	-15.337	-50.229	89.999
20	9	20.759	-15.336	20.681	-0.000	20.759	-15.336	180.000
21	1	-64.090	-0.286	-64.010	-0.000	-0.286	-64.090	90.000
21	2	-63.958	-0.286	-63.878	-0.000	-0.286	-63.958	90.000
	3	20.819	-15.566	20.766	0.000	20.819	-15.566	0.000

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ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
21	4	-132.082	-0.285	-131.918	-0.001	-0.285	-132.082	90.000
21	5	-47.305	-15.566	-47.272	-0.000	-15.566	-47.305	90.000
21	6	-42.807	-15.566	-42.780	-0.000	-15.566	-42.807	90.000
21	7	-44.782	-15.566	-44.753	-0.000	-15.566	-44.782	90.000
21	8	-50.280	-15.566	-50.244	-0.000	-15.566	-50.280	90.000
21	9	20.687	-15.566	20.635	0.000	20.687	-15.566	0.000
22	1	-64.077	-0.234	-64.002	0.005	-0.234	-64.077	89.994
22	2	-63.946	-0.234	-63.871	0.005	-0.234	-63.946	89.994
22	3	20.838	-15.510	20.781	0.004	20.838	-15.510	0.000
22	4	-132.071	-0.235	-131.916	0.006	-0.235	-132.071	89.997
22	5	-47.286	-15.511	-47.263	0.005	-15.511	-47.286	89.990
22	6	-42.788	-15.511	-42.771	0.005	-15.511	-42.788	89.988
22	7	-44.764	-15.511	-44.744	0.005	-15.511	-44.764	89.989
22	8	-50.261	-15.511	-50.235	0.005	-15.511	-50.261	89.991
22	9	20.706	-15.510	20.649	0.004	20.706	-15.510	0.000
23	1	-64.048	-0.116	-63.973	0.004	-0.116	-64.048	89.995
23	2	-63.916	-0.116	-63.842	0.004	-0.116	-63.916	89.995
23	3	20.867	-15.392	20.810	0.005	20.867	-15.392	0.000
23	4	-132.042	-0.116	-131.887	0.004	-0.116	-132.042	89.998
23	5	-47.257	-15.393	-47.235	0.005	-15.393	-47.257	89.990
23	6	-42.760	-15.393	-42.743	0.005	-15.393	-42.760	89.989
23	7	-44.735	-15.393	-44.715	0.005	-15.393	-44.735	89.989
23	8	-50.233	-15.393	-50.206	0.005	-15.393	-50.233	89.991
23	9	20.736	-15.392	20.679	0.005	20.736	-15.392	0.000
24	1	-64.033	-0.057	-63.953	0.000	-0.057	-64.033	89.999
24	2	-63.901	-0.057	-63.821	0.000	-0.057	-63.901	89.999
24	3	20.876	-15.337	20.823	-0.000	20.876	-15.337	180.000
24	4	-132.026	-0.056	-131.861	0.001	-0.056	-132.026	89.999
24	5	-47.248	-15.336	-47.215	0.000	-15.336	-47.248	89.999
24	6	-42.751	-15.336	-42.724	0.000	-15.336	-42.751	89.999
24	7	-44.726	-15.336	-44.696	0.000	-15.336	-44.726	89.999
24	8	-50.224	-15.336	-50.187	0.000	-15.336	-50.224	89.999
24	9	20.744	-15.337	20.692	-0.000	20.744	-15.337	180.000
25	1	-64.079	-0.287	-64.025	-0.000	-0.287	-64.079	90.000
25	2	-63.948	-0.287	-63.894	-0.000	-0.287	-63.948	90.000
25	3	20.815	-15.562	20.779	0.000	20.815	-15.562	0.000
25	4	-132.062	-0.287	-131.949	-0.000	-0.287	-132.062	90.000
25	5	-47.298	-15.562	-47.276	-0.000	-15.562	-47.298	90.000
25	6	-42.801	-15.562	-42.783	-0.000	-15.562	-42.801	90.000
25	7	-44.776	-15.562	-44.756	-0.000	-15.562	-44.776	90.000
25	8	-50.272	-15.562	-50.248	-0.000	-15.562	-50.272	90.000
25	9	20.684	-15.562	20.647	0.000	20.684	-15.562	0.000
26	1	-64.066	-0.233	-64.009	-0.004	-0.233	-64.066	90.003
26	2	-63.935	-0.233	-63.877	-0.004	-0.233	-63.935	90.003
26	3	20.828	-15.511	20.789	-0.004	20.828	-15.511	180.000
26	4	-132.048	-0.232	-131.929	-0.003	-0.232	-132.048	90.001
6	5	-47.284	-15.510	-47.252	-0.004	-15.510	-47.284	90.008
6	6	-42.787	-15.510	-42.770	-0.004	-15.510	-42.787	90.009
6	7	-44.762	-15.510	-44.743	-0.004	-15.510	-44.762	90.008
6	8	-50.259	-15.510	-50.234	-0.004	-15.510	-50.259	90.007

MENT	LOAD COMB	R-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	RZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
26	9	20.697	-15.511	20.657	-0.004	20.697	-15.511	180.000
27	1	-64.037	-0.115	-63.979	-0.005	-0.115	-64.037	90.004
	2	-63.905	-0.115	-63.848	-0.005	-0.115	-63.905	90.004
	3	20.858	-15.393	20.818	-0.004	20.858	-15.393	180.000
27	4	-132.019	-0.114	-131.990	-0.005	-0.114	-132.019	90.002
27	5	-47.255	-15.392	-47.233	-0.004	-15.392	-47.255	90.008
27	6	-42.759	-15.392	-42.741	-0.004	-15.392	-42.759	90.010
27	7	-44.734	-15.392	-44.714	-0.004	-15.392	-44.734	90.009
27	8	-50.230	-15.392	-50.205	-0.004	-15.392	-50.230	90.007
27	9	20.726	-15.392	20.686	-0.004	20.726	-15.393	180.000
28	1	-64.023	-0.058	-63.968	0.000	-0.058	-64.023	89.999
28	2	-63.891	-0.058	-63.837	0.000	-0.058	-63.891	89.999
28	3	20.871	-15.333	20.836	0.000	20.871	-15.333	0.000
28	4	-132.005	-0.058	-131.893	0.001	-0.058	-132.005	89.999
28	5	-47.241	-15.333	-47.219	0.000	-15.333	-47.241	89.999
28	6	-42.745	-15.333	-42.727	0.000	-15.333	-42.745	89.998
28	7	-44.720	-15.333	-44.700	0.000	-15.333	-44.720	89.999
28	8	-50.216	-15.333	-50.192	0.000	-15.333	-50.216	89.999
28	9	20.740	-15.333	20.704	0.000	20.740	-15.333	0.000
29	1	-64.073	-0.286	-64.029	-0.000	-0.286	-64.073	90.000
29	2	-63.941	-0.286	-63.898	-0.000	-0.286	-63.941	90.000
29	3	20.807	-15.563	20.782	0.000	20.807	-15.563	0.000
29	4	-132.048	-0.286	-131.958	-0.000	-0.286	-132.048	90.000
29	5	-47.298	-15.562	-47.277	-0.000	-15.562	-47.298	90.000
29	6	-42.802	-15.562	-42.784	-0.000	-15.562	-42.802	90.000
[illegible]	7	-44.776	-15.562	-44.757	-0.000	-15.562	-44.776	90.000
	8	-50.272	-15.562	-50.249	-0.000	-15.562	-50.272	90.000
	9	20.676	-15.563	20.650	0.000	20.676	-15.563	0.000
30	1	-64.060	-0.234	-64.018	0.005	-0.234	-64.060	89.995
30	2	-63.928	-0.234	-63.887	0.005	-0.234	-63.928	89.995
30	3	20.821	-15.508	20.793	0.005	20.821	-15.508	0.000
30	4	-132.035	-0.234	-131.949	0.005	-0.234	-132.035	89.997
30	5	-47.285	-15.508	-47.269	0.005	-15.508	-47.285	89.990
30	6	-42.788	-15.508	-42.775	0.005	-15.508	-42.788	89.988
30	7	-44.763	-15.508	-44.749	0.005	-15.508	-44.763	89.989
30	8	-50.259	-15.508	-50.241	0.005	-15.508	-50.259	89.991
30	9	20.689	-15.508	20.661	0.005	20.689	-15.508	0.000
31	1	-64.031	-0.115	-63.989	0.005	-0.115	-64.031	89.995
31	2	-63.899	-0.115	-63.858	0.005	-0.115	-63.899	89.995
31	3	20.850	-15.390	20.822	0.005	20.850	-15.390	0.000
31	4	-132.006	-0.116	-131.920	0.004	-0.116	-132.006	89.998
31	5	-47.256	-15.390	-47.239	0.005	-15.390	-47.256	89.990
31	6	-42.760	-15.390	-42.747	0.005	-15.390	-42.760	89.989
31	7	-44.734	-15.390	-44.720	0.005	-15.390	-44.735	89.989
31	8	-50.231	-15.390	-50.212	0.005	-15.390	-50.231	89.991
31	9	20.718	-15.390	20.690	0.005	20.718	-15.390	0.000
32	1	-64.015	-0.057	-63.972	-0.000	-0.057	-64.015	90.000
32	2	-63.884	-0.057	-63.841	-0.000	-0.057	-63.884	90.000
	3	20.865	-15.334	20.839	-0.000	20.865	-15.334	180.000

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MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
32	4	-131.990	-0.057	-131.901	0.000	-0.057	-131.990	90.000
32	5	-47.240	-15.333	-47.221	-0.000	-15.333	-47.240	90.000
32	6	-42.744	-15.333	-42.727	-0.000	-15.333	-42.744	90.000
32	7	-44.719	-15.333	-44.701	-0.000	-15.333	-44.719	90.000
32	8	-50.215	-15.333	-50.193	-0.000	-15.333	-50.215	90.000
32	9	20.734	-15.334	20.707	-0.000	20.734	-15.334	180.000
33	1	-64.068	-0.287	-64.036	-0.000	-0.287	-64.068	90.000
33	2	-63.937	-0.287	-63.904	-0.000	-0.287	-63.937	90.000
33	3	20.805	-15.560	20.782	0.000	20.805	-15.560	0.000
33	4	-132.038	-0.287	-131.971	-0.000	-0.287	-132.038	90.000
33	5	-47.295	-15.560	-47.283	-0.000	-15.560	-47.295	90.000
33	6	-42.799	-15.560	-42.790	-0.000	-15.560	-42.799	90.000
33	7	-44.774	-15.560	-44.763	-0.000	-15.560	-44.774	90.000
33	8	-50.269	-15.560	-50.256	-0.000	-15.560	-50.269	90.000
33	9	20.674	-15.560	20.651	0.000	20.674	-15.560	0.000
34	1	-64.055	-0.233	-64.021	-0.004	-0.233	-64.055	90.004
34	2	-63.923	-0.233	-63.889	-0.004	-0.233	-63.923	90.004
34	3	20.819	-15.508	20.797	-0.004	20.819	-15.508	180.000
34	4	-132.025	-0.233	-131.955	-0.004	-0.233	-132.025	90.002
34	5	-47.282	-15.508	-47.267	-0.004	-15.508	-47.282	90.008
34	6	-42.786	-15.508	-42.774	-0.004	-15.508	-42.786	90.009
34	7	-44.760	-15.508	-44.747	-0.004	-15.508	-44.760	90.009
34	8	-50.256	-15.508	-50.240	-0.004	-15.508	-50.256	90.007
34	9	20.687	-15.508	20.665	-0.004	20.687	-15.508	180.000
35	1	-64.026	-0.115	-63.992	-0.004	-0.115	-64.026	90.004
35	2	-63.894	-0.115	-63.860	-0.004	-0.115	-63.894	90.004
35	3	20.848	-15.390	20.826	-0.004	20.848	-15.390	180.000
35	4	-131.996	-0.115	-131.926	-0.005	-0.115	-131.996	90.002
35	5	-47.253	-15.390	-47.238	-0.004	-15.390	-47.253	90.008
35	6	-42.757	-15.390	-42.745	-0.004	-15.390	-42.757	90.010
35	7	-44.731	-15.390	-44.718	-0.004	-15.390	-44.731	90.009
35	8	-50.227	-15.390	-50.211	-0.004	-15.390	-50.227	90.008
35	9	20.716	-15.390	20.695	-0.004	20.716	-15.390	180.000
36	1	-64.011	-0.058	-63.979	0.000	-0.058	-64.011	89.999
36	2	-63.880	-0.058	-63.847	0.000	-0.058	-63.880	89.999
36	3	20.862	-15.331	20.839	0.000	20.862	-15.331	0.000
36	4	-131.982	-0.058	-131.914	0.000	-0.058	-131.982	89.999
36	5	-47.239	-15.331	-47.227	0.000	-15.331	-47.239	89.998
36	6	-42.743	-15.331	-42.734	0.000	-15.331	-42.743	89.998
36	7	-44.717	-15.331	-44.707	0.000	-15.331	-44.717	89.998
36	8	-50.213	-15.331	-50.200	0.000	-15.331	-50.213	89.998
36	9	20.731	-15.331	20.708	0.000	20.731	-15.331	0.000
37	1	-64.065	-0.286	-64.038	-0.000	-0.286	-64.065	90.000
37	2	-63.933	-0.286	-63.906	-0.000	-0.286	-63.933	90.000
37	3	20.802	-15.561	20.787	0.000	20.802	-15.561	0.000
37	4	-132.031	-0.286	-131.975	-0.000	-0.286	-132.031	90.000
37	5	-47.295	-15.560	-47.280	-0.000	-15.560	-47.295	90.000
37	6	-42.799	-15.560	-42.787	-0.000	-15.560	-42.799	90.000
37	7	-44.774	-15.560	-44.760	-0.000	-15.560	-44.774	90.000
37	8	-50.269	-15.560	-50.253	-0.000	-15.560	-50.269	90.000

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
37	9	20.670	-15.561	20.656	0.000	20.670	-15.561	0.000
38	1	-64.052	-0.233	-64.025	0.005	-0.233	-64.052	89.995
	2	-63.920	-0.233	-63.894	0.005	-0.233	-63.920	89.995
	3	20.815	-15.509	20.800	0.005	20.815	-15.509	0.000
38	4	-132.018	-0.234	-131.964	0.005	-0.234	-132.018	89.997
38	5	-47.282	-15.509	-47.269	0.005	-15.509	-47.282	89.990
38	6	-42.786	-15.509	-42.775	0.005	-15.509	-42.786	89.989
38	7	-44.761	-15.509	-44.749	0.005	-15.509	-44.761	89.989
38	8	-50.256	-15.509	-50.242	0.005	-15.509	-50.256	89.991
38	9	20.684	-15.509	20.668	0.005	20.684	-15.509	0.000
39	1	-64.022	-0.115	-63.996	0.005	-0.115	-64.022	89.995
39	2	-63.891	-0.115	-63.864	0.005	-0.115	-63.891	89.995
39	3	20.844	-15.391	20.829	0.005	20.844	-15.391	0.000
39	4	-131.989	-0.115	-131.935	0.004	-0.115	-131.989	89.998
39	5	-47.253	-15.391	-47.240	0.005	-15.391	-47.253	89.991
39	6	-42.758	-15.391	-42.747	0.005	-15.391	-42.758	89.989
39	7	-44.732	-15.391	-44.720	0.005	-15.391	-44.732	89.990
39	8	-50.227	-15.391	-50.213	0.005	-15.391	-50.227	89.991
39	9	20.713	-15.391	20.697	0.005	20.713	-15.391	0.000
40	1	-64.008	-0.057	-63.981	-0.000	-0.057	-64.008	90.000
40	2	-63.876	-0.057	-63.849	-0.000	-0.057	-63.876	90.000
40	3	20.859	-15.332	20.844	-0.000	20.859	-15.332	180.000
40	4	-131.974	-0.057	-131.919	-0.000	-0.057	-131.974	90.000
40	5	-47.238	-15.331	-47.224	-0.000	-15.331	-47.238	90.001
40	6	-42.743	-15.331	-42.730	-0.000	-15.331	-42.743	90.001
40	7	-44.717	-15.331	-44.704	-0.000	-15.331	-44.717	90.001
	8	-50.212	-15.331	-50.197	-0.000	-15.331	-50.212	90.001
	9	20.727	-15.332	20.713	-0.000	20.727	-15.332	180.000
41	1	-64.063	-0.286	-64.041	-0.000	-0.286	-64.063	90.000
41	2	-63.931	-0.286	-63.910	-0.000	-0.286	-63.931	90.000
41	3	20.804	-15.564	20.784	0.000	20.804	-15.564	0.000
41	4	-132.026	-0.287	-131.982	-0.000	-0.287	-132.026	90.000
41	5	-47.290	-15.564	-47.287	-0.000	-15.564	-47.290	90.000
41	6	-42.795	-15.564	-42.794	0.000	-15.564	-42.795	90.000
41	7	-44.769	-15.564	-44.767	-0.000	-15.564	-44.769	90.000
41	8	-50.264	-15.564	-50.260	-0.000	-15.564	-50.264	90.000
41	9	20.672	-15.564	20.652	0.000	20.672	-15.564	0.000
42	1	-64.049	-0.233	-64.027	-0.004	-0.233	-64.050	90.004
42	2	-63.918	-0.233	-63.895	-0.004	-0.233	-63.918	90.004
42	3	20.817	-15.509	20.798	-0.004	20.817	-15.509	180.000
42	4	-132.013	-0.233	-131.967	-0.004	-0.233	-132.013	90.002
42	5	-47.277	-15.509	-47.272	-0.004	-15.509	-47.277	90.008
42	6	-42.781	-15.509	-42.778	-0.004	-15.509	-42.781	90.010
42	7	-44.756	-15.509	-44.752	-0.004	-15.509	-44.756	90.009
42	8	-50.251	-15.509	-50.245	-0.004	-15.509	-50.251	90.007
42	9	20.686	-15.509	20.667	-0.004	20.686	-15.509	180.000
43	1	-64.020	-0.115	-63.997	-0.004	-0.115	-64.020	90.004
43	2	-63.889	-0.115	-63.866	-0.004	-0.115	-63.889	90.004
	3	20.846	-15.391	20.828	-0.004	20.846	-15.391	180.000

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NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
43	4	-131.985	-0.115	-131.937	-0.004	-0.115	-131.985	90.002
43	5	-47.248	-15.391	-47.243	-0.004	-15.391	-47.248	90.008
43	6	-42.753	-15.391	-42.749	-0.004	-15.391	-42.753	90.010
43	7	-44.727	-15.391	-44.723	-0.004	-15.391	-44.727	90.009
43	8	-50.222	-15.391	-50.216	-0.004	-15.391	-50.222	90.008
43	9	20.715	-15.391	20.696	-0.004	20.715	-15.391	180.000
44	1	-64.006	-0.058	-63.984	0.000	-0.058	-64.006	89.999
44	2	-63.874	-0.058	-63.853	0.000	-0.058	-63.874	89.999
44	3	20.861	-15.335	20.841	0.000	20.861	-15.335	0.000
44	4	-131.970	-0.058	-131.926	0.000	-0.058	-131.970	89.999
44	5	-47.234	-15.335	-47.231	0.000	-15.335	-47.234	89.999
44	6	-42.738	-15.335	-42.737	0.000	-15.335	-42.738	89.999
44	7	-44.713	-15.335	-44.711	0.000	-15.335	-44.713	89.999
44	8	-50.208	-15.335	-50.204	0.000	-15.335	-50.208	89.999
44	9	20.729	-15.335	20.709	0.000	20.729	-15.335	0.000
45	1	-64.061	-0.286	-64.042	-0.000	-0.286	-64.061	90.000
45	2	-63.929	-0.286	-63.910	-0.000	-0.286	-63.929	90.000
45	3	20.799	-15.563	20.790	0.000	20.799	-15.563	0.000
45	4	-132.023	-0.286	-131.984	-0.000	-0.286	-132.023	90.000
45	5	-47.294	-15.563	-47.283	-0.000	-15.563	-47.294	90.000
45	6	-42.798	-15.563	-42.788	0.000	-15.563	-42.798	90.000
45	7	-44.772	-15.563	-44.762	-0.000	-15.563	-44.772	90.000
45	8	-50.267	-15.563	-50.256	-0.000	-15.563	-50.267	90.000
45	9	20.668	-15.563	20.659	0.000	20.668	-15.563	0.000
46	1	-64.047	-0.233	-64.029	0.005	-0.233	-64.047	89.995
46	2	-63.916	-0.233	-63.898	0.005	-0.233	-63.916	89.995
46	3	20.812	-15.510	20.803	0.005	20.812	-15.510	0.000
46	4	-132.010	-0.233	-131.972	0.005	-0.233	-132.010	89.997
46	5	-47.280	-15.510	-47.271	0.005	-15.510	-47.280	89.990
46	6	-42.785	-15.510	-42.777	0.005	-15.510	-42.785	89.989
46	7	-44.759	-15.510	-44.750	0.005	-15.510	-44.759	89.990
46	8	-50.254	-15.510	-50.244	0.005	-15.510	-50.254	89.991
46	9	20.681	-15.510	20.671	0.005	20.681	-15.510	0.000
47	1	-64.018	-0.115	-64.000	0.005	-0.115	-64.018	89.995
47	2	-63.887	-0.115	-63.869	0.005	-0.115	-63.887	89.995
47	3	20.841	-15.392	20.832	0.005	20.842	-15.392	0.000
47	4	-131.980	-0.115	-131.943	0.005	-0.115	-131.980	89.998
47	5	-47.251	-15.392	-47.242	0.005	-15.392	-47.251	89.990
47	6	-42.756	-15.392	-42.748	0.005	-15.392	-42.756	89.989
47	7	-44.730	-15.392	-44.721	0.005	-15.392	-44.730	89.990
47	8	-50.225	-15.392	-50.215	0.005	-15.392	-50.225	89.991
47	9	20.710	-15.392	20.700	0.005	20.710	-15.392	0.000
48	1	-64.004	-0.057	-63.985	-0.000	-0.057	-64.004	90.000
48	2	-63.872	-0.057	-63.853	-0.000	-0.057	-63.872	90.000
48	3	20.856	-15.334	20.847	-0.000	20.856	-15.334	180.000
48	4	-131.966	-0.057	-131.927	-0.000	-0.057	-131.966	90.000
48	5	-47.237	-15.334	-47.226	-0.000	-15.334	-47.237	90.000
48	6	-42.741	-15.334	-42.732	-0.000	-15.334	-42.741	90.000
48	7	-44.716	-15.334	-44.705	-0.000	-15.334	-44.716	90.000
48	8	-50.211	-15.334	-50.199	-0.000	-15.334	-50.211	90.000

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
48	9	20.724	-15.334	20.715	-0.000	20.724	-15.334	180.000
49	1	-64.059	-0.286	-64.044	-0.000	-0.286	-64.059	90.000
[illegible]	2	-63.928	-0.286	-63.912	-0.000	-0.286	-63.928	90.000
[illegible]	3	20.801	-15.562	20.788	0.000	20.801	-15.562	0.000
[illegible]	4	-132.019	-0.286	-131.988	-0.000	-0.286	-132.019	90.000
49	5	-47.290	-15.562	-47.287	0.000	-15.562	-47.290	90.000
49	6	-42.795	-15.562	-42.793	0.000	-15.562	-42.795	90.000
49	7	-44.769	-15.562	-44.766	0.000	-15.562	-44.769	90.000
49	8	-50.264	-15.562	-50.260	0.000	-15.562	-50.264	90.000
49	9	20.669	-15.562	20.656	0.000	20.669	-15.562	0.000
50	1	-64.046	-0.233	-64.030	-0.004	-0.233	-64.046	90.004
50	2	-63.914	-0.233	-63.899	-0.004	-0.233	-63.914	90.004
50	3	20.814	-15.510	20.802	-0.004	20.814	-15.510	180.000
50	4	-132.006	-0.233	-131.974	-0.004	-0.233	-132.006	90.002
50	5	-47.277	-15.510	-47.272	-0.004	-15.510	-47.277	90.008
50	6	-42.782	-15.510	-42.778	-0.004	-15.510	-42.782	90.010
50	7	-44.756	-15.510	-44.752	-0.004	-15.510	-44.756	90.009
50	8	-50.251	-15.510	-50.245	-0.004	-15.510	-50.251	90.008
50	9	20.682	-15.510	20.670	-0.004	20.682	-15.510	180.000
51	1	-64.017	-0.115	-64.001	-0.004	-0.115	-64.017	90.004
51	2	-63.885	-0.115	-63.869	-0.004	-0.115	-63.885	90.004
51	3	20.843	-15.391	20.831	-0.004	20.843	-15.391	180.000
51	4	-131.978	-0.115	-131.945	-0.004	-0.115	-131.978	90.002
51	5	-47.248	-15.391	-47.244	-0.004	-15.391	-47.248	90.008
51	6	-42.754	-15.391	-42.749	-0.004	-15.391	-42.754	90.010
51	7	-44.727	-15.391	-44.723	-0.004	-15.391	-44.727	90.009
[illegible]	8	-50.222	-15.391	-50.217	-0.004	-15.391	-50.222	90.008
[illegible]	9	20.711	-15.391	20.699	-0.004	20.711	-15.391	180.000
52	1	-64.003	-0.058	-63.987	0.000	-0.058	-64.003	89.999
52	2	-63.871	-0.058	-63.855	0.000	-0.058	-63.871	89.999
52	3	20.857	-15.333	20.845	0.000	20.857	-15.333	0.000
52	4	-131.964	-0.058	-131.931	0.000	-0.058	-131.964	89.999
52	5	-47.235	-15.333	-47.230	0.000	-15.333	-47.235	89.998
52	6	-42.740	-15.333	-42.736	0.000	-15.333	-42.740	89.998
52	7	-44.714	-15.333	-44.709	0.000	-15.333	-44.714	89.998
52	8	-50.208	-15.333	-50.203	0.000	-15.333	-50.208	89.998
52	9	20.725	-15.333	20.713	0.000	20.725	-15.333	0.000
53	1	-64.059	-0.286	-64.045	-0.000	-0.286	-64.059	90.000
53	2	-63.927	-0.286	-63.913	-0.000	-0.286	-63.927	90.000
53	3	20.801	-15.562	20.787	0.000	20.801	-15.562	0.000
53	4	-132.018	-0.286	-131.989	-0.000	-0.286	-132.018	90.000
53	5	-47.289	-15.562	-47.288	0.000	-15.562	-47.289	90.000
53	6	-42.793	-15.562	-42.794	0.000	-15.562	-42.793	90.000
53	7	-44.768	-15.562	-44.768	0.000	-15.562	-44.768	90.000
53	8	-50.262	-15.562	-50.261	0.000	-15.562	-50.262	90.000
53	9	20.670	-15.562	20.656	0.000	20.670	-15.562	0.000
54	1	-64.045	-0.233	-64.031	0.005	-0.233	-64.045	89.995
54	2	-63.914	-0.233	-63.900	0.005	-0.233	-63.914	89.995
[illegible]	3	20.814	-15.512	20.800	0.005	20.814	-15.512	0.000

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#	LOAD COMB	X-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
4	4	-132.005	-0.233	-131.976	0.005	-0.233	-132.005	89.997
4	5	-47.276	-15.512	-47.275	0.005	-15.512	-47.276	89.989
4	6	-42.780	-15.512	-42.781	0.005	-15.512	-42.780	89.988
4	7	-44.755	-15.512	-44.754	0.005	-15.512	-44.755	89.988
4	8	-50.249	-15.512	-50.248	0.005	-15.512	-50.249	89.990
4	9	20.683	-15.512	20.669	0.005	20.683	-15.512	0.000
55	1	-64.016	-0.115	-64.002	0.005	-0.115	-64.016	89.995
55	2	-63.885	-0.115	-63.871	0.005	-0.115	-63.885	89.995
55	3	20.844	-15.394	20.830	0.005	20.844	-15.394	0.000
55	4	-131.976	-0.115	-131.948	0.005	-0.115	-131.976	89.997
55	5	-47.246	-15.394	-47.246	0.005	-15.394	-47.246	89.990
55	6	-42.752	-15.394	-42.752	0.005	-15.394	-42.752	89.989
55	7	-44.725	-15.394	-44.726	0.005	-15.394	-44.725	89.989
55	8	-50.220	-15.394	-50.220	0.005	-15.394	-50.220	89.991
55	9	20.712	-15.394	20.698	0.005	20.712	-15.394	0.000
56	1	-64.002	-0.057	-63.988	-0.000	-0.057	-64.002	90.000
56	2	-63.870	-0.057	-63.856	-0.000	-0.057	-63.870	90.000
56	3	20.858	-15.333	20.844	-0.000	20.858	-15.333	180.000
56	4	-131.961	-0.057	-131.933	-0.000	-0.057	-131.961	90.000
56	5	-47.232	-15.333	-47.231	-0.000	-15.333	-47.232	90.001
56	6	-42.737	-15.333	-42.737	-0.000	-15.333	-42.737	90.001
56	7	-44.711	-15.333	-44.711	-0.000	-15.333	-44.711	90.001
56	8	-50.206	-15.333	-50.204	-0.000	-15.333	-50.206	90.001
56	9	20.727	-15.333	20.713	-0.000	20.727	-15.333	180.000
57	1	-64.058	-0.286	-64.047	-0.000	-0.286	-64.058	90.000
57	2	-63.926	-0.286	-63.915	-0.000	-0.286	-63.926	90.000
57	3	20.795	-15.576	20.785	0.000	20.795	-15.576	0.000
57	4	-132.017	-0.287	-131.994	-0.000	-0.287	-132.017	90.000
57	5	-47.294	-15.576	-47.292	0.000	-15.576	-47.294	90.000
57	6	-42.799	-15.576	-42.798	0.000	-15.576	-42.799	90.000
57	7	-44.773	-15.576	-44.772	0.000	-15.576	-44.773	90.000
57	8	-50.268	-15.576	-50.265	0.000	-15.576	-50.268	90.000
57	9	20.663	-15.576	20.654	0.000	20.663	-15.576	0.000
58	1	-64.045	-0.233	-64.033	-0.004	-0.233	-64.045	90.004
58	2	-63.913	-0.233	-63.901	-0.004	-0.233	-63.913	90.004
58	3	20.815	-15.512	20.806	-0.005	20.815	-15.512	180.000
58	4	-132.003	-0.233	-131.979	-0.004	-0.233	-132.003	90.002
58	5	-47.274	-15.512	-47.271	-0.005	-15.512	-47.274	90.009
58	6	-42.779	-15.512	-42.777	-0.005	-15.512	-42.779	90.010
58	7	-44.753	-15.512	-44.750	-0.005	-15.512	-44.753	90.010
58	8	-50.248	-15.512	-50.244	-0.005	-15.512	-50.248	90.008
58	9	20.684	-15.512	20.674	-0.005	20.684	-15.512	180.000
59	1	-64.014	-0.115	-64.003	-0.004	-0.115	-64.014	90.004
59	2	-63.883	-0.115	-63.871	-0.004	-0.115	-63.883	90.004
59	3	20.846	-15.393	20.829	-0.005	20.846	-15.393	180.000
59	4	-131.972	-0.115	-131.948	-0.004	-0.115	-131.972	90.002
59	5	-47.243	-15.393	-47.247	-0.005	-15.393	-47.243	90.010
59	6	-42.748	-15.393	-42.753	-0.005	-15.393	-42.748	90.011
59	7	-44.722	-15.393	-44.727	-0.005	-15.393	-44.722	90.010
59	8	-50.217	-15.393	-50.220	-0.005	-15.393	-50.217	90.009

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
59	9	20.714	-15.393	20.697	-0.005	20.714	-15.393	180.000
60	1	-64.000	-0.058	-63.988	0.000	-0.058	-64.000	89.999
	2	-63.869	-0.058	-63.857	0.000	-0.058	-63.869	89.999
	3	20.853	-15.348	20.844	-0.002	20.853	-15.348	180.000
	4	-131.958	-0.058	-131.935	0.000	-0.058	-131.958	89.999
60	5	-47.236	-15.348	-47.233	-0.002	-15.348	-47.236	90.003
60	6	-42.741	-15.348	-42.739	-0.002	-15.348	-42.741	90.004
60	7	-44.715	-15.348	-44.713	-0.002	-15.348	-44.715	90.004
60	8	-50.210	-15.348	-50.206	-0.002	-15.348	-50.210	90.003
60	9	20.721	-15.348	20.712	-0.002	20.721	-15.348	180.000
61	1	-64.057	-0.286	-64.047	-0.000	-0.286	-64.057	90.000
61	2	-63.926	-0.286	-63.915	-0.000	-0.286	-63.926	90.000
61	3	20.796	-15.576	20.785	0.000	20.796	-15.576	0.000
61	4	-132.015	-0.286	-131.994	-0.000	-0.286	-132.015	90.000
61	5	-47.293	-15.576	-47.292	0.000	-15.576	-47.293	90.000
61	6	-42.798	-15.576	-42.798	0.000	-15.576	-42.798	90.000
61	7	-44.772	-15.576	-44.772	0.000	-15.576	-44.772	90.000
61	8	-50.267	-15.576	-50.265	0.000	-15.576	-50.267	90.000
61	9	20.664	-15.576	20.654	0.000	20.664	-15.576	0.000
62	1	-64.044	-0.233	-64.034	0.005	-0.233	-64.044	89.995
62	2	-63.912	-0.233	-63.903	0.005	-0.233	-63.912	89.995
62	3	20.816	-15.510	20.805	0.005	20.816	-15.510	0.000
62	4	-132.002	-0.233	-131.982	0.005	-0.233	-132.002	89.998
62	5	-47.273	-15.510	-47.273	0.005	-15.510	-47.273	89.990
62	6	-42.778	-15.510	-42.779	0.005	-15.510	-42.778	89.989
62	7	-44.752	-15.510	-44.753	0.005	-15.510	-44.752	89.989
	8	-50.247	-15.510	-50.247	0.005	-15.510	-50.247	89.991
	9	20.684	-15.510	20.673	0.005	20.684	-15.510	0.000
63	1	-64.013	-0.115	-64.004	0.005	-0.115	-64.013	89.995
63	2	-63.882	-0.115	-63.872	0.005	-0.115	-63.882	89.995
63	3	20.839	-15.391	20.835	0.005	20.839	-15.391	0.000
63	4	-131.971	-0.115	-131.951	0.004	-0.115	-131.971	89.998
63	5	-47.248	-15.391	-47.242	0.005	-15.391	-47.248	89.989
63	6	-42.754	-15.391	-42.748	0.005	-15.391	-42.754	89.987
63	7	-44.728	-15.391	-44.722	0.005	-15.391	-44.728	89.988
63	8	-50.222	-15.391	-50.215	0.005	-15.391	-50.222	89.990
63	9	20.708	-15.391	20.704	0.005	20.708	-15.391	0.000
64	1	-63.999	-0.057	-63.989	-0.000	-0.057	-63.999	90.000
64	2	-63.868	-0.057	-63.858	-0.000	-0.057	-63.868	90.000
64	3	20.853	-15.348	20.843	0.001	20.853	-15.348	0.000
64	4	-131.957	-0.057	-131.935	-0.000	-0.057	-131.957	90.000
64	5	-47.235	-15.348	-47.234	0.001	-15.348	-47.235	89.996
64	6	-42.740	-15.348	-42.740	0.001	-15.348	-42.740	89.996
64	7	-44.714	-15.348	-44.713	0.001	-15.348	-44.714	89.996
64	8	-50.208	-15.348	-50.207	0.001	-15.348	-50.208	89.996
64	9	20.722	-15.348	20.711	0.001	20.722	-15.348	0.000
65	1	-64.056	-0.286	-64.047	-0.000	-0.286	-64.056	90.000
65	2	-63.924	-0.286	-63.916	-0.000	-0.286	-63.924	90.000
	3	20.797	-15.557	20.791	-0.000	20.797	-15.557	180.000

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ELMT	LOAD COMB	X-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	XZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
65	4	-132.012	-0.286	-131.995	-0.000	-0.286	-132.012	90.000
65	5	-47.290	-15.557	-47.287	-0.000	-15.557	-47.290	90.000
65	6	-42.795	-15.557	-42.792	-0.000	-15.557	-42.795	90.000
65	7	-44.769	-15.557	-44.766	-0.000	-15.557	-44.769	90.000
65	8	-50.264	-15.557	-50.260	-0.000	-15.557	-50.264	90.000
65	9	20.665	-15.557	20.660	-0.000	20.665	-15.557	180.000
66	1	-64.043	-0.233	-64.034	-0.004	-0.233	-64.043	90.004
66	2	-63.911	-0.233	-63.902	-0.004	-0.233	-63.911	90.004
66	3	20.810	-15.510	20.805	-0.005	20.810	-15.510	180.000
66	4	-131.999	-0.233	-131.980	-0.004	-0.233	-131.999	90.002
66	5	-47.277	-15.510	-47.272	-0.005	-15.510	-47.277	90.009
66	6	-42.782	-15.510	-42.778	-0.005	-15.510	-42.782	90.011
66	7	-44.756	-15.510	-44.752	-0.005	-15.510	-44.756	90.010
66	8	-50.251	-15.510	-50.245	-0.005	-15.510	-50.251	90.009
66	9	20.679	-15.510	20.674	-0.005	20.679	-15.510	180.000
67	1	-64.013	-0.115	-64.004	-0.004	-0.115	-64.013	90.004
67	2	-63.882	-0.115	-63.873	-0.004	-0.115	-63.882	90.004
67	3	20.839	-15.392	20.835	-0.004	20.839	-15.392	180.000
67	4	-131.971	-0.115	-131.952	-0.005	-0.115	-131.971	90.002
67	5	-47.248	-15.392	-47.244	-0.004	-15.392	-47.248	90.008
67	6	-42.754	-15.392	-42.749	-0.004	-15.392	-42.754	90.010
67	7	-44.728	-15.392	-44.723	-0.004	-15.392	-44.728	90.009
67	8	-50.222	-15.392	-50.217	-0.004	-15.392	-50.222	90.007
67	9	20.708	-15.392	20.703	-0.004	20.708	-15.392	180.000
68	1	-63.999	-0.058	-63.990	0.000	-0.058	-63.999	89.999
68	2	-63.868	-0.058	-63.859	0.000	-0.058	-63.868	89.999
68	3	20.853	-15.327	20.848	0.002	20.853	-15.327	0.000
68	4	-131.957	-0.058	-131.938	0.000	-0.058	-131.957	89.999
68	5	-47.235	-15.327	-47.230	0.002	-15.327	-47.235	89.995
68	6	-42.740	-15.327	-42.736	0.002	-15.327	-42.740	89.994
68	7	-44.714	-15.327	-44.709	0.002	-15.327	-44.714	89.995
68	8	-50.208	-15.327	-50.203	0.002	-15.327	-50.208	89.996
68	9	20.722	-15.327	20.717	0.002	20.722	-15.327	0.000
69	1	-64.056	-0.286	-64.047	-0.000	-0.286	-64.056	90.000
69	2	-63.924	-0.286	-63.916	-0.000	-0.286	-63.924	90.000
69	3	20.797	-15.556	20.791	-0.000	20.797	-15.556	180.000
69	4	-132.012	-0.286	-131.995	-0.000	-0.286	-132.012	90.000
69	5	-47.290	-15.556	-47.287	-0.000	-15.556	-47.290	90.000
69	6	-42.795	-15.556	-42.793	-0.000	-15.556	-42.795	90.000
69	7	-44.769	-15.556	-44.766	-0.000	-15.556	-44.769	90.000
69	8	-50.264	-15.556	-50.260	-0.000	-15.556	-50.264	90.000
69	9	20.665	-15.556	20.660	-0.000	20.665	-15.556	180.000
70	1	-64.043	-0.233	-64.034	0.005	-0.233	-64.043	89.995
70	2	-63.911	-0.233	-63.903	0.005	-0.233	-63.911	89.995
70	3	20.810	-15.517	20.805	0.004	20.810	-15.517	0.000
70	4	-131.999	-0.233	-131.982	0.005	-0.233	-131.999	89.997
70	5	-47.277	-15.517	-47.273	0.004	-15.517	-47.277	89.992
70	6	-42.782	-15.517	-42.779	0.004	-15.517	-42.782	89.991
70	7	-44.756	-15.517	-44.753	0.004	-15.517	-44.756	89.992
70	8	-50.251	-15.517	-50.247	0.004	-15.517	-50.251	89.993

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
70	9	20.679	-15.517	20.673	0.004	20.679	-15.517	0.000
71	1	-64.013	-0.115	-64.005	0.005	-0.115	-64.013	89.995
[illegible]	2	-63.882	-0.115	-63.873	0.005	-0.115	-63.882	89.995
[illegible]	3	20.839	-15.399	20.834	0.003	20.839	-15.399	0.000
71	4	-131.970	-0.115	-131.953	0.005	-0.115	-131.970	89.997
71	5	-47.248	-15.399	-47.245	0.003	-15.399	-47.248	89.993
71	6	-42.753	-15.399	-42.751	0.003	-15.399	-42.753	89.991
71	7	-44.727	-15.399	-44.724	0.003	-15.399	-44.727	89.992
71	8	-50.221	-15.399	-50.218	0.003	-15.399	-50.221	89.993
71	9	20.708	-15.399	20.702	0.003	20.708	-15.399	0.000
72	1	-63.999	-0.057	-63.990	-0.000	-0.057	-63.999	90.000
72	2	-63.867	-0.057	-63.859	-0.000	-0.057	-63.867	90.000
72	3	20.854	-15.327	20.848	-0.002	20.854	-15.327	180.000
72	4	-131.955	-0.057	-131.939	-0.000	-0.057	-131.955	90.000
72	5	-47.233	-15.327	-47.230	-0.002	-15.327	-47.233	90.004
72	6	-42.738	-15.327	-42.736	-0.002	-15.327	-42.738	90.005
72	7	-44.712	-15.327	-44.710	-0.002	-15.327	-44.712	90.004
72	8	-50.207	-15.327	-50.204	-0.002	-15.327	-50.207	90.004
72	9	20.722	-15.327	20.717	-0.002	20.722	-15.327	180.000
73	1	-64.056	-0.286	-64.049	-0.000	-0.286	-64.056	90.000
73	2	-63.924	-0.286	-63.917	-0.000	-0.286	-63.924	90.000
73	3	20.797	-15.562	20.790	0.000	20.797	-15.562	0.000
73	4	-132.012	-0.286	-131.998	-0.000	-0.286	-132.012	90.000
73	5	-47.290	-15.562	-47.289	0.000	-15.562	-47.290	89.999
73	6	-42.795	-15.562	-42.795	0.000	-15.562	-42.795	89.999
[illegible]	7	-44.769	-15.562	-44.769	0.000	-15.562	-44.769	89.999
[illegible]	8	-50.264	-15.562	-50.263	0.000	-15.562	-50.264	89.999
[illegible]	9	20.665	-15.562	20.659	0.000	20.665	-15.562	0.000
74	1	-64.043	-0.233	-64.036	-0.004	-0.233	-64.043	90.004
74	2	-63.911	-0.233	-63.904	-0.004	-0.233	-63.911	90.004
74	3	20.810	-15.517	20.803	-0.003	20.810	-15.517	180.000
74	4	-131.999	-0.233	-131.985	-0.004	-0.233	-131.999	90.002
74	5	-47.277	-15.517	-47.276	-0.003	-15.517	-47.277	90.006
74	6	-42.782	-15.517	-42.782	-0.003	-15.517	-42.782	90.008
74	7	-44.756	-15.517	-44.756	-0.003	-15.517	-44.756	90.007
74	8	-50.251	-15.517	-50.250	-0.003	-15.517	-50.251	90.006
74	9	20.679	-15.517	20.672	-0.003	20.679	-15.517	180.000
75	1	-64.012	-0.115	-64.005	-0.004	-0.115	-64.012	90.004
75	2	-63.880	-0.115	-63.873	-0.004	-0.115	-63.880	90.004
75	3	20.841	-15.398	20.834	-0.004	20.841	-15.398	180.000
75	4	-131.968	-0.115	-131.953	-0.004	-0.115	-131.968	90.002
75	5	-47.246	-15.398	-47.245	-0.003	-15.398	-47.246	90.007
75	6	-42.751	-15.398	-42.750	-0.003	-15.398	-42.751	90.008
75	7	-44.725	-15.398	-44.724	-0.003	-15.398	-44.725	90.007
75	8	-50.219	-15.398	-50.218	-0.003	-15.398	-50.219	90.006
75	9	20.709	-15.398	20.702	-0.004	20.709	-15.398	180.000
76	1	-63.998	-0.058	-63.990	0.000	-0.058	-63.998	89.999
[illegible]	2	-63.867	-0.058	-63.859	0.000	-0.058	-63.867	89.999
[illegible]	3	20.855	-15.333	20.848	0.000	20.855	-15.333	0.000

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NT	LOAD COMB	R-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	RZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
76	4	-131.954	-0.058	-131.939	0.000	-0.058	-131.954	90.000
76	5	-47.232	-15.333	-47.230	0.000	-15.333	-47.232	89.999
76	6	-42.737	-15.333	-42.736	0.000	-15.333	-42.737	89.999
76	7	-44.711	-15.333	-44.710	0.000	-15.333	-44.711	89.999
76	8	-50.205	-15.333	-50.204	0.000	-15.333	-50.205	89.999
76	9	20.723	-15.333	20.717	0.000	20.723	-15.333	0.000
77	1	-64.055	-0.286	-64.048	-0.000	-0.286	-64.055	90.000
77	2	-63.923	-0.286	-63.917	-0.000	-0.286	-63.923	90.000
77	3	20.798	-15.562	20.791	0.000	20.798	-15.562	0.000
77	4	-132.011	-0.287	-131.996	-0.000	-0.287	-132.011	90.000
77	5	-47.289	-15.562	-47.288	0.000	-15.562	-47.289	89.999
77	6	-42.794	-15.562	-42.794	0.000	-15.562	-42.794	89.999
77	7	-44.768	-15.562	-44.767	0.000	-15.562	-44.768	89.999
77	8	-50.262	-15.562	-50.261	0.000	-15.562	-50.262	89.999
77	9	20.666	-15.562	20.659	0.000	20.666	-15.562	0.000
78	1	-64.042	-0.233	-64.035	0.005	-0.233	-64.042	89.995
78	2	-63.910	-0.233	-63.903	0.005	-0.233	-63.910	89.995
78	3	20.811	-15.502	20.804	0.006	20.811	-15.502	0.000
78	4	-131.997	-0.233	-131.983	0.005	-0.233	-131.997	89.997
78	5	-47.275	-15.502	-47.275	0.006	-15.502	-47.275	89.989
78	6	-42.780	-15.502	-42.781	0.006	-15.502	-42.780	89.987
78	7	-44.754	-15.502	-44.754	0.006	-15.502	-44.754	89.988
78	8	-50.248	-15.502	-50.248	0.006	-15.502	-50.248	89.990
78	9	20.679	-15.502	20.672	0.006	20.679	-15.502	0.000
79	1	-64.013	-0.115	-64.006	0.005	-0.115	-64.013	89.995
79	2	-63.881	-0.115	-63.874	0.005	-0.115	-63.881	89.995
79	3	20.840	-15.383	20.840	0.005	20.840	-15.383	0.000
79	4	-131.969	-0.115	-131.955	0.005	-0.115	-131.969	89.998
79	5	-47.246	-15.383	-47.239	0.005	-15.383	-47.246	89.989
79	6	-42.752	-15.383	-42.745	0.005	-15.383	-42.752	89.987
79	7	-44.726	-15.383	-44.719	0.005	-15.383	-44.726	89.988
79	8	-50.220	-15.383	-50.213	0.005	-15.383	-50.220	89.990
79	9	20.709	-15.383	20.709	0.005	20.709	-15.383	0.000
80	1	-63.998	-0.057	-63.991	-0.000	-0.057	-63.998	90.000
80	2	-63.867	-0.057	-63.860	-0.000	-0.057	-63.867	90.000
80	3	20.855	-15.333	20.848	-0.000	20.855	-15.333	180.000
80	4	-131.954	-0.057	-131.940	-0.000	-0.057	-131.954	90.000
80	5	-47.232	-15.333	-47.232	-0.000	-15.333	-47.232	90.001
80	6	-42.737	-15.333	-42.738	-0.000	-15.333	-42.737	90.001
80	7	-44.711	-15.333	-44.711	-0.000	-15.333	-44.711	90.001
80	8	-50.205	-15.333	-50.205	-0.000	-15.333	-50.205	90.001
80	9	20.723	-15.333	20.716	-0.000	20.723	-15.333	180.000
81	1	-64.054	-0.286	-64.049	0.000	-0.286	-64.054	90.000
81	2	-63.923	-0.286	-63.917	0.000	-0.286	-63.923	90.000
81	3	20.791	-15.568	20.790	-0.000	20.791	-15.568	180.000
81	4	-132.010	-0.287	-131.998	0.000	-0.287	-132.010	90.000
81	5	-47.294	-15.569	-47.289	-0.000	-15.569	-47.294	90.000
81	6	-42.799	-15.568	-42.795	-0.000	-15.568	-42.799	90.000
81	7	-44.773	-15.569	-44.769	-0.000	-15.569	-44.773	90.000
81	8	-50.268	-15.569	-50.263	-0.000	-15.569	-50.268	90.000

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
81	9	20.660	-15.568	20.659	-0.000	20.660	-15.568	180.000
82	1	-64.041	-0.233	-64.035	-0.004	-0.233	-64.041	90.004
[illegible]	2	-63.910	-0.233	-63.903	-0.004	-0.233	-63.910	90.004
[illegible]	3	20.812	-15.501	20.811	-0.005	20.812	-15.501	180.000
82	4	-131.996	-0.233	-131.984	-0.004	-0.233	-131.996	90.002
82	5	-47.274	-15.501	-47.269	-0.005	-15.501	-47.274	90.010
82	6	-42.779	-15.501	-42.774	-0.005	-15.501	-42.779	90.012
82	7	-44.753	-15.501	-44.748	-0.005	-15.501	-44.753	90.011
82	8	-50.248	-15.501	-50.242	-0.005	-15.501	-50.248	90.009
82	9	20.680	-15.501	20.679	-0.005	20.680	-15.501	180.000
83	1	-64.012	-0.115	-64.006	-0.004	-0.115	-64.012	90.004
83	2	-63.880	-0.115	-63.874	-0.004	-0.115	-63.880	90.004
83	3	20.841	-15.383	20.840	-0.005	20.841	-15.383	180.000
83	4	-131.968	-0.115	-131.955	-0.004	-0.115	-131.968	90.002
83	5	-47.246	-15.383	-47.239	-0.005	-15.383	-47.246	90.010
83	6	-42.751	-15.383	-42.745	-0.005	-15.383	-42.751	90.012
83	7	-44.725	-15.383	-44.719	-0.005	-15.383	-44.725	90.011
83	8	-50.219	-15.383	-50.213	-0.005	-15.383	-50.219	90.010
83	9	20.709	-15.383	20.709	-0.005	20.709	-15.383	180.000
84	1	-63.997	-0.058	-63.992	0.000	-0.058	-63.997	89.999
84	2	-63.866	-0.058	-63.860	0.000	-0.058	-63.866	89.999
84	3	20.855	-15.339	20.847	-0.000	20.855	-15.339	180.000
84	4	-131.953	-0.058	-131.942	0.000	-0.058	-131.953	89.999
84	5	-47.231	-15.339	-47.233	-0.000	-15.339	-47.231	90.001
84	6	-42.736	-15.339	-42.738	-0.000	-15.339	-42.736	90.001
[illegible]	7	-44.710	-15.339	-44.713	-0.000	-15.339	-44.710	90.001
[illegible]	8	-50.205	-15.339	-50.207	-0.000	-15.339	-50.205	90.001
[illegible]	9	20.724	-15.339	20.715	-0.000	20.724	-15.339	180.000
85	1	-64.055	-0.286	-64.049	0.000	-0.286	-64.055	90.000
85	2	-63.923	-0.286	-63.918	0.000	-0.286	-63.923	90.000
85	3	20.798	-15.568	20.789	-0.000	20.798	-15.568	180.000
85	4	-132.010	-0.286	-131.999	0.000	-0.286	-132.010	90.000
85	5	-47.288	-15.568	-47.291	-0.000	-15.568	-47.288	90.000
85	6	-42.793	-15.568	-42.797	-0.000	-15.568	-42.793	90.000
85	7	-44.767	-15.568	-44.770	-0.000	-15.568	-44.767	90.000
85	8	-50.262	-15.568	-50.264	-0.000	-15.568	-50.262	90.000
85	9	20.666	-15.568	20.658	-0.000	20.666	-15.568	180.000
86	1	-64.042	-0.233	-64.036	0.005	-0.233	-64.042	89.995
86	2	-63.910	-0.233	-63.905	0.005	-0.233	-63.910	89.995
86	3	20.811	-15.518	20.803	0.004	20.811	-15.518	0.000
86	4	-131.998	-0.233	-131.987	0.004	-0.233	-131.998	89.998
86	5	-47.276	-15.518	-47.278	0.004	-15.518	-47.276	89.992
86	6	-42.781	-15.518	-42.784	0.004	-15.518	-42.781	89.991
86	7	-44.755	-15.518	-44.758	0.004	-15.518	-44.755	89.992
86	8	-50.249	-15.518	-50.252	0.004	-15.518	-50.249	89.993
86	9	20.679	-15.518	20.671	0.004	20.679	-15.518	0.000
87	1	-64.011	-0.115	-64.006	0.005	-0.115	-64.011	89.995
87	2	-63.880	-0.115	-63.874	0.005	-0.115	-63.880	89.995
[illegible]	3	20.841	-15.400	20.833	0.004	20.841	-15.400	0.000

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N°	LOAD COMB	X-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	XZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
37	4	-131.966	-0.115	-131.955	0.004	-0.115	-131.966	89.998
37	5	-47.244	-15.400	-47.246	0.004	-15.400	-47.244	89.992
37	6	-42.749	-15.400	-42.752	0.004	-15.400	-42.749	89.990
37	7	-44.723	-15.400	-44.726	0.004	-15.400	-44.723	89.991
37	8	-50.217	-15.400	-50.220	0.004	-15.400	-50.217	89.992
37	9	20.710	-15.400	20.702	0.004	20.710	-15.400	0.000
38	1	-63.997	-0.057	-63.991	-0.000	-0.057	-63.997	90.000
38	2	-63.865	-0.057	-63.860	-0.000	-0.057	-63.865	90.000
38	3	20.856	-15.339	20.848	0.000	20.856	-15.339	0.000
38	4	-131.951	-0.057	-131.940	-0.000	-0.057	-131.951	90.000
38	5	-47.229	-15.339	-47.232	0.000	-15.339	-47.229	89.998
38	6	-42.734	-15.339	-42.738	0.000	-15.339	-42.734	89.998
38	7	-44.708	-15.339	-44.711	0.000	-15.339	-44.708	89.998
38	8	-50.203	-15.339	-50.205	0.000	-15.339	-50.203	89.998
38	9	20.724	-15.339	20.716	0.000	20.724	-15.339	0.000
39	1	-64.054	-0.286	-64.049	0.000	-0.286	-64.054	90.000
39	2	-63.923	-0.286	-63.917	0.000	-0.286	-63.923	90.000
39	3	20.798	-15.554	20.797	0.000	20.798	-15.554	0.000
39	4	-132.009	-0.286	-131.998	-0.000	-0.286	-132.009	90.000
39	5	-47.287	-15.554	-47.283	0.000	-15.554	-47.287	90.000
39	6	-42.792	-15.554	-42.788	0.000	-15.554	-42.792	90.000
39	7	-44.766	-15.554	-44.763	0.000	-15.554	-44.766	90.000
39	8	-50.260	-15.554	-50.257	0.000	-15.554	-50.260	90.000
39	9	20.667	-15.554	20.665	0.000	20.667	-15.554	0.000
40	1	-64.040	-0.233	-64.036	-0.004	-0.233	-64.040	90.004
40	2	-63.909	-0.233	-63.904	-0.004	-0.233	-63.909	90.004
40	3	20.805	-15.518	20.803	-0.004	20.805	-15.518	180.000
40	4	-131.995	-0.233	-131.985	-0.004	-0.233	-131.995	90.002
40	5	-47.280	-15.518	-47.277	-0.004	-15.518	-47.280	90.007
40	6	-42.785	-15.518	-42.782	-0.004	-15.518	-42.785	90.008
40	7	-44.759	-15.518	-44.756	-0.004	-15.518	-44.759	90.008
40	8	-50.253	-15.518	-50.250	-0.004	-15.518	-50.253	90.006
40	9	20.674	-15.518	20.672	-0.004	20.674	-15.518	180.000
41	1	-64.011	-0.115	-64.006	-0.004	-0.115	-64.011	90.004
41	2	-63.880	-0.115	-63.875	-0.004	-0.115	-63.880	90.004
41	3	20.835	-15.401	20.832	-0.003	20.835	-15.401	180.000
41	4	-131.967	-0.115	-131.956	-0.005	-0.115	-131.967	90.002
41	5	-47.251	-15.401	-47.248	-0.003	-15.401	-47.251	90.006
41	6	-42.756	-15.401	-42.754	-0.003	-15.401	-42.756	90.007
41	7	-44.730	-15.401	-44.727	-0.003	-15.401	-44.730	90.007
41	8	-50.225	-15.401	-50.221	-0.003	-15.401	-50.225	90.006
41	9	20.703	-15.401	20.701	-0.003	20.703	-15.401	180.000
42	1	-63.997	-0.058	-63.993	0.000	-0.058	-63.997	89.999
42	2	-63.866	-0.058	-63.861	0.000	-0.058	-63.866	89.999
42	3	20.855	-15.325	20.853	0.003	20.855	-15.325	0.000
42	4	-131.953	-0.058	-131.942	0.000	-0.058	-131.953	89.999
42	5	-47.230	-15.325	-47.227	0.003	-15.325	-47.230	89.994
42	6	-42.736	-15.325	-42.733	0.003	-15.325	-42.736	89.993
42	7	-44.710	-15.325	-44.706	0.003	-15.325	-44.710	89.993
42	8	-50.204	-15.325	-50.200	0.003	-15.325	-50.204	89.994

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
92	9	20.724	-15.325	20.722	0.003	20.724	-15.325	0.000
93	1	-64.054	-0.286	-64.049	0.000	-0.286	-64.054	90.000
[illegible]	2	-63.922	-0.286	-63.918	0.000	-0.286	-63.922	90.000
[illegible]	3	20.799	-15.554	20.796	0.000	20.799	-15.554	0.000
93	4	-132.008	-0.286	-131.999	-0.000	-0.286	-132.008	90.000
93	5	-47.286	-15.554	-47.284	0.000	-15.554	-47.286	90.000
93	6	-42.791	-15.554	-42.789	0.000	-15.554	-42.791	90.000
93	7	-44.765	-15.554	-44.763	0.000	-15.554	-44.765	90.000
93	8	-50.259	-15.554	-50.257	0.000	-15.554	-50.259	90.000
93	9	20.668	-15.554	20.665	0.000	20.668	-15.554	0.000
94	1	-64.040	-0.233	-64.036	0.005	-0.233	-64.040	89.995
94	2	-63.909	-0.233	-63.905	0.005	-0.233	-63.909	89.995
94	3	20.805	-15.514	20.803	0.004	20.805	-15.514	0.000
94	4	-131.995	-0.233	-131.986	0.005	-0.233	-131.995	89.997
94	5	-47.280	-15.514	-47.278	0.004	-15.514	-47.280	89.991
94	6	-42.785	-15.514	-42.784	0.004	-15.514	-42.785	89.990
94	7	-44.759	-15.514	-44.757	0.004	-15.514	-44.759	89.990
94	8	-50.253	-15.514	-50.251	0.004	-15.514	-50.253	89.992
94	9	20.674	-15.514	20.671	0.004	20.674	-15.514	0.000
95	1	-64.011	-0.115	-64.007	0.005	-0.115	-64.011	89.995
95	2	-63.880	-0.115	-63.876	0.005	-0.115	-63.880	89.995
95	3	20.835	-15.396	20.832	0.004	20.835	-15.396	0.000
95	4	-131.967	-0.115	-131.958	0.005	-0.115	-131.967	89.997
95	5	-47.251	-15.396	-47.249	0.004	-15.396	-47.251	89.992
95	6	-42.756	-15.396	-42.754	0.004	-15.396	-42.756	89.991
95	7	-44.730	-15.396	-44.729	0.004	-15.396	-44.730	89.992
[illegible]	8	-50.225	-15.396	-50.223	0.004	-15.396	-50.225	89.993
[illegible]	9	20.703	-15.396	20.700	0.004	20.703	-15.396	0.000
96	1	-63.997	-0.057	-63.993	-0.000	-0.057	-63.997	90.000
96	2	-63.865	-0.057	-63.861	-0.000	-0.057	-63.865	90.000
96	3	20.856	-15.325	20.853	-0.003	20.856	-15.325	180.000
96	4	-131.951	-0.057	-131.942	-0.000	-0.057	-131.951	90.000
96	5	-47.229	-15.325	-47.227	-0.003	-15.325	-47.229	90.006
96	6	-42.735	-15.325	-42.733	-0.003	-15.325	-42.735	90.007
96	7	-44.708	-15.325	-44.706	-0.003	-15.325	-44.708	90.006
96	8	-50.203	-15.325	-50.200	-0.003	-15.325	-50.203	90.005
96	9	20.724	-15.325	20.722	-0.003	20.725	-15.325	180.000
97	1	-64.054	-0.286	-64.050	-0.000	-0.286	-64.054	90.000
97	2	-63.923	-0.286	-63.919	-0.000	-0.286	-63.923	90.000
97	3	20.798	-15.569	20.789	0.000	20.798	-15.569	0.000
97	4	-132.009	-0.286	-132.001	-0.000	-0.286	-132.009	90.000
97	5	-47.287	-15.569	-47.292	0.000	-15.569	-47.287	89.999
97	6	-42.793	-15.569	-42.798	0.000	-15.569	-42.793	89.999
97	7	-44.766	-15.569	-44.772	0.000	-15.569	-44.766	89.999
97	8	-50.260	-15.569	-50.266	0.000	-15.569	-50.260	89.999
97	9	20.667	-15.569	20.657	0.000	20.667	-15.569	0.000
98	1	-64.041	-0.233	-64.037	-0.004	-0.233	-64.041	90.004
98	2	-63.910	-0.233	-63.905	-0.004	-0.233	-63.910	90.004
[illegible]	3	20.812	-15.514	20.809	-0.004	20.812	-15.514	180.000

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ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
98	4	-131.996	-0.233	-131.987	-0.004	-0.233	-131.996	90.002
98	5	-47.274	-15.514	-47.272	-0.004	-15.514	-47.274	90.007
98	6	-42.779	-15.514	-42.778	-0.004	-15.514	-42.779	90.009
98	7	-44.753	-15.514	-44.751	-0.004	-15.514	-44.753	90.008
98	8	-50.248	-15.514	-50.245	-0.004	-15.514	-50.248	90.007
98	9	20.680	-15.514	20.677	-0.004	20.680	-15.514	180.000
99	1	-64.011	-0.115	-64.006	-0.004	-0.115	-64.011	90.004
99	2	-63.879	-0.115	-63.875	-0.004	-0.115	-63.879	90.004
99	3	20.842	-15.396	20.832	-0.004	20.842	-15.396	180.000
99	4	-131.964	-0.115	-131.956	-0.004	-0.115	-131.964	90.002
99	5	-47.242	-15.396	-47.248	-0.004	-15.396	-47.242	90.008
99	6	-42.747	-15.396	-42.754	-0.004	-15.396	-42.747	90.010
99	7	-44.721	-15.396	-44.727	-0.004	-15.396	-44.721	90.009
99	8	-50.216	-15.396	-50.221	-0.004	-15.396	-50.216	90.008
99	9	20.711	-15.396	20.701	-0.004	20.711	-15.396	180.000
.00	1	-63.996	-0.057	-63.993	0.000	-0.057	-63.996	89.999
.00	2	-63.864	-0.057	-63.861	0.000	-0.057	-63.864	89.999
.00	3	20.850	-15.341	20.846	-0.001	20.850	-15.341	180.000
.00	4	-131.950	-0.057	-131.942	0.000	-0.057	-131.950	90.000
.00	5	-47.235	-15.341	-47.234	-0.001	-15.341	-47.235	90.002
.00	6	-42.740	-15.341	-42.740	-0.001	-15.341	-42.740	90.003
.00	7	-44.714	-15.341	-44.713	-0.001	-15.341	-44.714	90.002
.00	8	-50.208	-15.341	-50.207	-0.001	-15.341	-50.208	90.002
.00	9	20.718	-15.341	20.715	-0.001	20.718	-15.341	180.000
.01	1	-64.054	-0.286	-64.049	-0.000	-0.286	-64.054	90.000
01	2	-63.922	-0.286	-63.918	-0.000	-0.286	-63.922	90.000
01	3	20.792	-15.570	20.789	0.000	20.792	-15.570	0.000
01	4	-132.008	-0.287	-131.999	-0.000	-0.287	-132.008	90.000
01	5	-47.292	-15.570	-47.291	0.000	-15.570	-47.292	89.999
01	6	-42.798	-15.570	-42.797	0.000	-15.570	-42.798	89.999
01	7	-44.771	-15.570	-44.770	0.000	-15.570	-44.771	89.999
01	8	-50.266	-15.570	-50.264	0.000	-15.570	-50.266	89.999
01	9	20.661	-15.570	20.658	0.000	20.661	-15.570	0.000
.02	1	-64.040	-0.233	-64.036	0.005	-0.233	-64.040	89.995
.02	2	-63.909	-0.233	-63.905	0.005	-0.233	-63.909	89.995
.02	3	20.812	-15.501	20.810	0.006	20.812	-15.501	0.000
.02	4	-131.994	-0.233	-131.986	0.005	-0.233	-131.994	89.997
02	5	-47.272	-15.501	-47.271	0.006	-15.501	-47.272	89.988
02	6	-42.778	-15.501	-42.777	0.006	-15.501	-42.778	89.986
02	7	-44.751	-15.501	-44.750	0.006	-15.501	-44.751	89.987
02	8	-50.246	-15.501	-50.244	0.006	-15.501	-50.246	89.989
02	9	20.681	-15.501	20.678	0.006	20.681	-15.501	0.000
03	1	-64.011	-0.115	-64.007	0.005	-0.115	-64.011	89.995
03	2	-63.880	-0.115	-63.876	0.005	-0.115	-63.880	89.995
03	3	20.841	-15.382	20.839	0.006	20.841	-15.382	0.000
03	4	-131.966	-0.115	-131.958	0.005	-0.115	-131.966	89.998
03	5	-47.244	-15.382	-47.242	0.006	-15.382	-47.244	89.988
03	6	-42.749	-15.382	-42.748	0.006	-15.382	-42.749	89.986
03	7	-44.723	-15.382	-44.722	0.006	-15.382	-44.723	89.987
03	8	-50.217	-15.382	-50.216	0.006	-15.382	-50.217	89.989

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
103	9	20.710	-15.382	20.707	0.006	20.710	-15.382	0.000
104	1	-63.997	-0.057	-63.993	-0.000	-0.057	-63.997	90.000
[illegible]	2	-63.865	-0.057	-63.861	-0.000	-0.057	-63.865	90.000
[illegible]	3	20.849	-15.341	20.846	0.001	20.849	-15.341	0.000
104	4	-131.951	-0.057	-131.943	-0.000	-0.057	-131.951	90.000
104	5	-47.236	-15.341	-47.235	0.001	-15.341	-47.236	89.997
104	6	-42.741	-15.341	-42.740	0.001	-15.341	-42.741	89.997
104	7	-44.715	-15.341	-44.714	0.001	-15.341	-44.715	89.997
104	8	-50.209	-15.341	-50.208	0.001	-15.341	-50.210	89.998
104	9	20.718	-15.341	20.715	0.001	20.718	-15.341	0.000
105	1	-64.054	-0.286	-64.049	0.000	-0.286	-64.054	90.000
105	2	-63.922	-0.286	-63.918	0.000	-0.286	-63.922	90.000
105	3	20.792	-15.566	20.789	-0.000	20.792	-15.566	180.000
105	4	-132.008	-0.287	-132.000	0.000	-0.287	-132.008	90.000
105	5	-47.292	-15.566	-47.292	-0.000	-15.566	-47.292	90.000
105	6	-42.797	-15.566	-42.797	-0.000	-15.566	-42.797	90.000
105	7	-44.771	-15.566	-44.771	-0.000	-15.566	-44.771	90.000
105	8	-50.266	-15.566	-50.265	-0.000	-15.566	-50.266	90.000
105	9	20.661	-15.566	20.658	-0.000	20.661	-15.566	180.000
106	1	-64.040	-0.233	-64.036	-0.004	-0.233	-64.040	90.004
106	2	-63.908	-0.233	-63.905	-0.004	-0.233	-63.908	90.004
106	3	20.813	-15.501	20.810	-0.006	20.813	-15.501	180.000
106	4	-131.994	-0.233	-131.987	-0.004	-0.233	-131.994	90.002
106	5	-47.271	-15.501	-47.271	-0.006	-15.501	-47.271	90.011
106	6	-42.777	-15.501	-42.777	-0.006	-15.501	-42.777	90.013
[illegible]	7	-44.751	-15.501	-44.751	-0.006	-15.501	-44.751	90.012
[illegible]	8	-50.245	-15.501	-50.245	-0.006	-15.501	-50.245	90.010
[illegible]	9	20.681	-15.501	20.678	-0.006	20.681	-15.501	180.000
107	1	-64.011	-0.115	-64.007	-0.004	-0.115	-64.011	90.004
107	2	-63.879	-0.115	-63.876	-0.004	-0.115	-63.879	90.004
107	3	20.842	-15.382	20.839	-0.006	20.842	-15.382	180.000
107	4	-131.965	-0.115	-131.958	-0.004	-0.115	-131.965	90.002
107	5	-47.243	-15.382	-47.242	-0.006	-15.382	-47.243	90.011
107	6	-42.748	-15.382	-42.748	-0.006	-15.382	-42.748	90.013
107	7	-44.722	-15.382	-44.722	-0.006	-15.382	-44.722	90.012
107	8	-50.216	-15.382	-50.216	-0.006	-15.382	-50.216	90.010
107	9	20.711	-15.382	20.707	-0.006	20.711	-15.382	180.000
108	1	-63.997	-0.058	-63.993	0.000	-0.058	-63.997	89.999
108	2	-63.865	-0.058	-63.862	0.000	-0.058	-63.865	89.999
108	3	20.849	-15.337	20.853	-0.000	20.849	-15.337	180.000
108	4	-131.951	-0.058	-131.944	0.000	-0.058	-131.951	89.999
108	5	-47.236	-15.337	-47.228	-0.000	-15.337	-47.236	90.001
108	6	-42.741	-15.337	-42.734	-0.000	-15.337	-42.741	90.001
108	7	-44.715	-15.337	-44.708	-0.000	-15.337	-44.715	90.001
108	8	-50.209	-15.337	-50.202	-0.000	-15.337	-50.209	90.001
108	9	20.718	-15.337	20.721	-0.000	20.718	-15.337	180.000
109	1	-64.054	-0.286	-64.051	0.000	-0.286	-64.054	90.000
109	2	-63.922	-0.286	-63.919	0.000	-0.286	-63.922	90.000
[illegible]	3	20.799	-15.566	20.795	-0.000	20.799	-15.566	180.000

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NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
09	4	-132.008	-0.286	-132.002	0.000	-0.286	-132.008	90.000
09	5	-47.286	-15.566	-47.287	-0.000	-15.566	-47.286	90.000
09	6	-42.791	-15.566	-42.792	-0.000	-15.566	-42.791	90.000
09	7	-44.765	-15.566	-44.766	-0.000	-15.566	-44.765	90.000
09	8	-50.259	-15.566	-50.260	-0.000	-15.566	-50.259	90.000
09	9	20.668	-15.566	20.663	-0.000	20.668	-15.566	180.000
10	1	-64.040	-0.233	-64.038	0.005	-0.233	-64.040	89.995
10	2	-63.909	-0.233	-63.906	0.005	-0.233	-63.909	89.995
10	3	20.805	-15.515	20.808	0.004	20.805	-15.515	0.000
10	4	-131.995	-0.233	-131.989	0.004	-0.233	-131.995	89.998
10	5	-47.280	-15.515	-47.273	0.004	-15.515	-47.280	89.992
10	6	-42.785	-15.515	-42.779	0.004	-15.515	-42.785	89.991
10	7	-44.759	-15.515	-44.753	0.004	-15.515	-44.759	89.992
10	8	-50.253	-15.515	-50.247	0.004	-15.515	-50.253	89.993
10	9	20.674	-15.515	20.677	0.004	20.674	-15.515	0.000
11	1	-64.010	-0.115	-64.007	0.004	-0.115	-64.010	89.995
11	2	-63.878	-0.115	-63.876	0.005	-0.115	-63.878	89.995
11	3	20.836	-15.397	20.832	0.004	20.836	-15.397	0.000
11	4	-131.964	-0.115	-131.958	0.004	-0.115	-131.964	89.998
11	5	-47.248	-15.397	-47.249	0.004	-15.397	-47.248	89.992
11	6	-42.754	-15.397	-42.754	0.004	-15.397	-42.754	89.990
11	7	-44.728	-15.397	-44.729	0.004	-15.397	-44.728	89.991
11	8	-50.222	-15.397	-50.223	0.004	-15.397	-50.222	89.992
11	9	20.704	-15.397	20.700	0.004	20.704	-15.397	0.000
12	1	-63.996	-0.057	-63.993	-0.000	-0.057	-63.996	90.000
12	2	-63.864	-0.057	-63.861	-0.000	-0.057	-63.864	90.000
12	3	20.850	-15.337	20.846	0.000	20.850	-15.337	0.000
12	4	-131.950	-0.057	-131.943	-0.000	-0.057	-131.950	90.000
12	5	-47.235	-15.337	-47.235	0.000	-15.337	-47.235	89.998
12	6	-42.740	-15.337	-42.740	0.000	-15.337	-42.740	89.998
12	7	-44.714	-15.337	-44.714	0.000	-15.337	-44.714	89.998
12	8	-50.208	-15.337	-50.208	0.000	-15.337	-50.208	89.999
12	9	20.718	-15.337	20.715	0.000	20.718	-15.337	0.000
13	1	-64.053	-0.286	-64.050	0.000	-0.286	-64.053	90.000
13	2	-63.921	-0.286	-63.919	0.000	-0.286	-63.921	90.000
13	3	20.800	-15.553	20.796	0.000	20.800	-15.553	0.000
13	4	-132.007	-0.286	-132.001	0.000	-0.286	-132.007	90.000
13	5	-47.285	-15.553	-47.285	0.000	-15.553	-47.285	90.000
13	6	-42.790	-15.553	-42.791	0.000	-15.553	-42.790	90.000
13	7	-44.764	-15.553	-44.765	0.000	-15.553	-44.764	90.000
13	8	-50.258	-15.553	-50.259	0.000	-15.553	-50.258	90.000
13	9	20.668	-15.553	20.664	0.000	20.668	-15.553	0.000
14	1	-64.040	-0.233	-64.037	-0.004	-0.233	-64.040	90.004
14	2	-63.908	-0.233	-63.905	-0.004	-0.233	-63.908	90.004
14	3	20.806	-15.515	20.802	-0.004	20.806	-15.515	180.000
14	4	-131.994	-0.233	-131.987	-0.004	-0.233	-131.994	90.002
14	5	-47.278	-15.515	-47.279	-0.004	-15.515	-47.278	90.007
14	6	-42.784	-15.515	-42.785	-0.004	-15.515	-42.784	90.009
14	7	-44.758	-15.515	-44.758	-0.004	-15.515	-44.758	90.008
14	8	-50.252	-15.515	-50.252	-0.004	-15.515	-50.252	90.007

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
114	9	20.674	-15.515	20.670	-0.004	20.675	-15.515	180.000
115	1	-64.011	-0.115	-64.008	-0.004	-0.115	-64.011	90.004
[illegible]	2	-63.879	-0.115	-63.876	-0.004	-0.115	-63.879	90.004
[illegible]	3	20.835	-15.398	20.831	-0.003	20.835	-15.398	180.000
115	4	-131.964	-0.115	-131.959	-0.005	-0.115	-131.964	90.002
115	5	-47.249	-15.398	-47.251	-0.003	-15.398	-47.249	90.006
115	6	-42.755	-15.398	-42.756	-0.003	-15.398	-42.755	90.008
115	7	-44.728	-15.398	-44.730	-0.003	-15.398	-44.728	90.007
115	8	-50.223	-15.398	-50.224	-0.003	-15.398	-50.223	90.006
115	9	20.704	-15.398	20.699	-0.003	20.704	-15.398	180.000
116	1	-63.996	-0.058	-63.993	0.000	-0.058	-63.996	89.999
116	2	-63.864	-0.058	-63.862	0.000	-0.058	-63.864	89.999
116	3	20.857	-15.323	20.853	0.003	20.857	-15.323	0.000
116	4	-131.950	-0.058	-131.944	0.000	-0.058	-131.950	90.000
116	5	-47.228	-15.323	-47.229	0.003	-15.323	-47.228	89.994
116	6	-42.734	-15.323	-42.734	0.003	-15.323	-42.734	89.993
116	7	-44.707	-15.323	-44.708	0.003	-15.323	-44.707	89.994
116	8	-50.201	-15.323	-50.202	0.003	-15.323	-50.201	89.995
116	9	20.725	-15.323	20.721	0.003	20.725	-15.323	0.000
117	1	-64.053	-0.286	-64.050	0.000	-0.286	-64.053	90.000
117	2	-63.921	-0.286	-63.919	0.000	-0.286	-63.921	90.000
117	3	20.793	-15.553	20.796	0.000	20.793	-15.553	0.000
117	4	-132.007	-0.286	-132.001	0.000	-0.286	-132.007	90.000
117	5	-47.292	-15.553	-47.285	0.000	-15.553	-47.292	90.000
117	6	-42.797	-15.553	-42.791	0.000	-15.553	-42.797	90.000
[illegible]	7	-44.771	-15.553	-44.765	0.000	-15.553	-44.771	90.000
[illegible]	8	-50.265	-15.553	-50.259	0.000	-15.553	-50.265	90.000
117	9	20.661	-15.553	20.664	0.000	20.661	-15.553	0.000
118	1	-64.040	-0.233	-64.037	0.005	-0.233	-64.040	89.995
118	2	-63.908	-0.233	-63.905	0.005	-0.233	-63.908	89.995
118	3	20.806	-15.512	20.809	0.004	20.806	-15.512	0.000
118	4	-131.994	-0.233	-131.987	0.005	-0.233	-131.994	89.997
118	5	-47.278	-15.512	-47.272	0.004	-15.512	-47.278	89.991
118	6	-42.784	-15.512	-42.778	0.004	-15.512	-42.784	89.990
118	7	-44.758	-15.512	-44.751	0.004	-15.512	-44.758	89.990
118	8	-50.252	-15.512	-50.245	0.004	-15.512	-50.252	89.992
118	9	20.674	-15.512	20.677	0.004	20.675	-15.512	0.000
119	1	-64.011	-0.115	-64.008	0.005	-0.115	-64.011	89.995
119	2	-63.879	-0.115	-63.876	0.005	-0.115	-63.879	89.995
119	3	20.835	-15.394	20.838	0.004	20.835	-15.394	0.000
119	4	-131.964	-0.115	-131.959	0.005	-0.115	-131.964	89.997
119	5	-47.249	-15.394	-47.244	0.004	-15.394	-47.249	89.992
119	6	-42.754	-15.394	-42.749	0.004	-15.394	-42.754	89.991
119	7	-44.728	-15.394	-44.723	0.004	-15.394	-44.728	89.991
119	8	-50.223	-15.394	-50.217	0.004	-15.394	-50.223	89.993
119	9	20.704	-15.394	20.706	0.004	20.704	-15.394	0.000
120	1	-63.996	-0.057	-63.993	-0.000	-0.057	-63.996	90.000
[illegible]	2	-63.864	-0.057	-63.862	-0.000	-0.057	-63.864	90.000
[illegible]	3	20.857	-15.323	20.853	-0.003	20.857	-15.323	180.000

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ENT	LOAD COMB	[illegible] (RADIAL)	[illegible] (AXIAL)	[illegible]-STRESS (HOOP)	[illegible]-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
120	4	-131.950	-0.057	-131.944	-0.000	-0.057	-131.950	90.000
120	5	-47.228	-15.323	-47.229	-0.003	-15.323	-47.228	90.005
120	6	-42.733	-15.323	-42.734	-0.003	-15.323	-42.733	90.006
120	7	-44.707	-15.323	-44.708	-0.003	-15.323	-44.707	90.006
120	8	-50.201	-15.323	-50.202	-0.003	-15.323	-50.201	90.005
120	9	20.725	-15.323	20.721	-0.003	20.725	-15.323	180.000
121	1	-64.054	-0.286	-64.051	-0.000	-0.286	-64.054	90.000
121	2	-63.922	-0.286	-63.919	-0.000	-0.286	-63.922	90.000
121	3	20.792	-15.568	20.795	0.000	20.792	-15.568	0.000
121	4	-132.008	-0.286	-132.002	-0.000	-0.286	-132.008	90.000
121	5	-47.292	-15.568	-47.287	0.000	-15.568	-47.292	89.999
121	6	-42.797	-15.568	-42.793	0.000	-15.568	-42.797	89.999
121	7	-44.771	-15.568	-44.766	0.000	-15.568	-44.771	89.999
121	8	-50.266	-15.568	-50.260	0.000	-15.568	-50.266	89.999
121	9	20.661	-15.568	20.663	0.000	20.661	-15.568	0.000
122	1	-64.040	-0.233	-64.038	-0.004	-0.233	-64.040	90.004
122	2	-63.909	-0.233	-63.906	-0.004	-0.233	-63.909	90.004
122	3	20.805	-15.511	20.808	-0.004	20.805	-15.511	180.000
122	4	-131.994	-0.233	-131.989	-0.004	-0.233	-131.994	90.002
122	5	-47.279	-15.511	-47.273	-0.004	-15.511	-47.279	90.008
122	6	-42.785	-15.511	-42.779	-0.004	-15.511	-42.785	90.009
122	7	-44.758	-15.511	-44.753	-0.004	-15.511	-44.758	90.008
122	8	-50.253	-15.511	-50.247	-0.004	-15.511	-50.253	90.007
122	9	20.674	-15.511	20.677	-0.004	20.674	-15.511	180.000
23	1	-64.010	-0.115	-64.007	-0.004	-0.115	-64.010	90.004
23	2	-63.878	-0.115	-63.876	-0.004	-0.115	-63.878	90.004
23	3	20.836	-15.394	20.839	-0.004	20.836	-15.394	180.000
23	4	-131.963	-0.115	-131.958	-0.004	-0.115	-131.963	90.002
23	5	-47.248	-15.394	-47.242	-0.004	-15.394	-47.248	90.008
23	6	-42.753	-15.394	-42.748	-0.004	-15.394	-42.753	90.010
23	7	-44.727	-15.394	-44.722	-0.004	-15.394	-44.727	90.009
23	8	-50.221	-15.394	-50.216	-0.004	-15.394	-50.221	90.008
23	9	20.704	-15.394	20.707	-0.004	20.704	-15.394	180.000
124	1	-63.995	-0.057	-63.993	0.000	-0.057	-63.995	89.999
124	2	-63.864	-0.057	-63.862	0.000	-0.057	-63.864	89.999
124	3	20.851	-15.339	20.846	-0.000	20.851	-15.339	180.000
124	4	-131.948	-0.057	-131.944	0.000	-0.057	-131.948	90.000
24	5	-47.233	-15.339	-47.235	-0.000	-15.339	-47.233	90.001
24	6	-42.739	-15.339	-42.741	-0.000	-15.339	-42.739	90.002
24	7	-44.712	-15.339	-44.715	-0.000	-15.339	-44.712	90.002
24	8	-50.207	-15.339	-50.209	-0.000	-15.339	-50.207	90.001
24	9	20.719	-15.339	20.714	-0.000	20.719	-15.339	180.000
25	1	-64.053	-0.286	-64.050	-0.000	-0.286	-64.053	90.000
25	2	-63.921	-0.286	-63.919	-0.000	-0.286	-63.921	90.000
25	3	20.793	-15.568	20.789	0.000	20.793	-15.568	0.000
25	4	-132.006	-0.287	-132.001	-0.000	-0.287	-132.006	90.000
25	5	-47.291	-15.568	-47.292	0.000	-15.568	-47.291	89.999
25	6	-42.797	-15.568	-42.798	0.000	-15.568	-42.797	89.999
5	7	-44.770	-15.568	-44.772	0.000	-15.568	-44.770	89.999
5	8	-50.264	-15.568	-50.266	0.000	-15.568	-50.264	89.999

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ELEMENT	LOAD COMB	R-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	RZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
125	9	20.661	-15.568	20.657	0.000	20.661	-15.568	0.000
126	1	-64.040	-0.233	-64.037	0.005	-0.233	-64.040	89.995
	2	-63.908	-0.233	-63.905	0.005	-0.233	-63.908	89.995
	3	20.806	-15.503	20.809	0.005	20.806	-15.503	0.000
126	4	-131.993	-0.233	-131.987	0.005	-0.233	-131.993	89.998
126	5	-47.278	-15.503	-47.272	0.005	-15.503	-47.278	89.989
126	6	-42.784	-15.503	-42.778	0.005	-15.503	-42.784	89.987
126	7	-44.757	-15.503	-44.751	0.005	-15.503	-44.757	89.988
126	8	-50.251	-15.503	-50.245	0.005	-15.503	-50.251	89.990
126	9	20.674	-15.503	20.677	0.005	20.675	-15.503	0.000
127	1	-64.011	-0.115	-64.008	0.005	-0.115	-64.011	89.995
127	2	-63.879	-0.115	-63.876	0.005	-0.115	-63.879	89.995
127	3	20.842	-15.385	20.838	0.005	20.842	-15.385	0.000
127	4	-131.964	-0.115	-131.959	0.005	-0.115	-131.964	89.998
127	5	-47.242	-15.385	-47.244	0.005	-15.385	-47.242	89.989
127	6	-42.747	-15.385	-42.749	0.005	-15.385	-42.747	89.987
127	7	-44.721	-15.385	-44.723	0.005	-15.385	-44.721	89.988
127	8	-50.216	-15.385	-50.217	0.005	-15.385	-50.216	89.990
127	9	20.711	-15.385	20.706	0.005	20.711	-15.385	0.000
128	1	-63.996	-0.057	-63.993	-0.000	-0.057	-63.996	90.000
128	2	-63.864	-0.057	-63.862	-0.000	-0.057	-63.864	90.000
128	3	20.850	-15.339	20.853	0.000	20.850	-15.339	0.000
128	4	-131.950	-0.057	-131.944	-0.000	-0.057	-131.950	90.000
128	5	-47.235	-15.339	-47.229	0.000	-15.339	-47.235	89.998
128	6	-42.740	-15.339	-42.734	0.000	-15.339	-42.740	89.998
128	7	-44.714	-15.339	-44.708	0.000	-15.339	-44.714	89.998
	8	-50.208	-15.339	-50.202	0.000	-15.339	-50.208	89.998
	9	20.718	-15.339	20.721	0.000	20.718	-15.339	0.000
129	1	-64.053	-0.286	-64.050	0.000	-0.286	-64.053	90.000
129	2	-63.921	-0.286	-63.919	0.000	-0.286	-63.921	90.000
129	3	20.793	-15.564	20.796	-0.000	20.793	-15.564	180.000
129	4	-132.006	-0.287	-132.001	0.000	-0.287	-132.006	90.000
129	5	-47.291	-15.564	-47.286	-0.000	-15.564	-47.291	90.000
129	6	-42.797	-15.564	-42.791	-0.000	-15.564	-42.797	90.000
129	7	-44.770	-15.564	-44.765	-0.000	-15.564	-44.770	90.000
129	8	-50.264	-15.564	-50.259	-0.000	-15.564	-50.264	90.000
129	9	20.661	-15.564	20.664	-0.000	20.661	-15.564	180.000
130	1	-64.040	-0.233	-64.037	-0.004	-0.233	-64.040	90.004
130	2	-63.908	-0.233	-63.905	-0.004	-0.233	-63.908	90.004
130	3	20.806	-15.504	20.809	-0.005	20.806	-15.504	180.000
130	4	-131.993	-0.233	-131.988	-0.004	-0.233	-131.993	90.002
130	5	-47.278	-15.504	-47.273	-0.005	-15.504	-47.278	90.010
130	6	-42.783	-15.504	-42.778	-0.005	-15.504	-42.783	90.012
130	7	-44.757	-15.504	-44.752	-0.005	-15.504	-44.757	90.011
130	8	-50.251	-15.504	-50.246	-0.005	-15.504	-50.251	90.009
130	9	20.674	-15.504	20.677	-0.005	20.675	-15.504	180.000
131	1	-64.011	-0.115	-64.008	-0.004	-0.115	-64.011	90.004
131	2	-63.879	-0.115	-63.876	-0.004	-0.115	-63.879	90.004
	3	20.835	-15.385	20.838	-0.005	20.835	-15.385	180.000

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MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
131	4	-131.964	-0.115	-131.959	-0.004	-0.115	-131.964	90.002
131	5	-47.249	-15.385	-47.244	-0.005	-15.385	-47.249	90.010
131	6	-42.754	-15.385	-42.749	-0.005	-15.385	-42.754	90.012
131	7	-44.728	-15.385	-44.723	-0.005	-15.385	-44.728	90.011
131	8	-50.223	-15.385	-50.217	-0.005	-15.385	-50.223	90.009
131	9	20.704	-15.385	20.706	-0.005	20.704	-15.385	180.000
132	1	-63.996	-0.058	-63.993	0.000	-0.058	-63.996	89.999
132	2	-63.864	-0.058	-63.862	0.000	-0.058	-63.864	89.999
132	3	20.850	-15.335	20.853	-0.000	20.850	-15.335	180.000
132	4	-131.950	-0.058	-131.944	0.000	-0.058	-131.950	89.999
132	5	-47.235	-15.335	-47.229	-0.000	-15.335	-47.235	90.000
132	6	-42.740	-15.335	-42.735	-0.000	-15.335	-42.740	90.000
132	7	-44.714	-15.335	-44.708	-0.000	-15.335	-44.714	90.000
132	8	-50.208	-15.335	-50.202	-0.000	-15.335	-50.208	90.000
132	9	20.718	-15.335	20.721	-0.000	20.718	-15.335	180.000
133	1	-64.053	-0.286	-64.051	0.000	-0.286	-64.053	90.000
133	2	-63.921	-0.286	-63.919	0.000	-0.286	-63.921	90.000
133	3	20.793	-15.564	20.795	-0.000	20.793	-15.564	180.000
133	4	-132.007	-0.286	-132.003	0.000	-0.286	-132.007	90.000
133	5	-47.292	-15.564	-47.287	-0.000	-15.564	-47.292	90.000
133	6	-42.797	-15.564	-42.793	-0.000	-15.564	-42.797	90.000
133	7	-44.771	-15.564	-44.767	-0.000	-15.564	-44.771	90.000
133	8	-50.265	-15.564	-50.261	-0.000	-15.564	-50.265	90.000
133	9	20.661	-15.564	20.663	-0.000	20.661	-15.564	180.000
134	1	-64.040	-0.233	-64.038	0.004	-0.233	-64.040	89.995
134	2	-63.908	-0.233	-63.906	0.004	-0.233	-63.908	89.995
134	3	20.806	-15.513	20.808	0.004	20.806	-15.513	0.000
134	4	-131.994	-0.233	-131.989	0.004	-0.233	-131.994	89.998
134	5	-47.278	-15.513	-47.274	0.004	-15.513	-47.278	89.992
134	6	-42.784	-15.513	-42.779	0.004	-15.513	-42.784	89.990
134	7	-44.758	-15.513	-44.753	0.004	-15.513	-44.758	89.991
134	8	-50.252	-15.513	-50.248	0.004	-15.513	-50.252	89.992
134	9	20.674	-15.513	20.677	0.004	20.675	-15.513	0.000
135	1	-64.010	-0.115	-64.008	0.004	-0.115	-64.010	89.995
135	2	-63.878	-0.115	-63.876	0.004	-0.115	-63.878	89.995
135	3	20.836	-15.395	20.838	0.004	20.836	-15.395	0.000
135	4	-131.963	-0.115	-131.959	0.004	-0.115	-131.963	89.998
135	5	-47.248	-15.395	-47.244	0.004	-15.395	-47.248	89.991
135	6	-42.753	-15.395	-42.749	0.004	-15.395	-42.753	89.990
135	7	-44.727	-15.395	-44.723	0.004	-15.395	-44.727	89.990
135	8	-50.221	-15.395	-50.217	0.004	-15.395	-50.221	89.992
135	9	20.704	-15.395	20.706	0.004	20.704	-15.395	0.000
136	1	-63.995	-0.057	-63.993	-0.000	-0.057	-63.995	90.000
136	2	-63.864	-0.057	-63.862	-0.000	-0.057	-63.864	90.000
136	3	20.851	-15.335	20.853	0.000	20.851	-15.335	0.000
136	4	-131.948	-0.057	-131.944	-0.000	-0.057	-131.948	90.000
136	5	-47.233	-15.335	-47.229	0.000	-15.335	-47.233	89.999
136	6	-42.738	-15.335	-42.734	0.000	-15.335	-42.738	89.999
136	7	-44.712	-15.335	-44.708	0.000	-15.335	-44.712	89.999
136	8	-50.207	-15.335	-50.202	0.000	-15.335	-50.207	89.999

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
136	9	20.719	-15.335	20.721	0.000	20.719	-15.335	0.000
137	1	-64.052	-0.286	-64.050	0.000	-0.286	-64.052	90.000
[illegible]	2	-63.921	-0.286	-63.919	0.000	-0.286	-63.921	90.000
[illegible]	3	20.794	-15.558	20.796	-0.000	20.794	-15.558	180.000
137	4	-132.005	-0.286	-132.001	0.000	-0.286	-132.005	90.000
137	5	-47.290	-15.558	-47.286	-0.000	-15.558	-47.290	90.000
137	6	-42.795	-15.558	-42.791	-0.000	-15.558	-42.795	90.000
137	7	-44.769	-15.558	-44.765	-0.000	-15.558	-44.769	90.000
137	8	-50.264	-15.558	-50.259	-0.000	-15.558	-50.264	90.000
137	9	20.662	-15.558	20.664	-0.000	20.662	-15.558	180.000
138	1	-64.039	-0.233	-64.037	-0.004	-0.233	-64.039	90.004
138	2	-63.908	-0.233	-63.905	-0.004	-0.233	-63.908	90.004
138	3	20.807	-15.513	20.809	-0.004	20.807	-15.513	180.000
138	4	-131.992	-0.233	-131.988	-0.005	-0.233	-131.992	90.002
138	5	-47.277	-15.513	-47.273	-0.004	-15.513	-47.277	90.008
138	6	-42.782	-15.513	-42.778	-0.004	-15.513	-42.782	90.009
138	7	-44.756	-15.513	-44.752	-0.004	-15.513	-44.756	90.009
138	8	-50.250	-15.513	-50.246	-0.004	-15.513	-50.250	90.007
138	9	20.675	-15.513	20.677	-0.004	20.675	-15.513	180.000
139	1	-64.010	-0.115	-64.008	-0.004	-0.115	-64.010	90.004
139	2	-63.878	-0.115	-63.876	-0.004	-0.115	-63.878	90.004
139	3	20.836	-15.395	20.838	-0.004	20.836	-15.395	180.000
139	4	-131.964	-0.115	-131.959	-0.005	-0.115	-131.964	90.002
139	5	-47.248	-15.395	-47.244	-0.004	-15.395	-47.248	90.007
139	6	-42.754	-15.395	-42.749	-0.004	-15.395	-42.754	90.009
[illegible]	7	-44.728	-15.395	-44.723	-0.004	-15.395	-44.728	90.008
[illegible]	8	-50.222	-15.395	-50.217	-0.004	-15.395	-50.222	90.007
[illegible]	9	20.704	-15.395	20.706	-0.004	20.704	-15.395	180.000
140	1	-63.996	-0.058	-63.994	0.000	-0.058	-63.996	89.999
140	2	-63.864	-0.058	-63.862	0.000	-0.058	-63.864	89.999
140	3	20.857	-15.328	20.852	0.002	20.857	-15.328	0.000
140	4	-131.950	-0.058	-131.945	0.000	-0.058	-131.950	90.000
140	5	-47.228	-15.328	-47.230	0.002	-15.328	-47.228	89.995
140	6	-42.733	-15.328	-42.736	0.002	-15.328	-42.733	89.994
140	7	-44.707	-15.328	-44.709	0.002	-15.328	-44.707	89.995
140	8	-50.201	-15.328	-50.203	0.002	-15.328	-50.201	89.996
140	9	20.725	-15.328	20.720	0.002	20.725	-15.328	0.000
141	1	-64.053	-0.286	-64.050	0.000	-0.286	-64.053	90.000
141	2	-63.921	-0.286	-63.919	0.000	-0.286	-63.921	90.000
141	3	20.793	-15.558	20.796	-0.000	20.793	-15.558	180.000
141	4	-132.006	-0.286	-132.001	0.000	-0.286	-132.006	90.000
141	5	-47.291	-15.558	-47.286	-0.000	-15.558	-47.291	90.000
141	6	-42.796	-15.558	-42.791	-0.000	-15.558	-42.796	90.000
141	7	-44.770	-15.558	-44.765	-0.000	-15.558	-44.770	90.000
141	8	-50.264	-15.558	-50.259	-0.000	-15.558	-50.264	90.000
141	9	20.661	-15.558	20.664	-0.000	20.661	-15.558	180.000
142	1	-64.039	-0.233	-64.037	0.005	-0.233	-64.039	89.995
[illegible]	2	-63.908	-0.233	-63.905	0.005	-0.233	-63.908	89.995
[illegible]	3	20.807	-15.517	20.802	0.004	20.807	-15.517	0.000

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E 278

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	Z-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
142	4	-131.992	-0.233	-131.988	0.005	-0.233	-131.992	89.997
142	5	-47.277	-15.517	-47.280	0.004	-15.517	-47.277	89.991
142	6	-42.782	-15.517	-42.785	0.004	-15.517	-42.782	89.990
142	7	-44.756	-15.517	-44.759	0.004	-15.517	-44.756	89.991
142	8	-50.250	-15.517	-50.253	0.004	-15.517	-50.250	89.992
142	9	20.675	-15.517	20.670	0.004	20.675	-15.517	0.000
143	1	-64.010	-0.115	-64.008	0.005	-0.115	-64.010	89.995
143	2	-63.878	-0.115	-63.876	0.005	-0.115	-63.878	89.995
143	3	20.836	-15.399	20.838	0.004	20.836	-15.399	0.000
143	4	-131.964	-0.115	-131.959	0.005	-0.115	-131.964	89.997
143	5	-47.248	-15.399	-47.244	0.004	-15.399	-47.248	89.992
143	6	-42.754	-15.399	-42.749	0.004	-15.399	-42.754	89.991
143	7	-44.728	-15.399	-44.723	0.004	-15.399	-44.728	89.991
143	8	-50.222	-15.399	-50.217	0.004	-15.399	-50.222	89.993
143	9	20.704	-15.399	20.706	0.004	20.704	-15.399	0.000
144	1	-63.995	-0.057	-63.994	-0.000	-0.057	-63.995	90.000
144	2	-63.864	-0.057	-63.862	-0.000	-0.057	-63.864	90.000
144	3	20.857	-15.328	20.852	-0.002	20.857	-15.328	180.000
144	4	-131.949	-0.057	-131.945	-0.000	-0.057	-131.949	90.000
144	5	-47.227	-15.328	-47.230	-0.002	-15.328	-47.227	90.004
144	6	-42.732	-15.328	-42.736	-0.002	-15.328	-42.732	90.005
144	7	-44.706	-15.328	-44.709	-0.002	-15.328	-44.706	90.004
144	8	-50.200	-15.328	-50.203	-0.002	-15.328	-50.200	90.004
144	9	20.726	-15.328	20.720	-0.002	20.726	-15.328	180.000
145	1	-64.053	-0.286	-64.052	-0.000	-0.286	-64.053	90.000
145	2	-63.921	-0.286	-63.920	-0.000	-0.286	-63.921	90.000
145	3	20.793	-15.571	20.794	0.000	20.793	-15.571	0.000
145	4	-132.007	-0.286	-132.003	-0.000	-0.286	-132.007	90.000
145	5	-47.292	-15.571	-47.288	0.000	-15.571	-47.292	89.999
145	6	-42.797	-15.571	-42.793	0.000	-15.571	-42.797	89.999
145	7	-44.771	-15.571	-44.767	0.000	-15.571	-44.771	89.999
145	8	-50.265	-15.571	-50.262	0.000	-15.571	-50.265	89.999
145	9	20.661	-15.571	20.663	0.000	20.661	-15.571	0.000
146	1	-64.040	-0.233	-64.038	-0.004	-0.233	-64.040	90.004
146	2	-63.908	-0.233	-63.907	-0.004	-0.233	-63.908	90.004
146	3	20.806	-15.517	20.807	-0.004	20.806	-15.517	180.000
146	4	-131.994	-0.233	-131.990	-0.004	-0.233	-131.994	90.002
146	5	-47.278	-15.517	-47.275	-0.004	-15.517	-47.278	90.007
146	6	-42.784	-15.517	-42.780	-0.004	-15.517	-42.784	90.009
146	7	-44.758	-15.517	-44.754	-0.004	-15.517	-44.758	90.008
146	8	-50.252	-15.517	-50.248	-0.004	-15.517	-50.252	90.007
146	9	20.674	-15.517	20.676	-0.004	20.675	-15.517	180.000
147	1	-64.009	-0.115	-64.008	-0.004	-0.115	-64.009	90.004
147	2	-63.878	-0.115	-63.876	-0.004	-0.115	-63.878	90.004
147	3	20.837	-15.398	20.838	-0.004	20.837	-15.398	180.000
147	4	-131.962	-0.115	-131.959	-0.004	-0.115	-131.962	90.002
147	5	-47.247	-15.398	-47.244	-0.004	-15.398	-47.247	90.008
147	6	-42.752	-15.398	-42.749	-0.004	-15.398	-42.752	90.010
147	7	-44.726	-15.398	-44.723	-0.004	-15.398	-44.726	90.009
147	8	-50.221	-15.398	-50.217	-0.004	-15.398	-50.221	90.007

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
47	9	20.705	-15.398	20.706	-0.004	20.705	-15.398	180.000
	1	-63.995	-0.057	-63.993	0.000	-0.057	-63.995	89.999
	2	-63.864	-0.057	-63.862	0.000	-0.057	-63.864	89.999
[illegible]	3	20.851	-15.342	20.846	-0.001	20.851	-15.342	180.000
.48	4	-131.948	-0.057	-131.944	0.000	-0.057	-131.948	90.000
.48	5	-47.233	-15.342	-47.236	-0.001	-15.342	-47.233	90.002
.48	6	-42.738	-15.342	-42.741	-0.001	-15.342	-42.738	90.002
.48	7	-44.712	-15.342	-44.715	-0.001	-15.342	-44.712	90.002
148	8	-50.207	-15.342	-50.209	-0.001	-15.342	-50.207	90.002
148	9	20.719	-15.342	20.714	-0.001	20.719	-15.342	180.000
149	1	-64.052	-0.286	-64.051	-0.000	-0.286	-64.052	90.000
149	2	-63.921	-0.286	-63.919	-0.000	-0.286	-63.921	90.000
149	3	20.794	-15.571	20.788	0.000	20.794	-15.571	0.000
149	4	-132.005	-0.287	-132.002	-0.000	-0.287	-132.005	90.000
149	5	-47.290	-15.571	-47.294	0.000	-15.571	-47.290	89.999
149	6	-42.795	-15.571	-42.799	0.000	-15.571	-42.795	89.999
149	7	-44.769	-15.571	-44.773	0.000	-15.571	-44.769	89.999
149	8	-50.264	-15.571	-50.267	0.000	-15.571	-50.264	89.999
149	9	20.662	-15.571	20.656	0.000	20.662	-15.571	0.000
150	1	-64.039	-0.233	-64.038	0.005	-0.233	-64.039	89.995
150	2	-63.908	-0.233	-63.906	0.005	-0.233	-63.908	89.995
150	3	20.807	-15.504	20.808	0.006	20.807	-15.504	0.000
150	4	-131.992	-0.233	-131.989	0.005	-0.233	-131.992	89.998
150	5	-47.277	-15.504	-47.273	0.006	-15.504	-47.277	89.988
150	6	-42.782	-15.504	-42.779	0.006	-15.504	-42.782	89.987
	7	-44.756	-15.504	-44.753	0.006	-15.504	-44.756	89.987
	8	-50.250	-15.504	-50.247	0.006	-15.504	-50.250	89.989
150	9	20.675	-15.504	20.677	0.006	20.675	-15.504	0.000
151	1	-64.010	-0.115	-64.009	0.005	-0.115	-64.010	89.995
151	2	-63.878	-0.115	-63.877	0.005	-0.115	-63.878	89.995
151	3	20.843	-15.385	20.837	0.006	20.843	-15.385	0.000
151	4	-131.963	-0.115	-131.960	0.005	-0.115	-131.963	89.998
151	5	-47.241	-15.385	-47.245	0.006	-15.385	-47.241	89.988
151	6	-42.747	-15.385	-42.750	0.006	-15.385	-42.747	89.986
151	7	-44.720	-15.385	-44.724	0.006	-15.385	-44.720	89.987
151	8	-50.214	-15.385	-50.218	0.006	-15.385	-50.214	89.989
151	9	20.711	-15.385	20.706	0.006	20.711	-15.385	0.000
152	1	-63.995	-0.057	-63.994	-0.000	-0.057	-63.995	90.000
152	2	-63.864	-0.057	-63.862	-0.000	-0.057	-63.864	90.000
152	3	20.851	-15.343	20.852	0.001	20.851	-15.343	0.000
152	4	-131.948	-0.057	-131.946	-0.000	-0.057	-131.948	90.000
152	5	-47.233	-15.343	-47.230	0.001	-15.343	-47.233	89.998
152	6	-42.739	-15.343	-42.736	0.001	-15.343	-42.739	89.998
152	7	-44.712	-15.343	-44.710	0.001	-15.343	-44.712	89.998
152	8	-50.207	-15.343	-50.204	0.001	-15.343	-50.207	89.998
152	9	20.719	-15.343	20.720	0.001	20.719	-15.343	0.000
153	1	-64.052	-0.286	-64.051	0.000	-0.286	-64.052	90.000
	2	-63.921	-0.286	-63.919	0.000	-0.286	-63.921	90.000
	3	20.794	-15.569	20.795	-0.000	20.794	-15.569	180.000

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ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	XZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
153	4	-132.005	-0.287	-132.002	0.000	-0.287	-132.005	90.000
153	5	-47.290	-15.569	-47.287	-0.000	-15.569	-47.290	90.000
153	6	-42.795	-15.569	-42.793	-0.000	-15.569	-42.795	90.000
153	7	-44.769	-15.569	-44.766	-0.000	-15.569	-44.769	90.000
153	8	-50.264	-15.569	-50.260	-0.000	-15.569	-50.264	90.000
153	9	20.662	-15.569	20.663	-0.000	20.662	-15.569	180.000
154	1	-64.039	-0.233	-54.038	-0.004	-0.233	-64.039	90.004
154	2	-63.908	-0.233	-63.906	-0.004	-0.233	-63.908	90.004
154	3	20.807	-15.504	20.808	-0.006	20.807	-15.504	180.000
154	4	-131.992	-0.233	-131.989	-0.004	-0.233	-131.992	90.002
154	5	-47.277	-15.504	-47.273	-0.006	-15.504	-47.277	90.011
154	6	-42.782	-15.504	-42.779	-0.006	-15.504	-42.782	90.013
154	7	-44.756	-15.504	-44.753	-0.006	-15.504	-44.756	90.012
154	8	-50.250	-15.504	-50.247	-0.006	-15.504	-50.250	90.010
154	9	20.675	-15.504	20.677	-0.006	20.675	-15.504	180.000
155	1	-64.010	-0.115	-64.009	-0.004	-0.115	-64.010	90.004
155	2	-63.878	-0.115	-63.877	-0.004	-0.115	-63.878	90.004
155	3	20.836	-15.385	20.837	-0.006	20.836	-15.385	180.000
155	4	-131.963	-0.115	-131.960	-0.004	-0.115	-131.963	90.002
155	5	-47.248	-15.385	-47.245	-0.006	-15.385	-47.248	90.011
155	6	-42.754	-15.385	-42.750	-0.006	-15.385	-42.754	90.012
155	7	-44.727	-15.385	-44.724	-0.006	-15.385	-44.727	90.012
155	8	-50.221	-15.385	-50.218	-0.006	-15.385	-50.221	90.010
155	9	20.704	-15.385	20.706	-0.006	20.704	-15.385	180.000
156	1	-63.995	-0.058	-63.994	0.000	-0.058	-63.995	89.999
156	2	-63.864	-0.058	-63.862	0.000	-0.058	-63.864	89.999
156	3	20.851	-15.340	20.852	-0.000	20.851	-15.340	180.000
156	4	-131.948	-0.058	-131.946	0.000	-0.058	-131.948	89.999
156	5	-47.233	-15.340	-47.230	-0.000	-15.340	-47.233	90.001
156	6	-42.739	-15.340	-42.736	-0.000	-15.340	-42.739	90.001
156	7	-44.712	-15.340	-44.710	-0.000	-15.340	-44.712	90.001
156	8	-50.207	-15.340	-50.204	-0.000	-15.340	-50.207	90.001
156	9	20.719	-15.340	20.720	-0.000	20.719	-15.340	180.000
157	1	-64.053	-0.286	-64.052	0.000	-0.286	-64.053	90.000
157	2	-63.921	-0.286	-63.920	0.000	-0.286	-63.921	90.000
157	3	20.793	-15.568	20.794	-0.000	20.793	-15.568	180.000
157	4	-132.006	-0.286	-132.003	0.000	-0.286	-132.006	90.000
157	5	-47.291	-15.568	-47.288	-0.000	-15.568	-47.291	90.000
157	6	-42.797	-15.568	-42.794	-0.000	-15.568	-42.797	90.000
157	7	-44.770	-15.568	-44.767	-0.000	-15.568	-44.770	90.000
157	8	-50.264	-15.568	-50.262	-0.000	-15.568	-50.264	90.000
157	9	20.661	-15.568	20.663	-0.000	20.661	-15.568	180.000
158	1	-64.040	-0.233	-64.038	0.005	-0.233	-64.040	89.995
158	2	-63.908	-0.233	-63.907	0.005	-0.233	-63.908	89.995
158	3	20.806	-15.514	20.807	0.004	20.806	-15.514	0.000
158	4	-131.994	-0.233	-131.990	0.004	-0.233	-131.994	89.998
158	5	-47.278	-15.514	-47.275	0.004	-15.514	-47.278	89.992
158	6	-42.784	-15.514	-42.781	0.004	-15.514	-42.784	89.990
158	7	-44.758	-15.514	-44.754	0.004	-15.514	-44.758	89.991
158	8	-50.252	-15.514	-50.248	0.004	-15.514	-50.252	89.992

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MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
158	9	20.674	-15.514	20.676	0.004	20.675	-15.514	0.000
[illegible]	1	-64.009	-0.115	-64.008	0.005	-0.115	-64.009	89.995
[illegible]	2	-63.878	-0.115	-63.876	0.005	-0.115	-63.878	89.995
[illegible]	3	20.837	-15.396	20.838	0.004	20.837	-15.396	0.000
159	4	-131.962	-0.115	-131.959	0.004	-0.115	-131.962	89.998
159	5	-47.246	-15.396	-47.244	0.004	-15.396	-47.246	89.991
159	6	-42.752	-15.396	-42.749	0.004	-15.396	-42.752	89.989
159	7	-44.726	-15.396	-44.723	0.004	-15.396	-44.726	89.990
159	8	-50.220	-15.396	-50.217	0.004	-15.396	-50.220	89.992
159	9	20.705	-15.396	20.706	0.004	20.705	-15.396	0.000
160	1	-63.995	-0.057	-63.993	-0.000	-0.057	-63.995	90.000
160	2	-63.863	-0.057	-63.862	-0.000	-0.057	-63.863	90.000
160	3	20.851	-15.340	20.853	0.000	20.851	-15.340	0.000
160	4	-131.947	-0.057	-131.944	-0.000	-0.057	-131.947	90.000
160	5	-47.232	-15.340	-47.229	0.000	-15.340	-47.232	89.998
160	6	-42.738	-15.340	-42.735	0.000	-15.340	-42.738	89.998
160	7	-44.711	-15.340	-44.708	0.000	-15.340	-44.711	89.998
160	8	-50.205	-15.340	-50.202	0.000	-15.340	-50.205	89.998
160	9	20.720	-15.340	20.721	0.000	20.720	-15.340	0.000
161	1	-64.052	-0.287	-64.051	-0.000	-0.287	-64.052	90.000
161	2	-63.921	-0.287	-63.919	-0.000	-0.287	-63.921	90.000
161	3	20.794	-15.556	20.795	0.000	20.794	-15.556	0.000
161	4	-132.005	-0.288	-132.002	-0.000	-0.288	-132.005	90.000
161	5	-47.290	-15.557	-47.287	-0.000	-15.557	-47.290	90.000
161	6	-42.795	-15.557	-42.793	-0.000	-15.557	-42.795	90.000
[illegible]	7	-44.769	-15.557	-44.766	-0.000	-15.557	-44.769	90.000
[illegible]	8	-50.264	-15.557	-50.260	-0.000	-15.557	-50.264	90.000
161	9	20.662	-15.556	20.663	0.000	20.662	-15.556	0.000
162	1	-64.039	-0.233	-64.038	-0.004	-0.233	-64.039	90.004
162	2	-63.908	-0.233	-63.906	-0.004	-0.233	-63.908	90.004
162	3	20.807	-15.515	20.808	-0.004	20.807	-15.515	180.000
162	4	-131.992	-0.233	-131.989	-0.005	-0.233	-131.992	90.002
162	5	-47.277	-15.515	-47.273	-0.004	-15.515	-47.277	90.008
162	6	-42.782	-15.515	-42.779	-0.004	-15.515	-42.782	90.009
162	7	-44.756	-15.515	-44.753	-0.004	-15.515	-44.756	90.009
162	8	-50.250	-15.515	-50.247	-0.004	-15.515	-50.250	90.007
162	9	20.675	-15.515	20.677	-0.004	20.675	-15.515	180.000
163	1	-64.010	-0.115	-64.009	-0.005	-0.115	-64.010	90.004
163	2	-63.878	-0.115	-63.877	-0.005	-0.115	-63.878	90.004
163	3	20.836	-15.396	20.837	-0.004	20.836	-15.396	180.000
163	4	-131.963	-0.115	-131.960	-0.005	-0.115	-131.963	90.002
163	5	-47.248	-15.396	-47.245	-0.004	-15.396	-47.248	90.007
163	6	-42.753	-15.396	-42.750	-0.004	-15.396	-42.753	90.008
163	7	-44.727	-15.396	-44.724	-0.004	-15.396	-44.727	90.008
163	8	-50.221	-15.397	-50.218	-0.004	-15.396	-50.221	90.007
163	9	20.704	-15.396	20.706	-0.004	20.704	-15.396	180.000
164	1	-63.995	-0.057	-63.994	0.000	-0.057	-63.995	89.999
[illegible]	2	-63.864	-0.057	-63.862	0.000	-0.057	-63.864	89.999
[illegible]	3	20.857	-15.327	20.852	0.003	20.857	-15.327	0.000

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ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
164	4	-131.948	-0.057	-131.946	0.000	-0.057	-131.948	90.000
164	5	-47.226	-15.327	-47.230	0.003	-15.327	-47.226	89.994
164	6	-42.731	-15.327	-42.736	0.003	-15.327	-42.731	89.993
164	7	-44.705	-15.327	-44.710	0.003	-15.327	-44.705	89.994
164	8	-50.200	-15.327	-50.204	0.003	-15.327	-50.200	89.995
164	9	20.726	-15.327	20.720	0.003	20.726	-15.327	0.000
165	1	-64.051	-0.287	-64.051	-0.000	-0.287	-64.051	90.000
165	2	-63.919	-0.287	-63.919	-0.000	-0.287	-63.919	90.000
165	3	20.795	-15.556	20.795	0.000	20.795	-15.556	0.000
165	4	-132.003	-0.287	-132.002	-0.000	-0.287	-132.003	90.000
165	5	-47.287	-15.557	-47.287	-0.000	-15.557	-47.287	90.000
165	6	-42.793	-15.557	-42.792	-0.000	-15.557	-42.793	90.000
165	7	-44.767	-15.557	-44.766	-0.000	-15.557	-44.767	90.000
165	8	-50.261	-15.557	-50.260	-0.000	-15.557	-50.261	90.000
165	9	20.663	-15.556	20.663	0.000	20.663	-15.556	0.000
166	1	-64.039	-0.233	-64.038	0.002	-0.233	-64.039	89.997
166	2	-63.908	-0.233	-63.906	0.002	-0.233	-63.908	89.997
166	3	20.807	-15.520	20.801	0.007	20.807	-15.520	0.000
166	4	-131.992	-0.233	-131.989	0.000	-0.233	-131.992	89.999
166	5	-47.276	-15.519	-47.280	0.005	-15.519	-47.276	89.991
166	6	-42.782	-15.519	-42.786	0.005	-15.519	-42.782	89.989
166	7	-44.755	-15.519	-44.760	0.005	-15.519	-44.755	89.990
166	8	-50.250	-15.519	-50.254	0.004	-15.519	-50.250	89.992
166	9	20.675	-15.519	20.670	0.007	20.675	-15.520	0.000
167	1	-64.010	-0.116	-64.009	0.002	-0.116	-64.010	89.997
167	2	-63.878	-0.116	-63.877	0.002	-0.116	-63.878	89.997
167	3	20.836	-15.400	20.837	0.006	20.836	-15.400	0.000
167	4	-131.963	-0.117	-131.960	0.000	-0.117	-131.963	90.000
167	5	-47.248	-15.401	-47.245	0.003	-15.401	-47.248	89.993
167	6	-42.754	-15.401	-42.751	0.003	-15.401	-42.754	89.992
167	7	-44.727	-15.401	-44.724	0.003	-15.401	-44.727	89.992
167	8	-50.221	-15.401	-50.218	0.003	-15.401	-50.221	89.994
167	9	20.704	-15.400	20.706	0.006	20.704	-15.400	0.000
168	1	-63.997	-0.058	-63.994	-0.000	-0.058	-63.997	90.000
168	2	-63.865	-0.058	-63.862	-0.000	-0.058	-63.865	90.000
168	3	20.856	-15.327	20.852	-0.002	20.856	-15.327	180.000
168	4	-131.951	-0.058	-131.946	-0.000	-0.058	-131.951	90.000
168	5	-47.229	-15.327	-47.230	-0.002	-15.327	-47.229	90.005
168	6	-42.734	-15.327	-42.736	-0.002	-15.327	-42.734	90.006
168	7	-44.708	-15.327	-44.710	-0.002	-15.327	-44.708	90.005
168	8	-50.203	-15.327	-50.204	-0.002	-15.327	-50.203	90.005
168	9	20.724	-15.327	20.720	-0.002	20.725	-15.327	180.000
169	1	-64.049	-0.248	-64.043	0.008	-0.248	-64.050	89.992
169	2	-63.918	-0.248	-63.912	0.008	-0.248	-63.918	89.992
169	3	20.796	-15.632	20.782	-0.014	20.796	-15.632	180.000
169	4	-131.999	-0.206	-131.986	0.018	-0.206	-131.999	89.992
169	5	-47.284	-15.590	-47.292	-0.004	-15.590	-47.284	90.008
169	6	-42.790	-15.593	-42.798	-0.005	-15.593	-42.790	90.011
169	7	-44.763	-15.592	-44.771	-0.005	-15.592	-44.763	90.010
169	8	-50.257	-15.589	-50.265	-0.004	-15.589	-50.257	90.007

ZMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
169	9	20.665	-15.632	20.650	-0.014	20.665	-15.632	180.000
170	1	-64.038	-0.233	-64.038	-0.003	-0.233	-64.038	90.003
	2	-63.907	-0.233	-63.907	-0.003	-0.233	-63.907	90.003
	3	20.814	-15.519	20.807	-0.007	20.814	-15.519	180.000
170	4	-131.991	-0.233	-131.990	-0.001	-0.233	-131.991	90.000
170	5	-47.269	-15.518	-47.275	-0.005	-15.518	-47.269	90.009
170	6	-42.774	-15.518	-42.780	-0.005	-15.518	-42.774	90.011
170	7	-44.748	-15.518	-44.754	-0.005	-15.518	-44.748	90.010
170	8	-50.242	-15.518	-50.248	-0.005	-15.518	-50.242	90.008
170	9	20.683	-15.519	20.676	-0.007	20.683	-15.519	180.000
171	1	-64.009	-0.116	-64.008	-0.003	-0.116	-64.009	90.003
171	2	-63.877	-0.116	-63.876	-0.003	-0.116	-63.877	90.003
171	3	20.837	-15.399	20.838	-0.008	20.837	-15.399	180.000
171	4	-131.960	-0.117	-131.959	-0.001	-0.117	-131.960	90.001
171	5	-47.245	-15.400	-47.244	-0.006	-15.400	-47.245	90.012
171	6	-42.751	-15.400	-42.749	-0.006	-15.400	-42.751	90.014
171	7	-44.724	-15.400	-44.723	-0.006	-15.400	-44.724	90.013
171	8	-50.218	-15.400	-50.217	-0.006	-15.400	-50.218	90.011
171	9	20.706	-15.399	20.706	-0.008	20.706	-15.399	180.000
172	1	-64.000	-0.061	-63.995	-0.006	-0.061	-64.000	90.005
172	2	-63.869	-0.061	-63.864	-0.006	-0.061	-63.869	90.005
172	3	20.846	-15.325	20.851	-0.020	20.846	-15.325	179.967
172	4	-131.958	-0.065	-131.948	-0.012	-0.065	-131.958	90.005
172	5	-47.243	-15.329	-47.233	-0.027	-15.329	-47.243	90.049
172	6	-42.748	-15.328	-42.738	-0.027	-15.328	-42.748	90.056
172	7	-44.722	-15.328	-44.712	-0.027	-15.328	-44.722	90.053
172	8	-50.217	-15.329	-50.207	-0.027	-15.329	-50.217	90.045
172	9	20.714	-15.325	20.719	-0.020	20.714	-15.325	179.966
173	1	-64.119	-0.266	-64.061	0.008	-0.266	-64.119	89.992
173	2	-63.987	-0.266	-63.929	0.008	-0.266	-63.987	89.992
173	3	20.908	-15.603	20.806	-0.014	20.908	-15.603	180.000
173	4	-132.144	-0.243	-132.023	0.018	-0.243	-132.144	89.992
173	5	-47.248	-15.581	-47.287	-0.004	-15.581	-47.248	90.008
173	6	-42.749	-15.582	-42.791	-0.005	-15.582	-42.749	90.011
173	7	-44.725	-15.582	-44.766	-0.005	-15.582	-44.725	90.010
173	8	-50.225	-15.580	-50.261	-0.004	-15.580	-50.225	90.007
173	9	20.776	-15.603	20.674	-0.014	20.776	-15.603	180.000
174	1	-64.033	-0.078	-64.006	0.088	-0.078	-64.033	89.920
174	2	-63.901	-0.078	-63.874	0.088	-0.078	-63.901	89.920
174	3	20.827	-15.451	20.826	-0.189	20.828	-15.452	179.700
174	4	-131.980	0.083	-131.924	0.180	0.083	-131.980	89.921
174	5	-47.251	-15.289	-47.223	-0.097	-15.289	-47.251	90.175
174	6	-42.756	-15.300	-42.731	-0.103	-15.300	-42.756	90.216
174	7	-44.730	-15.295	-44.703	-0.101	-15.295	-44.730	90.196
174	8	-50.224	-15.282	-50.195	-0.093	-15.282	-50.224	90.153
174	9	20.695	-15.451	20.695	-0.189	20.696	-15.452	179.699
175	1	-63.996	0.068	-63.969	0.130	0.068	-63.996	89.883
175	2	-63.864	0.068	-63.837	0.129	0.068	-63.865	89.883
	3	20.829	-15.418	20.828	-0.192	20.830	-15.419	179.695

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E284

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
175	4	-131.935	0.262	-131.879	0.265	0.263	-131.935	89.884
175	5	-47.240	-15.223	-47.212	-0.056	-15.223	-47.240	90.101
175	6	-42.747	-15.236	-42.720	-0.065	-15.236	-42.747	90.136
[illegible]	7	-44.720	-15.231	-44.693	-0.061	-15.231	-44.720	90.119
[illegible]	8	-50.213	-15.215	-50.184	-0.050	-15.215	-50.213	90.082
175	9	20.697	-15.418	20.697	-0.192	20.698	-15.419	179.695
176	1	-63.948	-0.048	-63.982	0.019	-0.048	-63.948	89.983
176	2	-63.817	-0.048	-63.851	0.019	-0.048	-63.817	89.983
176	3	20.731	-15.355	20.822	-0.009	20.731	-15.355	180.000
176	4	-131.849	-0.037	-131.921	0.039	-0.037	-131.849	89.982
176	5	-47.300	-15.344	-47.247	0.011	-15.344	-47.300	89.979
176	6	-42.809	-15.345	-42.754	0.010	-15.345	-42.809	89.978
176	7	-44.781	-15.344	-44.727	0.010	-15.344	-44.781	89.978
176	8	-50.271	-15.344	-50.220	0.012	-15.344	-50.271	89.979
176	9	20.599	-15.355	20.690	-0.008	20.600	-15.355	180.000
177	1	-64.312	-1.253	-64.299	-0.199	-1.252	-64.313	90.181
177	2	-64.180	-1.251	-64.167	-0.199	-1.250	-64.181	90.181
177	3	21.090	-11.892	21.582	0.807	21.110	-11.912	1.400
177	4	-132.544	-2.352	-132.529	-0.427	-2.350	-132.545	90.188
177	5	-47.273	-12.993	-46.779	0.578	-12.984	-47.283	89.033
177	6	-42.760	-12.921	-42.265	0.593	-12.909	-42.772	88.861
177	7	-44.742	-12.953	-44.247	0.586	-12.942	-44.753	88.943
177	8	-50.259	-13.042	-49.764	0.568	-13.033	-50.267	89.125
177	9	20.958	-11.894	21.450	0.806	20.978	-11.914	1.405
178	1	-64.198	-0.120	-64.049	-0.038	-0.120	-64.198	90.034
[illegible]	2	-64.066	-0.120	-63.917	-0.038	-0.120	-64.066	90.034
[illegible]	3	20.836	-15.448	20.825	0.141	20.836	-15.449	0.224
[illegible]	4	-132.318	-0.002	-132.012	-0.077	-0.002	-132.318	90.033
178	5	-47.416	-15.330	-47.269	0.103	-15.330	-47.416	89.816
178	6	-42.910	-15.338	-42.774	0.105	-15.338	-42.910	89.780
178	7	-44.889	-15.335	-44.748	0.104	-15.334	-44.889	89.797
178	8	-50.396	-15.325	-50.243	0.101	-15.325	-50.397	89.834
178	9	20.704	-15.448	20.693	0.141	20.704	-15.449	0.224
179	1	-64.161	0.027	-64.012	0.003	0.027	-64.161	89.997
179	2	-64.029	0.026	-63.880	0.003	0.026	-64.029	89.997
179	3	20.845	-15.416	20.834	0.139	20.845	-15.416	0.220
179	4	-132.274	0.177	-131.967	0.008	0.177	-132.274	89.996
179	5	-47.399	-15.265	-47.252	0.144	-15.264	-47.400	89.742
179	6	-42.893	-15.275	-42.757	0.143	-15.274	-42.894	89.701
179	7	-44.872	-15.271	-44.731	0.144	-15.270	-44.873	89.721
179	8	-50.379	-15.259	-50.226	0.144	-15.258	-50.380	89.764
179	9	20.713	-15.416	20.702	0.139	20.713	-15.416	0.221
180	1	-63.427	-0.471	-63.959	1.307	-0.443	-63.454	88.811
180	2	-63.297	-0.470	-63.828	1.304	-0.443	-63.324	88.811
180	3	20.529	-15.688	20.713	-0.270	20.531	-15.690	179.572
180	4	-130.777	-0.896	-131.871	2.684	-0.840	-130.833	88.816
180	5	-46.951	-16.115	-47.330	1.109	-16.075	-46.991	87.942
180	6	-42.496	-16.086	-42.838	1.018	-16.047	-42.535	87.795
180	7	-44.453	-16.099	-44.811	1.058	-16.059	-44.492	87.865
[illegible]	8	-49.898	-16.133	-50.302	1.169	-16.093	-49.939	88.018

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E285

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
180	9	20.398	-15.689	20.581	-0.267	20.400	-15.691	179.575
181	1	-62.722	-0.853	-63.891	-0.199	-0.852	-62.723	90.185
181	2	-62.594	-0.852	-63.760	-0.199	-0.851	-62.594	90.185
181	3	14.676	-13.507	19.927	0.807	14.699	-13.530	1.639
181	4	-129.138	-1.495	-131.655	-0.427	-1.494	-129.140	90.192
181	5	-51.867	-14.150	-47.968	0.578	-14.141	-51.876	89.121
181	6	-47.474	-14.108	-43.486	0.593	-14.097	-47.485	88.981
181	7	-49.404	-14.126	-45.454	0.586	-14.117	-49.413	89.047
181	8	-54.774	-14.178	-50.933	0.568	-14.170	-54.782	89.198
181	9	14.547	-13.508	19.795	0.806	14.571	-13.531	1.645
182	1	-68.930	-27.891	-70.527	-1.872	-27.806	-69.015	92.606
182	2	-68.788	-27.834	-70.382	-1.867	-27.749	-68.873	92.605
182	3	25.405	10.454	26.860	10.521	30.837	5.023	27.303
182	4	-142.115	-57.509	-145.424	-4.084	-57.312	-142.312	92.758
182	5	-47.920	-19.220	-48.181	8.304	-16.990	-50.150	74.970
182	6	-43.085	-17.261	-43.229	8.451	-14.741	-45.605	73.397
182	7	-45.205	-18.121	-45.402	8.386	-15.735	-47.592	74.114
182	8	-51.123	-20.516	-51.458	8.207	-18.454	-53.185	75.897
182	9	25.263	10.397	26.715	10.517	30.709	4.951	27.374
183	1	-61.962	-0.027	-63.554	-1.846	0.027	-62.017	91.706
183	2	-61.835	-0.028	-63.424	-1.841	0.026	-61.890	91.705
183	3	18.331	-17.907	19.846	10.719	21.265	-20.841	15.304
183	4	-127.708	0.122	-131.007	-4.036	0.249	-127.836	91.806
183	5	-47.542	-17.757	-47.736	8.525	-15.489	-49.809	75.105
183	6	-43.193	-17.767	-43.274	8.670	-15.092	-45.868	72.853
183	7	-45.103	-17.762	-45.234	8.606	-15.279	-47.586	73.903
183	8	-50.419	-17.750	-50.688	8.429	-15.703	-52.465	76.351
183	9	18.204	-17.907	19.715	10.715	21.144	-20.847	15.344
184	1	-62.505	-0.237	-63.712	-1.057	-0.219	-62.523	90.972
184	2	-62.376	-0.236	-63.581	-1.055	-0.218	-62.394	90.972
184	3	24.914	-14.586	21.835	1.361	24.961	-14.633	1.972
184	4	-128.989	-0.442	-131.391	-2.197	-0.405	-129.026	90.979
184	5	-41.697	-14.792	-45.974	0.219	-14.790	-41.699	89.533
184	6	-37.299	-14.779	-41.498	0.294	-14.775	-37.303	89.251
184	7	-39.231	-14.785	-43.463	0.261	-14.782	-39.234	89.387
184	8	-44.606	-14.801	-48.935	0.169	-14.800	-44.607	89.675
184	9	24.786	-14.587	21.704	1.359	24.833	-14.634	1.975
185	1	-61.822	-0.123	-63.513	-1.462	-0.088	-61.857	91.357
185	2	-61.695	-0.123	-63.383	-1.460	-0.088	-61.730	91.357
185	3	26.269	-5.211	23.852	-20.421	36.313	-15.254	153.812
185	4	-127.562	-0.191	-130.972	-2.523	-0.141	-127.612	91.134
185	5	-39.597	-5.279	-43.736	-21.484	5.057	-49.934	115.693
185	6	-35.249	-5.274	-39.274	-21.414	5.876	-46.400	117.507
185	7	-37.159	-5.276	-41.233	-21.445	5.503	-47.939	116.688
185	8	-42.474	-5.282	-46.687	-21.531	4.571	-52.328	114.592
185	9	26.142	-5.211	23.722	-20.424	36.212	-15.281	153.754
186	1	-69.055	-27.917	-70.527	1.584	-27.856	-69.115	87.797
186	2	-68.913	-27.859	-70.382	1.580	-27.799	-68.974	87.798
186	3	24.641	10.256	26.638	-13.203	32.485	2.413	149.289

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ENT	LOAD COMB	R-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	RZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
186	4	-142.358	-57.557	-145.424	3.558	-57.408	-142.507	87.601
186	5	-48.802	-19.441	-48.403	-11.226	-15.640	-52.603	108.703
186	6	-43.955	-17.480	-43.451	-11.357	-13.276	-48.159	110.314
[illegible]	7	-46.083	-18.341	-45.625	-11.299	-14.321	-50.103	109.584
[illegible]	8	-52.010	-20.738	-51.680	-11.140	-17.175	-55.572	107.734
186	9	24.499	10.199	26.493	-13.200	32.361	2.337	149.222
187	1	-62.088	-0.053	-63.559	1.610	-0.011	-62.130	88.513
187	2	-61.961	-0.053	-63.428	1.606	-0.012	-62.003	88.514
187	3	17.566	-18.105	19.620	-13.006	21.805	-22.344	161.949
187	4	-127.950	0.073	-131.011	3.606	0.175	-128.051	88.387
187	5	-48.422	-17.977	-47.962	-11.006	-14.415	-51.984	107.934
187	6	-44.065	-17.985	-43.500	-11.138	-13.876	-48.175	110.251
187	7	-45.979	-17.982	-45.460	-11.080	-14.127	-49.833	109.181
187	8	-51.304	-17.971	-50.914	-10.919	-14.713	-54.562	106.615
187	9	17.438	-18.105	19.489	-13.002	21.687	-22.353	161.905
188	1	-63.357	0.100	-63.775	-0.436	0.103	-63.360	90.394
188	2	-63.227	0.100	-63.644	-0.436	0.103	-63.230	90.395
188	3	15.029	-10.626	20.598	-19.241	25.326	-20.923	151.845
188	4	-130.506	0.157	-131.491	-0.449	0.159	-130.507	90.197
188	5	-52.249	-10.569	-47.248	-19.254	-3.036	-59.782	111.367
188	6	-47.807	-10.572	-42.769	-19.253	-2.407	-55.972	112.981
188	7	-49.758	-10.571	-44.736	-19.253	-2.694	-57.634	112.249
188	8	-55.187	-10.566	-50.211	-19.254	-3.406	-62.347	110.397
188	9	14.899	-10.626	20.467	-19.241	25.225	-20.952	151.778
189	1	-63.752	-0.602	-63.979	1.917	-0.544	-63.810	88.262
[illegible]	2	-63.621	-0.601	-63.848	1.914	-0.543	-63.679	88.262
[illegible]	3	28.385	-4.672	24.436	19.600	37.496	-13.783	24.930
[illegible]	4	-131.566	-1.185	-131.939	3.474	-1.093	-131.659	88.474
189	5	-39.559	-5.256	-43.655	21.161	4.831	-49.647	64.513
189	6	-35.074	-5.217	-39.160	21.058	5.666	-45.958	62.666
189	7	-37.044	-5.234	-41.134	21.103	5.286	-47.564	63.502
189	8	-42.527	-5.281	-46.629	21.229	4.335	-52.144	65.629
189	9	28.254	-4.673	24.304	19.603	37.390	-13.809	24.988
190	1	-64.405	-0.707	-64.132	0.920	-0.694	-64.418	89.172
190	2	-64.273	-0.707	-64.000	0.918	-0.694	-64.286	89.172
190	3	19.108	-22.363	19.040	10.298	21.524	-24.779	13.205
190	4	-132.703	-1.046	-132.141	1.642	-1.026	-132.723	89.285
190	5	-49.321	-22.703	-49.100	11.021	-18.732	-53.292	70.186
190	6	-44.804	-22.680	-44.602	10.973	-18.161	-49.323	67.615
190	7	-46.787	-22.690	-46.577	10.994	-18.428	-51.049	68.809
190	8	-52.309	-22.717	-52.076	11.052	-19.045	-55.982	71.620
190	9	18.976	-22.364	18.909	10.299	21.400	-24.788	13.243
191	1	-64.276	-0.182	-64.008	0.866	-0.171	-64.288	89.226
191	2	-64.144	-0.182	-63.876	0.864	-0.171	-64.156	89.225
191	3	20.223	-17.846	20.102	10.142	22.757	-20.379	14.024
191	4	-132.494	-0.196	-131.942	1.534	-0.178	-132.512	89.335
191	5	-48.126	-17.859	-47.963	10.812	-14.394	-51.591	72.228
191	6	-43.613	-17.858	-43.470	10.767	-13.950	-47.522	70.049
191	7	-45.595	-17.859	-45.443	10.787	-14.157	-49.297	71.061
[illegible]	8	-51.111	-17.860	-50.936	10.841	-14.638	-54.333	73.446

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ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
191	9	20.091	-17.846	19.970	10.143	22.633	-20.387	14.067
192	1	-63.888	-0.031	-63.904	0.299	-0.030	-63.890	89.731
192	2	-63.757	-0.031	-63.772	0.299	-0.029	-63.759	89.730
192	3	15.908	-10.426	20.727	19.170	25.998	-20.516	27.758
192	4	-131.614	-0.117	-131.758	0.170	-0.116	-131.614	89.925
192	5	-51.948	-10.512	-47.258	19.041	-3.091	-59.369	68.707
192	6	-47.468	-10.506	-42.770	19.049	-2.446	-55.529	67.066
192	7	-49.435	-10.509	-44.741	19.046	-2.740	-57.204	67.810
192	8	-54.911	-10.516	-50.227	19.035	-3.471	-61.955	69.692
192	9	15.777	-10.426	20.595	19.170	25.895	-20.544	27.824
193	1	-64.518	-0.167	-64.051	-0.051	-0.167	-64.518	90.045
193	2	-64.386	-0.167	-63.919	-0.051	-0.167	-64.386	90.045
193	3	16.870	-14.407	20.198	-0.492	16.878	-14.414	179.098
193	4	-132.869	-0.068	-131.989	-0.093	-0.068	-132.869	90.040
193	5	-51.612	-14.308	-47.871	-0.534	-14.300	-51.620	90.821
193	6	-47.091	-14.314	-43.377	-0.531	-14.306	-47.100	90.929
193	7	-49.077	-14.312	-45.351	-0.533	-14.303	-49.085	90.878
193	8	-54.603	-14.304	-50.844	-0.536	-14.297	-54.610	90.762
193	9	16.738	-14.406	20.066	-0.492	16.745	-14.414	179.094
194	1	-64.187	-0.653	-64.081	-0.718	-0.645	-64.195	90.647
194	2	-64.055	-0.653	-63.950	-0.717	-0.645	-64.063	90.648
194	3	19.729	-22.207	19.202	-7.325	20.971	-23.450	170.371
194	4	-132.270	-0.939	-132.042	-1.296	-0.926	-132.283	90.565
194	5	-48.486	-22.493	-48.889	-7.905	-20.278	-50.701	105.656
194	6	-43.982	-22.474	-44.394	-7.867	-19.904	-46.553	106.094
194	7	-45.960	-22.483	-46.368	-7.884	-20.081	-48.362	106.943
194	8	-51.465	-22.506	-51.863	-7.930	-20.476	-53.495	104.355
194	9	19.597	-22.208	19.070	-7.326	20.844	-23.455	170.341
195	1	-64.056	-0.128	-63.956	-0.772	-0.119	-64.066	90.692
195	2	-63.925	-0.128	-63.825	-0.770	-0.119	-63.934	90.692
195	3	20.845	-17.690	20.257	-7.481	22.247	-19.091	169.389
195	4	-132.059	-0.089	-131.840	-1.403	-0.074	-132.074	90.609
195	5	-47.288	-17.650	-47.757	-8.114	-15.574	-49.364	104.352
195	6	-42.790	-17.653	-43.267	-8.072	-15.283	-45.159	106.356
195	7	-44.765	-17.652	-45.239	-8.091	-15.421	-46.996	105.415
195	8	-50.264	-17.648	-50.727	-8.142	-15.729	-52.183	103.266
195	9	20.713	-17.689	20.126	-7.482	22.120	-19.096	169.354
196	1	-63.558	-0.007	-63.834	-0.023	-0.007	-63.558	90.021
196	2	-63.427	-0.008	-63.702	-0.023	-0.008	-63.427	90.021
196	3	26.100	-14.869	21.880	-0.051	26.100	-14.869	179.928
196	4	-131.173	0.033	-131.640	-0.047	0.033	-131.173	90.020
196	5	-41.646	-14.828	-46.057	-0.075	-14.827	-41.646	90.161
196	6	-37.174	-14.830	-41.572	-0.073	-14.830	-37.174	90.189
196	7	-39.137	-14.829	-43.542	-0.074	-14.829	-39.138	90.175
196	8	-44.604	-14.826	-49.024	-0.076	-14.826	-44.605	90.147
196	9	25.969	-14.869	21.749	-0.051	25.969	-14.869	179.928
197	1	-64.104	-0.065	-63.952	-0.051	-0.064	-64.104	90.046
197	2	-63.972	-0.065	-63.821	-0.051	-0.065	-63.972	90.046
197	3	20.833	-13.422	21.157	-0.492	20.840	-13.429	179.177

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
197	4	-132.112	0.118	-131.308	-0.093	0.118	-132.112	90.040
197	5	-47.306	-13.238	-46.829	-0.534	-13.230	-47.314	90.899
[illegible]	6	-42.808	-13.250	-42.341	-0.531	-13.241	-42.817	91.030
[illegible]	7	-44.783	-13.245	-44.312	-0.533	-13.236	-44.792	90.968
[illegible]	8	-50.282	-13.230	-49.798	-0.536	-13.223	-50.290	90.829
197	9	20.701	-13.421	21.026	-0.492	20.708	-13.429	179.173
198	1	-64.104	-0.220	-63.984	-0.004	-0.220	-64.104	90.003
198	2	-63.973	-0.220	-63.853	-0.004	-0.220	-63.973	90.003
198	3	20.728	-15.339	20.750	-0.087	20.728	-15.339	179.861
198	4	-132.123	-0.211	-131.878	-0.011	-0.211	-132.123	90.005
198	5	-47.422	-15.329	-47.274	-0.094	-15.329	-47.422	90.169
198	6	-42.923	-15.329	-42.784	-0.094	-15.329	-42.923	90.195
198	7	-44.899	-15.329	-44.756	-0.094	-15.329	-44.899	90.183
198	8	-50.398	-15.328	-50.245	-0.094	-15.328	-50.399	90.155
198	9	20.596	-15.339	20.619	-0.087	20.596	-15.339	179.861
199	1	-64.076	-0.107	-63.956	-0.008	-0.107	-64.076	90.007
199	2	-63.944	-0.107	-63.825	-0.008	-0.107	-63.944	90.007
199	3	20.749	-15.263	20.771	-0.127	20.750	-15.263	179.796
199	4	-132.096	-0.101	-131.852	-0.018	-0.101	-132.096	90.008
199	5	-47.402	-15.257	-47.255	-0.138	-15.256	-47.402	90.247
199	6	-42.903	-15.257	-42.764	-0.137	-15.257	-42.904	90.285
199	7	-44.879	-15.257	-44.736	-0.138	-15.257	-44.879	90.267
199	8	-50.378	-15.257	-50.226	-0.138	-15.256	-50.379	90.226
199	9	20.618	-15.263	20.640	-0.127	20.618	-15.263	179.795
200	1	-64.025	-0.124	-63.949	-0.092	-0.124	-64.025	90.083
[illegible]	2	-63.894	-0.124	-63.817	-0.092	-0.124	-63.894	90.083
[illegible]	3	21.237	-16.077	20.702	-1.148	21.273	-16.113	178.238
200	4	-132.019	-0.177	-131.850	-0.162	-0.176	-132.019	90.070
200	5	-46.887	-16.130	-47.329	-1.219	-16.082	-46.936	92.266
200	6	-42.390	-16.127	-42.838	-1.214	-16.070	-42.446	92.642
200	7	-44.365	-16.128	-44.810	-1.216	-16.076	-44.417	92.462
200	8	-49.863	-16.132	-50.300	-1.222	-16.088	-49.907	92.072
200	9	21.106	-16.077	20.571	-1.149	21.141	-16.113	178.231
201	1	-64.099	-0.296	-64.001	-0.001	-0.296	-64.099	90.001
201	2	-63.968	-0.295	-63.869	-0.001	-0.295	-63.968	90.001
201	3	20.885	-15.573	20.734	0.003	20.885	-15.573	0.000
201	4	-132.104	-0.305	-131.899	-0.003	-0.305	-132.104	90.001
201	5	-47.250	-15.582	-47.294	0.001	-15.582	-47.250	89.997
201	6	-42.752	-15.581	-42.804	0.001	-15.581	-42.752	89.996
201	7	-44.727	-15.582	-44.776	0.001	-15.582	-44.727	89.997
201	8	-50.225	-15.582	-50.265	0.001	-15.582	-50.225	89.997
201	9	20.754	-15.573	20.602	0.003	20.754	-15.573	0.000
202	1	-64.088	-0.217	-63.982	0.003	-0.217	-64.088	89.996
202	2	-63.956	-0.217	-63.851	0.003	-0.217	-63.956	89.996
202	3	20.890	-15.297	20.794	0.074	20.890	-15.297	0.117
202	4	-132.093	-0.204	-131.875	0.011	-0.204	-132.093	89.995
202	5	-47.246	-15.284	-47.229	0.081	-15.284	-47.246	89.853
202	6	-42.748	-15.285	-42.738	0.081	-15.285	-42.748	89.831
[illegible]	7	-44.723	-15.285	-44.711	0.081	-15.285	-44.723	89.841
[illegible]	8	-50.221	-15.284	-50.200	0.081	-15.284	-50.222	89.865

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MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
202	9	20.759	-15.297	20.663	0.074	20.759	-15.297	0.118
203	1	-64.059	-0.103	-63.954	-0.000	-0.103	-64.059	90.000
203	2	-63.928	-0.103	-63.822	-0.000	-0.103	-63.928	90.000
203	3	20.912	-15.222	20.809	0.033	20.912	-15.222	0.053
203	4	-132.066	-0.094	-131.848	0.004	-0.094	-132.066	89.998
203	5	-47.225	-15.213	-47.216	0.037	-15.213	-47.226	89.932
203	6	-42.727	-15.214	-42.725	0.037	-15.214	-42.727	89.922
203	7	-44.703	-15.214	-44.697	0.037	-15.214	-44.703	89.927
203	8	-50.201	-15.213	-50.187	0.037	-15.213	-50.201	89.938
203	9	20.780	-15.222	20.677	0.033	20.780	-15.222	0.053
204	1	-64.055	-0.054	-63.944	-0.007	-0.054	-64.055	90.007
204	2	-63.923	-0.054	-63.812	-0.007	-0.054	-63.923	90.007
204	3	20.860	-15.339	20.777	-0.013	20.860	-15.339	180.000
204	4	-132.071	-0.050	-131.842	-0.016	-0.050	-132.071	90.007
204	5	-47.287	-15.335	-47.251	-0.021	-15.335	-47.287	90.038
204	6	-42.788	-15.335	-42.761	-0.020	-15.335	-42.788	90.044
204	7	-44.763	-15.335	-44.733	-0.021	-15.335	-44.763	90.041
204	8	-50.263	-15.335	-50.222	-0.021	-15.335	-50.263	90.036
204	9	20.729	-15.339	20.645	-0.013	20.729	-15.339	180.000
205	1	-64.086	-0.292	-64.000	-0.001	-0.292	-64.086	90.001
205	2	-63.955	-0.292	-63.869	-0.001	-0.292	-63.955	90.001
205	3	20.857	-15.579	20.734	0.003	20.857	-15.579	0.000
205	4	-132.076	-0.298	-131.897	-0.003	-0.298	-132.076	90.001
205	5	-47.264	-15.585	-47.292	0.001	-15.585	-47.264	89.997
205	6	-42.767	-15.585	-42.802	0.001	-15.585	-42.767	89.996
205	7	-44.742	-15.585	-44.774	0.001	-15.585	-44.742	89.997
205	8	-50.239	-15.586	-50.263	0.001	-15.586	-50.239	89.997
205	9	20.725	-15.579	20.603	0.003	20.725	-15.579	0.000
206	1	-64.082	-0.177	-63.977	-0.028	-0.177	-64.082	90.026
206	2	-63.950	-0.177	-63.845	-0.028	-0.177	-63.950	90.026
206	3	20.868	-15.511	20.751	0.004	20.868	-15.511	0.000
206	4	-132.082	-0.117	-131.863	-0.064	-0.117	-132.082	90.028
206	5	-47.262	-15.452	-47.265	-0.031	-15.452	-47.262	90.056
206	6	-42.765	-15.456	-42.775	-0.028	-15.456	-42.765	90.060
206	7	-44.740	-15.454	-44.747	-0.029	-15.454	-44.740	90.058
206	8	-50.238	-15.449	-50.236	-0.032	-15.449	-50.238	90.054
206	9	20.736	-15.511	20.620	0.004	20.736	-15.511	0.000
207	1	-64.056	-0.077	-63.952	-0.020	-0.077	-64.056	90.018
207	2	-63.925	-0.077	-63.820	-0.019	-0.077	-63.925	90.018
207	3	20.901	-15.393	20.776	0.007	20.901	-15.393	0.000
207	4	-132.060	-0.036	-131.842	-0.046	-0.036	-132.060	90.020
207	5	-47.234	-15.353	-47.245	-0.018	-15.353	-47.234	90.034
207	6	-42.736	-15.356	-42.754	-0.017	-15.356	-42.736	90.036
207	7	-44.711	-15.355	-44.727	-0.017	-15.355	-44.711	90.035
207	8	-50.209	-15.351	-50.216	-0.020	-15.351	-50.210	90.033
207	9	20.769	-15.393	20.645	0.007	20.769	-15.393	0.000
208	1	-64.068	-0.058	-63.949	0.004	-0.058	-64.068	89.996
208	2	-63.937	-0.058	-63.817	0.004	-0.058	-63.937	89.996
208	3	20.903	-15.327	20.793	0.024	20.903	-15.327	0.038

F 290

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
208	4	-132.099	-0.058	-131.852	0.008	-0.058	-132.099	89.996
208	5	-47.259	-15.328	-47.241	0.028	-15.328	-47.259	89.948
208	6	-42.759	-15.328	-42.749	0.028	-15.328	-42.759	89.940
[illegible]	7	-44.735	-15.328	-44.722	0.028	-15.328	-44.735	89.944
[illegible]	8	-50.236	-15.328	-50.212	0.028	-15.328	-50.236	89.952
208	9	20.771	-15.327	20.661	0.024	20.771	-15.327	0.038
209	1	-64.108	0.566	-63.836	0.247	0.567	-64.109	89.780
209	2	-63.976	0.564	-63.705	0.247	0.565	-63.977	89.780
209	3	20.856	-15.549	20.738	-0.013	20.856	-15.549	180.000
209	4	-132.120	1.463	-131.561	0.507	1.465	-132.122	89.782
209	5	-47.287	-14.651	-47.116	0.247	-14.649	-47.288	89.566
209	6	-42.788	-14.711	-42.637	0.229	-14.710	-42.790	89.531
209	7	-44.764	-14.685	-44.604	0.237	-14.683	-44.766	89.548
209	8	-50.263	-14.610	-50.079	0.258	-14.609	-50.264	89.584
209	9	20.724	-15.548	20.607	-0.013	20.725	-15.548	180.000
210	1	-64.115	-0.185	-63.986	0.034	-0.185	-64.115	89.969
210	2	-63.984	-0.186	-63.855	0.034	-0.186	-63.984	89.969
210	3	20.856	-15.514	20.748	-0.005	20.856	-15.514	180.000
210	4	-132.150	-0.135	-131.883	0.076	-0.135	-132.150	89.967
210	5	-47.309	-15.464	-47.278	0.036	-15.464	-47.309	89.934
210	6	-42.809	-15.467	-42.788	0.033	-15.467	-42.809	89.929
210	7	-44.786	-15.465	-44.760	0.034	-15.465	-44.786	89.932
210	8	-50.286	-15.461	-50.249	0.038	-15.461	-50.286	89.937
210	9	20.724	-15.514	20.617	-0.005	20.724	-15.514	180.000
211	1	-64.091	-0.086	-63.962	0.043	-0.086	-64.091	89.961
[illegible]	2	-63.959	-0.086	-63.831	0.043	-0.086	-63.959	89.961
[illegible]	3	20.887	-15.396	20.780	-0.002	20.887	-15.396	180.000
[illegible]	4	-132.131	-0.055	-131.864	0.094	-0.055	-132.131	89.959
211	5	-47.284	-15.365	-47.253	0.048	-15.365	-47.284	89.913
211	6	-42.783	-15.367	-42.761	0.045	-15.367	-42.783	89.905
211	7	-44.760	-15.366	-44.734	0.046	-15.366	-44.760	89.909
211	8	-50.261	-15.364	-50.224	0.050	-15.364	-50.261	89.916
211	9	20.755	-15.396	20.648	-0.002	20.755	-15.396	180.000
212	1	-63.971	-0.219	-63.965	0.272	-0.218	-63.972	89.754
212	2	-63.840	-0.219	-63.833	0.272	-0.218	-63.841	89.754
212	3	20.916	-15.362	20.791	0.036	20.916	-15.362	0.058
212	4	-131.900	-0.389	-131.885	0.558	-0.386	-131.902	89.756
212	5	-47.143	-15.532	-47.260	0.322	-15.528	-47.146	89.415
212	6	-42.649	-15.520	-42.767	0.303	-15.517	-42.653	89.358
212	7	-44.623	-15.525	-44.740	0.312	-15.522	-44.626	89.385
212	8	-50.115	-15.539	-50.232	0.335	-15.536	-50.119	89.444
212	9	20.785	-15.362	20.659	0.037	20.785	-15.362	0.059
213	1	-66.077	0.071	-64.344	0.247	0.072	-66.078	89.785
213	2	-65.941	0.070	-64.212	0.247	0.071	-65.942	89.785
213	3	20.968	-15.522	20.773	-0.013	20.968	-15.522	180.000
213	4	-136.156	0.446	-132.603	0.507	0.448	-136.158	89.787
213	5	-49.246	-15.146	-47.617	0.247	-15.144	-49.248	89.585
213	6	-44.614	-15.171	-43.102	0.229	-15.169	-44.616	89.553
213	7	-46.644	-15.160	-45.085	0.237	-15.158	-46.646	89.568
[illegible]	8	-52.316	-15.129	-50.605	0.258	-15.127	-52.317	89.601

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E 291

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
213	9	20.832	-15.521	20.641	-0.013	20.832	-15.521	180.000
214	1	-63.552	-0.648	-63.979	4.441	-0.336	-63.864	85.980
214	2	-63.422	-0.647	-63.848	4.432	-0.336	-63.733	85.981
214	3	20.577	-15.994	20.595	-0.486	20.584	-16.001	179.237
214	4	-130.987	-1.071	-131.864	9.118	-0.434	-131.624	86.004
214	5	-46.987	-16.418	-47.419	4.198	-15.852	-47.553	82.319
214	6	-42.527	-16.393	-42.930	3.885	-15.827	-43.093	81.719
214	7	-44.486	-16.405	-44.902	4.021	-15.841	-45.050	82.308
214	8	-49.937	-16.434	-50.389	4.407	-15.864	-50.508	82.629
214	9	20.447	-15.995	20.464	-0.477	20.453	-16.001	179.249
215	1	-63.676	-1.156	-64.086	0.720	-1.147	-63.684	89.339
215	2	-63.545	-1.154	-63.954	0.719	-1.145	-63.553	89.339
215	3	20.794	-15.111	20.823	0.680	20.807	-15.124	1.085
215	4	-131.277	-2.259	-132.118	1.453	-2.243	-131.293	89.355
215	5	-46.937	-16.217	-47.341	1.414	-16.152	-47.002	87.369
215	6	-42.465	-16.146	-42.842	1.363	-16.076	-42.536	87.042
215	7	-44.429	-16.178	-44.818	1.384	-16.111	-44.497	87.201
215	8	-49.894	-16.262	-50.317	1.449	-16.200	-49.957	87.536
215	9	20.663	-15.113	20.691	0.681	20.676	-15.126	1.091
216	1	-62.979	0.029	-63.711	-0.021	0.029	-62.979	90.020
216	2	-62.849	0.029	-63.580	-0.021	0.029	-62.849	90.020
216	3	21.178	-15.297	20.856	0.028	21.178	-15.297	0.044
216	4	-129.872	0.119	-131.366	-0.045	0.120	-129.872	90.020
216	5	-45.844	-15.206	-46.929	0.004	-15.206	-45.844	89.991
216	6	-41.422	-15.212	-42.454	0.005	-15.212	-41.422	89.987
216	7	-43.364	-15.209	-44.420	0.005	-15.209	-43.364	89.989
216	8	-48.770	-15.202	-49.889	0.003	-15.202	-48.770	89.993
216	9	21.048	-15.297	20.725	0.028	21.048	-15.297	0.044
217	1	-51.763	-3.342	-62.111	11.872	-0.588	-54.517	76.938
217	2	-51.656	-3.336	-61.983	11.847	-0.588	-54.404	76.939
217	3	16.177	-14.633	19.954	-3.792	16.637	-15.092	173.085
217	4	-106.627	-6.453	-127.965	24.441	-0.808	-112.272	76.994
217	5	-38.793	-17.750	-46.028	8.802	-14.553	-41.990	70.042
217	6	-35.150	-17.536	-41.668	7.947	-14.480	-38.206	68.969
217	7	-36.743	-17.626	-43.580	8.311	-14.518	-39.852	69.495
217	8	-41.211	-17.896	-48.915	9.380	-14.590	-44.517	70.589
217	9	16.070	-14.639	19.826	-3.766	16.525	-15.094	173.108
218	1	-51.638	-2.886	-61.946	6.887	-1.932	-52.593	82.111
218	2	-51.532	-2.881	-61.819	6.872	-1.929	-52.484	82.112
218	3	16.189	-14.581	19.965	-2.377	16.371	-14.764	175.608
218	4	-106.403	-5.642	-127.660	14.180	-3.685	-108.361	82.140
218	5	-38.682	-17.343	-45.875	4.931	-16.259	-39.766	77.597
218	6	-35.047	-17.162	-41.526	4.427	-16.126	-36.083	76.829
218	7	-36.638	-17.242	-43.435	4.638	-16.190	-37.690	77.219
218	8	-41.092	-17.462	-48.753	5.276	-16.337	-42.217	77.967
218	9	16.082	-14.587	19.838	-2.361	16.263	-14.767	175.622
219	1	-50.604	2.601	-60.681	6.582	3.403	-51.406	83.051
219	2	-50.500	2.595	-60.557	6.568	3.395	-51.300	83.051
219	3	16.516	-17.014	19.567	-3.155	16.810	-17.308	174.670

E292

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
219	4	-104.314	5.622	-125.071	13.594	7.278	-105.971	83.054
219	5	-37.298	-13.987	-44.946	3.870	-13.361	-37.924	80.814
219	6	-33.749	-14.190	-40.688	3.403	-13.615	-34.325	80.405
[illegible]	7	-35.310	-14.103	-42.559	3.607	-13.506	-35.906	80.606
[illegible]	8	-39.643	-13.851	-47.762	4.181	-13.190	-40.304	81.017
[illegible]	9	16.412	-17.008	19.443	-3.142	16.705	-17.301	174.675
220	1	-50.727	2.093	-60.788	2.861	2.247	-50.881	86.908
220	2	-50.622	2.088	-60.663	2.854	2.242	-50.777	86.908
220	3	16.736	-16.131	19.788	-1.988	16.856	-16.251	176.550
220	4	-104.603	4.433	-125.325	5.929	4.755	-104.925	86.896
220	5	-37.243	-13.786	-44.874	1.086	-13.736	-37.293	87.355
220	6	-33.684	-13.944	-40.607	0.880	-13.905	-33.723	87.450
220	7	-35.249	-13.876	-42.481	0.969	-13.832	-35.293	87.407
220	8	-39.596	-13.679	-47.696	1.222	-13.622	-39.653	87.304
220	9	16.632	-16.126	19.663	-1.982	16.752	-16.246	176.549
221	1	-51.609	-1.794	-61.684	2.461	-1.673	-51.731	87.178
221	2	-51.504	-1.790	-61.557	2.455	-1.669	-51.625	87.179
221	3	17.919	-14.699	20.296	-0.846	17.941	-14.721	178.514
221	4	-106.467	-3.635	-127.192	5.063	-3.387	-106.716	87.187
221	5	-37.043	-16.544	-45.338	1.761	-16.394	-37.193	85.124
221	6	-33.432	-16.414	-41.007	1.569	-16.270	-33.576	84.775
221	7	-35.026	-16.467	-42.910	1.644	-16.322	-35.171	84.976
221	8	-39.422	-16.636	-48.202	1.899	-16.479	-39.579	85.266
221	9	17.814	-14.703	20.170	-0.840	17.836	-14.725	178.520
222	1	-34.183	-3.133	-58.324	8.972	-0.727	-36.589	74.986
222	2	-34.111	-3.121	-58.203	8.953	-0.720	-36.512	74.989
[illegible]	3	11.093	-15.149	18.733	-3.053	11.446	-15.502	173.428
[illegible]	4	-70.386	-5.879	-120.131	18.466	-0.966	-75.298	75.104
222	5	-25.181	-17.906	-43.193	6.448	-14.140	-28.948	59.713
222	6	-22.756	-17.590	-39.071	5.802	-13.821	-26.525	56.997
222	7	-23.807	-17.665	-40.866	6.078	-13.926	-27.546	58.401
222	8	-26.803	-18.191	-45.939	6.885	-14.375	-30.618	61.010
222	9	11.021	-15.161	18.612	-3.044	11.370	-15.510	173.454
223	1	-34.105	-2.859	-58.212	6.923	-1.394	-35.570	78.049
223	2	-34.034	-2.849	-58.091	6.909	-1.386	-35.496	78.050
223	3	11.111	-15.080	18.755	-2.460	11.340	-15.309	174.680
223	4	-70.256	-5.432	-119.929	14.245	-2.440	-73.248	78.137
223	5	-25.110	-17.663	-43.082	4.876	-15.252	-27.522	63.683
223	6	-22.696	-17.391	-38.974	4.396	-14.909	-25.178	60.551
223	7	-23.746	-17.462	-40.766	4.609	-15.026	-26.182	62.139
223	8	-26.720	-17.900	-45.814	5.190	-15.499	-29.121	65.174
223	9	11.040	-15.090	18.634	-2.446	11.267	-15.317	174.698
224	1	-36.963	0.392	-58.231	10.770	3.275	-39.846	75.015
224	2	-36.886	0.391	-58.111	10.749	3.268	-39.764	75.014
224	3	11.985	-15.692	18.846	-3.571	12.438	-16.146	172.765
224	4	-76.166	1.234	-119.980	22.193	7.146	-82.078	75.083
224	5	-27.294	-14.849	-43.021	7.873	-11.036	-31.107	64.160
224	6	-24.692	-14.898	-38.934	7.122	-11.151	-28.439	62.254
224	7	-25.831	-14.873	-40.727	7.455	-11.100	-29.604	63.156
[illegible]	8	-29.020	-14.820	-45.727	8.366	-10.947	-32.893	65.159

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E293

INT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
224	9	11.909	-15.691	18.727	-3.549	12.358	-16.140	172.788
225	1	-36.838	0.849	-58.066	5.785	1.717	-37.707	81.466
225	2	-36.762	0.846	-57.947	5.774	1.713	-37.629	81.465
225	3	11.997	-15.642	18.858	-2.155	12.164	-15.809	175.567
225	4	-75.942	2.045	-119.673	11.932	3.830	-77.727	81.492
225	5	-27.182	-14.443	-42.868	4.002	-13.290	-28.335	73.926
225	6	-24.590	-14.525	-38.793	3.603	-13.368	-25.747	72.197
225	7	-25.725	-14.490	-40.581	3.782	-13.336	-26.879	73.023
225	8	-28.900	-14.387	-45.564	4.263	-13.228	-30.060	74.783
225	9	11.921	-15.639	18.738	-2.144	12.087	-15.805	175.578
226	1	-38.544	-1.416	-58.736	4.138	-0.961	-39.000	83.716
226	2	-38.465	-1.413	-58.615	4.129	-0.958	-38.920	83.717
226	3	12.544	-15.063	19.051	-1.605	12.637	-15.156	176.684
226	4	-79.479	-2.679	-121.069	8.522	-1.745	-80.413	83.743
226	5	-28.468	-16.330	-43.402	2.788	-15.720	-29.078	77.663
226	6	-25.765	-16.219	-39.274	2.488	-15.609	-26.374	76.233
226	7	-26.954	-16.254	-41.085	2.615	-15.649	-27.559	76.974
226	8	-30.254	-16.419	-46.135	2.992	-15.799	-30.874	78.304
226	9	12.465	-15.067	18.930	-1.595	12.558	-15.159	176.693
227	1	-38.512	-1.297	-58.695	1.375	-1.246	-38.563	87.885
227	2	-38.433	-1.295	-58.575	1.371	-1.244	-38.484	87.888
227	3	12.567	-14.983	19.084	-0.604	12.580	-14.996	178.744
227	4	-79.442	-2.550	-121.015	2.841	-2.445	-79.547	87.886
227	5	-28.440	-16.238	-43.355	0.866	-16.177	-28.502	85.959
227	6	-25.746	-16.161	-39.238	0.732	-16.105	-25.802	85.654
227	7	-26.935	-16.197	-41.048	0.773	-16.142	-26.991	85.898
227	8	-30.215	-16.285	-46.077	0.975	-16.217	-30.284	86.015
227	9	12.488	-14.985	18.963	-0.599	12.501	-14.998	178.751
228	1	-38.610	1.488	-58.264	1.924	1.580	-38.702	87.258
228	2	-38.533	1.485	-58.145	1.921	1.577	-38.625	87.258
228	3	12.692	-16.016	18.944	-0.910	12.721	-16.045	178.185
228	4	-79.660	3.135	-120.141	3.981	3.326	-79.851	87.253
228	5	-28.433	-14.366	-43.051	1.149	-14.273	-28.527	85.358
228	6	-25.769	-14.475	-38.968	1.022	-14.383	-25.861	84.868
228	7	-26.963	-14.427	-40.767	1.082	-14.334	-27.056	85.100
228	8	-30.167	-14.295	-45.746	1.228	-14.201	-30.262	85.599
228	9	12.615	-16.013	18.825	-0.907	12.644	-16.042	178.187
229	1	-26.414	-3.274	-56.414	7.187	-1.223	-28.465	74.075
229	2	-26.365	-3.242	-56.294	7.178	-1.194	-28.412	74.081
229	3	9.033	-15.060	18.205	-2.874	9.371	-15.398	173.289
229	4	-54.328	-6.150	-116.179	14.754	-1.991	-58.487	74.256
229	5	-18.929	-17.968	-41.679	4.701	-13.723	-23.174	47.917
229	6	-17.168	-17.286	-37.646	4.310	-12.916	-21.538	44.608
229	7	-17.982	-17.354	-39.379	4.534	-13.123	-22.213	46.981
229	8	-20.046	-18.693	-44.392	4.897	-14.426	-24.314	48.932
229	9	8.984	-15.092	18.085	-2.865	9.320	-15.429	173.304
230	1	-26.338	-2.996	-56.309	5.981	-1.553	-27.781	76.432
230	2	-26.289	-2.967	-56.190	5.980	-1.523	-27.733	76.425
230	3	9.022	-15.104	18.191	-2.438	9.267	-15.348	174.286

E294

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
230	4	-54.197	-5.682	-115.991	12.236	-2.771	-57.108	76.615
230	5	-18.884	-17.820	-41.609	3.817	-14.497	-22.207	48.968
230	6	-17.138	-17.198	-37.593	3.607	-13.560	-20.775	44.763
[illegible]	7	-17.951	-17.262	-39.324	3.796	-13.795	-21.418	47.594
[illegible]	8	-19.984	-18.478	-44.304	3.843	-15.315	-23.148	50.545
230	9	8.974	-15.134	18.072	-2.437	9.218	-15.378	174.284
231	1	-28.269	-1.596	-56.552	8.428	0.843	-30.709	73.853
231	2	-28.213	-1.588	-56.435	8.415	0.848	-30.650	73.850
231	3	9.358	-15.602	18.210	-2.899	9.690	-15.934	173.461
231	4	-58.209	-2.713	-116.480	17.332	2.254	-63.177	74.005
231	5	-20.637	-16.727	-41.835	6.017	-12.355	-25.009	53.999
231	6	-18.694	-16.535	-37.854	5.508	-12.002	-23.228	50.542
231	7	-19.565	-16.564	-39.595	5.769	-12.104	-24.025	52.289
231	8	-21.902	-16.919	-44.477	6.310	-12.626	-26.196	55.771
231	9	9.302	-15.610	18.093	-2.886	9.632	-15.940	173.477
232	1	-28.191	-1.322	-56.440	6.378	0.115	-29.629	77.300
232	2	-28.136	-1.316	-56.323	6.371	0.120	-29.572	77.293
232	3	9.375	-15.532	18.231	-2.295	9.585	-15.742	174.779
232	4	-58.079	-2.267	-116.280	13.112	0.659	-61.006	77.416
232	5	-20.568	-16.484	-41.725	4.445	-13.634	-23.418	57.336
232	6	-18.636	-16.336	-37.759	4.101	-13.226	-21.746	52.830
232	7	-19.506	-16.361	-39.497	4.300	-13.354	-22.512	55.042
232	8	-21.820	-16.629	-44.353	4.615	-13.929	-24.520	59.676
232	9	9.320	-15.539	18.115	-2.287	9.528	-15.747	174.785
233	1	-29.779	-1.550	-56.642	4.521	-0.843	-30.485	81.119
233	2	-29.715	-1.538	-56.523	4.522	-0.830	-30.423	81.100
[illegible]	3	9.647	-15.143	18.316	-2.030	9.812	-15.308	175.348
[illegible]	4	-61.401	-2.841	-116.728	9.241	-1.417	-62.825	81.241
233	5	-22.039	-16.446	-41.888	2.688	-15.363	-23.121	68.065
233	6	-19.893	-16.184	-37.868	2.577	-14.863	-21.214	62.866
233	7	-20.811	-16.216	-39.611	2.721	-14.952	-22.075	65.084
233	8	-23.488	-16.717	-44.573	2.648	-15.804	-24.401	70.979
233	9	9.583	-15.155	18.197	-2.032	9.749	-15.321	175.335
234	1	-29.713	-1.299	-56.563	2.940	-0.998	-30.014	84.153
234	2	-29.649	-1.290	-56.445	2.942	-0.988	-29.951	84.139
234	3	9.627	-15.233	18.304	-1.426	9.708	-15.314	176.727
234	4	-61.290	-2.423	-116.592	6.008	-1.815	-61.897	84.231
234	5	-22.013	-16.365	-41.842	1.640	-15.923	-22.455	74.923
234	6	-19.884	-16.168	-37.838	1.581	-15.586	-20.466	69.799
234	7	-20.800	-16.196	-39.581	1.675	-15.651	-21.345	71.977
234	8	-23.444	-16.564	-44.509	1.599	-16.210	-23.798	77.531
234	9	9.563	-15.241	18.186	-1.427	9.645	-15.323	176.716
235	1	-30.461	0.655	-56.456	4.103	1.187	-30.993	82.612
235	2	-30.395	0.656	-56.339	4.099	1.189	-30.927	82.603
235	3	9.610	-15.814	18.229	-1.489	9.697	-15.901	176.659
235	4	-62.858	1.581	-116.381	8.431	2.666	-63.943	82.667
235	5	-22.853	-14.888	-41.812	2.842	-13.978	-23.763	72.241
235	6	-20.635	-14.902	-37.823	2.646	-13.867	-21.670	68.643
235	7	-21.573	-14.874	-39.563	2.774	-13.874	-22.573	70.181
[illegible]	8	-24.362	-14.906	-44.464	2.921	-14.076	-25.192	74.144

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E295

. T	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
5	9	9.543	-15.815	18.112	-1.485	9.630	-15.902	176.658
36	1	-30.429	0.774	-56.416	1.340	0.832	-30.487	87.544
36	2	-30.363	0.773	-56.299	1.341	0.831	-30.421	87.538
36	3	9.632	-15.734	18.262	-0.488	9.642	-15.744	178.897
36	4	-62.822	1.711	-116.328	2.750	1.828	-62.939	87.564
36	5	-22.826	-14.797	-41.765	0.920	-14.692	-22.930	83.543
36	6	-20.616	-14.844	-37.786	0.890	-14.710	-20.751	81.422
36	7	-21.555	-14.817	-39.526	0.933	-14.690	-21.682	82.254
36	8	-24.324	-14.773	-44.406	0.904	-14.688	-24.409	84.638
36	9	9.566	-15.733	18.145	-0.489	9.576	-15.743	178.893
37	1	-30.871	-0.810	-56.683	1.051	-0.773	-30.908	87.999
37	2	-30.806	-0.811	-56.566	1.051	-0.774	-30.842	87.995
37	3	9.552	-14.920	18.370	-0.706	9.572	-14.941	178.348
37	4	-63.731	-1.593	-116.885	2.161	-1.517	-63.806	88.009
37	5	-23.372	-15.702	-41.948	0.404	-15.680	-23.394	86.991
37	6	-21.168	-15.700	-37.970	0.363	-15.675	-21.192	86.208
37	7	-22.121	-15.724	-39.718	0.397	-15.699	-22.145	86.460
37	8	-24.849	-15.675	-44.577	0.412	-15.657	-24.867	87.429
37	9	9.486	-14.919	18.254	-0.706	9.507	-14.939	178.344
38	1	-21.129	-4.168	-55.063	3.941	-3.297	-22.000	77.537
38	2	-21.115	-4.113	-54.946	3.947	-3.241	-21.987	77.546
38	3	8.035	-13.143	18.226	-2.342	8.291	-13.399	173.762
38	4	-43.277	-8.105	-113.381	8.048	-6.351	-45.031	77.704
38	5	-14.126	-17.136	-40.208	1.758	-13.317	-17.945	24.721
38	6	-13.204	-15.980	-36.289	1.755	-12.355	-16.830	25.830
38	7	-13.866	-16.066	-37.981	1.882	-12.785	-17.147	29.850
38	8	-14.433	-18.398	-42.834	1.611	-13.861	-18.970	19.550
38	9	8.021	-13.199	18.110	-2.349	8.278	-13.456	173.758
39	1	-20.977	-3.575	-54.896	4.047	-2.680	-21.872	77.524
39	2	-20.963	-3.519	-54.780	4.068	-2.617	-21.865	77.495
39	3	7.873	-13.793	18.067	-2.191	8.092	-14.012	174.282
.39	4	-42.989	-6.986	-113.065	8.146	-5.228	-44.747	77.825
239	5	-14.152	-17.260	-40.218	1.886	-13.262	-18.150	25.262
239	6	-13.233	-16.110	-36.300	2.151	-12.083	-17.260	28.116
239	7	-13.889	-16.180	-37.988	2.288	-12.476	-17.593	31.703
239	8	-14.463	-18.534	-42.849	1.411	-14.021	-18.975	17.374
239	9	7.859	-13.849	17.950	-2.212	8.082	-14.072	174.239
240	1	-23.068	-2.369	-55.234	6.645	-0.419	-25.018	73.647
240	2	-23.041	-2.342	-55.120	6.645	-0.392	-24.991	73.646
240	3	7.811	-15.386	17.789	-2.370	8.051	-15.626	174.225
240	4	-47.338	-4.261	-113.722	13.583	-0.335	-51.264	73.880
240	5	-16.485	-17.305	-40.812	4.568	-12.309	-21.481	42.437
240	6	-15.243	-16.758	-36.936	4.361	-11.574	-20.427	40.075
240	7	-15.960	-16.799	-38.635	4.571	-11.789	-20.970	42.378
240	8	-17.105	-17.901	-43.381	4.564	-12.921	-22.085	42.506
240	9	7.784	-15.412	17.675	-2.370	8.023	-15.652	174.225
241	1	-22.992	-2.091	-55.129	5.438	-0.760	-24.322	76.253
241	2	-22.965	-2.067	-55.016	5.446	-0.733	-24.299	76.234
241	3	7.800	-15.431	17.781	-1.934	7.960	-15.591	175.272

E296

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
241	4	-47.207	-3.793	-113.535	11.065	-1.135	-49.864	76.495
241	5	-16.440	-17.157	-40.736	3.683	-13.097	-20.500	42.222
241	6	-15.214	-16.670	-36.877	3.657	-12.213	-19.672	39.370
[illegible]	7	-15.929	-16.708	-38.573	3.832	-12.467	-20.170	42.099
[illegible]	8	-17.043	-17.687	-43.287	3.508	-13.841	-20.888	42.378
241	9	7.774	-15.455	17.668	-1.942	7.935	-15.616	175.252
242	1	-24.594	-2.025	-55.260	3.509	-1.492	-25.127	81.362
242	2	-24.547	-1.991	-55.141	3.539	-1.449	-25.089	81.287
242	3	8.175	-14.304	18.031	-1.672	8.299	-14.428	175.769
242	4	-50.650	-3.860	-113.873	6.958	-2.847	-51.663	81.718
242	5	-17.927	-16.172	-40.700	1.746	-15.095	-19.004	58.340
242	6	-16.265	-15.497	-36.728	2.201	-13.647	-18.115	49.945
242	7	-17.023	-15.533	-38.427	2.323	-13.838	-18.718	53.892
242	8	-18.994	-16.927	-43.380	1.065	-16.476	-19.444	67.066
242	9	8.128	-14.337	17.913	-1.702	8.256	-14.466	175.691
243	1	-24.470	-1.538	-55.124	2.978	-1.157	-24.850	82.719
243	2	-24.422	-1.504	-55.006	3.013	-1.115	-24.812	82.633
243	3	8.063	-14.756	17.924	-1.448	8.154	-14.848	176.383
243	4	-50.422	-2.966	-113.623	5.836	-2.259	-51.130	83.090
243	5	-17.936	-16.218	-40.692	1.374	-15.456	-18.698	61.000
243	6	-16.274	-15.548	-36.720	1.932	-13.944	-17.877	50.319
243	7	-17.030	-15.571	-38.415	2.039	-14.134	-18.466	54.839
243	8	-19.006	-16.981	-43.379	0.590	-16.822	-19.165	74.865
243	9	8.015	-14.790	17.805	-1.482	8.111	-14.886	176.295
244	1	-25.287	-0.364	-55.205	4.084	0.287	-25.939	80.925
[illegible]	2	-25.223	-0.352	-55.087	4.096	0.304	-25.880	80.884
[illegible]	3	7.916	-15.597	17.780	-1.402	7.999	-15.680	176.599
[illegible]	4	-52.219	-0.416	-113.786	8.270	0.871	-53.507	81.146
244	5	-19.080	-15.661	-40.918	2.771	-14.114	-20.627	60.831
244	6	-17.072	-15.437	-36.954	2.854	-13.285	-19.224	52.986
244	7	-17.847	-15.432	-38.652	2.987	-13.417	-19.862	56.000
244	8	-20.534	-15.931	-43.591	2.516	-14.822	-21.643	66.222
244	9	7.852	-15.609	17.662	-1.413	7.936	-15.693	176.565
245	1	-25.221	-0.113	-55.127	2.503	0.133	-25.468	84.360
245	2	-25.157	-0.105	-55.009	2.515	0.144	-25.408	84.323
245	3	7.895	-15.686	17.768	-0.797	7.922	-15.713	178.065
245	4	-52.108	0.001	-113.650	5.037	0.484	-52.591	84.529
245	5	-19.055	-15.579	-40.872	1.724	-14.869	-19.765	67.611
245	6	-17.063	-15.420	-36.924	1.858	-14.209	-18.274	56.917
245	7	-17.837	-15.412	-38.622	1.941	-14.335	-18.914	60.992
245	8	-20.491	-15.777	-43.527	1.467	-15.357	-20.911	74.047
245	9	7.831	-15.695	17.650	-0.809	7.859	-15.722	178.033
246	1	-25.709	-0.875	-55.216	2.017	-0.712	-25.871	85.385
246	2	-25.631	-0.874	-55.098	2.046	-0.706	-25.799	85.305
246	3	7.775	-14.942	17.839	-1.048	7.823	-14.990	177.362
246	4	-53.222	-1.577	-113.859	3.910	-1.283	-53.516	85.694
246	5	-19.815	-15.645	-40.922	0.814	-15.492	-19.969	79.333
246	6	-17.538	-15.601	-36.949	1.303	-14.946	-18.193	63.303
246	7	-18.323	-15.622	-38.649	1.377	-15.043	-18.902	67.212
[illegible]	8	-21.576	-15.672	-43.603	0.149	-15.669	-21.580	88.553

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E297

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
246	9	7.697	-14.943	17.720	-1.078	7.748	-14.994	177.279
247	1	-25.607	-0.472	-55.112	1.032	-0.429	-25.650	87.651
247	2	-25.529	-0.470	-54.993	1.045	-0.426	-25.573	87.614
247	3	7.688	-15.293	17.763	-0.824	7.718	-15.322	177.947
247	4	-53.041	-0.860	-113.674	2.031	-0.781	-53.120	87.774
247	5	-19.823	-15.683	-40.917	0.160	-15.677	-19.829	87.781
247	6	-17.545	-15.637	-36.943	0.375	-15.566	-17.616	79.265
247	7	-18.327	-15.648	-38.641	0.413	-15.586	-18.389	81.429
247	8	-21.587	-15.724	-43.603	-0.137	-15.721	-21.591	91.342
247	9	7.610	-15.295	17.644	-0.837	7.641	-15.325	177.908
248	1	-25.349	0.631	-54.995	0.872	0.660	-25.378	88.079
248	2	-25.265	0.634	-54.875	0.878	0.664	-25.294	88.059
248	3	7.084	-15.558	17.645	-0.147	7.085	-15.559	179.627
248	4	-52.551	1.327	-113.459	1.735	1.383	-52.607	88.157
248	5	-20.201	-14.865	-40.939	0.709	-14.773	-20.294	82.553
248	6	-17.818	-14.823	-36.935	0.803	-14.621	-18.020	75.894
248	7	-18.590	-14.799	-38.629	0.833	-14.624	-18.765	78.130
248	8	-22.102	-14.943	-43.664	0.563	-14.899	-22.146	85.529
248	9	7.000	-15.562	17.524	-0.153	7.001	-15.563	179.609
249	1	-19.786	-3.143	-54.067	0.430	-3.132	-19.797	88.520
249	2	-19.818	-3.080	-53.960	0.441	-3.069	-19.830	88.489
249	3	7.275	-15.233	17.497	0.082	7.275	-15.233	0.209
249	4	-40.162	-5.915	-111.238	0.772	-5.897	-40.179	88.708
249	5	-13.068	-18.067	-39.780	0.413	-13.034	-18.101	4.692
249	6	-13.052	-16.823	-36.079	0.619	-12.953	-16.922	9.089
249	7	-13.686	-16.869	-37.741	0.636	-13.564	-16.992	10.895
249	8	-12.338	-19.480	-42.184	0.149	-12.335	-19.484	1.200
249	9	7.307	-15.295	17.390	0.070	7.307	-15.295	0.179
250	1	-21.742	-4.249	-54.850	2.480	-3.904	-22.087	82.082
250	2	-21.771	-4.204	-54.746	2.485	-3.859	-22.116	82.099
250	3	7.671	-13.256	18.024	-0.035	7.671	-13.256	179.902
250	4	-44.177	-8.179	-112.849	4.980	-7.502	-44.853	82.266
250	5	-14.734	-17.232	-40.078	2.458	-13.225	-18.741	31.537
250	6	-14.590	-16.278	-36.390	2.473	-12.821	-18.047	35.582
250	7	-15.285	-16.370	-38.079	2.551	-13.219	-18.436	38.999
250	8	-14.083	-18.249	-42.436	2.349	-13.026	-19.306	24.222
250	9	7.700	-13.301	17.920	-0.040	7.700	-13.301	179.889
251	1	-21.590	-3.656	-54.684	2.587	-3.290	-21.956	81.951
251	2	-21.619	-3.610	-54.580	2.607	-3.240	-21.989	81.926
251	3	7.509	-13.906	17.864	0.115	7.510	-13.907	0.308
251	4	-43.890	-7.060	-112.534	5.078	-6.372	-44.577	82.291
251	5	-14.761	-17.355	-40.089	2.586	-13.164	-18.952	31.683
251	6	-14.619	-16.408	-36.402	2.869	-12.507	-18.519	36.344
251	7	-15.309	-16.484	-38.087	2.956	-12.882	-18.911	39.382
251	8	-14.113	-18.384	-42.452	2.150	-13.218	-19.279	22.599
251	9	7.538	-13.952	17.759	0.096	7.538	-13.952	0.256
252	1	-22.520	-2.291	-54.422	1.226	-2.217	-22.594	86.542
252	2	-22.520	-2.239	-54.311	1.278	-2.159	-22.600	86.408
252	3	7.325	-15.159	17.528	0.123	7.326	-15.160	0.316

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
252	4	-45.994	-4.330	-112.046	2.067	-4.228	-46.096	87.165
252	5	-16.148	-17.250	-40.206	0.913	-15.632	-17.766	29.448
[illegible]	6	-15.445	-16.227	-36.407	1.842	-13.953	-17.720	39.009
[illegible]	7	-16.154	-16.258	-38.081	1.898	-14.307	-18.105	44.217
[illegible]	8	-16.139	-18.421	-42.713	-0.248	-16.113	-18.448	173.854
252	9	7.325	-15.211	17.418	0.072	7.325	-15.211	0.184
253	1	-22.405	-1.840	-54.302	1.370	-1.749	-22.496	86.203
253	2	-22.403	-1.777	-54.188	1.441	-1.677	-22.503	86.021
253	3	7.321	-15.182	17.527	0.221	7.323	-15.184	0.565
253	4	-45.811	-3.613	-111.856	2.200	-3.498	-45.925	87.022
253	5	-16.087	-17.017	-40.140	0.980	-15.466	-17.638	32.309
253	6	-15.336	-15.805	-36.286	2.272	-13.286	-17.854	42.054
253	7	-16.041	-15.821	-37.956	2.339	-13.589	-18.273	46.343
253	8	-16.141	-18.429	-42.717	-0.622	-15.982	-18.588	165.734
253	9	7.318	-15.245	17.413	0.150	7.319	-15.246	0.383
254	1	-23.272	-1.627	-54.591	2.373	-1.369	-23.530	83.816
254	2	-23.238	-1.597	-54.477	2.401	-1.333	-23.502	83.742
254	3	7.591	-14.472	17.779	0.039	7.591	-14.472	0.104
254	4	-47.845	-3.018	-112.474	4.578	-2.556	-48.307	84.226
254	5	-17.015	-15.893	-40.217	2.217	-14.167	-18.741	52.094
254	6	-15.639	-15.296	-36.343	2.682	-12.779	-18.155	46.832
254	7	-16.360	-15.320	-38.023	2.765	-13.026	-18.655	50.327
254	8	-17.786	-16.571	-42.805	1.569	-15.495	-18.861	55.585
254	9	7.556	-14.502	17.665	0.011	7.556	-14.502	0.000
255	1	-23.147	-1.140	-54.456	1.842	-0.987	-23.301	85.248
[illegible]	2	-23.113	-1.109	-54.341	1.875	-0.951	-23.272	85.163
[illegible]	3	7.479	-14.925	17.655	0.263	7.482	-14.928	0.674
255	4	-47.615	-2.125	-112.224	3.457	-1.863	-47.876	85.679
255	5	-17.022	-15.940	-40.217	1.845	-14.558	-18.404	53.170
255	6	-15.647	-15.347	-36.342	2.413	-13.079	-17.915	46.781
255	7	-16.365	-15.359	-38.018	2.481	-13.330	-18.395	50.732
255	8	-17.797	-16.625	-42.811	1.094	-15.970	-18.453	59.066
255	9	7.445	-14.955	17.550	0.230	7.447	-14.957	0.590
256	1	-23.374	-1.004	-54.307	1.508	-0.903	-23.476	86.159
256	2	-23.295	-0.984	-54.186	1.596	-0.870	-23.409	85.928
256	3	7.362	-15.344	17.508	0.211	7.364	-15.346	0.534
256	4	-48.440	-1.798	-111.981	2.346	-1.680	-48.558	87.127
256	5	-17.782	-16.157	-40.287	0.961	-15.711	-18.229	65.095
256	6	-15.549	-15.762	-36.288	2.566	-13.087	-18.224	43.809
256	7	-16.259	-15.774	-37.957	2.643	-13.362	-18.671	47.616
256	8	-19.580	-16.609	-43.036	-1.022	-16.291	-19.898	107.272
256	9	7.282	-15.364	17.386	0.123	7.283	-15.364	0.313
257	1	-23.226	-0.416	-54.152	1.383	-0.332	-23.310	86.541
257	2	-23.142	-0.381	-54.026	1.465	-0.287	-23.236	86.332
257	3	7.340	-15.434	17.494	0.108	7.340	-15.435	0.274
257	4	-48.196	-0.833	-111.728	2.148	-0.736	-48.293	87.408
257	5	-17.713	-15.886	-40.207	0.792	-15.591	-18.008	69.526
257	6	-15.411	-15.225	-36.130	2.283	-13.033	-17.603	46.163
[illegible]	7	-16.115	-15.217	-37.794	2.354	-13.269	-18.063	50.397
[illegible]	8	-19.598	-16.677	-43.053	-1.051	-16.337	-19.937	107.879

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NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
57	9	7.256	-15.469	17.368	0.027	7.256	-15.469	0.069
58	1	-23.019	-0.137	-54.212	1.145	-0.079	-23.076	87.142
58	2	-22.892	-0.123	-54.081	1.172	-0.063	-22.952	87.059
58	3	7.191	-15.111	17.584	0.352	7.197	-15.116	0.906
58	4	-48.127	-0.168	-111.906	2.088	-0.077	-48.218	87.511
58	5	-18.043	-15.155	-40.239	1.268	-14.677	-18.521	69.346
58	6	-14.931	-14.906	-36.072	1.748	-13.170	-16.667	45.205
58	7	-15.614	-14.899	-37.737	1.793	-13.428	-17.085	50.636
58	8	-20.909	-15.458	-43.191	0.649	-15.381	-20.986	83.295
58	9	7.064	-15.124	17.454	0.325	7.069	-15.129	0.840
59	1	-22.918	0.266	-54.109	0.160	0.267	-22.919	89.603
59	2	-22.791	0.280	-53.978	0.171	0.281	-22.792	89.573
59	3	7.105	-15.462	17.500	0.577	7.120	-15.476	1.464
59	4	-47.946	0.548	-111.722	0.209	0.549	-47.947	89.752
59	5	-18.050	-15.193	-40.243	0.615	-15.066	-18.176	78.350
59	6	-14.937	-14.942	-36.074	0.820	-14.119	-15.760	44.920
59	7	-15.617	-14.925	-37.737	0.828	-14.373	-16.169	56.338
59	8	-20.920	-15.510	-43.200	0.363	-15.485	-20.944	86.177
59	9	6.978	-15.476	17.370	0.566	6.992	-15.490	1.443
60	1	-22.317	-0.494	-53.975	0.942	-0.454	-22.357	87.533
60	2	-22.160	-0.524	-53.847	0.995	-0.479	-22.205	87.370
60	3	6.549	-15.399	17.353	-0.067	6.549	-15.400	179.824
60	4	-46.951	-0.698	-111.436	1.485	-0.651	-46.998	88.162
60	5	-18.241	-15.573	-40.235	0.422	-15.508	-18.306	81.213
60	6	-14.581	-16.128	-36.120	1.401	-13.754	-16.955	30.549
60	7	-15.231	-16.152	-37.779	1.449	-14.171	-17.212	36.188
60	8	-21.793	-14.890	-43.131	-0.789	-14.801	-21.882	96.444
60	9	6.392	-15.369	17.225	-0.120	6.393	-15.370	179.682
61	1	-22.651	-3.788	-54.427	0.430	-3.778	-22.661	88.694
61	2	-22.752	-3.743	-54.340	0.441	-3.733	-22.762	88.669
61	3	6.871	-15.356	17.284	0.082	6.871	-15.356	0.212
61	4	-45.391	-7.074	-111.805	0.772	-7.058	-45.406	88.845
61	5	-15.767	-18.686	-40.180	0.413	-15.710	-18.744	7.901
61	6	-16.950	-17.751	-36.822	0.619	-16.613	-18.088	28.557
61	7	-17.697	-17.823	-38.503	0.636	-17.121	-18.399	42.164
61	8	-13.489	-19.705	-42.158	0.149	-13.485	-19.708	1.379
61	9	6.972	-15.401	17.197	0.070	6.972	-15.401	0.180
2	1	-23.146	-6.067	-54.818	0.186	-6.065	-23.148	89.375
2	2	-23.245	-6.155	-54.757	0.221	-6.152	-23.248	89.256
2	3	6.996	-15.364	17.256	0.243	6.999	-15.366	0.625
2	4	-46.421	-10.691	-112.392	0.077	-10.691	-46.421	89.876
2	5	-16.179	-19.900	-40.378	0.099	-16.176	-19.903	1.529
2	6	-17.321	-21.383	-37.516	0.761	-17.183	-21.521	10.283
2	7	-18.083	-21.574	-39.218	0.779	-17.916	-21.740	12.033
2	8	-13.931	-17.924	-41.745	-0.703	-13.811	-18.044	170.294
2	9	7.095	-15.276	17.195	0.208	7.097	-15.278	0.533
3	1	-23.024	-5.579	-54.695	-0.503	-5.565	-23.038	91.652
3	2	-23.117	-5.644	-54.628	-0.459	-5.632	-23.130	91.506
3	3	7.039	-15.194	17.302	0.623	7.057	-15.212	1.604

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MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
263	4	-46.251	-10.009	-112.223	-1.407	-9.954	-46.305	92.220
263	5	-16.093	-19.559	-40.293	-0.323	-16.063	-19.589	174.706
[illegible]	6	-17.129	-20.623	-37.318	0.513	-17.056	-20.697	8.185
[illegible]	7	-17.886	-20.795	-39.016	0.511	-17.798	-20.882	9.691
[illegible]	8	-13.977	-18.100	-41.798	-1.310	-13.596	-18.481	163.782
263	9	7.133	-15.129	17.235	0.579	7.148	-15.145	1.490
264	1	-23.222	-2.399	-54.259	0.214	-2.396	-23.225	89.410
264	2	-23.280	-2.361	-54.163	0.233	-2.359	-23.283	89.361
264	3	7.120	-15.232	17.363	0.537	7.132	-15.245	1.377
264	4	-46.955	-4.430	-111.583	0.251	-4.428	-46.957	89.660
264	5	-16.554	-17.301	-40.055	0.556	-16.258	-17.597	28.080
264	6	-16.909	-16.549	-36.558	0.907	-15.804	-17.655	50.602
264	7	-17.660	-16.589	-38.232	0.920	-16.060	-18.189	60.099
264	8	-15.249	-18.140	-42.205	0.126	-15.243	-18.146	2.506
264	9	7.177	-15.269	17.268	0.518	7.189	-15.281	1.323
265	1	-23.109	-1.948	-54.138	0.358	-1.942	-23.115	89.030
265	2	-23.164	-1.900	-54.040	0.396	-1.893	-23.171	88.931
265	3	7.115	-15.255	17.362	0.635	7.133	-15.274	1.626
265	4	-46.773	-3.712	-111.392	0.384	-3.709	-46.777	89.488
265	5	-16.494	-17.068	-39.989	0.623	-16.094	-17.467	32.650
265	6	-16.800	-16.127	-36.437	1.337	-15.084	-17.843	52.065
265	7	-17.547	-16.152	-38.107	1.361	-15.320	-18.379	58.568
265	8	-15.251	-18.149	-42.209	-0.246	-15.230	-18.170	175.166
265	9	7.170	-15.303	17.263	0.597	7.185	-15.319	1.521
266	1	-23.673	-3.724	-54.445	-0.049	-3.724	-23.673	90.143
[illegible]	2	-23.676	-3.762	-54.353	0.063	-3.762	-23.676	89.816
[illegible]	3	7.409	-15.124	17.396	0.970	7.451	-15.166	2.462
266	4	-48.356	-6.685	-111.971	-1.058	-6.659	-48.383	91.454
266	5	-17.270	-18.047	-40.221	-0.151	-17.241	-18.076	169.365
266	6	-16.578	-18.658	-36.788	1.987	-15.375	-19.861	31.187
266	7	-17.325	-18.770	-38.472	2.024	-15.898	-20.197	35.181
266	8	-17.204	-17.194	-42.284	-2.718	-14.480	-19.918	134.950
266	9	7.412	-15.086	17.304	0.857	7.445	-15.119	2.178
267	1	-23.399	-2.634	-54.165	-0.003	-2.634	-23.400	90.010
267	2	-23.387	-2.611	-54.058	0.138	-2.611	-23.388	89.618
267	3	7.461	-14.923	17.455	1.213	7.527	-14.988	3.094
267	4	-47.954	-5.081	-111.566	-1.201	-5.047	-47.988	91.603
267	5	-17.105	-17.392	-40.052	-0.126	-17.058	-17.440	159.338
267	6	-16.131	-16.895	-36.320	2.549	-13.936	-19.091	40.741
267	7	-16.866	-16.955	-37.990	2.597	-14.313	-19.508	44.507
267	8	-17.387	-17.907	-42.485	-3.340	-14.296	-20.997	137.227
267	9	7.449	-14.945	17.347	1.071	7.500	-14.996	2.732
268	1	-23.265	-0.910	-53.948	0.084	-0.910	-23.266	89.783
268	2	-23.167	-0.886	-53.822	0.126	-0.885	-23.168	89.674
268	3	7.756	-15.256	17.503	0.826	7.786	-15.296	2.053
268	4	-48.391	-1.649	-111.288	-0.209	-1.648	-48.392	90.256
268	5	-17.467	-16.030	-39.962	0.490	-15.878	-17.619	72.834
268	6	-14.879	-15.550	-35.891	1.285	-13.886	-16.543	37.694
[illegible]	7	-15.580	-15.557	-37.548	1.302	-14.267	-16.871	45.249
[illegible]	8	-19.693	-16.587	-42.809	-0.466	-16.518	-19.762	98.364

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ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
268	9	7.658	-15.291	17.377	0.784	7.685	-15.318	1.954
269	1	-23.117	-0.322	-53.792	-0.040	-0.322	-23.117	90.101
269	2	-23.014	-0.282	-53.662	-0.004	-0.282	-23.014	90.010
269	3	7.735	-15.357	17.483	0.723	7.757	-15.379	1.793
269	4	-48.148	-0.685	-111.034	-0.406	-0.681	-48.151	90.491
269	5	-17.398	-15.759	-39.888	0.321	-15.698	-17.458	79.301
269	6	-14.742	-15.013	-35.740	1.003	-13.865	-15.889	41.157
269	7	-15.437	-15.000	-37.392	1.013	-14.182	-16.255	51.083
269	8	-19.711	-16.555	-42.833	-0.495	-16.576	-19.790	98.989
269	9	7.632	-15.396	17.353	0.687	7.653	-15.417	1.708
270	1	-22.549	-0.991	-53.648	0.688	-0.969	-22.571	88.172
270	2	-22.344	-1.018	-53.510	0.855	-0.984	-22.378	87.706
270	3	7.925	-15.520	17.440	0.985	7.966	-15.561	2.403
270	4	-47.835	-1.552	-110.815	0.011	-1.552	-47.835	89.985
270	5	-17.565	-16.054	-39.863	0.141	-16.041	-17.578	84.690
270	6	-12.993	-16.545	-35.574	3.265	-11.052	-18.486	30.726
270	7	-13.635	-16.578	-37.218	3.343	-11.453	-18.760	33.120
270	8	-22.203	-15.436	-42.984	-3.637	-13.851	-23.788	113.535
270	9	7.720	-15.493	17.302	0.818	7.748	-15.522	2.017
271	1	-22.224	0.295	-53.310	1.393	0.381	-22.310	86.471
271	2	-22.001	0.336	-53.153	1.533	0.441	-22.106	86.090
271	3	7.944	-15.450	17.464	0.378	7.950	-15.456	0.927
271	4	-47.346	0.385	-110.309	1.686	0.445	-47.405	87.979
271	5	-17.400	-15.400	-39.691	0.531	-15.268	-17.532	76.008
271	6	-12.508	-14.635	-35.060	3.117	-10.277	-16.865	35.581
271	7	-13.134	-14.608	-36.688	3.209	-10.578	-17.164	38.535
271	8	-22.433	-16.336	-43.233	-2.529	-15.358	-23.411	110.389
271	9	7.721	-15.491	17.307	0.238	7.723	-15.494	0.589
272	1	-20.820	-0.051	-53.256	-0.345	-0.045	-20.825	90.952
272	2	-20.486	-0.037	-53.082	-0.339	-0.031	-20.491	90.951
272	3	7.912	-15.080	17.583	0.490	7.923	-15.091	1.220
272	4	-45.394	-0.170	-110.350	-0.770	-0.157	-45.407	90.976
272	5	-16.995	-15.214	-39.683	0.058	-15.212	-16.997	88.108
272	6	-10.059	-14.948	-34.741	0.178	-10.053	-14.954	2.084
272	7	-10.603	-14.943	-36.362	0.168	-10.596	-14.949	2.222
272	8	-24.538	-15.533	-43.601	-0.070	-15.533	-24.539	90.449
272	9	7.579	-15.095	17.410	0.484	7.589	-15.105	1.223
273	1	-21.636	-13.761	-55.613	-1.396	-13.520	-21.876	99.762
273	2	-21.772	-14.360	-55.664	-1.454	-14.085	-22.047	100.713
273	3	6.073	-16.587	16.682	-0.038	6.073	-16.587	179.902
273	4	-43.003	-22.135	-113.079	-2.377	-21.867	-43.270	96.418
273	5	-15.158	-24.361	-40.731	-0.961	-15.058	-24.461	174.096
273	6	-17.035	-35.236	-39.947	-2.005	-16.817	-35.454	173.786
273	7	-17.761	-35.844	-41.713	-2.069	-17.527	-36.078	173.554
273	8	-12.085	-10.809	-39.571	0.344	-10.721	-12.172	75.806
273	9	6.209	-15.987	16.734	0.019	6.209	-15.987	0.049
274	1	-21.502	-5.593	-54.095	-0.830	-5.550	-21.545	92.979
274	2	-21.622	-5.686	-54.041	-0.857	-5.640	-21.668	93.071
274	3	6.036	-15.625	16.916	0.093	6.036	-15.625	0.247

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
274	4	-42.866	-9.672	-110.854	-1.467	-9.607	-42.930	92.526
274	5	-15.207	-19.510	-39.895	-0.516	-15.147	-19.669	173.401
274	6	-16.796	-21.212	-37.185	-1.004	-16.578	-21.430	167.769
[illegible]	7	-17.512	-21.390	-38.867	-1.040	-17.251	-21.652	165.897
[illegible]	8	-12.485	-17.508	-41.197	0.101	-12.483	-17.510	1.162
274	9	6.156	-15.532	16.863	0.120	6.157	-15.532	0.319
275	1	-21.379	-5.106	-53.972	-1.520	-4.965	-21.520	95.291
275	2	-21.494	-5.176	-53.913	-1.539	-5.032	-21.638	95.342
275	3	6.079	-15.455	16.961	0.472	6.090	-15.465	1.257
275	4	-42.696	-8.990	-110.685	-2.951	-8.733	-42.953	94.967
275	5	-15.122	-19.269	-39.810	-0.939	-14.919	-19.472	167.813
275	6	-16.604	-20.453	-36.988	-1.253	-16.232	-20.825	163.462
275	7	-17.316	-20.612	-38.664	-1.307	-16.860	-21.068	160.779
275	8	-12.531	-17.684	-41.160	-0.504	-12.482	-17.733	174.459
275	9	6.194	-15.385	16.902	0.492	6.205	-15.396	1.305
276	1	-22.948	-12.077	-55.543	-2.433	-11.557	-23.468	102.056
276	2	-23.076	-12.594	-55.575	-2.424	-12.060	-23.610	102.414
276	3	6.360	-15.934	16.875	0.795	6.388	-15.962	2.041
276	4	-45.803	-19.613	-113.149	-5.047	-18.673	-46.742	100.540
276	5	-16.366	-22.953	-40.697	-1.827	-15.893	-23.426	165.489
276	6	-18.049	-32.325	-39.561	-1.598	-17.873	-32.502	173.689
276	7	-18.816	-32.859	-41.319	-1.672	-18.619	-33.056	173.301
276	8	-13.475	-11.261	-39.962	-2.009	-10.074	-14.662	120.576
276	9	6.488	-15.417	16.908	0.787	6.516	-15.445	2.056
277	1	-22.727	-11.188	-55.328	-4.601	-9.577	-24.337	109.286
[illegible]	2	-22.832	-11.614	-55.337	-4.664	-9.928	-24.518	109.872
[illegible]	3	6.521	-15.298	17.044	1.004	6.567	-15.344	2.630
277	4	-45.573	-18.674	-112.937	-8.896	-15.997	-48.249	106.742
277	5	-16.218	-22.358	-40.555	-3.228	-14.833	-23.743	156.779
277	6	-17.476	-30.038	-38.979	-4.262	-16.166	-31.348	162.920
277	7	-18.228	-30.517	-40.723	-4.429	-16.798	-31.947	162.107
277	8	-13.846	-12.727	-40.355	-1.810	-11.392	-15.182	126.412
277	9	6.626	-14.872	17.053	1.067	6.679	-14.925	2.835
278	1	-24.037	-3.756	-54.239	-2.715	-3.399	-24.394	97.495
278	2	-24.118	-3.813	-54.168	-2.768	-3.443	-24.488	97.627
278	3	6.822	-15.291	17.150	[illegible]	6.846	-15.315	1.883
278	4	-48.456	-6.587	-111.380	-5.122	-5.970	-49.074	96.875
278	5	-17.515	-18.065	-40.061	-1.626	-16.141	-19.440	139.795
278	6	-18.272	-19.044	-37.022	-2.536	-16.092	-21.224	139.324
278	7	-19.057	-19.164	-38.706	-2.640	-16.469	-21.752	135.578
278	8	-15.696	-16.768	-41.659	-0.428	-15.545	-16.919	160.680
278	9	6.903	-15.234	17.079	0.780	6.930	-15.261	2.018
279	1	-23.763	-2.666	-53.960	-2.669	-2.333	-24.096	97.100
279	2	-23.829	-2.653	-53.873	-2.693	-2.325	-24.166	97.140
279	3	6.874	-15.090	17.209	0.970	6.917	-15.132	2.525
279	4	-48.055	-4.983	-110.976	-5.265	-4.348	-48.689	96.869
279	5	-17.351	-17.410	-39.893	-1.601	-15.779	-18.982	135.520
279	6	-17.827	-17.281	-36.554	-1.975	-15.560	-19.548	131.068
[illegible]	7	-18.599	-17.349	-38.225	-2.067	-15.814	-20.134	126.595
[illegible]	8	-15.879	-17.481	-41.860	-1.050	-15.359	-18.001	153.666

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E 303

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
279	9	6.939	-15.093	17.122	0.994	6.984	-15.138	2.580
280	1	-25.136	-6.009	-54.774	-3.717	-5.312	-25.834	100.621
280	2	-25.100	-6.221	-54.710	-3.625	-5.549	-25.772	100.505
280	3	7.944	-14.417	17.526	1.945	8.112	-14.585	4.934
280	4	-51.709	-10.105	-112.473	-8.372	-8.484	-53.331	100.962
280	5	-18.664	-18.302	-40.237	-2.301	-15.675	-21.291	133.150
280	6	-17.182	-22.104	-37.288	-0.950	-17.005	-22.281	169.437
280	7	-17.963	-22.353	-38.991	-1.036	-17.730	-22.586	167.359
280	8	-19.492	-13.520	-41.705	-4.884	-10.781	-22.231	119.282
280	9	7.908	-14.206	17.461	1.852	8.062	-14.360	4.756
281	1	-24.618	-3.940	-54.252	-2.814	-3.564	-24.995	97.614
281	2	-24.533	-3.960	-54.136	-2.651	-3.624	-24.869	97.226
281	3	8.192	-13.444	17.787	2.652	8.512	-13.765	6.888
281	4	-51.082	-7.586	-111.853	-7.112	-6.453	-52.216	99.055
281	5	-18.357	-17.070	-39.930	-1.809	-15.794	-19.634	125.214
281	6	-15.979	-17.329	-36.045	1.349	-15.145	-18.163	31.713
281	7	-16.727	-17.451	-37.716	1.316	-15.724	-18.454	37.320
281	8	-20.279	-16.622	-42.541	-5.497	-12.656	-24.245	125.800
281	9	8.106	-13.424	17.671	2.489	8.390	-13.709	6.509
282	1	-24.722	-1.475	-53.898	-2.523	-1.204	-24.992	96.124
282	2	-24.442	-1.484	-53.741	-2.545	-1.205	-24.721	96.251
282	3	9.662	-15.104	17.793	1.104	9.711	-15.153	2.549
282	4	-52.909	-2.702	-111.492	-4.983	-2.212	-53.399	95.614
282	5	-18.805	-16.322	-39.957	-1.333	-15.741	-19.385	113.528
282	6	-12.763	-16.444	-35.293	-1.670	-12.119	-17.089	158.888
282	7	-13.448	-16.486	-36.938	-1.757	-12.644	-17.290	155.416
282	8	-25.125	-16.128	-43.519	-0.833	-16.051	-25.202	95.247
282	9	9.382	-15.095	17.636	1.126	9.434	-15.147	2.630
283	1	-24.397	-0.189	-53.560	-1.817	-0.053	-24.532	94.270
283	2	-24.100	-0.128	-53.384	-1.867	0.015	-24.244	94.427
283	3	9.680	-15.033	17.810	0.497	9.690	-15.043	1.153
283	4	-52.420	-0.763	-110.985	-3.308	-0.552	-52.631	93.650
283	5	-18.640	-15.668	-39.791	-0.944	-15.393	-18.914	106.216
283	6	-12.279	-14.534	-34.786	-1.817	-11.267	-15.546	150.907
283	7	-12.949	-14.516	-36.414	-1.892	-11.685	-15.780	146.245
283	8	-25.356	-17.028	-43.774	0.174	-17.024	-25.359	88.798
283	9	9.383	-15.093	17.634	0.547	9.395	-15.106	1.279
284	1	-21.708	0.131	-52.817	0.696	0.153	-21.730	88.175
284	2	-21.085	0.013	-52.609	0.974	0.058	-21.130	87.361
284	3	10.423	-16.295	17.682	1.329	10.489	-16.361	2.842
284	4	-49.627	1.307	-109.745	-0.882	1.323	-49.642	90.992
284	5	-18.118	-15.001	-39.453	-0.526	-14.915	-18.205	99.340
284	6	-5.714	-17.225	-33.869	4.679	-4.052	-18.887	19.557
284	7	-6.188	-17.259	-35.465	4.796	-4.398	-19.049	20.455
284	8	-32.198	-12.336	-44.159	-6.810	-10.225	-34.309	107.220
284	9	9.800	-16.177	17.474	1.051	9.843	-16.220	2.314
285	1	-14.905	-12.014	-53.611	-1.396	-11.450	-15.469	112.003
285	2	-14.752	-12.541	-53.589	-1.454	-11.820	-15.473	116.381
285	3	6.340	-16.538	16.660	-0.038	6.340	-16.538	179.903

E 30N

ELEMENT	LOAD COMB	R-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	RZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
285	4	-31.628	-19.161	-109.584	-2.377	-18.723	-32.066	100.438
285	5	-10.536	-23.158	-39.334	-0.961	-10.463	-23.231	175.667
285	6	-7.188	-32.728	-37.250	-2.005	-7.031	-32.884	175.537
[illegible]	7	-7.602	-33.256	-38.928	-2.069	-7.436	-33.422	175.418
[illegible]	8	-13.998	-11.240	-39.812	0.344	-11.198	-14.041	82.976
285	9	6.186	-16.011	16.638	0.019	6.186	-16.011	0.049
286	1	-16.916	-24.738	-56.396	-2.211	-16.334	-25.320	165.254
286	2	-16.915	-26.460	-56.643	-2.307	-16.386	-26.988	167.099
286	3	5.691	-21.522	15.488	-0.199	5.692	-21.523	179.580
286	4	-34.491	-35.335	-113.068	-3.737	-31.152	-38.675	138.219
286	5	-11.884	-30.397	-40.935	-1.629	-11.742	-30.539	175.006
286	6	-11.331	-62.033	-43.814	-3.354	-11.110	-62.254	176.231
286	7	-11.861	-63.374	-45.672	-3.457	-11.630	-63.605	176.177
286	8	-11.912	8.523	-35.346	0.526	8.536	-11.925	88.524
286	9	5.690	-19.800	15.735	-0.103	5.690	-19.800	179.766
287	1	-16.990	-25.018	-56.482	-6.349	-13.492	-28.516	151.149
287	2	-16.984	-26.721	-56.725	-6.639	-13.619	-30.085	153.125
287	3	5.828	-20.970	15.628	-0.887	5.858	-20.999	178.105
287	4	-34.714	-36.197	-113.317	-10.590	-24.839	-46.071	137.003
287	5	-11.900	-30.446	-40.963	-4.838	-10.714	-31.633	166.223
287	6	-11.254	-61.709	-43.747	-10.085	-9.312	-63.651	169.104
287	7	-11.785	-63.056	-45.607	-10.385	-9.761	-65.080	168.973
287	8	-12.036	8.040	-35.480	1.708	8.184	-12.180	85.169
287	9	5.822	-19.267	15.871	-0.598	5.837	-19.281	178.635
288	1	-17.763	-10.720	-53.944	-4.336	-8.656	-19.828	115.461
[illegible]	2	-17.714	-11.193	-53.932	-4.555	-8.851	-20.056	117.205
[illegible]	3	5.912	-16.065	16.671	-0.508	5.924	-16.077	178.675
[illegible]	4	-36.667	-17.205	-110.245	-7.052	-14.918	-38.954	107.966
288	5	-13.040	-22.077	-39.641	-3.005	-12.132	-22.985	163.187
288	6	-11.551	-30.659	-37.725	-6.990	-9.267	-32.943	161.904
288	7	-12.092	-31.135	-39.418	-7.202	-9.675	-33.552	161.448
288	8	-14.157	-11.386	-39.902	1.948	-10.381	-15.163	52.707
288	9	5.863	-15.592	16.659	-0.289	5.867	-15.596	179.227
289	1	-17.543	-9.831	-53.730	-6.505	-6.125	-21.249	119.672
289	2	-17.470	-10.213	-53.695	-6.795	-6.139	-21.545	120.949
289	3	6.073	-15.429	16.839	-0.299	6.077	-15.433	179.201
289	4	-36.436	-16.266	-110.034	-10.901	-11.500	-41.202	113.613
289	5	-12.892	-21.482	-39.499	-4.405	-11.034	-23.340	157.135
289	6	-10.977	-28.372	-37.145	-9.654	-6.680	-32.669	156.008
289	7	-11.504	-28.793	-38.823	-9.958	-6.962	-33.336	155.479
289	8	-14.528	-12.853	-40.295	2.147	-11.385	-15.996	55.656
289	9	6.001	-15.047	16.804	-0.009	6.001	-15.047	180.000
290	1	-22.889	-23.060	-57.307	-10.480	-12.494	-33.455	135.233
290	2	-23.054	-24.587	-57.548	-10.894	-12.899	-34.742	137.012
290	3	5.404	-18.921	15.965	-0.616	5.420	-18.937	178.550
290	4	-45.411	-33.893	-115.078	-18.003	-20.750	-58.555	126.130
290	5	-16.952	-28.227	-41.564	-7.725	-13.026	-32.153	153.060
290	6	-19.329	-56.231	-44.283	-15.181	-13.886	-61.674	160.276
290	7	-20.106	-57.463	-46.170	-15.653	-14.414	-63.155	160.017
[illegible]	8	-13.230	6.276	-36.127	1.632	6.412	-13.366	85.248

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ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
290	9	5.569	-17.394	16.206	-0.202	5.571	-17.396	179.496
291	1	-22.820	-22.750	-57.274	-14.606	-8.179	-37.392	134.931
291	2	-22.940	-24.099	-57.470	-15.112	-8.396	-38.643	136.097
291	3	6.025	-16.446	16.598	-0.154	6.026	-16.447	179.606
291	4	-45.672	-34.861	-115.416	-25.673	-14.030	-66.503	129.055
291	5	-16.706	-27.208	-41.347	-10.715	-10.024	-33.890	148.054
291	6	-18.245	-51.872	-43.218	-19.777	-9.100	-61.017	155.185
291	7	-19.005	-53.038	-45.089	-20.411	-9.448	-62.595	154.908
291	8	-13.991	3.277	-36.929	0.727	3.307	-14.022	87.591
291	9	6.145	-15.097	16.794	0.352	6.151	-15.103	0.949
292	1	-27.597	-6.574	-55.138	-8.564	-3.527	-30.644	109.586
292	2	-27.737	-6.830	-55.119	-8.951	-3.521	-31.046	110.287
292	3	6.246	-14.860	17.012	-0.209	6.248	-14.862	179.432
292	4	-55.276	-10.893	-112.844	-14.310	-6.679	-59.490	106.408
292	5	-21.292	-18.923	-40.712	-5.567	-14.415	-25.800	128.995
292	6	-23.063	-23.543	-38.600	-12.571	-10.729	-35.877	135.546
292	7	-23.982	-23.826	-40.331	-12.974	-10.930	-36.878	134.827
292	8	-18.116	-13.137	-41.161	3.173	-11.593	-19.661	64.056
292	9	6.386	-14.604	16.993	0.177	6.388	-14.606	0.485
293	1	-27.079	-4.505	-54.615	-7.661	-2.151	-29.434	107.085
293	2	-27.171	-4.570	-54.545	-7.977	-2.038	-29.703	107.610
293	3	6.493	-13.887	17.266	0.498	6.505	-13.899	1.399
293	4	-54.649	-8.374	-112.225	-13.051	-4.947	-58.076	104.713
293	5	-20.985	-17.692	-40.412	-4.575	-14.476	-24.201	125.104
293	6	-21.860	-18.768	-37.365	-10.271	-9.927	-30.701	130.720
293	7	-22.747	-18.923	-39.063	-10.621	-10.043	-31.627	129.897
293	8	-18.904	-16.238	-42.004	2.560	-14.684	-20.458	58.748
293	9	6.585	-13.823	17.196	0.813	6.617	-13.855	2.280
294	1	-33.926	-11.222	-57.226	-13.670	-4.805	-40.344	115.147
294	2	-34.005	-11.885	-57.271	-13.919	-5.156	-40.724	115.765
294	3	9.306	-10.879	18.408	2.941	9.726	-11.299	8.125
294	4	-68.761	-17.214	-116.616	-25.889	-6.456	-79.519	112.564
294	5	-25.448	-16.208	-40.936	-9.028	-10.686	-30.970	121.449
294	6	-25.866	-28.321	-39.984	-13.279	-13.758	-40.429	137.640
294	7	-26.965	-28.894	-41.805	-13.795	-14.100	-41.759	136.999
294	8	-23.657	-1.235	-39.909	-3.401	-0.730	-24.162	98.438
294	9	9.386	-10.217	18.454	3.190	9.892	-10.723	9.016
295	1	-32.072	-3.812	-55.369	-4.782	-3.024	-32.859	99.349
295	2	-31.966	-3.741	-55.225	-4.329	-3.092	-32.616	98.527
295	3	11.150	-3.550	20.288	8.491	15.031	-7.431	24.560
295	4	-66.530	-8.256	-114.422	-13.530	-5.268	-69.518	102.454
295	5	-23.412	-8.065	-38.908	-0.709	-8.032	-23.445	92.642
295	6	-20.418	-6.623	-34.447	7.968	-2.982	-24.059	65.439
295	7	-21.396	-6.716	-36.144	7.972	-3.219	-24.893	66.316
295	8	-25.792	-9.557	-42.168	-10.957	-4.117	-31.331	116.818
295	9	11.045	-3.620	20.144	8.038	14.592	-7.168	23.813
296	1	-32.029	-2.401	-55.159	-4.714	-1.669	-32.761	98.826
296	2	-31.248	-2.478	-54.907	-4.924	-1.658	-32.068	99.449
296	3	17.424	-14.552	19.391	1.455	17.491	-14.619	2.600

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
296	4	-72.045	-4.206	-114.896	-7.893	-3.299	-72.951	96.550
296	5	-23.371	-16.280	-40.598	-1.512	-15.971	-23.680	101.554
296	6	-7.665	-17.664	-34.118	-5.324	-5.361	-19.968	156.598
[illegible]	7	-8.411	-17.765	-35.773	-5.545	-5.834	-20.342	155.072
[illegible]	8	-41.027	-14.528	-46.291	3.245	-14.136	-41.418	83.117
296	9	16.643	-14.475	19.139	1.665	16.732	-14.564	3.055
297	1	-8.145	-25.890	-54.537	-1.253	-8.057	-25.978	175.980
297	2	-7.612	-28.091	-54.771	-1.308	-7.529	-28.174	176.357
297	3	8.036	-25.309	15.131	-0.363	8.040	-25.313	179.375
297	4	-20.947	-33.693	-109.373	-2.100	-20.610	-34.030	170.879
297	5	-5.299	-30.911	-39.470	-1.155	-5.247	-30.963	177.423
297	6	4.971	-71.517	-42.149	-2.161	5.032	-71.578	178.382
297	7	4.900	-73.057	-43.944	-2.220	4.963	-73.120	178.370
297	8	-17.337	18.830	-34.188	0.101	18.830	-17.337	89.838
297	9	7.503	-23.108	15.365	-0.308	7.506	-23.111	179.423
298	1	-9.627	-22.864	-54.315	-1.474	-9.464	-23.026	173.720
298	2	-9.275	-24.498	-54.473	-1.603	-9.108	-24.665	174.051
298	3	6.986	-21.211	15.755	-0.985	7.020	-21.245	178.001
298	4	-22.487	-32.232	-109.558	-1.932	-22.118	-32.601	169.184
298	5	-6.225	-28.944	-39.329	-1.313	-6.149	-29.020	176.701
298	6	0.685	-58.986	-40.586	-3.697	0.913	-59.214	176.468
298	7	0.505	-60.237	-42.348	-3.787	0.740	-60.472	176.445
298	8	-14.169	7.988	-35.764	1.605	8.104	-14.285	85.876
298	9	6.634	-19.577	15.913	-0.856	6.662	-19.604	178.131
299	1	-9.699	-23.143	-54.401	-5.612	-7.664	-25.178	160.069
[illegible]	2	-9.343	-24.758	-54.554	-5.936	-7.322	-26.779	161.199
[illegible]	3	7.124	-20.658	15.890	-1.673	7.224	-20.759	176.564
[illegible]	4	-22.708	-33.094	-109.804	-8.784	-17.697	-38.105	150.294
299	5	-6.240	-28.994	-39.359	-4.522	-5.375	-29.859	169.161
299	6	0.763	-58.661	-40.524	-10.428	2.539	-60.437	170.330
299	7	0.581	-59.918	-42.287	-10.715	2.423	-61.760	170.247
299	8	-14.293	7.504	-35.902	2.787	7.855	-14.643	82.827
299	9	6.768	-19.043	16.043	-1.350	6.838	-19.114	177.013
300	1	-9.598	-27.261	-55.134	-6.592	-7.409	-29.450	161.628
300	2	-9.131	-29.565	-55.401	-7.045	-6.937	-31.759	162.706
300	3	7.661	-25.743	14.966	-2.719	7.881	-25.963	175.376
300	4	-23.429	-35.863	-110.366	-9.742	-18.089	-41.203	151.272
300	5	-6.636	-32.040	-39.998	-5.416	-5.529	-33.147	168.452
300	6	2.451	-74.546	-43.297	-13.709	4.819	-76.914	170.199
300	7	2.311	-76.172	-45.123	-14.072	4.758	-78.619	170.136
300	8	-17.195	20.044	-33.949	4.799	20.652	-17.804	82.773
300	9	7.194	-23.438	15.234	-2.267	7.361	-23.605	175.790
301	1	-10.395	-30.417	-55.963	-10.368	-5.994	-34.818	156.997
301	2	-9.975	-32.912	-56.279	-11.004	-5.550	-37.338	158.090
301	3	7.439	-26.636	14.748	-4.061	7.916	-27.113	173.295
301	4	-24.699	-40.876	-111.699	-15.931	-14.920	-50.655	148.459
301	5	-7.283	-34.600	-40.671	-8.988	-4.591	-37.292	163.326
301	6	0.935	-80.577	-44.845	-20.634	5.860	-85.503	166.574
301	7	0.752	-82.371	-46.715	-21.179	5.837	-87.456	166.498
[illegible]	8	-16.768	21.780	-33.537	5.400	22.522	-17.510	82.173

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ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
301	9	7.019	-24.141	15.063	-3.424	7.391	-24.513	173.801
302	1	-15.599	-21.192	-55.259	-10.768	-7.270	-29.521	142.279
302	2	-15.597	-22.677	-55.457	-11.501	-7.133	-31.171	143.553
302	3	4.621	-19.130	15.702	-4.879	5.585	-20.094	168.832
302	4	-31.887	-30.420	-111.241	-15.934	-15.202	-47.105	133.682
302	5	-11.667	-26.873	-40.082	-9.312	-7.248	-31.293	154.614
302	6	-11.141	-54.151	-42.068	-22.765	-1.330	-63.962	156.684
302	7	-11.631	-55.309	-43.876	-23.355	-1.495	-65.445	156.539
302	8	-11.709	6.687	-35.602	7.260	9.207	-14.229	70.857
302	9	4.620	-17.645	15.900	-4.146	5.367	-18.392	169.786
303	1	-15.530	-20.882	-55.225	-14.893	-3.074	-33.338	140.093
303	2	-15.484	-22.189	-55.378	-15.719	-2.763	-34.909	141.020
303	3	5.242	-16.655	16.336	-4.417	6.100	-17.513	169.013
303	4	-32.148	-31.388	-111.579	-23.604	-8.161	-55.375	134.539
303	5	-11.420	-25.854	-39.864	-12.302	-4.374	-32.900	150.198
303	6	-10.056	-49.793	-41.002	-27.360	3.888	-63.738	152.993
303	7	-10.531	-50.884	-42.794	-28.112	3.895	-65.311	152.833
303	8	-12.470	3.687	-36.403	6.356	5.888	-14.671	70.902
303	9	5.196	-15.348	16.489	-3.592	5.806	-15.958	170.362
304	1	-21.171	-34.680	-59.070	-20.301	-6.530	-49.321	144.201
304	2	-21.168	-37.379	-59.510	-21.483	-6.312	-52.235	145.335
304	3	5.628	-27.087	14.316	-6.827	6.996	-28.455	168.673
304	4	-43.323	-48.134	-117.084	-31.728	-13.909	-77.549	137.167
304	5	-16.525	-37.842	-43.258	-17.073	-7.057	-47.311	150.987
304	6	-15.807	-87.519	-49.656	-38.656	1.061	-104.388	156.424
304	7	-16.475	-89.525	-51.668	-39.702	0.946	-106.948	156.306
304	8	-16.584	23.155	-33.330	9.634	25.367	-18.797	77.067
304	9	5.626	-24.388	14.755	-5.645	6.553	-25.415	169.692
305	1	-23.069	-42.195	-61.047	-29.965	-1.177	-64.087	143.849
305	2	-23.106	-45.052	-61.526	-31.555	-0.670	-67.488	144.587
305	3	6.010	-25.572	14.702	-9.579	8.688	-28.251	164.379
305	4	-46.909	-62.321	-120.829	-48.108	-5.893	-103.337	139.550
305	5	-17.793	-42.842	-44.600	-26.132	-1.339	-59.296	147.803
305	6	-17.759	-95.249	-51.682	-55.088	10.844	-123.853	152.560
305	7	-18.501	-97.554	-53.770	-56.577	10.989	-127.045	152.469
305	8	-16.957	21.732	-33.775	9.801	24.073	-19.298	76.565
305	9	6.047	-22.715	15.181	-7.989	8.117	-24.785	165.472
306	1	-50.126	-15.248	-61.153	-26.820	-0.695	-64.679	118.484
306	2	-51.476	-16.229	-61.518	-28.396	-0.432	-67.273	119.087
306	3	-0.689	-13.393	15.835	-10.135	4.919	-19.003	151.037
306	4	-91.365	-22.811	-121.999	-41.784	-3.043	-111.133	115.318
306	5	-40.578	-19.975	-44.645	-23.524	-4.596	-55.958	123.176
306	6	-64.385	-37.944	-49.584	-52.304	2.784	-105.114	127.907
306	7	-66.431	-38.754	-51.636	-53.689	2.851	-108.037	127.773
306	8	-10.065	2.186	-36.391	12.077	9.602	-17.482	58.448
306	9	0.660	-12.412	16.200	-8.560	4.894	-16.646	153.682
307	1	-48.274	-7.837	-59.297	-17.932	-1.030	-55.081	110.785
307	2	-49.439	-8.085	-59.473	-18.805	-0.812	-56.712	111.143
307	3	1.153	-6.063	17.720	-4.586	3.380	-8.290	154.098

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
307	4	-89.137	-13.853	-119.807	-29.426	-3.716	-99.274	109.008
307	5	-38.544	-11.832	-42.613	-15.206	-4.949	-45.427	114.354
307	6	-58.938	-16.246	-44.043	-31.057	0.093	-75.278	117.749
307	7	-60.863	-16.575	-45.973	-31.922	0.130	-77.570	117.625
[illegible]	8	-12.200	-6.234	-38.645	4.520	-3.801	-14.633	61.710
[illegible]	9	2.318	-5.816	17.896	-3.713	3.758	-7.256	158.803
308	1	-64.278	-3.070	-61.534	-22.524	4.324	-71.673	108.176
308	2	-63.352	-4.091	-61.439	-22.834	3.686	-71.129	108.810
308	3	33.467	-13.495	22.754	5.207	34.037	-14.066	6.252
308	4	-139.164	2.226	-126.621	-43.480	14.527	-151.465	105.796
308	5	-42.345	-7.177	-42.427	-15.438	-1.362	-48.160	110.641
308	6	-22.890	-26.268	-38.713	-20.565	-3.945	-45.214	137.347
308	7	-24.603	-26.712	-40.622	-21.382	-4.249	-47.066	136.411
308	8	-63.282	15.877	-44.555	-8.422	16.763	-64.168	96.006
308	9	32.540	-12.475	22.660	5.518	33.207	-13.142	6.887
309	1	-5.473	-25.186	-53.686	-1.253	-5.393	-25.265	176.377
309	2	-4.817	-27.355	-53.886	-1.308	-4.742	-27.431	176.687
309	3	8.875	-25.105	15.316	-0.363	8.878	-25.109	179.387
309	4	-16.502	-32.513	-107.914	-2.100	-16.231	-32.784	172.649
309	5	-2.809	-30.262	-38.711	-1.155	-2.761	-30.311	177.595
309	6	9.682	-70.303	-40.782	-2.161	9.740	-70.361	178.453
309	7	9.737	-71.810	-42.538	-2.220	9.798	-71.870	178.441
309	8	-17.618	18.773	-34.193	0.102	18.773	-17.618	89.839
309	9	8.219	-22.935	15.515	-0.307	8.222	-22.938	179.433
310	1	-5.828	-23.578	-53.351	-1.007	-5.771	-23.635	176.761
310	2	-5.130	-26.052	-53.601	-1.121	-5.070	-26.112	176.941
[illegible]	3	9.309	-27.601	14.892	-0.808	9.327	-27.619	178.746
[illegible]	4	-17.593	-26.737	-106.817	-1.125	-17.457	-26.873	173.084
310	5	-3.154	-28.286	-38.323	-0.812	-3.128	-28.312	178.151
310	6	10.164	-74.102	-41.356	-2.921	10.265	-74.204	178.017
310	7	10.222	-75.664	-43.120	-2.992	10.326	-75.768	178.007
310	8	-18.942	27.631	-32.661	1.760	27.698	-19.009	87.838
310	9	8.610	-25.127	15.143	-0.694	8.625	-25.141	178.821
311	1	-6.241	-25.217	-53.777	-2.842	-5.825	-25.633	171.662
311	2	-5.592	-27.890	-54.078	-2.968	-5.204	-28.278	172.544
311	3	8.899	-29.242	14.483	-0.535	8.907	-29.249	179.195
311	4	-18.063	-28.588	-107.313	-4.767	-16.224	-30.426	158.913
311	5	-3.570	-29.940	-38.752	-2.334	-3.365	-30.145	174.980
311	6	8.827	-79.434	-42.706	-4.624	9.069	-79.675	177.008
311	7	8.855	-81.120	-44.500	-4.758	9.106	-81.371	176.981
311	8	-18.236	30.464	-31.966	0.526	30.470	-18.241	89.381
311	9	8.250	-26.569	14.783	-0.409	8.255	-26.574	179.326
312	1	-5.497	-26.199	-53.927	-2.891	-5.101	-26.596	172.196
312	2	-4.824	-28.452	-54.140	-3.128	-4.417	-28.860	172.583
312	3	9.193	-25.366	15.324	-1.576	9.264	-25.438	177.393
312	4	-16.743	-34.123	-108.350	-3.940	-15.891	-34.975	167.803
312	5	-2.725	-31.037	-38.884	-2.388	-2.525	-31.237	175.210
12	6	10.091	-72.600	-41.197	-6.752	10.638	-73.148	175.362
12	7	10.150	-74.174	-42.967	-6.924	10.715	-74.739	175.336
[illegible]	8	-17.922	19.876	-34.065	2.964	20.107	-18.153	85.543

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!	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
2	9	8.520	-23.113	15.538	-1.339	8.577	-23.170	177.579
3	1	-6.294	-29.355	-54.756	-6.567	-4.505	-31.144	164.981
3	2	-5.669	-31.798	-55.018	-7.088	-3.870	-33.597	165.758
3	3	8.970	-26.258	15.106	-2.919	9.210	-26.498	175.295
3	4	-18.013	-39.135	-109.683	-10.130	-13.940	-43.208	158.097
3	5	-3.373	-33.596	-39.558	-5.960	-2.240	-34.729	169.236
3	6	8.575	-78.630	-42.746	-13.676	10.669	-80.724	171.292
3	7	8.591	-80.373	-44.559	-14.030	10.751	-82.533	171.246
3	8	-17.494	21.612	-33.654	3.564	21.934	-17.817	84.834
3	9	8.345	-23.815	15.368	-2.497	8.538	-24.008	175.585
4	1	-6.274	-30.240	-54.864	-6.885	-4.437	-32.078	165.059
4	2	-5.490	-33.497	-55.254	-7.445	-3.634	-35.353	166.000
4	3	10.823	-34.442	13.833	-4.226	11.214	-34.834	174.711
4	4	-19.298	-34.264	-108.845	-9.437	-14.737	-38.825	154.206
4	5	-2.984	-35.210	-39.757	-6.217	-1.826	-36.368	169.450
4	6	11.965	-95.508	-45.369	-16.543	14.453	-97.997	171.444
4	7	12.036	-97.559	-47.230	-16.952	14.599	-100.122	171.405
4	8	-20.712	38.371	-30.936	6.452	39.068	-21.408	83.839
4	9	10.038	-31.186	14.223	-3.665	10.362	-31.510	174.958
15	1	-8.653	-39.704	-57.295	-10.402	-5.490	-42.866	163.089
15	2	-8.134	-44.022	-57.951	-11.003	-5.029	-47.127	164.241
15	3	8.391	-44.177	11.407	-3.927	8.683	-44.469	175.750
15	4	-21.999	-44.356	-111.652	-16.289	-13.552	-53.412	152.592
15	5	-5.473	-45.121	-42.293	-9.213	-3.437	-47.158	167.536
15	6	4.558	-125.081	-52.822	-20.194	7.631	-128.154	171.348
15	7	4.463	-127.803	-54.852	-20.727	7.636	-130.976	171.299
15	8	-17.201	52.460	-27.470	4.376	52.734	-17.475	86.419
15	9	7.872	-39.859	12.053	-3.326	8.102	-40.089	176.032
16	1	-10.427	-31.963	-56.223	-11.652	-5.329	-37.061	156.370
16	2	-9.967	-34.547	-56.546	-12.651	-4.619	-39.895	157.084
16	3	8.748	-26.314	15.064	-8.374	10.645	-28.212	167.233
16	4	-25.144	-43.527	-112.229	-15.536	-16.283	-52.388	150.304
16	5	-6.428	-35.295	-40.618	-11.259	-2.555	-39.167	161.021
16	6	2.552	-82.899	-44.911	-29.691	11.856	-92.203	162.601
16	7	2.381	-84.780	-46.793	-30.401	11.937	-94.336	162.550
16	8	-16.824	23.109	-33.329	11.332	26.100	-19.816	75.211
16	9	8.288	-23.730	15.387	-7.374	9.905	-25.347	167.633
17	1	-12.325	-39.477	-58.199	-21.316	-0.628	-51.173	151.245
17	2	-11.905	-42.219	-58.561	-22.724	0.253	-54.378	151.851
17	3	9.129	-24.798	15.459	-11.126	12.452	-28.122	163.369
17	4	-28.730	-57.715	-115.973	-31.916	-8.159	-78.276	147.210
17	5	-7.695	-40.294	-41.952	-20.319	2.053	-50.043	154.368
317	6	0.601	-90.634	-46.929	-46.124	19.856	-109.888	157.342
317	7	0.354	-92.809	-48.888	-47.278	20.143	-112.598	157.287
317	8	-17.196	21.686	-33.765	11.499	24.832	-20.343	74.697
317	9	8.709	-22.056	15.821	-9.719	11.521	-24.869	163.857
318	1	-29.347	-64.452	-66.592	-33.527	-9.055	-84.744	148.816
318	2	-29.226	-71.183	-67.810	-36.008	-8.531	-91.878	150.112
318	3	11.337	-66.386	7.592	-20.376	16.355	-71.404	166.165

E 310

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
318	4	-61.060	-75.825	-126.063	-48.020	-19.858	-117.027	139.370
318	5	-20.496	-71.028	-50.660	-32.388	-4.684	-86.840	153.979
318	6	-17.280	-195.585	-71.460	-77.977	12.009	-224.875	159.412
[illegible]	7	-18.166	-199.922	-73.982	-79.884	11.952	-230.041	159.342
[illegible]	8	-23.245	81.098	-23.133	23.667	86.215	-28.362	77.799
318	9	11.215	-59.654	8.810	-17.895	15.478	-63.917	166.602
319	1	-41.533	-112.951	-79.013	-71.055	2.281	-156.766	148.341
319	2	-42.718	-124.911	-81.538	-73.642	0.518	-168.148	149.582
319	3	-1.172	-116.484	-4.858	-10.696	-0.188	-117.467	174.745
319	4	-75.192	-131.863	-140.680	-123.858	23.530	-230.585	141.443
319	5	-33.645	-123.436	-63.999	-60.912	-2.871	-154.210	153.196
319	6	-54.625	-344.795	-108.986	-107.311	-19.251	-380.168	161.756
319	7	-56.344	-352.448	-112.347	-110.444	-19.687	-389.105	161.639
319	8	-6.855	146.856	-6.936	-2.451	146.896	-6.894	90.913
319	9	0.013	-104.524	-2.333	-8.109	0.638	-105.149	175.590
320	1	-149.611	-24.431	-82.999	-53.312	-4.804	-169.238	110.212
320	2	-153.502	-26.657	-84.114	-57.272	-4.624	-175.534	111.041
320	3	0.615	-21.712	14.538	-34.258	25.483	-46.580	144.025
320	4	-273.745	-31.468	-160.509	-76.214	-9.487	-295.726	106.088
320	5	-119.627	-26.524	-61.857	-53.201	-2.383	-143.768	114.407
320	6	-188.083	-67.605	-80.187	-125.986	11.802	-267.491	122.223
320	7	-194.131	-69.137	-83.188	-129.025	11.730	-274.999	122.077
320	8	-31.687	23.769	-36.679	36.293	41.714	-49.632	63.690
320	9	4.506	-19.487	15.652	-30.298	25.097	-40.077	145.801
321	1	-5.251	-18.274	-51.945	-0.785	-5.204	-18.322	176.561
[illegible]	2	-4.546	-20.558	-52.151	-0.769	-4.509	-20.595	177.255
[illegible]	3	8.994	-25.880	15.146	0.290	8.997	-25.882	0.475
321	4	-16.464	-17.442	-104.299	-1.733	-15.152	-18.754	142.882
321	5	-2.922	-22.764	-37.001	-0.673	-2.899	-22.787	178.057
321	6	10.496	-65.170	-39.256	-0.351	10.498	-65.171	179.733
321	7	10.576	-66.498	-40.960	-0.371	10.577	-66.500	179.724
321	8	-18.853	28.852	-32.329	-1.031	28.874	-18.875	91.237
321	9	8.289	-23.596	15.352	0.274	8.292	-23.598	0.493
322	1	-4.128	-23.120	-52.762	0.747	-4.099	-23.150	2.251
322	2	-3.419	-25.591	-53.007	0.832	-3.388	-25.623	2.146
322	3	9.053	-27.670	14.808	0.945	9.077	-27.694	1.473
322	4	-14.204	-25.828	-105.662	0.843	-14.143	-25.889	4.130
322	5	-1.731	-27.906	-37.846	0.957	-1.696	-27.941	2.091
322	6	11.723	-73.678	-40.789	2.522	11.797	-73.753	1.690
322	7	11.838	-75.225	-42.531	2.575	11.915	-75.301	1.692
322	8	-17.747	27.940	-32.314	-0.952	27.959	-17.767	91.194
322	9	8.344	-25.198	15.053	0.860	8.365	-25.221	1.469
323	1	-4.541	-24.759	-53.188	-1.086	-4.483	-24.817	176.931
323	2	-3.882	-27.428	-53.482	-1.015	-3.838	-27.472	177.536
323	3	8.643	-29.309	14.399	1.217	8.682	-29.349	1.835
323	4	-14.674	-27.678	-106.157	-2.797	-14.097	-28.255	168.358
323	5	-2.148	-29.559	-38.275	-0.565	-2.136	-29.571	178.819
323	6	10.386	-79.009	-42.138	0.818	10.394	-79.016	0.524
323	7	10.470	-80.679	-43.912	0.809	10.478	-80.687	0.508
[illegible]	8	-17.042	30.773	-31.620	-2.187	30.873	-17.142	92.613

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E 311

MENT	LOAD COMB	(RADIAL)	(AXIAL)	(HOOP)	(SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
323	9	7.984	-26.640	14.694	1.145	8.022	-26.678	1.893
324	1	-5.430	-18.520	-52.062	1.020	-5.351	-18.599	4.431
324	2	-4.698	-20.915	-52.286	1.211	-4.608	-21.005	4.249
324	3	9.576	-26.803	15.082	2.370	9.730	-26.956	3.713
324	4	-17.103	-17.244	-104.453	0.505	-16.663	-17.684	41.338
324	5	-2.828	-23.132	-37.085	1.664	-2.693	-23.257	4.556
324	6	11.111	-67.607	-39.649	5.225	11.456	-67.952	3.781
324	7	11.192	-68.988	-41.364	5.322	11.544	-69.340	3.781
324	8	-19.376	30.988	-32.034	-2.652	31.127	-19.516	93.007
324	9	8.844	-24.408	15.305	2.179	8.986	-24.550	3.734
325	1	-5.625	-19.275	-52.286	-0.419	-5.613	-19.288	178.240
325	2	-4.955	-21.918	-52.571	-0.109	-4.954	-21.918	179.631
325	3	8.977	-29.208	14.489	3.988	9.389	-29.620	5.899
325	4	-17.027	-16.881	-104.437	-3.422	-13.531	-20.377	134.387
325	5	-3.094	-24.171	-37.376	0.675	-3.072	-24.193	1.834
325	6	9.689	-73.279	-41.091	6.526	10.199	-73.789	4.470
325	7	9.742	-74.773	-42.835	6.620	10.257	-75.289	4.451
325	8	-18.244	35.549	-30.931	-6.340	36.287	-18.981	96.632
325	9	8.307	-26.565	14.774	3.678	8.691	-26.949	5.955
326	1	-2.899	-29.363	-53.850	2.691	-2.628	-29.634	5.748
326	2	-2.077	-32.609	-54.227	3.191	-1.748	-32.939	5.903
326	3	10.533	-34.518	13.750	5.607	11.220	-35.206	6.990
326	4	-12.708	-32.555	-106.885	1.386	-12.612	-32.651	3.976
326	5	-0.097	-34.463	-38.906	3.802	0.318	-34.879	6.239
326	6	15.448	-94.598	-44.297	13.118	16.990	-96.141	6.705
326	7	15.639	-96.619	-46.122	13.375	17.211	-98.190	6.701
326	8	-18.670	38.893	-30.389	-7.494	39.853	-19.630	97.298
326	9	9.711	-31.272	14.127	5.108	10.338	-31.899	6.998
327	1	-5.278	-38.827	-56.281	-0.925	-5.258	-38.847	178.590
327	2	-4.722	-43.134	-56.923	-0.366	-4.718	-43.138	179.453
327	3	8.101	-44.252	11.324	5.906	8.759	-44.910	6.358
327	4	-15.410	-43.257	-109.691	-5.465	-14.375	-44.291	169.283
327	5	-2.586	-44.375	-41.442	0.607	-2.571	-44.390	1.107
327	6	8.042	-124.174	-51.750	9.468	8.717	-124.848	4.075
327	7	8.066	-126.858	-53.743	9.599	8.746	-127.538	4.049
327	8	-15.159	52.981	-26.922	-9.569	54.299	-16.478	97.844
327	9	7.545	-39.944	11.967	5.447	8.152	-40.561	6.460
328	1	-6.060	-19.361	-52.513	6.245	-3.587	-21.833	21.600
328	2	-5.513	-22.300	-52.883	7.212	-2.840	-24.973	20.336
328	3	8.506	-32.343	13.785	10.442	11.020	-34.857	13.539
328	4	-16.932	-14.829	-104.257	4.770	-10.995	-20.766	51.214
328	5	-2.912	-24.872	-37.588	8.000	-0.306	-27.478	18.039
328	6	7.563	-79.548	-42.881	25.991	14.729	-86.713	15.412
328	7	7.559	-81.154	-44.662	26.519	14.892	-88.477	15.437
328	8	-15.271	41.552	-29.238	-13.855	44.751	-18.470	102.998
328	9	7.959	-29.404	14.154	9.475	10.225	-31.669	13.446
329	1	-5.064	-15.297	-51.596	3.364	-4.057	-16.304	16.664
329	2	-4.515	-18.629	-52.063	4.798	-3.130	-20.114	17.201
329	3	7.152	-37.777	12.452	16.918	12.810	-43.435	18.491

E 312

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
329	4	-14.120	-3.418	-101.610	-4.977	-1.461	-16.077	111.464
329	5	-2.352	-22.566	-37.094	7.142	-0.083	-24.835	17.624
329	6	6.247	-84.756	-44.252	33.997	17.545	-96.054	18.383
[illegible]	7	6.239	-86.372	-46.039	34.595	17.736	-97.868	18.382
[illegible]	8	-12.493	52.737	-26.535	-25.258	61.374	-21.130	108.977
329	9	6.703	-34.445	12.919	15.484	11.879	-39.621	18.482
330	1	7.998	-55.081	-57.086	15.114	11.433	-58.516	12.802
330	2	8.222	-61.786	-58.274	17.857	12.514	-66.078	13.513
330	3	1.670	-68.802	5.178	29.759	12.556	-79.688	20.091
330	4	14.436	-56.890	-106.882	8.234	15.374	-57.829	6.500
330	5	7.884	-63.906	-43.430	20.136	13.147	-69.169	14.646
330	6	11.848	-188.264	-63.960	71.232	34.614	-211.030	17.724
330	7	12.175	-192.292	-66.172	72.650	35.360	-215.477	17.699
330	8	2.819	87.617	-16.588	-41.841	104.787	-14.349	112.310
330	9	1.446	-62.097	6.365	27.017	11.380	-72.031	20.188
331	1	-4.184	-103.583	-69.506	-22.415	0.636	-108.404	167.861
331	2	-5.267	-115.516	-72.001	-19.779	-1.826	-118.957	170.130
331	3	-10.838	-118.903	-7.270	39.437	2.023	-131.764	18.062
331	4	0.307	-112.930	-121.496	-67.606	31.871	-144.494	154.972
331	5	-5.263	-116.316	-56.765	-8.388	-4.633	-116.946	175.704
331	6	-25.495	-337.469	-101.484	41.892	-19.967	-342.997	7.516
331	7	-26.001	-344.827	-104.533	42.090	-20.538	-350.290	7.395
331	8	19.211	153.380	-0.386	-67.965	181.793	-9.200	112.687
331	9	-9.755	-106.969	-4.775	36.801	2.604	-119.329	18.565
332	1	57.428	-20.782	-40.685	22.822	63.601	-26.955	15.134
[illegible]	2	52.463	-23.709	-42.159	27.914	61.598	-32.843	18.119
[illegible]	3	-76.140	-30.764	-2.755	57.098	7.988	-114.892	55.835
332	4	158.338	-18.209	-71.029	4.544	158.455	-18.326	1.473
332	5	29.734	-25.264	-31.625	33.728	45.753	-41.282	25.404
332	6	-65.431	-79.647	-58.071	128.749	56.406	-201.485	43.420
332	7	-65.328	-81.303	-59.861	131.213	58.140	-204.772	43.258
332	8	141.928	40.875	1.700	-81.328	187.147	-4.343	150.925
332	9	-71.175	-27.837	-1.281	52.006	6.834	-105.847	56.309
333	1	-3.993	-17.931	-51.487	-0.785	-3.949	-17.976	176.786
333	2	-3.318	-20.222	-51.698	-0.769	-3.283	-20.257	177.399
333	3	8.503	-26.006	15.003	0.290	8.506	-26.008	0.481
333	4	-13.650	-16.686	-103.326	-1.733	-12.864	-17.472	155.605
333	5	-1.828	-22.469	-36.623	-0.673	-1.806	-22.491	178.132
333	6	10.991	-65.013	-38.981	-0.351	10.993	-65.015	179.735
333	7	11.100	-66.333	-40.672	-0.370	11.101	-66.335	179.725
333	8	-17.086	29.299	-31.844	-1.031	29.322	-17.109	91.273
333	9	7.828	-23.715	15.214	0.274	7.830	-23.717	0.498
334	1	-6.554	-12.347	-50.821	0.660	-6.480	-12.422	6.425
334	2	-6.121	-14.295	-51.011	0.746	-6.053	-14.362	5.172
334	3	6.109	-22.575	15.178	0.956	6.141	-22.707	1.900
334	4	-16.894	-8.141	-102.148	0.634	-8.095	-16.939	85.873
334	5	-4.663	-16.521	-35.958	0.844	-4.603	-16.581	4.055
334	6	3.690	-52.782	-37.936	2.428	3.794	-52.886	2.458
334	7	3.635	-53.810	-39.599	2.478	3.742	-53.916	2.466
[illegible]	8	-14.458	27.486	-31.659	-1.083	27.514	-14.486	91.478

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E313

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
334	9	5.675	-20.728	15.368	0.870	5.704	-20.757	1.886
335	1	-6.377	-11.624	-50.661	-0.141	-6.373	-11.628	178.459
335	2	-5.945	-13.578	-50.852	0.138	-5.943	-13.581	1.042
335	3	6.103	-22.703	15.175	3.407	6.501	-23.101	6.654
335	4	-16.552	-6.741	-101.839	-2.609	-6.090	-17.203	104.005
335	5	-4.503	-15.866	-35.811	0.558	-4.465	-15.904	3.306
335	6	3.817	-52.264	-37.823	5.932	4.438	-52.885	5.973
335	7	3.766	-53.274	-39.482	6.024	4.395	-53.904	5.963
335	8	-14.263	28.285	-31.476	-5.674	29.029	-15.007	97.467
335	9	5.671	-20.749	15.367	3.126	6.036	-21.115	6.658
336	1	-4.285	-18.206	-51.636	1.778	-4.061	-18.430	7.166
336	2	-3.659	-20.627	-51.884	2.184	-3.382	-20.904	7.221
336	3	8.179	-27.156	14.715	4.560	8.759	-27.735	7.237
336	4	-13.886	-16.387	-103.386	0.292	-13.853	-16.421	6.582
336	5	-2.047	-22.916	-36.787	2.668	-1.711	-23.252	7.172
336	6	9.856	-67.892	-39.814	10.256	11.186	-69.223	7.390
336	7	9.936	-69.272	-41.523	10.452	11.292	-70.628	7.392
336	8	-16.191	31.793	-31.196	-6.518	32.663	-17.060	97.600
336	9	7.554	-24.735	14.962	4.154	8.079	-25.261	7.215
337	1	-4.480	-18.960	-51.856	0.338	-4.472	-18.968	1.337
337	2	-3.916	-21.628	-52.165	0.864	-3.874	-21.670	2.786
337	3	7.579	-29.559	14.121	6.178	8.580	-30.560	9.201
337	4	-13.809	-16.023	-103.363	-3.635	-11.116	-18.716	143.469
337	5	-2.312	-23.953	-37.075	1.679	-2.183	-24.083	4.411
337	6	8.432	-73.559	-41.253	11.557	10.030	-75.156	7.872
337	7	8.485	-75.052	-42.991	11.748	10.106	-76.672	7.855
337	8	-15.057	36.353	-30.092	-10.204	38.304	-17.008	100.826
337	9	7.015	-26.890	14.430	5.652	7.933	-27.808	9.219
338	1	-8.650	-10.690	-50.995	2.398	-7.064	-12.277	33.480
338	2	-8.609	-12.536	-51.243	3.104	-6.899	-14.246	28.844
338	3	2.423	-21.243	14.742	8.032	4.891	-23.712	17.083
338	4	-18.010	-5.971	-102.113	-0.930	-5.900	-18.081	94.392
38	5	-6.977	-14.678	-36.127	3.997	-5.277	-16.378	23.035
38	6	-5.930	-49.070	-39.188	17.197	0.086	-55.087	19.282
38	7	-6.188	-50.022	-40.879	17.515	-0.049	-56.161	19.315
38	8	-7.908	27.035	-30.517	-11.957	30.735	-11.608	107.193
38	9	2.381	-19.397	14.990	7.326	4.616	-21.632	16.965
39	1	-7.911	-7.684	-50.306	-0.264	-7.510	-8.086	123.397
39	2	-7.837	-9.396	-50.522	0.566	-7.653	-9.580	18.001
39	3	2.724	-20.040	15.047	10.217	6.637	-23.954	20.956
39	4	-16.807	-1.061	-101.010	-7.411	1.878	-19.746	111.634
39	5	-6.245	-11.705	-35.440	2.240	-5.444	-12.506	19.685
39	6	-4.593	-43.668	-37.904	17.882	2.354	-50.616	21.233
39	7	-4.817	-44.484	-39.562	18.160	2.240	-51.542	21.239
39	8	-7.930	26.980	-30.573	-16.548	33.578	-14.528	111.736
39	9	2.649	-18.329	15.263	9.386	6.236	-21.915	20.912
40	1	-3.658	-18.731	-51.769	2.791	-3.158	-19.232	10.160
40	2	-3.521	-21.772	-52.238	4.097	-2.643	-22.650	12.091
40	3	2.869	-33.755	12.353	15.249	8.387	-39.273	19.893

E 314

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
340	4	-8.637	-12.701	-101.908	-5.078	-5.199	-16.139	145.905
340	5	-2.246	-24.684	-37.316	6.073	-0.708	-26.223	14.215
340	6	0.457	-81.292	-44.513	30.562	10.620	-91.454	18.393
[illegible]	7	0.389	-82.913	-46.304	31.099	10.718	-93.243	18.373
[illegible]	8	-5.357	44.038	-25.706	-23.463	53.407	-14.725	111.765
340	9	2.731	-30.714	12.822	13.943	7.781	-35.764	19.910
341	1	-2.662	-14.669	-50.855	-0.089	-2.662	-14.670	179.573
341	2	-2.623	-18.103	-51.422	1.684	-2.442	-18.284	6.138
341	3	1.515	-39.193	11.020	21.727	10.933	-48.610	23.434
341	4	-5.826	-1.290	-99.267	-14.827	11.441	-18.558	130.652
341	5	-1.686	-22.380	-36.824	5.215	-0.446	-23.620	13.375
341	6	-0.858	-86.506	-45.888	38.571	13.951	-101.316	21.004
341	7	-0.930	-88.138	-47.685	39.177	14.084	-103.153	20.970
341	8	-2.579	55.227	-24.004	-34.867	71.613	-18.966	115.171
341	9	1.476	-35.759	11.588	19.953	10.149	-44.431	23.492
342	1	-2.772	-6.254	-49.180	2.985	-1.057	-7.969	29.874
342	2	-4.634	-7.666	-49.724	5.055	-0.872	-11.428	36.651
342	3	-21.341	-16.280	11.008	24.777	6.095	-43.717	47.916
342	4	9.672	-0.864	-96.046	-11.011	16.610	-7.803	147.784
342	5	-7.035	-9.477	-35.314	8.710	0.538	-17.052	41.009
342	6	-41.955	-35.841	-43.992	47.543	8.743	-86.540	46.839
342	7	-42.684	-36.515	-45.729	48.348	8.847	-88.046	46.825
342	8	35.037	22.432	-23.020	-38.072	67.325	-9.854	139.700
342	9	-19.480	-14.868	11.552	22.707	5.650	-39.998	47.899
343	1	-1.094	0.562	-47.604	-1.950	1.853	-2.384	123.493
[illegible]	2	-2.738	0.024	-47.936	-0.655	0.171	-2.886	102.685
[illegible]	3	-19.010	-6.920	13.299	16.797	4.887	-30.817	54.896
[illegible]	4	11.275	5.723	-94.609	-14.702	23.461	-6.462	140.346
343	5	-4.995	-1.220	-33.373	2.750	0.227	-6.443	62.231
343	6	-35.885	-11.372	-38.113	27.172	6.180	-53.437	57.139
343	7	-36.486	-11.535	-39.729	27.555	6.236	-54.258	57.179
343	8	32.170	10.953	-25.870	-26.524	50.129	-7.005	145.899
343	9	-17.365	-6.381	13.631	15.502	4.572	-28.320	54.754
344	1	67.220	-18.272	-37.930	-11.167	68.655	-19.706	172.679
344	2	67.708	-19.836	-38.046	-9.997	68.835	-20.963	173.567
344	3	-10.909	-14.486	13.403	17.679	5.071	-30.467	42.111
344	4	133.280	-24.340	-76.632	-32.484	139.712	-30.773	168.799
344	5	54.661	-18.991	-25.182	-4.807	54.974	-19.303	176.281
344	6	61.713	-47.834	-26.163	17.538	64.453	-50.573	8.877
344	7	63.998	-48.945	-27.400	17.588	66.674	-51.620	8.649
344	8	43.640	16.361	-22.564	-31.238	64.087	-4.085	146.794
344	9	-11.397	-12.922	13.519	16.509	4.367	-28.687	43.677
345	1	-3.496	0.957	-47.043	-0.330	0.981	-3.521	94.217
345	2	-3.192	0.444	-46.968	-0.272	0.465	-3.212	94.263
345	3	4.101	-7.757	17.622	0.744	4.148	-7.804	3.580
345	4	-9.583	7.233	-96.611	-1.145	7.311	-9.661	93.877
345	5	-2.289	-0.968	-32.020	-0.127	-0.956	-2.302	95.464
345	6	3.545	-10.673	-29.132	0.965	3.610	-10.738	3.866
345	7	3.542	-10.787	-30.584	0.974	3.608	-10.853	3.874
[illegible]	8	-9.172	10.618	-33.713	-1.428	10.721	-9.275	94.107

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MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
345	9	3.797	-7.245	17.547	0.687	3.839	-7.287	3.548
346	1	-5.233	-11.958	-50.194	-0.517	-5.193	-11.997	175.626
346	2	-5.180	-14.000	-50.477	-0.420	-5.160	-14.020	177.273
346	3	1.408	-23.866	13.924	1.220	1.466	-23.925	2.759
346	4	-11.056	-6.565	-100.104	-1.847	-5.903	-11.718	109.724
346	5	-4.467	-16.431	-35.702	-0.205	-4.463	-16.435	179.015
346	6	-3.317	-54.484	-39.441	1.624	-3.266	-54.536	1.816
346	7	-3.462	-55.532	-41.116	1.641	-3.410	-55.584	1.803
346	8	-5.653	29.716	-29.311	-2.385	29.876	-5.813	93.841
346	9	1.355	-21.824	14.207	1.124	1.410	-21.878	2.771
347	1	-5.055	-11.234	-50.031	-1.319	-4.785	-11.504	168.436
347	2	-5.004	-13.282	-50.315	-1.028	-4.879	-13.408	173.025
347	3	1.401	-23.893	13.920	3.671	1.924	-24.415	8.094
347	4	-10.713	-5.164	-99.789	-5.091	-2.140	-13.737	120.708
347	5	-4.306	-15.775	-35.553	-0.391	-4.293	-15.788	178.044
347	6	-3.190	-53.964	-39.327	5.128	-2.677	-54.477	5.710
347	7	-3.331	-54.995	-40.997	5.186	-2.815	-55.510	5.677
347	8	-5.457	30.513	-29.127	-6.976	31.819	-6.762	100.600
347	9	1.351	-21.845	14.204	3.380	1.833	-22.327	8.125
348	1	-3.206	1.256	-46.958	-1.301	1.608	-3.557	105.124
348	2	-3.037	0.797	-46.900	-1.137	1.109	-3.349	105.344
348	3	2.555	-6.900	17.481	2.202	3.043	-7.388	12.489
348	4	-7.907	7.158	-96.353	-3.987	8.148	-8.897	103.946
348	5	-2.314	-0.539	-31.970	-0.646	-0.328	-2.524	108.039
348	6	0.955	-9.250	-29.407	2.466	1.520	-9.815	12.898
348	7	0.913	-9.344	-30.865	2.482	1.482	-9.913	12.913
348	8	-6.123	9.853	-33.274	-4.339	10.955	-7.226	104.256
348	9	2.387	-6.441	17.424	2.039	2.835	-6.889	12.398
349	1	-3.079	1.790	-46.857	-2.011	2.513	-3.802	109.777
349	2	-2.895	1.393	-46.735	-1.768	2.028	-3.530	109.755
349	3	2.752	-6.104	17.671	3.308	3.852	-7.204	18.379
349	4	-7.805	7.611	-96.296	-6.089	9.726	-9.921	109.154
349	5	-2.157	0.112	-31.839	-1.013	0.499	-2.544	110.873
349	6	1.400	-7.426	-29.007	3.612	2.690	-8.716	19.653
349	7	1.366	-7.485	-30.458	3.633	2.667	-8.785	19.692
349	8	-6.317	9.080	-33.468	-6.497	11.455	-8.692	110.081
349	9	2.568	-5.708	17.599	3.065	3.580	-6.719	18.265
350	1	-3.713	-9.397	-49.462	-3.201	-2.274	-10.836	155.796
350	2	-3.916	-11.303	-49.770	-2.759	-3.000	-12.220	161.620
350	3	-1.748	-22.305	13.602	5.879	-0.185	-23.868	14.884
350	4	-5.896	-2.823	-98.484	-10.188	5.943	-14.663	130.711
350	5	-3.728	-13.825	-35.110	-1.550	-3.495	-14.057	171.466
350	6	-7.434	-49.403	-39.351	6.874	-6.336	-50.500	9.069
350	7	-7.620	-50.335	-41.014	6.925	-6.525	-51.430	8.983
350	8	0.865	29.265	-28.141	-11.553	33.371	-3.240	109.566
350	9	-1.544	-20.399	13.911	5.436	-0.089	-21.854	14.985
351	1	-2.974	-6.390	-48.774	-5.865	1.426	-10.791	143.119
351	2	-3.144	-8.163	-49.049	-5.297	0.207	-11.515	147.675
351	3	-1.446	-21.103	13.907	8.065	1.439	-23.988	19.686

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
351	4	-4.693	2.087	-97.380	-16.669	15.707	-18.314	129.251
351	5	-2.995	-10.852	-34.423	-3.306	-1.789	-12.059	159.954
351	6	-6.096	-44.002	-38.066	7.559	-4.644	-45.454	10.872
[illegible]	7	-6.249	-44.797	-39.697	7.570	-4.815	-46.230	10.721
[illegible]	8	0.843	29.209	-28.197	-16.144	36.516	-6.462	114.350
351	9	-1.276	-19.330	14.182	7.497	1.430	-22.037	19.855
352	1	1.011	1.770	-46.147	-2.630	4.048	-1.266	130.895
352	2	0.837	1.514	-46.121	-2.319	3.519	-1.167	130.847
352	3	-2.263	-4.100	17.056	4.305	1.220	-7.584	38.978
352	4	3.489	6.149	-94.520	-7.915	12.845	-3.206	130.231
352	5	0.388	0.534	-31.342	-1.290	1.753	-0.830	133.388
352	6	-2.915	-4.343	-29.397	4.636	1.062	-8.320	40.623
352	7	-2.943	-4.362	-30.842	4.661	1.062	-8.368	40.673
352	8	4.321	6.313	-31.930	-8.314	13.691	-3.056	131.585
352	9	-2.089	-3.844	17.030	3.994	1.123	-7.056	38.804
353	1	1.238	2.724	-45.965	-2.617	4.702	-0.738	127.075
353	2	1.099	2.610	-45.907	-2.342	4.316	-0.606	126.062
353	3	-1.853	-2.436	17.441	3.911	1.777	-6.066	42.868
353	4	3.638	6.816	-94.441	-7.592	12.984	-2.529	129.091
353	5	0.686	1.769	-31.092	-1.339	2.672	-0.216	123.989
353	6	-1.972	-0.475	-28.550	3.901	2.748	-5.196	50.428
353	7	-1.982	-0.420	-29.980	3.913	2.789	-5.192	50.643
353	8	3.835	4.353	-32.402	-7.538	11.637	-3.448	134.016
353	9	-1.713	-2.322	17.383	3.636	1.631	-5.667	42.610
354	1	6.548	-3.856	-46.505	-9.990	12.610	-9.918	148.753
[illegible]	2	6.194	-4.891	-46.675	-9.620	11.754	-10.451	149.975
[illegible]	3	-5.708	-12.401	14.762	6.772	-1.500	-16.609	31.353
354	4	16.267	0.928	-93.669	-23.474	33.293	-16.097	144.046
354	5	4.363	-6.581	-32.232	-7.081	7.841	-10.058	153.848
354	6	-2.493	-25.940	-33.959	0.202	-2.491	-25.942	0.494
354	7	-2.409	-26.409	-35.484	0.015	-2.409	-26.409	0.036
354	8	12.357	16.820	-28.392	-15.456	30.206	-1.027	130.892
354	9	-5.355	-11.365	14.931	6.402	-1.288	-15.433	32.426
355	1	8.226	2.961	-44.931	-14.927	20.751	-9.563	140.001
355	2	8.089	2.799	-44.889	-15.330	21.001	-10.113	139.895
355	3	-3.379	-3.042	17.053	-1.205	-1.993	-4.428	131.033
355	4	17.871	7.517	-92.237	-27.165	40.349	-14.960	140.395
355	5	6.402	1.675	-30.293	-13.040	17.292	-9.214	140.137
355	6	3.575	-1.473	-28.083	-20.165	21.374	-19.272	138.568
355	7	3.785	-1.432	-29.486	-20.774	22.114	-19.761	138.579
355	8	9.491	5.343	-31.244	-3.912	11.845	2.989	148.965
355	9	-3.242	-2.880	17.011	-0.802	-2.239	-3.883	128.646
356	1	19.772	1.429	-42.693	-1.269	19.860	1.341	176.060
356	2	20.173	1.375	-42.525	-1.064	20.233	1.315	176.770
356	3	0.347	-1.070	18.070	2.846	2.571	-3.294	38.005
356	4	37.032	3.415	-88.718	-4.274	37.567	2.880	172.865
356	5	17.206	0.969	-28.122	-0.364	17.214	0.961	178.715
356	6	24.111	-0.082	-23.612	3.531	24.616	-0.587	8.137
356	7	24.869	-0.054	-24.902	3.562	25.368	-0.553	7.976
[illegible]	8	8.161	2.177	-31.920	-4.998	10.995	-0.655	150.452

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ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
356	9	-0.052	-1.017	17.902	2.641	2.149	-3.219	39.826
357	1	-1.871	1.452	-46.192	-0.330	1.485	-1.903	95.618
357	2	-1.913	0.853	-46.202	-0.272	0.880	-1.939	95.575
357	3	-0.245	-8.874	16.383	0.744	-0.181	-8.938	4.898
357	4	-3.433	8.951	-94.174	-1.145	9.056	-3.538	95.239
357	5	-1.765	-0.777	-31.588	-0.127	-0.761	-1.782	97.234
357	6	-2.490	-12.120	-30.335	0.965	-2.394	-12.216	5.668
357	7	-2.562	-12.249	-31.790	0.974	-2.465	-12.346	5.690
357	8	-0.825	12.761	-31.348	-1.428	12.910	-0.974	95.937
357	9	-0.203	-8.275	16.393	0.687	-0.145	-8.333	4.833
358	1	-0.994	9.715	-44.156	-0.742	9.767	-1.046	93.945
358	2	-0.974	9.977	-43.983	-0.755	10.029	-1.026	93.928
358	3	0.356	0.165	18.226	-0.035	0.363	0.159	169.867
358	4	-2.163	18.588	-91.564	-1.388	18.680	-2.255	93.810
358	5	-0.831	8.776	-29.353	-0.667	8.822	-0.878	93.957
358	6	-0.421	13.363	-24.705	-0.900	13.421	-0.480	93.722
358	7	-0.445	13.785	-26.033	-0.928	13.845	-0.505	93.715
358	8	-1.288	2.863	-33.270	-0.360	2.894	-1.319	94.927
358	9	0.336	-0.095	18.053	-0.021	0.337	-0.096	177.138
359	1	-1.162	9.057	-44.336	-1.579	9.296	-1.401	98.588
359	2	-1.143	9.314	-44.164	-1.579	9.548	-1.376	98.404
359	3	0.403	0.358	18.268	0.266	0.648	0.113	42.582
359	4	-2.521	17.176	-91.940	-3.194	17.681	-3.026	98.986
359	5	-0.973	8.220	-29.507	-1.348	8.413	-1.167	98.173
359	6	-0.582	12.744	-24.888	-1.301	12.870	-0.708	95.526
359	7	-0.612	13.142	-26.224	-1.350	13.273	-0.743	95.554
359	8	-1.400	2.410	-33.380	-1.345	2.838	-1.827	107.614
359	9	0.384	0.101	18.097	0.267	0.545	-0.059	31.028
360	1	-1.434	1.789	-46.068	-2.536	3.182	-2.828	118.784
360	2	-1.504	1.269	-46.069	-2.563	2.797	-3.031	120.792
360	3	-0.631	-7.730	16.523	0.147	-0.628	-7.733	1.193
360	4	-2.329	8.735	-94.046	-4.954	10.629	-4.223	110.922
360	5	-1.456	-0.264	-31.453	-2.242	1.459	-3.181	127.558
360	6	-2.718	-10.110	-30.034	-2.662	-1.858	-10.969	162.114
360	7	-2.786	-10.208	-31.483	-2.751	-1.877	-11.117	161.723
360	8	0.112	11.471	-31.417	-1.642	11.703	-0.120	98.064
360	9	-0.562	-7.210	16.524	0.174	-0.557	-7.215	1.502
361	1	-1.307	2.322	-45.967	-3.246	4.227	-3.212	120.394
361	2	-1.361	1.866	-45.954	-3.193	3.831	-3.326	121.594
361	3	-0.434	-6.934	16.712	1.253	-0.201	-7.168	10.547
361	4	-2.227	9.188	-93.989	-7.056	12.556	-5.595	115.516
361	5	-1.300	0.386	-31.323	-2.609	2.285	-3.198	126.041
361	6	-2.273	-8.286	-29.634	-1.516	-1.912	-8.647	166.619
361	7	-2.333	-8.349	-31.076	-1.600	-1.934	-8.749	165.996
361	8	-0.081	10.698	-31.613	-3.799	11.903	-1.285	107.591
361	9	-0.380	-6.478	16.699	1.200	-0.152	-6.706	10.750
362	1	-0.098	7.368	-44.518	-2.731	8.261	-0.990	108.094
362	2	-0.129	7.634	-44.357	-2.772	8.522	-1.017	107.765
362	3	-0.385	1.054	18.226	0.006	1.054	-0.385	89.759

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
362	4	0.063	13.420	-92.268	-5.204	15.208	-1.724	108.965
362	5	-0.192	6.840	-29.683	-2.426	7.596	-0.947	107.304
362	6	-0.775	11.588	-25.265	-3.105	12.324	-1.511	103.336
[illegible]	7	-0.788	11.928	-26.612	-3.203	12.690	-1.550	103.371
[illegible]	8	0.512	0.834	-33.307	-1.508	2.191	-0.843	131.947
362	9	-0.354	0.788	18.066	0.046	0.790	-0.356	87.666
363	1	-0.560	5.550	-45.010	-3.070	6.826	-1.837	112.572
363	2	-0.600	5.781	-44.861	-3.135	7.063	-1.883	112.246
363	3	-0.377	1.106	18.216	-0.199	1.132	-0.403	97.529
363	4	-0.827	9.898	-93.204	-5.707	12.366	-3.296	113.391
363	5	-0.604	5.223	-30.127	-2.771	6.331	-1.712	111.785
363	6	-1.344	9.375	-25.902	-3.880	10.632	-2.602	107.951
363	7	-1.377	9.643	-27.269	-3.998	10.941	-2.674	107.981
363	8	0.308	0.006	-33.499	-1.324	1.490	-1.176	138.248
363	9	-0.336	0.875	18.067	-0.135	0.890	-0.351	96.302
364	1	0.593	1.760	-45.779	-5.115	6.325	-3.971	131.746
364	2	0.530	1.532	-45.727	-5.229	6.284	-4.222	132.264
364	3	-0.928	-3.804	17.200	-0.353	-0.885	-3.847	173.089
364	4	1.737	5.907	-93.978	-9.500	13.549	-5.904	128.812
364	5	0.279	0.570	-31.050	-4.624	5.052	-4.202	134.098
364	6	-0.928	-3.791	-28.626	-6.608	4.401	-9.121	141.111
364	7	-0.931	-3.801	-30.051	-6.808	4.590	-9.324	140.951
364	8	1.708	5.731	-32.229	-2.048	6.590	0.849	112.760
364	9	-0.865	-3.576	17.148	-0.239	-0.844	-3.597	174.984
365	1	0.820	2.714	-45.596	-5.102	6.957	-3.421	129.742
365	2	0.792	2.628	-45.512	-5.253	7.042	-3.622	130.044
[illegible]	3	-0.518	-2.140	17.586	-0.748	-0.225	-2.433	158.653
[illegible]	4	1.887	6.574	-93.897	-9.178	13.703	-5.241	127.838
365	5	0.576	1.805	-30.799	-4.673	5.905	-3.522	131.254
365	6	0.014	0.075	-27.778	-7.343	7.388	-7.298	134.880
365	7	0.029	0.140	-29.187	-7.555	7.641	-7.470	134.789
365	8	1.222	3.771	-32.700	-1.271	4.297	0.696	112.473
365	9	-0.489	-2.053	17.502	-0.597	-0.287	-2.255	161.301
366	1	2.758	2.389	-45.069	-2.843	5.423	-0.276	136.855
366	2	2.812	2.532	-44.925	-2.937	5.512	-0.269	136.355
366	3	0.042	0.971	18.217	-0.584	1.253	-0.240	115.762
366	4	5.189	3.928	-93.330	-5.004	9.602	-0.484	138.591
366	5	2.421	2.367	-30.187	-2.650	5.045	-0.256	135.289
366	6	3.317	4.975	-26.054	-4.328	8.553	-0.261	129.581
366	7	3.422	5.106	-27.425	-4.449	8.792	-0.264	129.641
366	8	1.239	-0.864	-33.445	-0.527	1.364	-0.989	166.685
366	9	-0.010	0.828	18.073	-0.490	1.054	-0.236	114.745
367	1	2.440	1.246	-45.413	-1.232	3.185	0.401	148.853
367	2	2.479	1.237	-45.286	-1.295	3.294	0.421	147.806
367	3	-0.028	0.715	18.120	-0.531	0.992	-0.305	117.517
367	4	4.627	1.716	-93.926	-1.982	5.631	0.712	153.148
367	5	2.119	1.193	-30.519	-1.218	2.960	0.353	145.403
367	6	2.768	2.858	-26.680	-2.370	5.184	0.442	134.461
367	7	2.857	2.929	-28.069	-2.431	5.324	0.462	134.579
[illegible]	8	1.249	-0.854	-33.409	0.212	1.270	-0.875	5.711

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F 319

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
367	9	-0.067	0.624	17.993	-0.468	0.860	-0.303	116.781
368	1	4.078	-2.380	-46.047	-3.800	5.836	-4.138	155.176
368	2	4.268	-2.486	-45.930	-4.073	6.182	-4.400	154.829
368	3	1.455	-0.828	18.173	-2.591	3.063	-2.436	147.267
368	4	6.730	-3.928	-95.141	-5.515	9.070	-6.269	157.008
368	5	3.917	-2.271	-31.037	-3.943	5.835	-4.189	154.060
368	6	7.357	-4.187	-27.382	-8.955	12.239	-9.069	151.402
368	7	7.549	-4.296	-28.795	-9.168	12.542	-9.288	151.431
368	8	-0.370	0.119	-33.681	2.223	2.111	-2.362	48.139
368	9	1.265	-0.722	18.056	-2.228	2.711	-2.168	147.020
369	1	-13.267	-177.708	-144.173	-53.972	2.864	-193.840	163.359
369	2	-13.158	-181.698	-144.800	-53.872	2.589	-197.447	163.705
369	3	-6.554	-238.646	-15.703	19.141	-4.986	-240.214	4.683
369	4	-29.928	-136.377	-251.453	-112.245	41.072	-207.378	147.684
369	5	-23.323	-193.325	-122.356	-39.231	-14.706	-201.942	167.612
369	6	-23.172	-262.215	-140.868	-44.368	-15.202	-270.184	169.817
369	7	-21.243	-269.737	-134.359	-37.323	-15.758	-275.222	171.640
369	8	-25.777	-103.140	-108.188	-41.481	-7.740	-121.177	156.499
369	9	-6.662	-234.656	-15.076	19.041	-5.083	-236.235	4.741
370	1	11.516	-217.840	-118.680	38.977	17.959	-224.283	9.386
370	2	11.493	-222.291	-119.447	39.849	18.099	-228.897	9.412
370	3	-19.343	-261.248	-30.065	52.307	-8.517	-272.074	11.693
370	4	24.074	-191.141	-192.822	29.936	28.160	-195.227	7.773
370	5	-6.762	-230.098	-103.440	42.393	1.014	-237.875	10.394
370	6	-5.676	-309.081	-119.638	57.463	4.842	-319.599	10.373
370	7	-7.212	-315.328	-118.131	59.109	3.738	-326.279	10.495
370	8	-6.231	-129.509	-86.102	22.665	-2.196	-133.544	10.094
370	9	-19.320	-256.797	-29.298	51.434	-8.558	-267.459	11.710
371	1	-0.597	-220.791	-121.326	15.065	0.428	-221.817	3.896
371	2	-1.440	-225.447	-122.297	17.928	-0.015	-226.873	4.547
371	3	-41.296	-266.735	-35.547	47.906	-31.538	-276.493	11.513
371	4	18.358	-192.438	-193.595	-5.993	18.528	-192.608	178.372
371	5	-21.497	-233.726	-106.845	23.984	-18.820	-236.403	6.368
371	6	-34.776	-316.293	-126.597	74.350	-16.346	-334.723	13.922
371	7	-37.642	-322.876	-125.434	78.799	-17.320	-343.197	14.461
371	8	-2.442	-128.515	-84.905	-40.710	9.560	-140.518	163.572
371	9	-40.453	-262.079	-34.576	45.043	-31.648	-270.884	11.060
372	1	16.381	-266.319	-155.090	-62.174	29.451	-279.389	168.128
372	2	16.593	-272.208	-156.072	-61.937	29.316	-284.931	168.392
372	3	-11.228	-272.741	-23.440	23.055	-9.211	-274.758	5.000
372	4	27.380	-272.033	-265.606	-129.879	75.866	-320.520	159.528
372	5	-0.442	-272.566	-132.974	-44.886	6.770	-279.779	170.871
372	6	4.995	-382.213	-158.458	-48.674	11.020	-388.237	172.944
372	7	3.616	-385.336	-151.778	-40.348	7.758	-389.478	174.139
372	8	-5.232	-139.468	-110.782	-50.239	11.487	-156.188	161.592
372	9	-11.440	-266.851	-22.458	22.818	-9.417	-268.874	5.065
373	1	-4.395	-271.416	-159.798	-67.569	11.729	-287.541	166.578
373	2	-4.153	-277.297	-160.769	-67.594	11.658	-293.109	166.834
373	3	-4.664	-271.092	-21.755	18.468	-3.390	-272.366	3.946

E 320

ELEMENT	LOAD COMB	R-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	RZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
373	4	-15.191	-282.512	-275.422	-136.433	42.143	-339.847	157.206
373	5	-15.702	-276.306	-136.408	-50.371	-5.305	-285.704	169.432
373	6	-12.282	-386.440	-162.305	-59.277	-3.115	-395.607	171.209
[illegible]	7	-11.069	-388.918	-154.999	-50.847	-4.346	-395.641	172.468
[illegible]	8	-21.170	-143.397	-114.466	-49.807	-3.444	-161.123	160.410
[illegible]	9	-4.906	-265.211	-20.784	18.493	-3.599	-266.513	4.043
374	1	-49.481	-278.493	-141.930	-60.156	-34.641	-293.333	166.142
374	2	-50.254	-283.061	-142.865	-62.954	-34.320	-298.994	165.797
374	3	-25.533	-247.944	-28.581	-34.295	-20.365	-253.112	171.430
374	4	-82.129	-311.160	-236.254	-85.925	-53.477	-339.813	161.558
374	5	-57.409	-276.043	-121.970	-57.266	-43.317	-290.135	166.176
374	6	-63.343	-362.320	-140.888	-111.379	-26.412	-399.250	161.655
374	7	-72.206	-363.516	-139.879	-110.856	-34.819	-400.904	161.362
374	8	-39.944	-172.801	-100.830	5.983	-39.675	-173.070	2.573
374	9	-24.761	-243.375	-27.645	-31.497	-20.313	-247.823	171.962
375	1	-23.723	-271.999	-135.187	-58.924	-10.448	-285.274	167.304
375	2	-23.704	-276.370	-135.923	-59.768	-10.279	-289.795	167.340
375	3	-8.033	-243.569	-24.173	-45.977	0.623	-252.226	169.337
375	4	-48.299	-302.611	-227.305	-70.842	-29.896	-321.014	165.438
375	5	-32.627	-269.811	-115.555	-57.052	-19.617	-282.820	167.154
375	6	-23.070	-352.199	-130.541	-74.279	-7.083	-368.186	167.853
375	7	-32.262	-353.489	-129.648	-73.210	-16.364	-369.388	167.748
375	8	-33.057	-171.045	-98.921	-37.981	-23.294	-180.808	165.583
375	9	-8.052	-239.199	-23.437	-45.134	0.448	-247.699	169.334
376	1	17.854	-268.243	-153.888	-56.425	28.581	-278.969	169.236
376	2	17.895	-272.091	-154.489	-56.346	28.458	-282.654	169.381
[illegible]	3	-16.784	-209.201	-11.774	16.348	-15.405	-210.580	4.822
[illegible]	4	34.195	-322.594	-272.142	-114.483	67.770	-356.169	163.655
376	5	-0.483	-259.704	-129.427	-41.789	6.086	-266.274	171.064
376	6	2.550	-338.263	-148.951	-48.097	9.208	-344.920	172.119
376	7	0.288	-333.390	-140.929	-40.266	5.078	-338.181	173.215
376	8	-1.395	-172.738	-115.851	-43.584	9.053	-183.187	166.518
376	9	-16.824	-205.353	-11.173	16.268	-15.431	-206.747	4.896
377	1	-7.459	-108.201	-184.631	38.844	5.779	-121.439	18.819
377	2	-7.569	-113.106	-185.439	38.945	5.245	-125.922	18.214
377	3	-17.276	-293.398	-14.557	-7.050	-17.096	-293.578	178.538
377	4	-11.934	30.969	-328.835	75.682	88.181	-69.146	52.912
377	5	-21.641	-149.322	-157.953	29.686	-15.076	-155.886	12.469
377	6	-24.317	-222.777	-186.020	35.823	-18.048	-229.045	9.925
377	7	-23.759	-243.256	-173.424	31.615	-19.296	-247.720	8.035
377	8	-19.141	-38.465	-139.695	27.407	0.257	-57.864	35.291
377	9	-17.165	-288.493	-13.749	-7.151	-16.977	-288.681	178.491
378	1	15.954	-176.965	-220.506	-83.201	46.880	-207.890	159.610
378	2	15.944	-181.809	-221.258	-83.037	46.186	-212.052	159.988
378	3	-18.815	-273.434	-3.946	26.782	-16.028	-276.221	5.940
378	4	32.604	-108.740	-403.217	-170.815	146.790	-222.925	146.238
378	5	-2.154	-200.365	-185.904	-60.995	15.111	-217.631	164.194
378	6	-0.180	-281.365	-218.472	-68.624	15.673	-297.219	166.991
378	7	-2.356	-293.131	-200.300	-57.852	8.730	-304.219	169.150
[illegible]	8	-1.917	-90.881	-168.915	-64.702	32.118	-124.917	152.254

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E 321

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
378	9	-18.804	-268.590	-3.194	26.618	-15.999	-271.395	6.015
379	1	-18.618	-185.472	-228.479	-91.131	21.506	-225.597	156.236
379	2	-18.565	-190.300	-229.212	-90.960	20.655	-229.520	156.675
379	3	-7.845	-270.696	-1.240	28.852	-4.715	-273.826	6.191
379	4	-38.260	-126.208	-419.698	-186.751	109.624	-274.093	141.625
379	5	-27.541	-206.603	-191.726	-66.939	-5.283	-228.861	161.608
379	6	-28.798	-288.392	-224.999	-75.437	-8.468	-308.722	164.917
379	7	-26.524	-299.060	-205.773	-63.646	-12.394	-313.191	167.482
379	8	-28.740	-97.490	-175.148	-70.822	15.608	-141.839	147.945
379	9	-7.898	-265.868	-0.506	28.680	-4.748	-269.018	6.268
380	1	11.213	-240.958	-206.298	30.890	14.942	-244.687	6.883
380	2	11.734	-245.648	-206.932	30.976	15.410	-249.323	6.767
380	3	-2.910	-251.305	-3.286	-7.090	-2.708	-251.507	178.366
380	4	11.367	-241.172	-376.529	61.447	25.524	-255.330	12.974
380	5	-3.277	-246.829	-172.883	23.379	-1.053	-249.053	5.434
380	6	6.352	-333.018	-200.868	28.447	8.720	-335.386	4.758
380	7	6.709	-336.632	-185.013	25.037	8.525	-338.449	4.149
380	8	-15.064	-140.841	-158.568	21.422	-11.515	-144.389	9.405
380	9	-3.431	-246.615	-2.652	-7.177	-3.220	-246.827	178.311
381	1	-9.526	-246.020	-210.854	25.497	-6.808	-248.738	6.084
381	2	-8.974	-250.702	-211.476	25.322	-6.350	-253.326	5.916
381	3	3.645	-249.668	-1.636	-11.680	4.182	-250.205	177.365
381	4	-31.127	-251.576	-386.039	54.895	-18.214	-264.490	13.237
381	5	-18.507	-250.542	-176.198	17.892	-17.135	-251.914	4.383
381	6	-10.889	-337.215	-204.576	17.846	-9.916	-338.188	3.121
381	7	-7.947	-340.187	-188.118	14.537	-7.312	-340.822	2.500
381	8	-30.970	-144.735	-162.131	21.852	-26.917	-148.788	10.507
381	9	3.093	-244.986	-1.013	-11.505	3.626	-245.518	177.350
382	1	18.013	-310.361	-244.777	-91.048 ←	41.568	-333.916	165.495
382	2	17.997	-314.984	-245.478	-90.915 ←	41.203	-338.190	165.681
382	3	-19.384	-231.123	4.320	27.862	-15.779	-234.728	7.372
382	4	36.754	-382.227	-453.436	-185.852	107.313	-452.786	159.211
382	5	-0.627	-298.366	-203.638	-67.075	13.785	-312.779	167.872
382	6	1.494	-392.006	-238.395	-76.173	15.725	-406.237	169.418
382	7	-0.922	-386.888	-217.058	-64.522	9.578	-397.389	170.756
382	8	-0.280	-193.881	-187.799	-70.084	22.426	-216.589	162.047
382	9	-19.369	-226.499	5.020	27.729	-15.721	-230.147	7.494
383	1	-16.868	-318.930	-252.749	-84.951	5.383	-341.182	165.321
383	2	-16.838	-323.541	-253.437	-84.835	5.063	-345.443	165.524
383	3	-8.836	-228.493	6.896	25.782	-5.850	-231.478	6.605
383	4	-34.362	-399.722	-469.833	-173.287	34.751	-468.836	158.255
383	5	-26.360	-304.673	-209.499	-62.669	-12.900	-318.134	167.878
383	6	-27.802	-399.187	-245.034	-71.277	-14.592	-412.397	169.500
383	7	-25.778	-392.972	-222.660	-60.451	-16.082	-402.668	170.887
383	8	-27.046	-200.458	-193.967	-65.283	-5.217	-222.287	161.511
383	9	-8.866	-223.881	7.583	25.566	-5.845	-226.903	6.714
384	1	-21.150	-378.694	-238.458	32.129	-18.286	-381.558	5.094
384	2	-21.253	-383.155	-239.162	31.915	-18.460	-385.948	5.001
384	3	-13.482	-207.731	3.267	-16.128	-12.152	-209.061	175.285

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
384	4	-39.515	-523.467	-439.815	70.376	-29.488	-533.494	8.108
384	5	-31.743	-348.044	-197.385	22.332	-30.174	-349.613	4.018
384	6	-35.684	-447.874	-230.506	23.981	-34.293	-449.265	3.318
[illegible]	7	-33.714	-433.458	-210.874	18.242	-32.884	-434.289	2.607
[illegible]	8	-29.417	-247.236	-181.463	27.158	-26.082	-250.571	7.001
384	9	-13.379	-203.270	3.972	-15.915	-12.054	-204.595	175.242
385	1	-23.025	-55.545	-281.458	-104.770	66.739	-145.310	139.411
385	2	-22.982	-60.586	-282.178	-104.589	64.481	-148.050	140.095
385	3	-6.900	-309.287	10.751	32.084	-3.534	-312.654	5.990
385	4	-46.593	138.031	-529.366	-213.846	278.639	-187.201	123.325
385	5	-30.511	-110.669	-236.435	-77.172	16.369	-157.550	148.722
385	6	-32.410	-179.983	-278.986	-87.083	7.943	-220.336	155.137
385	7	-29.688	-207.191	-250.231	-73.694	-3.080	-233.799	160.147
385	8	-31.481	3.245	-220.155	-81.273	68.989	-97.224	128.970
385	9	-6.943	-304.247	11.472	31.902	-3.558	-307.632	6.056
386	1	14.301	-140.194	-265.548	71.881	42.572	-168.465	21.469
386	2	14.290	-145.074	-266.265	71.747	41.832	-172.616	21.000
386	3	-18.316	-282.436	7.546	-23.106	-16.310	-284.442	175.037
386	4	28.586	-35.331	-496.723	147.601	147.649	-154.394	38.891
386	5	-4.020	-172.692	-222.911	52.747	11.116	-187.829	16.012
386	6	-2.657	-249.702	-262.527	59.465	10.910	-263.270	12.853
386	7	-4.226	-266.145	-236.642	50.171	5.054	-275.427	10.481
386	8	-3.777	-62.395	-206.707	55.786	29.929	-96.103	31.141
386	9	-18.305	-277.555	8.263	-22.972	-16.285	-279.575	174.975
387	1	-20.236	-148.666	-273.374	63.954	6.178	-175.081	22.441
[illegible]	2	-20.183	-153.530	-274.073	63.827	5.443	-179.157	21.875
[illegible]	3	-7.354	-279.704	10.224	-21.040	-5.738	-281.320	175.608
387	4	-42.206	-52.725	-512.914	131.669	84.308	-179.240	43.856
387	5	-29.377	-178.898	-228.615	46.801	-15.936	-192.339	16.023
387	6	-31.241	-256.693	-268.916	52.641	-19.555	-268.379	12.516
387	7	-28.366	-272.041	-241.999	44.374	-20.537	-279.870	10.006
387	8	-30.571	-68.972	-212.820	49.663	3.473	-103.017	34.431
387	9	-7.406	-274.840	10.923	-20.913	-5.781	-276.465	175.555
388	1	21.224	-241.083	-308.027	-108.368	60.203	-280.061	160.217
388	2	21.182	-245.788	-308.694	-108.180	59.514	-284.120	160.489
388	3	-20.530	-251.049	19.514	33.069	-15.880	-255.699	8.004
388	4	43.739	-241.773	-584.082	-221.062	164.133	-362.166	151.426
388	5	2.026	-247.034	-255.874	-79.812	25.407	-270.415	163.672
388	6	4.138	-333.726	-300.840	-90.020	26.627	-356.214	165.974
388	7	1.208	-337.127	-268.635	-76.217	17.585	-353.504	167.873
388	8	2.991	-140.696	-240.815	-84.050	41.719	-179.424	155.261
388	9	-20.488	-246.344	20.180	32.881	-15.798	-251.034	8.117
389	1	-23.220	-252.006	-318.208	-109.006	20.400	-295.627	158.190
389	2	-23.189	-256.693	-318.854	-108.817	19.658	-299.541	158.507
389	3	-6.989	-247.685	22.791	33.231	-2.485	-252.189	7.718
389	4	-46.932	-264.084	-604.979	-222.365	91.949	-402.966	148.012
389	5	-30.732	-255.076	-263.333	-80.317	-4.942	-280.865	162.198
389	6	-32.886	-342.811	-309.229	-90.590	-8.349	-367.347	164.845
389	7	-30.147	-344.813	-275.706	-76.679	-12.456	-362.504	167.008
[illegible]	8	-31.420	-149.160	-248.731	-84.606	12.781	-193.362	152.415

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E 323

MEMT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
389	9	-7.020	-242.998	23.437	33.041	-2.480	-247.537	7.822
390	1	0.409	-337.743	-305.416	65.732	12.737	-350.071	10.622
390	2	0.422	-342.286	-306.055	65.648	12.567	-354.431	10.481
390	3	-14.174	-221.161	20.409	-20.170	-12.227	-223.108	174.485
390	4	0.335	-489.161	-578.604	134.284	38.117	-476.943	15.714
390	5	-14.260	-318.036	-252.138	48.465	-6.715	-325.581	8.848
390	6	-14.291	-413.895	-295.437	55.260	-6.790	-421.396	7.730
390	7	-14.012	-405.034	-264.371	46.858	-8.475	-410.571	6.739
390	8	-14.554	-215.354	-237.702	50.359	-2.632	-227.276	13.319
390	9	-14.187	-216.618	21.048	-20.086	-12.213	-218.591	174.387
391	1	-34.438	-346.277	-313.249	71.826	-18.689	-362.026	12.367
391	2	-34.379	-350.809	-313.875	71.725	-18.880	-366.308	12.193
391	3	-3.635	-218.545	22.957	-22.247	-1.356	-220.824	174.151
391	4	-70.710	-456.587	-594.708	146.843	-21.186	-506.111	18.637
391	5	-39.966	-324.323	-257.875	52.870	-30.454	-333.835	10.199
391	6	-43.556	-421.048	-301.944	60.159	-34.200	-430.404	8.839
391	7	-38.841	-411.090	-269.850	50.930	-31.999	-417.932	7.651
391	8	-41.292	-221.909	-243.742	55.159	-25.779	-237.422	15.708
391	9	-3.693	-214.013	23.583	-22.145	-1.387	-216.320	174.054
392	1	20.752	-437.624	-344.687	-103.736	43.135	-460.008	167.823
392	2	20.700	-442.019	-345.287	-103.557	42.819	-464.138	167.943
392	3	-20.438	-190.686	31.281	31.782	-14.698	-196.426	10.237
392	4	42.764	-643.124	-659.322	-211.717	102.852	-703.212	164.155
392	5	1.624	-391.790	-282.753	-76.377	15.931	-406.098	169.390
392	6	3.513	-497.666	-331.208	-86.173	17.916	-512.069	170.511
392	7	0.642	-475.937	-294.252	-72.958	11.561	-486.856	171.488
392	8	2.782	-292.472	-269.183	-80.408	23.259	-312.949	165.712
392	9	-20.387	-186.291	31.881	31.604	-14.570	-192.108	10.428
393	1	-21.415	-9.696	-319.256	94.833	79.458	-110.570	46.768
393	2	-21.384	-14.811	-319.961	94.668	76.627	-112.823	45.994
393	3	-7.250	-320.429	20.142	-29.540	-4.488	-323.191	174.658
393	4	-44.089	229.396	-608.211	193.939	329.953	-144.645	62.593
393	5	-29.956	-76.221	-268.107	69.730	20.378	-126.556	35.823
393	6	-32.305	-141.272	-317.166	78.708	8.936	-182.515	27.654
393	7	-29.357	-174.175	-281.598	66.565	-3.409	-200.123	21.296
393	8	-30.662	39.372	-252.189	73.462	85.736	-77.026	57.743
393	9	-7.281	-315.314	20.847	-29.374	-4.505	-318.090	174.601
394	1	25.138	-121.437	-354.062	-115.319	88.487	-184.786	151.218
394	2	25.095	-126.358	-354.727	-115.113	87.157	-188.420	151.669
394	3	-21.036	-286.622	29.508	34.427	-16.646	-291.013	7.267
394	4	51.558	1.537	-679.692	-234.599	262.476	-209.381	138.042
394	5	5.426	-158.726	-295.456	-85.058	41.550	-194.851	156.989
394	6	8.013	-234.411	-349.083	-95.729	41.256	-267.654	160.849
394	7	4.610	-252.965	-308.197	-81.115	28.026	-276.381	163.898
394	8	6.388	-47.506	-280.425	-89.706	73.106	-114.225	143.360
394	9	-20.993	-281.701	30.173	34.222	-16.576	-286.118	7.355
395	1	-25.403	-133.854	-365.611	-118.680	50.852	-210.110	147.278
395	2	-25.359	-138.753	-366.252	-118.468	49.279	-213.393	147.787
395	3	-6.018	-282.892	33.129	35.080	-1.642	-287.268	7.110

E 324

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
395	4	-51.243	-23.746	-703.301	-241.183	204.079	-279.070	133.368
395	5	-31.902	-167.885	-303.919	-87.634	11.023	-210.811	153.903
395	6	-34.074	-244.724	-358.576	-98.597	4.873	-283.673	158.445
[illegible]	7	-31.064	-261.701	-316.208	-83.563	-3.971	-288.794	162.036
[illegible]	8	-32.889	-57.159	-289.420	-92.434	48.203	-138.252	138.739
[illegible]	9	-6.061	-277.993	33.770	34.868	-1.662	-282.392	7.191
396	1	12.293	-237.631	-356.145	91.548	42.239	-267.578	18.113
396	2	12.254	-242.347	-356.780	91.393	41.664	-271.757	17.838
396	3	-18.183	-251.348	31.546	-28.529	-14.743	-254.788	173.124
396	4	25.162	-235.205	-683.537	187.268	123.052	-333.095	27.597
396	5	-5.275	-244.206	-295.210	67.345	12.399	-261.881	14.705
396	6	-4.599	-330.618	-347.645	76.131	12.302	-347.520	12.517
396	7	-6.011	-334.504	-307.363	64.380	6.155	-346.671	10.702
396	8	-4.406	-137.636	-280.870	70.841	26.220	-168.264	23.380
396	9	-18.145	-246.632	32.180	-28.374	-14.674	-250.103	173.025
397	1	-32.120	-248.527	-366.201	90.916	1.004	-281.653	20.019
397	2	-32.086	-253.224	-366.815	90.764	0.396	-285.706	19.691
397	3	-4.649	-247.995	34.795	-28.360	-1.388	-251.256	173.439
397	4	-65.444	-257.456	-704.176	185.979	47.847	-370.748	31.348
397	5	-38.008	-252.226	-302.565	66.854	-18.856	-271.378	15.985
397	6	-41.594	-339.673	-355.916	75.583	-23.524	-357.743	13.445
397	7	-37.342	-342.168	-314.332	63.932	-24.477	-355.034	11.378
397	8	-38.793	-146.078	-288.681	70.299	-4.007	-180.864	26.327
397	9	-4.684	-243.298	35.409	-28.208	-1.395	-246.587	173.348
398	1	22.463	-357.013	-398.506	-117.951	56.138	-390.688	164.066
398	2	22.414	-361.524	-399.085	-117.739	55.644	-394.754	164.239
[illegible]	3	-20.162	-215.163	43.560	34.969	-14.080	-221.244	9.865
[illegible]	4	45.964	-478.697	-770.689	-239.753	139.018	-571.752	158.787
398	5	3.387	-332.336	-328.044	-87.044	24.513	-353.563	166.295
398	6	5.475	-430.145	-385.722	-97.902	26.467	-451.137	167.898
398	7	2.445	-418.694	-339.129	-82.976	18.204	-434.453	169.246
398	8	4.496	-230.409	-314.963	-91.840	36.140	-262.053	160.988
398	9	-20.113	-210.652	44.138	34.756	-13.971	-216.794	10.021
99	1	-27.958	-369.374	-409.909	-115.833	7.630	-404.964	162.920
99	2	-27.921	-373.863	-410.465	-115.626	7.166	-408.951	163.119
99	3	-5.167	-211.446	47.131	34.525	0.457	-217.071	9.254
99	4	-56.603	-503.863	-793.999	-235.633	44.625	-605.092	156.751
99	5	-33.850	-341.446	-336.402	-85.481	-11.691	-363.605	165.467
99	6	-36.506	-440.409	-395.090	-96.229	-14.751	-462.164	167.261
399	7	-33.137	-427.388	-347.042	-81.524	-16.944	-443.581	168.765
399	8	-34.690	-240.013	-323.847	-90.144	-0.730	-273.974	159.357
399	9	-5.204	-206.958	47.687	34.319	0.473	-212.636	9.394
400	1	1.606	-475.388	-402.659	95.368	19.966	-493.749	10.897
400	2	1.585	-479.690	-403.202	95.210	19.735	-497.840	10.793
400	3	-15.188	-179.287	46.130	-29.387	-10.084	-184.391	170.147
400	4	3.553	-719.829	-778.681	194.821	52.686	-768.961	14.154
400	5	-13.219	-419.426	-329.348	70.224	-1.422	-431.223	9.536
400	6	-13.539	-528.166	-385.986	79.395	-1.569	-540.137	8.574
400	7	-13.623	-501.777	-339.748	67.197	-4.541	-510.859	7.696
[illegible]	8	-12.744	-322.215	-317.075	73.792	3.950	-338.910	12.748

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E 325

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
400	9	-15.167	-174.986	46.673	-29.229	-9.989	-180.164	169.954
401	1	-24.915	9.904	-398.923	-121.833	115.565	-130.576	130.934
401	2	-24.865	4.741	-399.587	-121.610	112.446	-132.570	131.530
401	3	-6.132	-323.279	39.634	34.785	-2.362	-327.049	6.186
401	4	-49.860	266.672	-773.309	-246.589	401.415	-184.604	118.653
401	5	-31.127	-61.348	-334.087	-90.194	45.212	-137.689	139.755
401	6	-33.068	-125.255	-396.291	-101.236	32.073	-190.397	147.240
401	7	-30.171	-160.206	-346.809	-85.926	12.563	-202.941	153.557
401	8	-32.255	55.320	-319.080	-95.224	116.342	-93.276	122.652
401	9	-6.182	-318.116	40.298	34.562	-2.398	-321.900	6.247
402	1	20.473	-105.604	-393.215	111.236	85.291	-170.422	30.229
402	2	20.428	-110.556	-393.864	111.040	83.851	-173.979	29.734
402	3	-19.605	-289.146	39.198	-33.598	-15.480	-293.271	173.001
402	4	41.369	32.103	-761.197	226.651	263.435	-189.962	44.414
402	5	1.336	-146.486	-328.134	82.013	37.828	-182.979	23.987
402	6	2.855	-220.844	-388.430	92.430	36.104	-254.093	19.785
402	7	0.464	-241.312	-340.565	78.269	23.590	-264.438	16.460
402	8	2.364	-34.569	-313.471	86.426	72.274	-104.480	38.969
402	9	-19.559	-284.194	39.847	-33.402	-15.408	-288.345	172.916
403	1	-30.040	-117.993	-404.652	107.874	42.477	-190.511	33.910
403	2	-29.999	-122.923	-405.278	107.686	40.820	-193.743	33.331
403	3	-4.593	-285.423	42.791	-32.945	-0.780	-289.236	173.397
403	4	-61.374	6.882	-784.576	220.068	195.452	-249.945	49.407
403	5	-35.968	-155.617	-336.507	79.436	3.650	-195.237	26.508
403	6	-39.204	-231.130	-397.812	89.569	-3.898	-266.436	21.513
403	7	-35.187	-250.027	-348.487	75.821	-11.123	-274.091	17.608
403	8	-36.890	-44.201	-322.374	83.698	43.232	-124.323	43.749
403	9	-4.634	-280.493	43.416	-32.756	-0.798	-284.329	173.320
404	1	25.009	-238.388	-436.201	-122.347	73.069	-286.449	158.554
404	2	24.960	-243.105	-436.792	-122.121	72.251	-290.397	158.831
404	3	-20.327	-250.189	51.068	34.697	-15.204	-255.313	8.399
404	4	51.048	-237.636	-849.327	-247.406	193.140	-379.728	150.130
404	5	5.760	-244.720	-361.466	-90.587	35.087	-274.047	162.061
404	6	8.159	-331.472	-427.006	-101.583	36.223	-359.537	164.556
404	7	4.826	-335.038	-372.788	-86.263	25.467	-355.679	166.543
404	8	6.861	-138.121	-348.109	-95.682	54.412	-185.672	153.574
404	9	-20.279	-245.472	51.659	34.472	-15.120	-250.631	8.511
405	1	-28.644	-251.541	-448.298	-122.874	25.795	-305.981	156.104
405	2	-28.598	-256.234	-448.864	-122.649	24.907	-309.740	156.430
405	3	-4.978	-246.396	54.712	34.767	-0.071	-251.303	8.034
405	4	-57.605	-264.288	-873.926	-248.441	108.129	-430.023	146.292
405	5	-33.985	-254.449	-370.350	-91.024	-1.261	-287.174	160.226
405	6	-36.534	-342.404	-436.923	-102.111	-5.578	-373.360	163.135
405	7	-33.111	-344.312	-381.187	-86.698	-10.587	-366.835	165.437
405	8	-35.016	-148.388	-357.565	-96.123	19.890	-203.295	150.264
405	9	-5.024	-241.703	55.277	34.541	-0.086	-246.641	8.136
406	1	11.612	-366.229	-443.555	108.423	40.514	-395.131	14.926
406	2	11.574	-370.712	-444.103	108.234	40.091	-399.229	14.760
406	3	-17.491	-212.664	54.409	-33.043	-12.048	-218.106	170.647

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
406	4	23.697	-497.060	-863.659	221.165	104.948	-578.311	20.172
406	5	-5.368	-339.011	-365.145	79.887	12.773	-357.153	12.794
406	6	-4.790	-437.319	-429.888	90.097	13.226	-455.336	11.308
[illegible]	7	-6.090	-424.861	-375.649	76.261	7.364	-438.316	10.006
[illegible]	8	-4.516	-237.680	-352.752	84.161	22.687	-264.884	17.913
406	9	-17.453	-208.180	54.958	-32.854	-11.952	-213.681	170.495
407	1	-38.782	-378.562	-454.840	110.541	-5.985	-411.359	16.525
407	2	-38.734	-383.024	-455.365	110.346	-6.403	-415.354	16.330
407	3	-2.503	-208.954	57.967	-33.486	2.792	-214.250	171.013
407	4	-78.813	-522.176	-886.740	225.284	15.567	-616.558	22.731
407	5	-42.583	-348.107	-373.407	81.450	-22.225	-368.465	14.033
407	6	-46.745	-447.555	-439.138	91.763	-26.735	-467.565	12.301
407	7	-41.652	-433.534	-383.465	77.713	-26.803	-448.383	10.817
407	8	-43.681	-247.277	-361.538	85.857	-12.309	-278.649	20.072
407	9	-2.552	-204.493	58.493	-33.291	2.794	-209.839	170.876
408	1	20.875	-498.611	-485.173	-120.847	47.612	-525.347	167.524
408	2	20.823	-502.860	-485.667	-120.625	47.272	-529.309	167.632
408	3	-19.051	-173.645	66.041	34.603	-11.659	-181.037	12.058
408	4	42.481	-766.131	-949.139	-244.639	110.734	-834.384	164.411
408	5	2.606	-436.916	-397.430	-89.410	20.099	-454.408	168.930
408	6	4.363	-547.604	-467.305	-100.326	22.033	-565.273	170.011
408	7	1.607	-518.270	-406.882	-85.159	15.202	-531.865	170.930
408	8	3.784	-340.881	-386.279	-94.420	27.955	-365.052	165.641
408	9	-18.999	-169.395	66.534	34.381	-11.512	-176.883	12.285
409	1	-28.827	23.479	-432.062	118.965	119.132	-124.480	51.199
[illegible]	2	-28.782	18.285	-432.722	118.749	115.810	-126.307	50.605
[illegible]	3	-4.371	-322.922	48.090	-34.757	-0.623	-326.671	173.845
409	4	-58.967	290.868	-843.041	241.395	414.058	-182.156	62.963
409	5	-34.556	-50.339	-362.229	87.888	45.794	-130.689	42.434
409	6	-37.572	-113.430	-430.624	98.749	30.282	-181.285	34.494
409	7	-33.703	-149.798	-374.872	83.752	10.150	-193.652	27.637
409	8	-35.561	67.034	-347.318	92.764	121.739	-90.267	59.471
409	9	-4.415	-317.729	48.749	-34.541	-0.653	-321.492	173.783
410	1	27.536	-101.756	-461.055	-121.777	100.763	-174.983	148.981
410	2	27.487	-106.723	-461.684	-121.550	99.226	-178.462	149.451
410	3	-20.399	-287.765	55.363	33.226	-16.332	-291.832	6.979
410	4	56.050	37.741	-902.393	-245.196	292.263	-198.471	136.069
410	5	8.162	-143.299	-385.344	-90.418	50.375	-185.512	154.974
410	6	10.870	-217.827	-457.701	-101.187	49.212	-256.169	159.247
410	7	7.224	-238.409	-397.404	-86.066	34.379	-265.564	162.489
410	8	9.269	-31.055	-371.120	-95.547	86.758	-108.545	140.958
410	9	-20.350	-282.798	55.993	32.999	-16.264	-286.884	7.058
411	1	-27.098	-115.131	-473.298	-122.159	58.732	-200.963	144.907
411	2	-27.049	-120.073	-473.901	-121.932	56.940	-204.064	145.440
411	3	-5.504	-284.087	58.876	32.880	-1.676	-287.915	6.641
411	4	-54.009	10.780	-927.137	-245.640	226.152	-269.382	131.243
411	5	-32.464	-153.233	-394.360	-90.828	16.219	-201.917	151.808
411	6	-34.697	-228.949	-467.729	-101.618	8.745	-272.393	156.852
[illegible]	7	-31.529	-247.868	-405.916	-96.465	-1.218	-278.179	160.681
[illegible]	8	-33.565	-41.548	-380.729	-95.969	58.494	-133.609	136.190

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E 327

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
411	9	-5.553	-279.145	59.479	32.552	-1.710	-282.988	6.712
412	1	18.472	-235.493	-471.777	118.430	65.128	-282.148	21.502
412	2	18.426	-240.210	-472.356	118.217	64.313	-286.102	21.216
412	3	-18.624	-250.039	59.434	-34.858	-13.488	-255.176	171.517
412	4	37.294	-232.408	-923.329	240.557	178.220	-373.334	30.363
412	5	0.243	-242.237	-391.537	87.481	28.509	-270.503	17.906
412	6	1.466	-328.606	-463.333	98.381	28.565	-355.705	15.400
412	7	-0.648	-332.568	-402.635	83.398	19.127	-352.344	13.340
412	8	1.294	-135.623	-378.447	92.294	47.748	-182.077	26.717
412	9	-18.578	-245.321	60.013	-34.645	-13.402	-250.497	171.503
413	1	-35.157	-248.624	-483.784	117.902	17.146	-300.929	23.923
413	2	-35.109	-253.318	-484.338	117.689	16.268	-304.697	23.584
413	3	-3.281	-246.253	63.050	-34.796	1.603	-251.138	172.008
413	4	-71.312	-259.014	-947.734	239.523	92.089	-422.417	34.301
413	5	-39.484	-251.949	-400.345	87.037	-8.381	-283.051	19.564
413	6	-43.203	-339.511	-473.166	97.854	-13.804	-368.910	16.722
413	7	-38.567	-341.825	-410.959	82.956	-17.358	-363.034	14.341
413	8	-40.564	-145.873	-387.827	91.847	12.650	-199.089	30.087
413	9	-3.329	-241.559	63.604	-34.583	1.589	-246.478	171.905
414	1	21.835	-372.062	-512.104	-121.645	56.374	-406.601	164.149
414	2	21.786	-376.533	-512.629	-121.418	55.879	-410.626	164.315
414	3	-18.900	-211.512	70.273	32.810	-13.465	-216.948	9.407
414	4	44.467	-508.581	-1,005.830	-244.633	137.147	-601.261	159.251
414	5	3.780	-343.560	-422.927	-90.404	25.901	-365.682	156.250
414	6	5.717	-442.430	-499.666	-101.111	27.473	-464.187	167.856
414	7	2.842	-429.159	-432.989	-86.044	19.350	-445.667	169.140
414	8	4.884	-242.527	-411.060	-95.542	37.484	-275.127	161.160
414	9	-18.852	-207.041	70.798	32.583	-13.370	-212.523	9.550
415	1	-32.680	-385.381	-524.187	-122.145	5.489	-423.552	162.646
415	2	-32.631	-389.827	-524.686	-121.919	5.014	-427.473	162.840
415	3	-4.038	-207.841	73.743	33.240	1.246	-213.125	9.033
415	4	-65.350	-535.431	-1,030.256	-245.905	39.775	-640.558	156.853
415	5	-36.756	-353.445	-431.825	-90.745	-12.597	-377.605	155.091
415	6	-39.747	-453.499	-509.562	-101.583	-16.152	-477.094	166.923
415	7	-35.823	-438.569	-441.389	-86.396	-18.072	-456.320	168.389
415	8	-37.857	-252.972	-420.543	-95.870	-1.331	-289.497	159.144
415	9	-4.086	-203.395	74.243	33.013	1.239	-208.721	9.164
416	1	11.749	-506.326	-523.090	119.055	37.798	-532.375	12.342
416	2	11.706	-510.546	-523.564	118.840	37.477	-536.317	12.235
416	3	-17.418	-173.713	74.268	-34.722	-10.052	-181.079	168.021
416	4	24.152	-779.726	-1,027.189	241.562	91.155	-846.730	15.502
416	5	-4.973	-442.893	-429.356	88.000	12.048	-459.915	10.947
416	6	-4.487	-553.624	-505.548	98.909	12.784	-570.897	9.905
416	7	-5.786	-523.587	-438.441	93.873	7.457	-536.931	8.973
416	8	-4.015	-347.527	-418.638	92.864	19.482	-371.025	11.199
416	9	-17.376	-169.493	74.743	-34.506	-9.914	-176.954	167.798
417	1	-23.547	21.742	-488.187	-118.791	119.939	-121.744	129.599
417	2	-23.500	15.544	-488.849	-118.480	116.682	-123.638	130.204
417	3	-6.183	-318.538	60.935	30.915	-3.153	-321.569	5.598

E 328

ELEMENT	LOAD COMB	[illegible] (RADIAL)	[illegible] (AXIAL)	[illegible] (HOOP)	[illegible] (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
417	4	-46.653	284.099	-960.543	-237.890	408.449	-171.003	117.597
417	5	-29.337	-50.983	-410.758	-88.494	48.993	-129.313	138.486
417	6	-31.118	-114.882	-490.152	-98.881	34.385	-180.386	146.477
417	7	-28.439	-150.528	-423.438	-84.254	14.560	-193.528	152.962
[illegible]	8	-30.394	66.485	-395.808	-93.490	123.339	-87.248	121.305
[illegible]	9	-6.230	-313.340	61.597	30.694	-3.192	-316.378	5.652
418	1	22.175	-99.555	-490.062	122.361	97.973	-175.353	31.776
418	2	22.125	-104.524	-490.693	122.135	96.376	-178.775	31.297
418	3	-18.604	-285.712	62.285	-33.982	-14.348	-289.967	172.862
418	4	44.328	40.204	-963.464	246.878	289.153	-204.620	44.760
418	5	3.597	-140.982	-410.484	90.760	47.338	-184.724	25.731
418	6	5.177	-215.416	-488.576	101.708	44.913	-255.153	21.340
418	7	2.644	-236.138	-422.572	86.426	30.642	-264.137	17.950
418	8	4.720	-28.687	-396.231	95.867	85.328	-109.295	40.058
418	9	-18.554	-280.743	62.916	-33.756	-14.278	-285.019	172.780
419	1	-32.440	-112.916	-502.229	121.979	55.765	-201.123	35.872
419	2	-32.392	-117.860	-502.833	121.753	53.908	-204.162	35.330
419	3	-3.713	-282.041	65.784	-34.329	0.457	-286.213	173.071
419	4	-65.692	13.277	-988.041	246.441	223.377	-275.791	49.551
419	5	-37.013	-150.902	-419.423	90.357	12.846	-200.762	28.890
419	6	-40.370	-226.522	-498.520	101.277	4.104	-270.997	23.708
419	7	-36.093	-245.583	-431.006	86.034	-5.289	-276.387	19.699
419	8	-38.097	-39.166	-405.764	95.453	56.822	-134.086	44.839
419	9	-3.761	-277.097	66.388	-34.104	0.429	-281.288	172.994
420	1	23.703	-236.624	-527.479	-117.312	68.767	-281.689	158.986
420	2	23.656	-241.342	-528.059	-117.093	67.981	-285.668	159.266
[illegible]	3	-18.759	-248.732	71.926	30.337	-14.824	-252.667	7.390
[illegible]	4	48.132	-235.628	-1,039.761	-234.905	180.680	-368.175	150.565
420	5	5.717	-243.017	-439.775	-87.475	33.399	-270.700	162.439
420	6	7.914	-329.757	-522.479	-97.680	34.135	-355.978	164.974
420	7	4.810	-333.355	-450.905	-83.270	24.202	-352.747	166.890
420	8	6.786	-136.396	-426.650	-92.429	52.107	-181.718	153.880
420	9	-18.711	-244.014	72.506	30.118	-14.755	-247.971	7.484
421	1	-29.782	-249.680	-539.270	-117.666	21.309	-300.772	156.529
421	2	-29.733	-254.374	-539.825	-117.447	20.456	-304.564	156.861
421	3	-4.819	-245.302	75.153	30.364	-1.045	-249.077	7.086
421	4	-59.119	-261.815	-1,063.450	-235.593	96.000	-416.934	146.638
421	5	-34.205	-252.743	-448.471	-87.780	-3.312	-283.635	160.611
421	6	-36.781	-340.629	-532.118	-98.055	-7.885	-369.525	163.580
421	7	-33.268	-342.619	-459.108	-83.579	-12.131	-363.756	165.807
421	8	-35.308	-146.674	-435.929	-92.731	17.173	-199.157	150.492
421	9	-4.868	-240.609	75.708	30.145	-1.074	-244.402	7.173
422	1	16.663	-369.305	-540.715	122.347	52.178	-404.820	16.187
422	2	16.615	-373.773	-541.240	122.121	51.670	-408.828	16.016
422	3	-18.004	-213.009	76.252	-34.343	-12.133	-218.881	170.298
422	4	33.812	-502.287	-1,065.407	247.142	130.358	-598.833	21.338
422	5	-0.808	-341.523	-447.914	90.677	21.821	-364.153	14.012
422	6	0.134	-439.798	-530.215	101.673	22.495	-462.159	12.403
422	7	-1.736	-427.069	-457.977	86.357	15.128	-443.934	11.050
[illegible]	8	0.285	-240.548	-436.045	95.769	33.725	-273.988	19.248

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E 329

ENT	LOAD COMB	R-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	RZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
422	9	-17.956	-208.541	76.777	-34.118	-12.032	-214.465	170.150
423	1	-37.833	-382.604	-552.729	121.840	0.877	-421.315	17.626
423	2	-37.784	-387.047	-553.228	121.614	0.389	-425.221	17.426
423	3	-3.145	-209.346	79.702	-33.913	2.288	-214.780	170.896
423	4	-75.967	-529.096	-1,089.679	245.857	31.799	-636.862	23.669
423	5	-41.329	-351.394	-456.749	90.329	-16.933	-375.790	15.113
423	6	-45.311	-450.847	-540.034	101.194	-21.462	-474.696	13.261
423	7	-40.386	-436.465	-466.315	85.998	-22.519	-454.331	11.736
423	8	-42.440	-250.979	-445.466	95.434	-5.360	-288.059	21.233
423	9	-3.195	-204.902	80.201	-33.687	2.282	-210.380	170.764
424	1	17.084	-506.805	-578.152	-117.944	42.412	-532.134	167.880
424	2	17.039	-511.021	-578.627	-117.723	42.095	-536.077	167.984
424	3	-17.286	-175.854	86.031	30.769	-11.525	-181.615	10.605
424	4	34.893	-779.028	-1,141.843	-236.376	98.561	-842.695	164.925
424	5	0.567	-443.861	-477.183	-87.883	17.314	-460.609	169.211
424	6	1.940	-554.486	-564.104	-98.166	18.751	-571.297	170.282
424	7	-0.283	-524.569	-486.288	-83.655	12.740	-537.593	171.150
424	8	1.570	-348.590	-466.445	-92.865	24.674	-371.694	166.029
424	9	-17.242	-171.638	86.506	30.548	-11.417	-177.463	10.794
425	1	-30.055	13.890	-512.874	120.520	114.424	-130.590	50.166
425	2	-30.006	8.713	-513.544	120.295	111.196	-132.489	49.571
425	3	-3.865	-312.911	66.899	-32.045	-0.577	-316.199	174.142
425	4	-60.836	265.727	-1,013.086	242.010	394.387	-189.496	62.003
425	5	-34.695	-55.897	-432.641	89.670	44.997	-135.591	41.629
425	6	-37.700	-120.561	-517.395	100.229	29.323	-187.585	33.771
425	7	-33.747	-155.033	-445.480	85.340	10.302	-199.083	27.301
425	8	-35.813	61.091	-417.506	94.771	119.078	-93.800	58.539
425	9	-3.914	-307.734	67.569	-31.819	-0.617	-311.031	174.085
426	1	25.559	-105.208	-534.076	-111.548	89.473	-169.123	150.188
426	2	25.512	-110.167	-534.730	-111.343	88.055	-172.710	150.676
426	3	-18.380	-282.028	71.818	28.385	-15.358	-285.050	6.076
426	4	51.614	27.005	-1,056.556	-223.045	262.694	-184.074	136.578
426	5	7.721	-144.855	-450.008	-83.316	44.399	-181.533	156.239
426	6	10.170	-220.139	-537.999	-93.055	43.059	-253.038	160.529
426	7	6.837	-239.826	-462.545	-79.390	30.180	-263.169	163.615
426	8	8.762	-32.770	-435.229	-87.940	78.355	-102.363	141.643
426	9	-18.334	-277.069	72.472	28.180	-15.300	-280.103	6.144
427	1	-25.408	-117.624	-545.187	-109.916	47.679	-190.712	146.378
427	2	-25.364	-122.561	-545.817	-109.717	46.036	-193.962	146.945
427	3	-5.488	-278.860	74.780	27.740	-2.702	-281.646	5.736
427	4	-50.312	2.167	-1,078.810	-219.648	197.137	-245.282	131.593
427	5	-30.436	-154.131	-458.212	-82.189	10.576	-195.144	153.480
427	6	-32.543	-230.499	-547.076	-91.847	3.506	-266.549	158.570
427	7	-29.594	-248.666	-470.281	-78.370	-4.445	-273.815	152.208
427	8	-31.428	-42.562	-443.985	-86.688	49.871	-123.862	136.837
427	9	-5.532	-273.923	75.409	27.541	-2.735	-276.720	5.799
428	1	19.698	-234.583	-549.548	121.791	58.620	-283.504	21.884
428	2	19.648	-239.300	-550.142	121.564	67.773	-287.425	21.597
428	3	-17.760	-248.366	76.551	-32.560	-13.251	-252.875	172.115

E 330

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
428	4	39.485	-232.108	-1,086.517	244.723	183.564	-376.187	30.487
428	5	2.075	-241.174	-459.823	90.598	32.110	-271.209	18.341
428	6	3.324	-327.607	-547.583	101.319	31.880	-356.163	15.740
[illegible]	7	1.120	-331.498	-471.209	86.233	22.148	-352.525	13.703
[illegible]	8	3.201	-134.568	-446.399	95.743	52.264	-183.631	27.133
428	9	-17.711	-243.649	77.145	-32.333	-13.175	-248.185	172.014
429	1	-33.773	-247.624	-561.277	121.444	21.108	-302.507	24.319
429	2	-33.727	-252.317	-561.845	121.216	20.191	-306.236	23.980
429	3	-3.825	-244.939	79.765	-32.533	0.487	-249.251	172.449
429	4	-67.736	-258.264	-1,110.082	244.049	98.983	-424.984	34.338
429	5	-37.834	-250.886	-468.470	90.299	-4.711	-284.009	20.143
429	6	-41.356	-338.461	-557.166	100.951	-10.300	-369.517	17.099
429	7	-36.945	-340.742	-479.362	85.931	-14.323	-363.364	14.748
429	8	-38.881	-144.832	-455.629	95.448	17.306	-201.021	30.484
429	9	-3.871	-240.246	80.333	-32.305	0.464	-244.582	172.356
430	1	18.070	-365.972	-582.944	-109.604	47.148	-395.051	165.141
430	2	18.030	-370.449	-583.495	-109.404	46.722	-399.141	165.305
430	3	-16.908	-214.109	84.928	27.727	-13.083	-217.933	7.853
430	4	36.790	-495.595	-1,154.578	-219.043	115.327	-574.132	160.275
430	5	1.851	-339.254	-486.155	-81.911	20.501	-357.905	167.173
430	6	3.442	-437.402	-578.124	-91.499	21.679	-455.639	168.728
430	7	1.095	-424.979	-496.715	-78.087	14.955	-438.839	169.935
430	8	2.742	-238.069	-473.704	-86.416	30.543	-265.870	162.166
430	9	-16.868	-209.631	85.479	27.527	-13.014	-213.486	7.970
431	1	-32.781	-378.333	-593.909	-111.736	0.201	-411.315	163.554
[illegible]	2	-32.730	-382.787	-594.436	-111.531	-0.215	-415.302	163.747
[illegible]	3	-4.043	-210.954	87.855	28.370	-0.223	-214.773	7.667
[illegible]	4	-64.904	-520.322	-1,176.540	-223.399	26.383	-611.610	157.773
431	5	-36.216	-348.489	-494.249	-83.497	-15.292	-369.413	165.931
431	6	-39.170	-447.722	-587.076	-93.298	-18.872	-468.019	167.726
431	7	-35.249	-433.770	-504.347	-79.580	-19.946	-449.074	169.114
431	8	-37.356	-247.819	-482.343	-88.111	-5.338	-279.836	160.030
431	9	-4.093	-206.499	88.381	28.166	-0.247	-210.346	7.776
432	1	15.584	-494.895	-597.562	120.451	42.577	-521.889	12.631
432	2	15.532	-499.131	-598.055	120.226	42.232	-525.831	12.521
432	3	-17.603	-180.721	89.312	-31.933	-11.574	-186.750	169.309
432	4	31.784	-753.679	-1,182.743	241.830	100.268	-822.164	15.811
432	5	-1.351	-435.270	-495.375	89.671	16.449	-453.070	11.228
432	6	-0.651	-544.506	-587.034	100.256	17.241	-562.400	10.119
432	7	-2.347	-516.354	-504.831	85.360	11.457	-530.159	9.186
432	8	-0.177	-339.555	-484.225	94.750	24.484	-364.216	14.589
432	9	-17.551	-176.486	89.805	-31.708	-11.458	-182.578	169.123
433	1	-19.992	-1.545	-544.812	-102.381	92.027	-113.565	132.426
433	2	-19.959	-6.682	-545.527	-102.206	89.101	-115.743	133.142
433	3	-6.111	-306.807	73.125	25.779	-3.917	-309.001	4.864
433	4	-39.656	233.130	-1,081.853	-204.630	342.657	-149.183	118.157
433	5	-25.809	-66.994	-463.200	-76.644	32.960	-125.764	142.519
433	6	-27.436	-133.101	-556.763	-85.854	20.539	-181.076	150.803
433	7	-25.168	-165.372	-476.903	-73.286	6.145	-196.685	156.864
[illegible]	8	-26.562	49.093	-447.052	-80.598	100.299	-77.769	122.429

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ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
433	9	-6.144	-301.670	73.840	25.604	-3.942	-303.872	4.915
434	1	20.594	-112.236	-551.874	115.124	87.087	-178.729	30.009
434	2	20.549	-117.170	-552.548	114.911	85.653	-182.274	29.534
434	3	-16.961	-278.621	75.500	-29.518	-13.672	-281.910	173.642
434	4	40.925	11.892	-1,094.888	230.376	257.243	-234.424	43.197
434	5	3.414	-149.559	-466.840	85.946	41.980	-188.124	24.166
434	6	4.852	-225.226	-559.506	95.999	39.646	-260.020	19.922
434	7	2.554	-244.041	-479.752	81.854	27.250	-268.738	15.789
434	8	4.428	-38.055	-451.621	90.767	76.406	-110.033	38.414
434	9	-16.916	-273.687	76.173	-29.305	-13.614	-276.989	173.571
435	1	-30.362	-124.638	-562.944	116.756	48.412	-203.414	34.007
435	2	-30.317	-129.549	-563.593	116.538	46.726	-206.594	33.469
435	3	-4.072	-275.452	78.462	-30.163	-0.760	-278.764	173.733
435	4	-60.977	-12.918	-1,117.051	233.767	198.051	-271.946	47.934
435	5	-34.732	-158.820	-474.996	87.065	10.134	-203.687	27.263
435	6	-37.847	-235.571	-568.527	97.208	1.937	-275.357	22.258
435	7	-33.867	-252.868	-487.438	82.866	-6.046	-280.689	18.558
435	8	-35.752	-47.833	-460.331	92.012	50.418	-134.003	43.122
435	9	-4.117	-270.541	79.111	-29.944	-0.793	-273.865	173.665
436	1	19.605	-235.652	-580.458	-99.902	54.055	-270.103	160.974
436	2	19.569	-240.369	-581.098	-99.734	53.426	-274.226	161.249
436	3	-16.573	-247.155	82.456	25.189	-13.854	-249.875	6.162
436	4	39.739	-235.131	-1,153.161	-199.706	144.732	-340.123	152.267
436	5	3.596	-241.917	-489.605	-74.783	24.581	-262.902	164.325
436	6	5.449	-328.689	-586.062	-93.798	25.287	-348.527	166.681
436	7	2.900	-332.229	-501.887	-71.555	17.539	-346.867	168.438
436	8	4.416	-135.326	-475.130	-78.583	39.699	-170.609	155.820
436	9	-16.537	-242.439	83.097	25.020	-13.799	-245.177	6.245
437	1	-27.479	-247.083	-590.493	-100.090	11.293	-285.856	158.824
437	2	-27.437	-251.779	-591.112	-99.922	10.614	-289.831	159.152
437	3	-4.832	-244.286	85.103	25.174	-2.214	-246.904	5.937
437	4	-54.345	-257.966	-1,173.230	-200.054	68.314	-380.627	148.486
437	5	-31.741	-250.473	-497.014	-74.957	-8.519	-273.694	162.787
437	6	-34.185	-338.263	-594.256	-84.027	-12.510	-359.938	165.536
437	7	-30.929	-340.401	-508.883	-71.738	-15.108	-356.222	167.563
437	8	-32.696	-144.339	-483.026	-78.747	8.007	-185.043	152.665
437	9	-4.874	-239.589	85.722	25.006	-2.240	-242.224	6.014
438	1	17.445	-355.743	-596.291	116.930	51.055	-389.353	16.037
438	2	17.395	-360.242	-596.873	116.712	50.554	-393.401	15.860
438	3	-16.964	-216.582	87.126	-30.141	-12.512	-221.034	171.598
438	4	35.039	-475.186	-1,183.734	234.094	126.167	-566.314	21.270
438	5	0.679	-331.527	-499.734	87.239	22.196	-353.043	13.854
438	6	1.595	-428.749	-596.006	97.430	22.626	-449.780	12.180
438	7	-0.281	-417.573	-510.894	83.050	15.636	-433.591	10.850
438	8	1.811	-229.840	-486.580	92.175	34.012	-262.041	19.256
438	9	-16.914	-212.083	87.708	-29.923	-12.429	-216.568	171.476
439	1	-33.395	-368.097	-607.222	114.791	2.190	-403.683	17.223
439	2	-33.355	-372.573	-607.780	114.578	1.719	-407.648	17.020
439	3	-4.100	-213.421	89.997	-29.498	-0.022	-217.498	172.130

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
439	4	-66.632	-499.893	-1,205.613	229.723	32.493	-599.018	23.340
439	5	-37.377	-340.740	-507.835	85.647	-14.867	-363.250	14.725
439	6	-41.002	-439.041	-504.930	95.638	-19.215	-460.828	12.833
[illegible]	7	-36.614	-426.451	-518.531	81.551	-20.242	-442.823	11.352
[illegible]	8	-38.275	-239.569	-495.227	90.473	-3.589	-274.256	20.976
439	9	-4.140	-208.944	90.555	-29.284	-0.035	-213.049	172.020
440	1	11.799	-480.048	-625.777	-101.840	32.052	-500.301	168.752
440	2	11.772	-484.326	-626.323	-101.665	31.798	-504.352	168.856
440	3	-15.206	-184.930	94.301	25.709	-11.397	-188.739	8.427
440	4	24.410	-723.944	-1,243.809	-203.568	76.200	-775.735	165.726
440	5	-2.569	-424.548	-523.184	-76.193	10.767	-437.885	170.072
440	6	-1.557	-532.902	-623.277	-85.312	11.804	-546.264	171.098
440	7	-3.080	-506.451	-533.647	-72.837	7.246	-516.778	171.930
440	8	-1.966	-327.868	-510.851	-80.144	16.676	-346.510	166.905
440	9	-15.179	-180.652	94.847	25.534	-11.329	-184.503	8.576
441	1	-27.220	-22.571	-559.930	107.090	82.219	-132.011	45.621
441	2	-27.175	-27.631	-560.662	106.898	79.495	-134.301	44.939
441	3	-4.285	-300.513	75.962	-27.052	-1.834	-302.963	174.824
441	4	-54.689	190.764	-1,114.648	214.016	314.745	-178.670	59.916
441	5	-31.799	-82.117	-478.023	80.065	26.966	-140.883	36.278
441	6	-34.486	-149.238	-575.881	89.493	14.444	-198.168	28.667
441	7	-30.931	-179.015	-492.068	76.383	1.405	-211.353	22.945
441	8	-32.821	32.227	-461.474	84.401	90.154	-90.748	55.537
441	9	-4.330	-295.453	76.694	-26.861	-1.872	-297.911	174.772
442	1	20.950	-123.319	-572.923	-91.520	65.346	-167.715	154.122
[illegible]	2	20.916	-128.218	-573.658	-91.385	64.296	-171.598	154.606
[illegible]	3	-16.109	-274.891	78.841	23.503	-13.992	-277.009	5.147
442	4	42.273	-11.002	-1,141.755	-183.427	200.986	-169.715	139.131
442	5	5.247	-157.676	-489.255	-68.538	30.244	-182.673	159.962
442	6	7.341	-234.213	-589.708	-77.222	29.918	-256.790	163.703
442	7	4.598	-251.486	-503.355	-65.937	20.579	-267.466	166.376
442	8	6.011	-46.972	-472.643	-71.598	55.861	-96.822	145.152
442	9	-16.075	-269.993	79.576	23.368	-13.943	-272.125	5.214
443	1	-21.656	-133.624	-581.826	-88.749	27.291	-182.573	151.122
443	2	-21.628	-138.507	-582.543	-88.626	26.091	-186.227	151.700
443	3	-5.388	-272.264	81.247	22.893	-3.438	-274.214	4.867
443	4	-43.030	-31.632	-1,159.599	-178.043	140.803	-215.466	134.083
443	5	-26.790	-165.389	-495.807	-66.522	-0.029	-192.151	158.085
443	6	-28.798	-242.893	-596.986	-75.152	-5.051	-266.640	162.464
443	7	-26.252	-258.895	-509.568	-64.158	-9.731	-275.416	165.560
443	8	-27.423	-55.041	-479.593	-69.303	29.433	-111.898	140.634
443	9	-5.416	-267.381	81.965	22.770	-3.452	-269.346	4.931
444	1	17.961	-234.402	-589.937	109.381	58.771	-275.212	20.460
444	2	17.918	-239.116	-590.614	109.183	58.035	-279.234	20.175
444	3	-16.184	-246.601	83.837	-27.560	-12.934	-249.852	173.273
444	4	35.820	-233.181	-1,174.718	218.537	157.929	-355.291	29.194
444	5	1.717	-240.666	-500.267	81.794	26.736	-265.685	17.008
444	6	2.827	-327.193	-600.673	91.388	26.444	-350.810	14.489
444	7	0.890	-330.931	-513.246	77.977	18.301	-348.341	12.586
[illegible]	8	2.690	-134.125	-484.972	86.289	44.399	-175.833	25.797

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E 333

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	XZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
444	9	-16.141	-241.887	84.513	-27.361	-12.872	-245.156	173.187
445	1	-29.118	-245.819	-599.944	109.194	16.360	-291.297	22.611
445	2	-29.082	-250.513	-600.599	108.995	15.565	-295.161	22.275
445	3	-4.444	-243.725	86.490	-27.581	-1.306	-246.863	173.509
445	4	-58.252	-255.995	-1,194.724	218.189	82.422	-396.669	32.811
445	5	-33.613	-249.206	-507.634	81.613	-6.203	-276.616	18.564
445	6	-36.797	-336.753	-608.756	91.145	-11.273	-362.277	15.644
445	7	-32.932	-339.089	-520.198	77.787	-14.302	-357.719	13.469
445	8	-34.415	-143.123	-492.827	86.119	13.067	-190.607	28.871
445	9	-4.479	-239.031	87.145	-27.381	-1.325	-242.185	173.429
446	1	12.744	-346.611	-614.131	-88.618	33.409	-367.276	166.873
446	2	12.724	-351.143	-614.784	-88.494	33.105	-371.523	167.030
446	3	-14.905	-218.066	89.590	22.922	-12.350	-220.620	6.358
446	4	26.340	-457.851	-1,224.173	-177.792	84.612	-516.123	161.853
446	5	-1.289	-324.774	-519.798	-66.376	11.800	-337.865	168.844
446	6	0.004	-421.736	-623.576	-74.951	12.928	-434.660	170.216
446	7	-1.668	-411.548	-532.320	-64.000	8.092	-421.309	171.328
446	8	-0.843	-222.354	-505.043	-69.171	18.982	-242.179	164.006
446	9	-14.885	-213.534	90.243	22.798	-12.302	-216.117	6.463
447	1	-29.759	-356.868	-622.930	-91.576	-5.867	-380.760	165.377
447	2	-29.717	-361.384	-623.566	-91.441	-6.177	-384.924	165.563
447	3	-4.206	-215.446	91.989	23.440	-1.636	-218.016	6.256
447	4	-58.758	-478.398	-1,241.795	-183.511	10.169	-547.326	159.413
447	5	-33.247	-332.460	-526.239	-68.629	-18.257	-347.450	167.679
447	6	-36.043	-430.374	-630.708	-77.354	-21.411	-445.006	169.289
447	7	-32.441	-418.923	-538.427	-66.041	-21.468	-429.897	170.566
447	8	-34.196	-230.402	-511.877	-71.673	-10.803	-253.796	161.924
447	9	-4.248	-210.930	92.624	23.305	-1.653	-213.525	6.354
448	1	15.713	-456.618	-629.638	106.868	38.768	-479.672	12.173
448	2	15.661	-460.968	-630.239	106.677	38.448	-483.755	12.057
448	3	-16.245	-190.079	94.274	-26.940	-12.166	-194.159	171.389
448	4	31.554	-677.864	-1,254.169	213.559	90.882	-737.191	15.525
448	5	-0.352	-406.975	-529.655	79.941	14.798	-422.127	10.732
448	6	0.235	-513.847	-633.319	89.388	15.334	-528.946	9.588
448	7	-1.350	-490.256	-541.166	76.282	10.274	-501.882	8.665
448	8	0.822	-308.659	-516.089	84.250	22.272	-330.108	14.283
448	9	-16.193	-185.729	94.874	-26.749	-12.073	-189.849	171.243
449	1	-15.378	-45.011	-570.090	-79.354	50.530	-110.920	140.288
449	2	-15.371	-49.980	-570.901	-79.276	48.466	-113.818	141.157
449	3	-5.689	-295.223	76.404	21.515	-4.099	-296.813	4.226
449	4	-31.099	146.456	-1,139.630	-160.255	240.881	-125.523	120.507
449	5	-21.417	-98.786	-492.324	-59.463	10.837	-131.041	151.523
449	6	-23.076	-166.948	-596.944	-67.930	3.928	-193.953	158.320
449	7	-21.279	-193.962	-507.883	-57.960	-3.629	-211.612	163.063
449	8	-21.577	13.523	-473.997	-61.229	59.668	-67.722	127.003
449	9	-5.696	-290.254	77.215	21.437	-4.090	-291.860	4.284
450	1	17.059	-135.548	-580.152	96.631	63.881	-182.370	25.852
450	2	17.030	-140.390	-580.920	96.476	62.831	-186.191	25.395
450	3	-15.336	-271.654	79.468	-24.453	-13.024	-273.966	174.598

E 334

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
450	4	34.062	-35.189	-1,158.621	193.317	195.830	-196.957	39.922
450	5	1.696	-166.453	-498.232	72.386	28.564	-193.321	20.364
450	6	3.022	-243.253	-602.263	81.298	27.439	-267.670	16.717
[illegible]	7	1.139	-259.180	-512.952	69.409	18.490	-276.530	14.034
[illegible]	8	2.350	-57.020	-480.890	75.891	54.155	-108.825	34.318
450	9	-15.307	-266.812	80.236	-24.298	-12.981	-269.138	174.532
451	1	-25.545	-145.847	-589.048	99.402	30.489	-201.881	29.410
451	2	-25.512	-150.573	-589.798	99.235	29.227	-205.412	28.881
451	3	-4.615	-269.027	81.875	-25.056	-2.262	-271.381	174.634
451	4	-51.234	-55.812	-1,176.443	198.700	145.190	-252.237	44.670
451	5	-30.337	-174.166	-504.770	74.408	1.228	-205.733	22.988
451	6	-33.111	-251.928	-609.513	83.374	-4.963	-280.075	18.654
451	7	-29.706	-266.583	-519.149	71.195	-9.955	-286.334	15.505
451	8	-31.081	-65.097	-487.830	78.192	31.931	-128.110	38.864
451	9	-4.648	-264.201	82.624	-24.888	-2.283	-266.566	174.571
452	1	14.045	-235.159	-598.854	-76.437	35.622	-256.736	164.236
452	2	14.030	-239.871	-599.613	-76.372	35.231	-261.073	164.484
452	3	-14.560	-245.602	84.025	21.114	-12.647	-247.516	5.179
452	4	28.902	-235.462	-1,197.252	-154.719	100.215	-306.775	155.254
452	5	0.311	-241.193	-513.613	-57.233	13.188	-254.069	167.320
452	6	1.899	-327.980	-620.631	-65.597	14.465	-340.546	169.156
452	7	0.024	-331.418	-528.180	-55.972	9.221	-340.615	170.668
452	8	0.648	-134.703	-496.452	-58.712	22.567	-156.622	159.528
452	9	-14.545	-240.890	84.784	21.048	-12.605	-242.831	5.268
453	1	-23.330	-244.152	-606.409	-76.479	0.570	-268.053	162.645
[illegible]	2	-23.306	-248.854	-607.157	-76.414	0.144	-272.305	162.939
[illegible]	3	-4.761	-243.217	86.197	21.064	-2.914	-245.064	5.009
453	4	-46.371	-253.570	-1,212.490	-154.782	36.282	-336.225	151.897
453	5	-27.826	-247.933	-519.136	-57.303	-13.801	-261.958	166.247
453	6	-30.195	-335.647	-626.874	-65.715	-16.657	-349.185	168.359
453	7	-27.360	-337.968	-533.471	-56.055	-17.553	-347.774	170.076
453	8	-28.374	-141.675	-502.247	-58.768	-3.397	-166.653	156.974
453	9	-4.785	-238.515	86.944	20.999	-2.913	-240.387	5.093
454	1	15.409	-332.645	-614.777	99.423	41.808	-359.044	14.870
454	2	15.368	-337.228	-615.489	99.256	41.389	-363.249	14.690
454	3	-15.422	-219.999	88.955	-24.999	-12.412	-223.009	173.133
454	4	30.839	-431.290	-1,228.260	198.722	104.538	-504.990	20.348
454	5	0.048	-314.061	-523.815	74.465	16.807	-330.820	12.683
454	6	0.814	-410.340	-630.888	83.472	17.114	-426.640	11.049
454	7	-0.749	-401.798	-537.462	71.267	11.538	-414.086	9.782
454	8	0.987	-210.499	-507.736	78.230	26.779	-236.292	18.247
454	9	-15.381	-215.416	89.666	-24.833	-12.344	-218.453	173.028
455	1	-27.092	-342.895	-623.562	96.465	0.042	-370.030	15.710
455	2	-27.072	-347.462	-624.256	96.309	-0.350	-374.184	15.507
455	3	-4.724	-217.379	91.299	-24.475	-1.943	-220.159	173.518
455	4	-54.254	-451.815	-1,245.846	193.004	24.028	-530.099	22.077
455	5	-31.906	-321.733	-530.291	72.219	-14.907	-338.731	13.245
455	6	-35.226	-418.972	-638.076	81.076	-18.800	-435.398	11.453
455	7	-31.517	-409.166	-543.602	69.232	-19.225	-421.458	10.068
[illegible]	8	-32.362	-218.534	-514.607	75.735	-5.445	-245.452	19.566

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ELEMT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
455	9	-4.744	-212.812	91.993	-24.319	-1.939	-215.617	173.421
456	1	5.861	-433.395	-634.888	-79.075	19.663	-447.197	170.099
456	2	5.863	-437.841	-635.585	-78.997	19.508	-451.486	170.200
456	3	-13.559	-193.862	93.720	21.453	-11.042	-196.379	6.693
456	4	13.158	-633.646	-1,269.543	-159.671	50.427	-670.916	166.861
456	5	-6.265	-389.667	-540.237	-59.219	2.673	-398.606	171.416
456	6	-5.408	-495.916	-650.374	-67.618	3.742	-505.067	172.293
456	7	-6.218	-474.770	-553.591	-57.707	0.784	-481.773	173.081
456	8	-6.322	-289.201	-524.504	-60.996	6.269	-301.793	168.335
456	9	-13.562	-189.416	94.416	21.374	-11.001	-191.977	6.831
457	1	-22.115	-72.631	-576.152	85.499	41.779	-136.526	36.771
457	2	-22.083	-77.459	-576.981	85.390	39.996	-139.539	36.017
457	3	-4.798	-290.473	76.101	-22.456	-3.044	-292.228	175.532
457	4	-44.420	93.769	-1,153.550	171.883	209.926	-160.577	55.949
457	5	-27.136	-119.244	-500.467	64.036	5.687	-152.067	27.138
457	6	-29.453	-187.618	-608.166	72.555	-1.212	-215.859	21.267
457	7	-26.523	-211.701	-516.368	61.937	-7.716	-230.508	16.890
457	8	-27.857	-10.138	-481.738	66.504	48.094	-86.090	48.794
457	9	-4.830	-285.645	76.930	-22.347	-3.063	-287.413	175.478
458	1	15.172	-148.958	-581.590	-66.954	39.021	-172.806	160.395
458	2	15.161	-153.734	-582.442	-66.944	38.477	-177.049	160.797
458	3	-14.047	-268.928	77.425	20.271	-12.445	-270.530	4.519
458	4	31.045	-61.303	-1,165.880	-137.249	129.679	-159.937	144.297
458	5	1.836	-176.497	-506.012	-50.034	14.915	-189.576	165.351
458	6	3.686	-253.675	-615.819	-58.489	16.355	-266.344	167.778
458	7	1.619	-267.951	-522.370	-49.823	10.533	-276.865	169.856
458	8	2.091	-68.569	-486.745	-50.276	28.209	-94.688	152.548
458	9	-14.036	-264.152	78.277	20.260	-12.405	-265.783	4.601
459	1	-16.779	-156.597	-587.812	-63.718	7.901	-181.278	158.826
459	2	-16.781	-161.369	-588.659	-63.728	7.297	-185.448	159.301
459	3	-4.834	-266.682	79.458	19.827	-3.341	-268.175	4.305
459	4	-34.159	-76.897	-1,178.639	-131.206	77.407	-188.463	139.625
459	5	-22.212	-182.210	-510.521	-47.651	-9.096	-195.326	164.510
459	6	-24.326	-260.314	-620.944	-56.170	-11.638	-273.002	167.272
459	7	-22.238	-273.604	-526.782	-47.828	-13.445	-282.397	169.583
459	8	-22.179	-74.347	-491.367	-47.435	5.870	-102.397	149.402
459	9	-4.833	-261.909	80.305	19.836	-3.311	-263.431	4.386
460	1	14.361	-234.583	-597.854	88.236	42.463	-262.685	17.666
460	2	14.336	-239.292	-598.665	88.113	41.943	-266.898	17.396
460	3	-14.683	-244.912	82.723	-22.754	-12.455	-247.139	174.409
460	4	28.917	-234.833	-1,197.804	177.009	117.776	-323.691	26.656
460	5	-0.101	-240.453	-516.415	66.141	16.897	-257.452	14.413
460	6	0.930	-327.057	-626.465	74.715	17.148	-343.275	12.247
460	7	-0.576	-330.619	-531.984	63.787	11.322	-342.518	10.566
460	8	0.456	-134.036	-498.076	58.911	29.494	-163.075	22.850
460	9	-14.658	-240.203	83.534	-22.631	-12.409	-242.452	174.326
461	1	-23.015	-243.569	-605.409	88.201	7.918	-274.503	19.326
461	2	-23.000	-248.267	-606.208	88.078	7.348	-278.617	19.012
461	3	-4.882	-242.519	84.895	-22.803	-2.714	-244.687	174.568

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
461	4	-46.356	-252.933	-1,213.042	176.953	55.247	-354.537	29.864
461	5	-28.238	-247.185	-521.938	66.071	-9.845	-265.578	15.556
461	6	-31.161	-334.716	-632.638	74.604	-13.817	-352.060	13.088
[illegible]	7	-27.959	-337.153	-537.272	63.704	-15.348	-349.764	11.197
[illegible]	8	-28.565	-141.000	-503.874	68.855	4.107	-173.673	25.385
461	9	-4.897	-237.820	85.694	-22.680	-2.709	-240.008	174.490
462	1	7.222	-320.437	-612.354	-63.725	19.180	-332.394	169.372
462	2	7.234	-325.079	-613.168	-63.734	19.038	-336.883	169.507
462	3	-12.974	-220.940	86.415	19.890	-11.089	-222.825	5.414
462	4	15.656	-408.988	-1,228.223	-131.233	52.940	-446.272	164.140
462	5	-4.552	-304.849	-528.640	-47.608	2.814	-312.217	171.203
462	6	-3.331	-401.152	-641.381	-56.093	4.426	-408.910	172.125
462	7	-4.329	-393.722	-544.255	-47.769	1.445	-399.496	173.107
462	8	-4.815	-199.951	-510.246	-47.413	6.094	-210.861	167.041
462	9	-12.986	-216.298	87.229	19.899	-11.056	-218.227	5.538
463	1	-24.643	-328.034	-618.499	-66.879	-10.554	-342.123	168.104
463	2	-24.621	-332.673	-619.308	-66.869	-10.732	-346.562	168.266
463	3	-3.779	-218.694	88.399	20.200	-1.897	-220.576	5.323
463	4	-49.374	-424.506	-1,240.822	-137.091	-4.615	-469.266	161.918
463	5	-28.531	-310.527	-533.114	-50.021	-19.921	-319.137	170.233
463	6	-31.264	-407.749	-646.555	-58.504	-22.382	-416.631	171.367
463	7	-28.118	-399.340	-548.634	-49.824	-21.547	-405.911	172.487
463	8	-29.017	-205.694	-514.832	-50.248	-15.726	-218.985	165.184
463	9	-3.800	-214.055	89.208	20.190	-1.879	-215.976	5.436
464	1	13.190	-404.736	-626.895	85.249	29.911	-421.456	11.097
[illegible]	2	13.149	-409.316	-627.678	85.141	29.662	-425.829	10.976
[illegible]	3	-14.686	-197.191	91.419	-22.288	-12.004	-199.873	173.137
464	4	26.436	-579.934	-1,256.851	171.329	71.497	-624.994	14.735
464	5	-1.399	-367.809	-537.754	63.898	9.424	-378.632	9.614
464	6	-0.995	-473.486	-650.784	72.423	9.856	-484.337	8.521
464	7	-2.198	-455.493	-552.761	61.821	6.081	-463.773	7.628
464	8	-0.458	-264.305	-520.075	66.341	15.283	-280.047	13.348
464	9	-14.645	-192.511	92.201	-22.180	-11.922	-195.333	173.001
465	1	-10.727	-97.208	-568.840	-54.354	15.488	-123.424	154.251
465	2	-10.762	-101.884	-569.760	-54.434	14.661	-127.309	154.964
465	3	-5.093	-286.933	71.565	18.801	-3.845	-288.182	3.799
465	4	-22.703	47.344	-1,143.038	-113.886	131.470	-106.830	126.452
465	5	-17.034	-137.704	-501.712	-40.650	-4.618	-150.121	163.015
465	6	-19.062	-205.937	-614.208	-49.563	-6.730	-218.269	166.028
465	7	-17.707	-227.263	-519.381	-42.174	-9.537	-235.433	169.037
465	8	-16.240	-32.013	-480.905	-38.847	15.512	-63.766	140.738
465	9	-5.058	-282.256	72.486	18.881	-3.778	-283.537	3.879
466	1	12.620	-163.319	-579.993	72.527	38.663	-189.362	19.752
466	2	12.620	-168.002	-580.878	72.484	38.111	-193.492	19.375
466	3	-13.968	-266.453	75.343	-20.842	-12.259	-268.162	175.312
466	4	25.848	-88.537	-1,164.628	147.602	126.950	-189.639	34.410
466	5	-0.740	-186.988	-508.406	54.275	13.922	-201.651	15.117
466	6	0.684	-263.835	-620.645	62.694	14.791	-277.942	12.681
466	7	-0.730	-276.666	-525.408	53.431	9.254	-286.651	10.585
[illegible]	8	-0.754	-81.152	-488.384	55.264	27.385	-109.291	26.984

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MEMB	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
466	9	-13.968	-261.770	76.229	-20.798	-12.235	-263.504	175.235
467	1	-19.336	-170.958	-586.229	75.763	12.032	-202.326	22.491
467	2	-19.325	-175.638	-587.109	75.699	11.324	-206.288	22.042
467	3	-4.754	-264.207	77.390	-21.286	-3.019	-265.942	175.341
467	4	-39.361	-104.138	-1,177.408	153.651	85.278	-228.777	39.048
467	5	-24.789	-192.707	-512.908	56.665	-7.456	-210.040	17.008
467	6	-27.327	-270.475	-625.826	65.013	-11.035	-286.767	14.068
467	7	-24.588	-282.326	-529.811	55.432	-13.171	-293.742	11.637
467	8	-25.025	-86.944	-493.002	58.111	9.859	-121.829	30.976
467	9	-4.764	-259.527	78.270	-21.222	-3.008	-261.283	175.270
468	1	8.501	-234.895	-589.180	-51.583	18.982	-245.376	168.515
468	2	8.519	-239.599	-590.090	-51.683	18.854	-249.934	168.691
468	3	-12.581	-244.132	78.138	18.525	-11.108	-245.605	4.545
468	4	18.178	-236.120	-1,184.819	-108.749	58.341	-276.283	159.730
468	5	-2.922	-240.653	-516.590	-38.541	3.169	-246.746	171.017
468	6	-1.354	-327.400	-631.368	-47.527	5.431	-334.187	171.873
468	7	-2.571	-330.727	-534.056	-40.448	2.340	-335.639	173.075
468	8	-3.337	-134.345	-496.022	-36.286	6.041	-143.724	165.507
468	9	-12.599	-239.428	79.048	18.624	-11.080	-240.947	4.663
469	1	-17.938	-241.152	-594.034	-51.522	-6.620	-252.471	167.610
469	2	-17.946	-245.862	-594.948	-51.622	-6.799	-257.010	167.815
469	3	-3.978	-242.033	80.030	18.439	-2.558	-243.453	4.403
469	4	-36.809	-249.158	-1,195.032	-108.603	8.896	-294.864	157.176
469	5	-22.841	-245.329	-520.052	-38.540	-16.354	-251.816	170.445
469	6	-25.368	-333.031	-635.513	-47.553	-18.186	-340.214	171.411
469	7	-22.993	-335.514	-537.591	-40.460	-17.839	-340.668	172.741
469	8	-22.650	-138.882	-499.397	-36.271	-12.269	-149.273	164.014
469	9	-3.970	-237.323	80.944	18.540	-2.506	-238.787	4.514
470	1	11.968	-305.569	-603.493	75.659	29.074	-322.675	12.740
470	2	11.947	-310.296	-604.384	75.596	28.801	-327.149	12.567
470	3	-13.751	-221.914	83.539	-21.208	-11.612	-224.053	174.241
470	4	24.063	-381.747	-1,213.426	153.429	75.542	-433.226	18.547
470	5	-1.635	-293.365	-525.502	56.624	8.969	-303.971	10.608
470	6	-0.924	-389.701	-640.777	64.999	9.654	-400.280	9.244
470	7	-2.036	-383.874	-542.604	55.409	5.841	-391.753	8.092
470	8	-1.164	-186.541	-505.359	58.050	15.513	-203.219	16.029
470	9	-13.730	-217.187	84.430	-21.145	-11.556	-219.362	174.128
471	1	-19.900	-313.166	-609.652	72.506	-2.953	-330.113	13.155
471	2	-19.911	-317.890	-610.538	72.462	-3.224	-334.577	12.968
471	3	-4.554	-219.661	85.502	-20.891	-2.543	-221.671	174.503
471	4	-40.972	-397.272	-1,226.045	147.573	12.211	-450.456	19.818
471	5	-25.615	-299.043	-530.004	54.219	-15.256	-309.402	10.816
471	6	-28.855	-396.291	-645.972	62.597	-18.484	-406.663	9.407
471	7	-25.825	-389.493	-547.008	53.362	-18.156	-397.161	8.177
471	8	-25.366	-192.284	-509.975	55.223	-8.750	-208.900	16.746
471	9	-4.543	-214.937	86.388	-20.847	-2.497	-216.983	174.395
472	1	1.153	-378.131	-614.166	-54.195	8.745	-385.723	172.025
472	2	1.198	-382.869	-615.070	-54.273	8.721	-390.391	172.109
472	3	-11.400	-199.410	86.527	18.858	-9.527	-201.283	5.671

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ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
472	4	3.777	-531.202	-1,236.396	-113.611	26.904	-554.329	168.493
472	5	-8.821	-347.744	-534.799	-40.479	-4.054	-352.511	173.282
472	6	-7.778	-453.868	-652.569	-49.332	-2.387	-459.258	173.764
[illegible]	7	-7.956	-438.437	-552.135	-41.982	-3.900	-442.493	174.481
[illegible]	8	-9.843	-240.687	-514.380	-38.700	-3.527	-247.002	170.732
472	9	-11.445	-194.673	87.430	18.936	-9.509	-196.610	5.839
473	1	-15.828	-124.659	-566.902	60.538	11.155	-151.644	24.024
473	2	-15.819	-129.117	-567.824	60.570	10.464	-155.401	23.458
473	3	-4.769	-282.575	68.821	-19.679	-3.382	-283.962	175.968
473	4	-32.515	-4.318	-1,140.449	125.451	107.823	-144.658	48.206
473	5	-21.465	-157.776	-503.803	45.201	-7.838	-171.403	16.776
473	6	-23.554	-224.609	-618.006	53.816	-10.055	-238.107	14.081
473	7	-21.301	-243.138	-521.495	45.806	-12.215	-252.224	11.219
473	8	-21.657	-57.041	-482.974	44.481	8.521	-87.220	34.155
473	9	-4.777	-278.118	69.743	-19.711	-3.363	-279.532	175.896
474	1	9.319	-175.951	-566.305	-43.495	19.022	-185.654	167.424
474	2	9.342	-180.529	-567.272	-43.676	18.908	-190.094	167.647
474	3	-12.315	-264.147	68.782	17.185	-11.148	-265.314	3.886
474	4	20.007	-112.703	-1,140.897	-93.537	68.335	-161.031	152.676
474	5	-1.651	-196.321	-504.842	-32.674	3.686	-201.659	170.721
474	6	0.220	-272.661	-620.854	-42.366	6.646	-279.087	171.375
474	7	-1.205	-283.986	-523.411	-36.142	3.340	-288.532	172.830
474	8	-2.177	-92.861	-482.979	-28.581	6.079	-101.117	163.887
474	9	-12.338	-259.569	69.749	17.366	-11.124	-260.783	3.998
475	1	-12.159	-180.972	-569.965	-40.486	-2.951	-190.180	167.187
475	2	-12.207	-185.567	-570.947	-40.697	-3.128	-194.645	167.424
[illegible]	3	-4.461	-262.227	70.510	16.644	-3.391	-263.297	3.679
[illegible]	4	-25.692	-123.431	-1,148.877	-87.864	25.978	-175.102	149.541
475	5	-17.946	-200.091	-507.419	-30.523	-12.968	-205.069	170.735
475	6	-20.511	-277.470	-624.131	-40.483	-14.284	-283.697	171.255
475	7	-18.858	-288.086	-526.272	-34.554	-14.494	-292.450	172.801
475	8	-15.870	-96.238	-485.222	-25.764	-9.240	-103.868	163.503
475	9	-4.413	-257.631	71.493	16.854	-3.296	-258.748	3.791
476	1	10.285	-234.770	-580.388	63.090	25.574	-250.060	13.622
476	2	10.293	-239.471	-581.353	63.101	25.330	-254.508	13.403
476	3	-13.130	-243.275	74.542	-19.933	-11.416	-244.989	175.086
476	4	21.188	-236.440	-1,169.464	130.152	75.500	-290.753	22.649
476	5	-2.235	-240.244	-513.568	47.127	6.756	-249.236	10.802
476	6	-1.045	-326.866	-630.395	55.618	8.187	-336.099	9.425
476	7	-2.080	-330.252	-532.086	47.325	4.607	-336.941	8.044
476	8	-2.419	-134.016	-491.764	46.888	12.577	-149.013	17.737
476	9	-13.138	-238.575	75.506	-19.943	-11.387	-240.325	174.983
477	1	-16.160	-241.034	-585.256	63.152	0.360	-257.556	14.660
477	2	-16.178	-245.741	-586.225	63.162	0.052	-261.972	14.411
477	3	-4.524	-241.175	76.441	-20.011	-2.844	-242.855	175.200
477	4	-33.809	-249.489	-1,179.704	130.309	27.495	-310.794	25.195
477	5	-22.155	-244.923	-517.037	47.136	-12.592	-254.486	11.468
477	6	-25.059	-332.496	-634.534	55.603	-15.311	-342.244	9.943
477	7	-22.503	-335.043	-535.625	47.321	-15.495	-342.050	8.423
[illegible]	8	-21.744	-138.557	-495.149	46.911	-5.237	-155.064	19.385

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E329

MEMT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
477	9	-4.506	-236.468	77.409	-20.021	-2.790	-238.184	175.103
478	1	2.177	-293.152	-586.222	-40.597	7.657	-298.631	172.313
478	2	2.234	-297.970	-587.222	-40.307	7.682	-303.418	172.395
478	3	-11.222	-222.796	76.569	16.729	-9.907	-224.111	4.493
478	4	6.042	-359.286	-1,183.020	-88.100	26.178	-379.422	167.126
478	5	-7.414	-284.112	-519.229	-30.563	-4.078	-287.448	173.771
478	6	-5.929	-381.075	-638.402	-40.495	-1.608	-385.397	173.908
478	7	-6.327	-376.357	-538.422	-34.576	-3.124	-379.560	174.707
478	8	-8.696	-175.239	-496.628	-25.827	-4.783	-179.152	171.384
478	9	-11.279	-217.979	77.569	16.938	-9.900	-219.358	4.654
479	1	-19.240	-298.159	-589.840	-43.374	-12.650	-304.749	171.361
479	2	-19.254	-302.994	-590.854	-43.556	-12.718	-309.530	171.466
479	3	-3.389	-220.890	78.277	17.064	-2.059	-222.220	4.459
479	4	-39.526	-369.976	-1,190.910	-93.251	-15.027	-394.475	165.280
479	5	-23.661	-287.872	-521.778	-32.630	-19.691	-291.843	173.062
479	6	-26.600	-385.868	-641.680	-42.335	-21.679	-390.789	173.369
479	7	-23.929	-380.440	-541.251	-36.107	-20.309	-384.061	174.274
479	8	-23.344	-178.614	-498.847	-28.526	-18.269	-183.689	169.912
479	9	-3.375	-216.055	79.291	17.245	-1.986	-217.444	4.606
480	1	9.773	-350.597	-598.618	60.196	19.562	-360.386	9.236
480	2	9.755	-355.545	-599.629	60.229	19.429	-365.219	9.125
480	3	-12.818	-202.066	82.099	-19.562	-10.817	-204.067	174.159
480	4	19.520	-480.469	-1,208.441	124.771	48.927	-509.875	13.262
480	5	-3.053	-326.989	-526.712	44.979	3.076	-333.119	7.760
480	6	-2.698	-434.249	-646.819	53.592	3.857	-440.805	6.974
480	7	-3.410	-421.736	-546.117	45.597	1.501	-426.648	6.149
480	8	-2.633	-215.159	-503.859	44.245	6.209	-224.003	11.303
480	9	-12.799	-197.118	83.111	-19.595	-10.739	-199.178	173.998
481	1	-6.766	-146.319	-546.847	-32.569	0.460	-153.546	167.489
481	2	-6.863	-150.552	-547.840	-32.880	0.303	-157.718	167.704
481	3	-4.786	-278.559	60.243	15.376	-3.925	-279.419	3.204
481	4	-15.404	-45.482	-1,103.534	-73.114	44.201	-105.088	140.811
481	5	-13.327	-173.489	-495.451	-24.857	-9.558	-177.258	171.377
481	6	-16.146	-238.463	-612.368	-35.927	-10.484	-244.125	171.044
481	7	-15.180	-254.534	-514.520	-30.814	-11.277	-258.438	172.780
481	8	-11.142	-77.833	-473.006	-17.829	-6.675	-82.300	165.933
481	9	-4.689	-274.326	61.236	15.687	-3.779	-275.236	3.318
482	1	8.340	-189.256	-557.881	48.361	19.541	-200.458	13.041
482	2	8.387	-193.700	-558.865	48.493	19.421	-204.734	12.818
482	3	-12.556	-261.207	64.641	-17.832	-11.284	-262.479	175.919
482	4	17.972	-138.203	-1,125.552	102.585	68.808	-189.040	26.361
482	5	-2.971	-205.710	-502.045	36.260	3.318	-212.000	9.841
482	6	-1.098	-280.820	-619.277	45.528	6.125	-288.044	9.015
482	7	-2.071	-290.788	-520.925	38.778	3.046	-295.906	7.518
482	8	-4.034	-105.295	-479.821	33.284	5.926	-115.256	16.660
482	9	-12.603	-256.763	65.624	-17.963	-11.288	-258.078	175.814
483	1	-13.146	-194.291	-561.569	51.370	0.407	-207.845	14.780
483	2	-13.170	-198.752	-562.567	51.472	0.149	-212.072	14.509
483	3	-4.699	-259.287	66.376	-18.367	-3.381	-260.605	175.894

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ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
483	4	-27.741	-148.952	-1,133.581	108.258	35.721	-212.414	30.379
483	5	-19.271	-209.487	-504.636	38.418	-11.804	-216.953	10.998
483	6	-21.833	-285.635	-622.624	47.417	-13.569	-293.899	9.886
[illegible]	7	-19.727	-294.895	-523.797	40.372	-13.926	-300.696	8.177
[illegible]	8	-18.731	-108.686	-482.080	36.108	-6.031	-121.387	19.379
483	9	-4.675	-254.827	67.374	-18.470	-3.319	-256.183	175.800
484	1	3.352	-234.569	-559.270	-30.257	7.140	-238.357	172.864
484	2	3.418	-239.260	-560.317	-30.597	7.216	-243.059	172.923
484	3	-10.899	-242.620	65.793	15.079	-9.922	-243.597	3.708
484	4	8.489	-236.675	-1,130.525	-68.834	26.494	-254.680	165.342
484	5	-5.828	-240.035	-504.414	-23.157	-3.560	-242.303	174.407
484	6	-3.934	-326.644	-624.034	-34.519	-0.283	-330.295	173.962
484	7	-4.573	-329.864	-524.505	-29.666	-1.889	-332.548	174.831
484	8	-7.308	-134.017	-480.763	-15.480	-5.444	-135.881	173.134
484	9	-10.965	-237.928	66.840	15.419	-9.922	-238.971	3.869
485	1	-13.314	-238.409	-561.777	-30.124	-9.352	-242.371	172.507
485	2	-13.372	-243.131	-562.851	-30.465	-9.401	-247.102	172.573
485	3	-3.820	-240.901	67.342	14.970	-2.878	-241.843	3.599
485	4	-28.205	-245.182	-1,136.337	-68.536	-8.370	-265.017	163.859
485	5	-18.653	-242.952	-506.143	-23.101	-16.298	-245.306	174.180
485	6	-21.699	-330.721	-626.583	-34.474	-17.899	-334.521	173.711
485	7	-19.756	-333.362	-526.762	-29.617	-16.983	-336.135	174.652
485	8	-17.351	-136.251	-481.868	-15.415	-15.385	-138.217	172.731
485	9	-3.762	-236.179	68.416	15.310	-2.758	-237.184	3.752
486	1	7.791	-280.006	-571.284	51.217	16.634	-288.849	9.796
[illegible]	2	7.806	-284.952	-572.365	51.320	16.542	-293.687	9.660
[illegible]	3	-12.456	-223.858	71.474	-18.249	-10.892	-225.422	175.102
[illegible]	4	16.342	-335.299	-1,155.490	107.914	46.818	-365.775	15.770
486	5	-3.921	-274.205	-511.650	38.344	1.413	-279.540	7.920
486	6	-2.999	-372.204	-632.583	47.360	2.979	-378.183	7.194
486	7	-3.636	-368.899	-532.404	40.313	0.760	-373.295	6.224
486	8	-4.258	-162.447	-487.213	36.016	3.555	-170.262	12.241
486	9	-12.471	-218.913	72.555	-18.352	-10.852	-220.531	174.959
487	1	-13.632	-285.020	-574.930	48.439	-5.245	-293.407	9.822
487	2	-13.688	-289.983	-576.026	48.570	-5.398	-298.272	9.685
487	3	-4.619	-221.946	73.188	-17.914	-3.152	-223.413	175.319
487	4	-29.239	-346.003	-1,163.429	102.761	1.177	-376.419	16.488
487	5	-20.170	-277.967	-514.213	36.276	-15.163	-282.974	7.859
487	6	-23.670	-376.998	-635.923	45.518	-17.900	-382.768	7.224
487	7	-21.239	-372.984	-535.245	38.781	-17.014	-377.209	6.217
487	8	-18.909	-165.824	-489.449	33.315	-11.707	-173.026	12.198
487	9	-4.563	-216.984	74.284	-18.045	-3.041	-218.506	175.178
488	1	-3.257	-326.236	-574.090	-32.596	-0.000	-329.493	174.294
488	2	-3.154	-331.413	-575.217	-32.905	0.111	-334.680	174.331
488	3	-9.884	-205.150	72.838	15.435	-8.672	-206.362	4.492
488	4	-4.463	-435.448	-1,163.085	-73.171	7.620	-447.532	170.622
488	5	-11.193	-309.184	-515.029	-24.830	-9.139	-311.239	175.269
488	6	-9.559	-418.479	-638.187	-35.845	-6.441	-421.597	175.028
488	7	-9.213	-408.333	-536.658	-30.754	-6.857	-410.689	175.619
[illegible]	8	-13.529	-192.166	-489.562	-17.841	-11.764	-193.931	174.352

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E 341

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
88	9	-9.988	-199.972	73.965	15.745	-8.692	-201.268	4.705
89	1	-9.988	-170.472	-538.805	37.959	-1.463	-178.997	12.658
89	2	-10.015	-174.396	-539.758	38.202	-1.571	-182.840	12.464
89	3	-4.733	-273.674	55.623	-16.344	-3.743	-274.563	176.535
89	4	-21.473	-91.174	-1,088.182	83.219	33.897	-146.545	33.638
89	5	-16.190	-190.451	-492.800	28.672	-11.594	-195.048	9.107
89	6	-18.337	-251.972	-609.812	38.986	-12.003	-258.306	9.228
89	7	-16.707	-265.583	-511.109	33.334	-12.320	-269.970	7.498
89	8	-15.579	-101.770	-471.254	23.170	-9.745	-107.605	14.132
89	9	-4.705	-269.749	56.576	-16.587	-3.671	-270.784	176.432
90	1	4.286	-199.749	-533.791	-23.365	6.928	-202.391	173.550
90	2	4.358	-204.041	-534.811	-23.817	7.045	-206.729	173.562
90	3	-10.519	-258.828	54.327	13.842	-9.750	-259.597	3.181
90	4	10.468	-158.337	-1,079.748	-56.013	27.364	-175.233	163.215
90	5	-4.409	-213.124	-490.610	-18.353	-2.807	-214.726	175.012
90	6	-2.165	-286.586	-609.270	-31.163	1.209	-289.961	173.820
90	7	-3.036	-295.297	-510.195	-27.011	-0.561	-297.773	174.763
90	8	-6.027	-116.131	-467.562	-8.143	-5.428	-116.730	175.793
90	9	-10.591	-254.536	55.347	14.294	-9.756	-255.371	3.342
91	1	-8.109	-202.527	-535.277	-20.786	-5.912	-204.725	173.965
91	2	-8.223	-206.865	-536.340	-21.277	-5.969	-209.118	173.954
91	3	-4.168	-257.279	55.728	13.281	-3.473	-257.974	2.995
91	4	-18.288	-164.875	-1,083.674	-51.150	-2.204	-180.959	162.545
91	5	-14.233	-215.289	-491.604	-16.590	-12.873	-216.649	175.314
91	6	-17.698	-290.107	-611.340	-29.919	-14.451	-293.355	173.805
91	7	-16.416	-298.340	-512.019	-26.014	-14.035	-300.721	174.772
91	8	-11.659	-117.264	-467.578	-5.477	-11.375	-117.547	177.038
91	9	-4.054	-252.941	56.791	13.773	-3.295	-253.701	3.158
92	1	6.105	-234.770	-545.312	40.112	12.609	-241.275	9.210
92	2	6.163	-239.459	-546.395	40.325	12.614	-245.910	9.088
92	3	-11.817	-241.652	60.229	-16.597	-10.625	-242.845	175.890
92	4	13.566	-237.680	-1,104.138	87.164	40.844	-264.958	17.377
92	5	-4.415	-239.973	-497.513	30.241	-0.593	-243.695	7.203
92	6	-2.697	-326.422	-618.069	40.202	2.220	-331.340	6.974
92	7	-3.292	-329.657	-518.311	34.312	0.275	-333.225	5.937
92	8	-5.741	-133.907	-473.032	25.436	-0.877	-138.770	10.825
92	9	-11.876	-236.964	61.312	-16.810	-10.628	-238.212	175.752
93	1	-10.570	-238.611	-547.854	40.245	-3.676	-245.505	9.720
93	2	-10.635	-243.330	-548.964	40.458	-3.801	-250.163	9.587
93	3	-4.733	-239.921	61.792	-16.707	-3.552	-241.102	175.957
93	4	-23.145	-246.194	-1,110.020	87.464	7.060	-276.401	19.053
93	5	-17.244	-242.786	-499.263	30.299	-13.244	-246.785	7.519
93	6	-20.465	-330.494	-620.694	40.247	-15.325	-335.634	7.277
93	7	-18.478	-333.150	-520.588	34.362	-14.769	-336.859	6.160
93	8	-15.788	-136.136	-474.161	25.502	-10.607	-141.317	11.484
93	9	-4.669	-235.202	62.902	-16.919	-3.434	-236.437	175.824
94	1	-1.912	-268.736	-544.194	-20.940	-0.279	-270.369	175.539
94	2	-1.795	-273.807	-545.351	-21.431	-0.117	-275.485	175.522
94	3	-9.544	-225.032	60.724	13.409	-8.712	-225.863	3.547

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
494	4	-1.712	-314.838	-1,104.094	-51.501	6.540	-323.091	170.895
494	5	-9.461	-266.063	-498.018	-16.659	-8.384	-267.140	176.301
494	6	-7.301	-365.495	-620.854	-29.972	-4.810	-367.986	175.249
	7	-7.212	-363.172	-520.235	-26.068	-5.313	-365.071	175.833
	8	-12.112	-151.457	-471.865	-5.564	-11.890	-151.679	177.717
494	9	-9.661	-219.961	61.881	13.900	-8.746	-220.875	3.765
495	1	-14.256	-271.493	-545.666	-23.185	-12.183	-273.566	174.890
495	2	-14.324	-276.609	-546.866	-23.637	-12.211	-278.723	174.891
495	3	-3.203	-223.480	62.105	13.715	-2.353	-224.331	3.549
495	4	-30.361	-321.339	-1,107.984	-55.612	-20.094	-331.606	169.540
495	5	-19.240	-268.210	-499.012	-18.259	-17.908	-269.542	175.827
495	6	-22.774	-368.988	-622.902	-31.065	-20.008	-371.754	174.913
495	7	-20.540	-366.190	-522.047	-26.915	-18.457	-368.274	175.574
495	8	-17.706	-152.572	-471.895	-8.052	-17.227	-153.052	176.595
495	9	-3.136	-218.363	63.305	14.167	-2.207	-219.292	3.750
496	1	5.430	-302.583	-554.305	37.672	9.971	-307.124	6.873
496	2	5.451	-308.063	-555.544	37.916	9.971	-312.583	6.798
496	3	-11.760	-208.049	66.357	-16.172	-10.437	-209.373	175.321
496	4	11.682	-391.966	-1,125.836	82.587	27.926	-408.210	11.127
496	5	-5.529	-291.952	-503.933	28.498	-2.721	-294.760	5.627
496	6	-4.913	-404.569	-628.861	38.788	-1.183	-408.299	5.492
496	7	-5.139	-396.895	-527.720	33.154	-2.353	-399.681	4.803
496	8	-5.990	-168.104	-475.927	23.004	-2.789	-171.305	7.922
496	9	-11.781	-202.569	67.597	-16.415	-10.378	-203.971	175.118
497	1	-3.409	-187.972	-510.659	-14.345	-2.301	-189.080	175.582
	2	-3.589	-191.582	-511.614	-14.971	-2.404	-192.766	175.475
	3	-4.490	-269.846	43.593	11.943	-3.954	-270.382	2.572
497	4	-9.304	-124.244	-1,033.461	-39.167	2.772	-136.322	162.862
497	5	-10.205	-202.508	-478.253	-12.252	-9.428	-203.286	176.369
497	6	-14.308	-259.954	-595.416	-27.499	-11.267	-262.995	173.690
497	7	-13.654	-271.613	-496.595	-24.246	-11.395	-273.873	174.676
497	8	-6.140	-120.926	-456.677	1.886	-6.109	-120.957	0.941
497	9	-4.310	-266.236	44.548	12.568	-3.709	-266.837	2.741
498	1	4.606	-211.097	-520.847	27.434	8.041	-214.531	7.136
498	2	4.720	-215.206	-521.838	27.818	8.184	-218.670	7.098
498	3	-11.098	-255.800	48.404	-14.499	-10.242	-256.656	176.620
498	4	11.148	-180.135	-1,054.547	63.540	30.331	-199.319	16.799
498	5	-4.669	-220.730	-484.304	21.222	-2.605	-222.795	5.557
498	6	-1.892	-291.817	-602.673	33.160	1.852	-295.561	6.442
498	7	-2.488	-299.399	-503.354	28.574	0.235	-302.124	5.447
498	8	-7.241	-127.871	-461.891	12.551	-5.949	-129.163	5.877
498	9	-11.212	-251.691	49.395	-14.883	-10.294	-252.609	176.472
499	1	-7.799	-213.881	-522.374	30.014	-3.517	-218.164	8.120
499	2	-7.871	-218.036	-523.409	30.358	-3.574	-222.333	8.057
499	3	-4.743	-254.243	49.826	-15.060	-3.837	-255.149	176.558
499	4	-17.627	-186.690	-1,058.555	68.404	6.582	-210.900	19.490
499	5	-14.499	-222.897	-485.319	22.985	-11.994	-225.402	6.220
499	6	-17.429	-295.339	-604.756	34.404	-13.234	-299.535	6.953
499	7	-15.873	-302.444	-505.197	29.571	-12.853	-305.464	5.830
	8	-12.879	-129.006	-461.929	15.216	-10.918	-130.967	7.342

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ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	Z-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
499	9	-4.671	-250.088	50.861	-15.404	-3.708	-251.051	176.422
500	1	-0.811	-234.131	-516.395	-12.502	-0.143	-234.800	176.941
500	2	-0.683	-238.805	-517.495	-13.167	0.042	-239.531	176.844
500	3	-9.264	-241.109	48.073	11.665	-8.678	-241.695	2.873
500	4	0.674	-237.002	-1,047.981	-35.798	5.948	-242.277	171.618
500	5	-7.906	-239.307	-482.412	-10.964	-7.388	-239.825	177.293
500	6	-5.278	-325.658	-603.326	-26.749	-3.060	-327.877	175.260
500	7	-5.451	-328.793	-503.536	-23.699	-3.724	-330.521	175.830
500	8	-10.799	-133.696	-457.556	4.047	-10.666	-133.829	1.884
500	9	-9.392	-236.436	49.173	12.330	-8.724	-237.104	3.099
501	1	-9.252	-235.930	-516.965	-12.334	-8.583	-236.599	176.894
501	2	-9.380	-240.667	-518.125	-12.997	-8.652	-241.395	176.793
501	3	-3.726	-239.754	49.297	11.531	-3.164	-240.316	2.790
501	4	-20.679	-241.712	-1,050.195	-35.410	-15.144	-247.246	171.117
501	5	-15.024	-240.799	-482.771	-10.880	-14.501	-241.322	177.247
501	6	-19.051	-328.739	-604.986	-26.657	-16.773	-331.017	175.116
501	7	-17.473	-331.493	-505.056	-23.609	-15.708	-333.258	175.724
501	8	-12.137	-133.757	-456.546	4.124	-11.997	-133.897	1.940
501	9	-3.598	-235.017	50.458	12.195	-2.957	-235.658	3.008
502	1	3.893	-258.020	-525.868	29.807	7.242	-261.370	6.411
502	2	3.962	-263.271	-527.087	30.151	7.322	-266.631	6.358
502	3	-11.103	-225.967	53.863	-14.930	-10.071	-227.000	176.044
502	4	9.172	-295.597	-1,068.893	67.955	23.637	-310.062	12.017
502	5	-5.893	-258.293	-487.941	22.872	-3.837	-260.349	5.136
502	6	-4.373	-360.043	-611.652	34.291	-1.097	-363.319	5.457
502	7	-4.572	-358.841	-511.356	29.464	-2.138	-361.275	4.722
502	8	-7.452	-139.633	-460.381	15.097	-5.750	-141.335	6.433
502	9	-11.172	-220.717	55.083	-15.274	-10.065	-221.824	175.852
503	1	-8.460	-260.798	-527.388	27.563	-5.484	-263.774	6.162
503	2	-8.576	-266.094	-528.650	27.947	-5.578	-269.092	6.123
503	3	-4.758	-224.421	55.258	-14.623	-3.789	-225.390	176.208
503	4	-19.495	-302.129	-1,072.873	63.844	-5.742	-315.882	12.156
503	5	-15.677	-260.456	-488.963	21.273	-13.842	-262.291	4.930
503	6	-19.850	-363.556	-613.729	33.200	-16.673	-366.733	5.467
503	7	-17.904	-361.875	-513.195	28.618	-15.539	-364.240	4.723
503	8	-13.051	-140.771	-460.439	12.611	-11.818	-142.004	5.585
503	9	-4.642	-219.125	56.520	-15.006	-3.597	-220.170	176.017
504	1	-6.648	-281.861	-522.673	-14.495	-5.886	-282.622	176.993
504	2	-6.470	-287.655	-523.977	-15.118	-5.660	-288.466	176.931
504	3	-8.459	-211.155	53.730	12.017	-7.749	-211.865	3.381
504	4	-10.728	-353.913	-1,064.630	-39.456	-6.250	-358.391	173.525
504	5	-12.717	-277.413	-486.921	-12.320	-12.145	-277.985	177.340
504	6	-10.063	-394.118	-612.847	-27.517	-8.101	-396.079	175.922
504	7	-9.311	-388.389	-511.954	-24.271	-7.763	-389.937	176.351
504	8	-16.731	-146.459	-457.455	1.768	-16.706	-146.483	0.781
504	9	-8.637	-205.361	55.034	12.640	-7.828	-206.170	3.661
505	1	-5.090	-208.298	-498.736	18.874	-3.352	-210.036	5.261
505	2	-5.167	-211.505	-499.579	19.410	-3.357	-213.315	5.327
505	3	-4.736	-264.871	37.386	-12.913	-4.096	-265.511	177.165

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ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
505	4	-12.182	-162.664	-1,009.426	47.618	1.529	-176.466	16.164
505	5	-11.750	-216.030	-472.460	15.294	-10.612	-217.168	4.258
505	6	-14.333	-267.775	-587.729	29.271	-10.396	-271.111	6.503
[illegible]	7	-13.226	-277.410	-488.664	25.578	-10.772	-279.854	5.479
[illegible]	8	-10.011	-143.546	-453.410	3.168	-9.935	-143.621	1.358
505	9	-4.659	-261.664	38.229	-13.449	-3.957	-262.366	177.012
506	1	0.233	-219.388	-490.791	-6.753	0.440	-219.596	178.240
506	2	0.368	-223.294	-491.717	-7.561	0.623	-223.549	178.066
506	3	-8.778	-253.520	35.039	10.585	-8.321	-253.977	2.472
506	4	2.818	-195.968	-994.904	-25.311	5.990	-199.140	172.856
506	5	-6.328	-226.194	-468.147	-7.164	-6.095	-226.427	178.135
506	6	-3.304	-294.373	-584.986	-25.167	-1.144	-296.533	175.094
506	7	-3.735	-300.962	-485.938	-22.667	-2.017	-302.681	175.664
506	8	-9.384	-137.927	-447.229	11.109	-8.431	-138.880	4.903
506	9	-8.913	-249.615	35.965	11.394	-8.375	-250.153	2.704
507	1	-4.612	-220.305	-490.527	-4.534	-4.517	-220.400	178.796
507	2	-4.814	-224.294	-491.534	-5.392	-4.682	-224.427	178.593
507	3	-3.934	-252.335	36.118	10.047	-3.528	-252.741	2.312
507	4	-11.931	-199.057	-995.604	-21.162	-9.568	-201.420	173.627
507	5	-11.051	-227.098	-467.951	-5.722	-10.900	-227.249	178.484
507	6	-15.891	-297.172	-586.395	-24.480	-13.777	-299.286	175.063
507	7	-14.916	-303.470	-487.302	-22.182	-13.221	-305.165	175.629
507	8	-6.496	-136.942	-445.193	13.678	-5.077	-138.361	5.922
507	9	-3.732	-248.346	37.124	10.906	-3.247	-248.831	2.547
508	1	2.481	-234.479	-499.576	20.631	4.264	-236.262	4.939
[illegible]	2	2.611	-239.152	-500.665	21.126	4.443	-240.985	4.956
[illegible]	3	-10.474	-240.020	40.945	-13.141	-9.724	-240.770	176.734
508	4	7.015	-238.387	-1,014.887	50.777	17.106	-248.478	11.240
508	5	-6.070	-239.254	-473.276	16.509	-4.907	-240.417	4.030
508	6	-3.356	-325.631	-593.729	29.877	-0.610	-328.377	5.252
508	7	-3.577	-328.747	-494.201	25.997	-1.512	-330.813	4.542
508	8	-9.010	-133.629	-448.660	5.321	-8.783	-133.856	2.440
508	9	-10.604	-235.346	42.034	-13.636	-9.780	-236.170	176.540
509	1	-5.970	-236.298	-500.201	20.799	-4.107	-238.161	5.119
509	2	-6.096	-241.035	-501.351	21.295	-4.181	-242.950	5.137
509	3	-4.931	-238.669	42.176	-13.275	-4.179	-239.421	176.759
509	4	-14.359	-243.128	-1,017.205	51.165	-3.437	-254.050	12.049
509	5	-13.194	-240.762	-473.677	16.594	-11.990	-241.966	4.149
509	6	-17.134	-328.731	-595.430	29.970	-14.278	-331.587	5.444
509	7	-15.605	-331.470	-495.763	26.088	-13.464	-333.610	4.690
509	8	-10.353	-133.706	-447.692	5.399	-10.117	-133.942	2.502
509	9	-4.805	-233.932	43.326	-13.770	-3.981	-234.757	176.573
510	1	-5.250	-248.201	-493.416	-4.738	-5.158	-248.293	178.883
510	2	-5.057	-253.614	-494.623	-5.596	-4.931	-253.740	178.710
510	3	-8.059	-227.242	40.057	10.180	-7.587	-227.714	2.653
510	4	-7.881	-277.839	-1,004.824	-21.609	-6.162	-279.558	175.452
510	5	-10.883	-251.468	-470.143	-5.832	-10.741	-251.609	178.612
510	6	-7.650	-355.503	-593.076	-24.592	-5.920	-357.233	175.976
[illegible]	7	-7.180	-355.131	-493.316	-22.289	-5.758	-356.554	176.349
[illegible]	8	-15.247	-129.138	-442.879	13.564	-13.653	-130.732	6.699

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ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
510	9	-8.252	-221.829	41.263	11.038	-7.683	-222.398	2.951
511	1	-10.063	-249.118	-493.159	-6.564	-9.883	-249.298	178.428
511	2	-10.207	-254.614	-494.446	-7.371	-9.984	-254.836	178.274
511	3	-3.227	-226.066	41.130	10.435	-2.739	-226.553	2.675
511	4	-22.555	-280.920	-1,005.515	-24.869	-20.183	-283.292	174.551
511	5	-15.575	-252.372	-469.939	-7.062	-15.365	-252.582	178.293
511	6	-20.188	-358.299	-594.465	-25.034	-18.344	-360.142	175.788
511	7	-18.320	-357.626	-494.650	-22.542	-16.829	-359.117	176.215
511	8	-12.340	-128.151	-440.861	11.182	-11.270	-129.230	5.464
511	9	-3.084	-220.570	42.416	11.242	-2.504	-221.149	2.951
512	1	1.575	-262.368	-501.048	18.640	2.885	-263.677	4.019
512	2	1.655	-268.564	-502.441	19.174	3.009	-269.918	4.038
512	3	-10.626	-213.956	45.696	-12.712	-9.834	-214.748	176.436
512	4	4.753	-318.496	-1,022.636	47.049	11.462	-325.205	8.115
512	5	-7.527	-263.889	-474.497	15.162	-6.633	-264.782	3.373
512	6	-6.211	-386.315	-601.388	29.084	-3.999	-388.528	4.350
512	7	-6.007	-382.568	-501.252	25.408	-4.300	-384.274	3.843
512	8	-9.321	-123.859	-443.007	3.081	-9.238	-123.942	1.540
512	9	-10.705	-207.760	47.090	-13.247	-9.818	-208.646	176.171
513	1	-0.459	-222.631	-466.659	0.931	-0.455	-222.635	0.240
513	2	-0.744	-225.434	-467.368	-0.093	-0.744	-225.434	179.976
513	3	-4.102	-261.455	22.603	8.938	-3.792	-261.765	1.986
513	4	-4.102	-189.274	-944.611	-11.266	-3.419	-189.957	176.531
513	5	-7.460	-225.295	-454.639	-2.234	-7.437	-225.318	179.412
513	6	-13.335	-270.807	-566.666	-23.685	-11.174	-272.968	174.787
513	7	-12.930	-278.911	-468.277	-21.898	-11.140	-280.702	175.324
513	8	-1.014	-161.957	-438.622	20.938	1.665	-164.637	7.292
513	9	-3.817	-258.652	23.312	9.963	-3.428	-259.041	2.235
514	1	1.348	-229.090	-475.513	10.090	1.789	-229.531	2.502
514	2	1.550	-232.767	-476.333	10.810	2.048	-233.264	2.636
514	3	-9.668	-250.599	27.666	-11.128	-9.155	-251.112	177.361
514	4	5.313	-214.508	-963.888	31.333	9.692	-218.887	7.956
514	5	-5.906	-232.340	-459.888	9.394	-5.517	-232.729	2.371
514	6	-1.741	-297.059	-574.486	26.034	0.535	-299.336	4.999
514	7	-2.028	-302.719	-475.643	23.199	-0.249	-304.498	4.386
514	8	-10.476	-149.247	-441.373	-6.879	-10.136	-149.587	177.168
514	9	-9.871	-246.922	28.486	-11.848	-9.280	-247.512	177.145
515	1	-3.508	-230.013	-475.298	12.309	-2.842	-230.680	3.101
515	2	-3.643	-233.774	-476.199	12.979	-2.913	-234.504	3.218
515	3	-4.819	-249.405	28.765	-11.666	-4.264	-249.960	177.275
515	4	-9.460	-217.616	-964.678	35.482	-3.578	-223.498	9.412
515	5	-10.636	-233.246	-459.713	10.836	-10.110	-233.773	2.780
515	6	-14.336	-299.861	-575.923	26.722	-11.856	-302.340	5.301
515	7	-13.227	-305.229	-477.030	23.685	-11.308	-307.137	4.607
515	8	-7.594	-148.256	-439.356	-4.309	-7.462	-148.388	178.246
515	9	-4.684	-245.644	29.666	-12.336	-4.055	-246.274	177.076
516	1	-3.977	-233.548	-466.840	2.406	-3.952	-233.573	0.600
516	2	-3.771	-238.197	-467.815	1.332	-3.763	-238.205	0.325
516	3	-7.573	-239.572	26.108	8.727	-7.245	-239.900	2.151

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
516	4	-5.311	-237.060	-948.926	-8.662	-4.988	-237.383	177.862
516	5	-9.113	-238.435	-455.002	-1.267	-9.106	-238.442	179.683
[illegible]	6	-5.353	-324.402	-572.527	-23.501	-3.631	-326.124	175.809
[illegible]	7	-5.164	-327.459	-473.745	-21.867	-3.587	-328.936	176.136
[illegible]	8	-13.766	-133.362	-432.967	23.009	-9.492	-137.636	10.523
516	9	-7.778	-234.923	27.083	9.801	-7.356	-235.345	2.466
517	1	-5.470	-233.652	-465.833	2.604	-5.440	-233.682	0.654
517	2	-5.689	-238.407	-466.911	1.531	-5.679	-238.417	0.377
517	3	-3.402	-238.557	27.053	8.590	-3.089	-238.870	2.089
517	4	-13.936	-238.661	-948.272	-8.214	-13.636	-238.960	177.909
517	5	-11.649	-238.810	-454.307	-1.155	-11.643	-238.816	179.708
517	6	-17.130	-327.017	-573.791	-23.350	-15.381	-328.767	175.715
517	7	-15.852	-329.861	-475.029	-21.723	-14.356	-331.357	176.061
517	8	-6.696	-131.347	-429.939	23.082	-2.559	-135.484	10.161
517	9	-3.183	-233.802	28.131	9.662	-2.779	-234.206	2.395
518	1	0.461	-239.395	-473.666	12.101	1.070	-240.004	2.881
518	2	0.605	-245.041	-474.882	12.770	1.267	-245.703	2.968
518	3	-9.842	-227.948	31.846	-11.511	-9.236	-228.554	176.987
518	4	3.027	-262.479	-965.639	35.004	7.565	-267.016	7.385
518	5	-7.420	-245.386	-458.910	10.722	-6.937	-245.868	2.574
518	6	-4.813	-353.024	-581.381	26.585	-2.795	-355.043	4.341
518	7	-4.647	-353.511	-482.268	23.557	-3.063	-355.095	3.845
518	8	-10.689	-117.796	-431.432	-4.409	-10.507	-117.977	177.646
518	9	-9.986	-222.302	33.062	-12.180	-9.290	-222.999	176.727
519	1	-4.363	-240.319	-473.458	10.275	-3.917	-240.766	2.489
[illegible]	2	-4.555	-246.048	-474.754	10.996	-4.055	-246.547	2.601
[illegible]	3	-5.004	-226.762	32.932	-11.255	-4.434	-227.332	177.101
519	4	-11.669	-265.578	-966.428	31.744	-7.760	-269.486	7.019
519	5	-12.118	-246.292	-458.740	9.491	-11.734	-246.676	2.317
519	6	-17.358	-355.818	-582.805	26.143	-15.351	-357.825	4.391
519	7	-15.793	-356.014	-483.639	23.304	-14.204	-357.603	3.900
519	8	-7.787	-116.820	-429.446	-6.790	-7.366	-117.241	176.450
519	9	-4.813	-221.033	34.229	-11.976	-4.151	-221.694	176.839
520	1	-8.995	-244.506	-466.048	0.765	-8.992	-244.509	0.186
520	2	-8.728	-251.099	-467.390	-0.257	-8.728	-251.099	179.939
520	3	-6.903	-216.775	30.512	9.088	-6.510	-217.168	2.475
520	4	-15.144	-286.201	-952.598	-11.647	-14.644	-286.701	177.544
520	5	-13.319	-251.877	-454.695	-2.301	-13.297	-251.899	179.447
520	6	-9.262	-380.335	-579.624	-23.696	-7.755	-381.842	176.361
520	7	-8.206	-378.159	-480.466	-21.908	-6.913	-379.452	176.622
520	8	-19.343	-102.888	-424.375	20.804	-14.449	-107.783	13.237
520	9	-7.170	-210.182	31.854	10.111	-6.668	-210.684	2.844
521	1	-1.078	-239.506	-452.881	2.862	-1.044	-239.541	0.688
521	2	-1.220	-241.813	-453.367	3.779	-1.160	-241.872	0.899
521	3	-4.645	-256.669	15.104	-9.884	-4.258	-257.057	177.757
521	4	-4.624	-220.910	-915.589	18.292	-3.088	-222.447	4.800
521	5	-8.050	-235.767	-447.117	4.628	-7.956	-235.861	1.164
521	6	-11.452	-273.358	-554.694	24.344	-9.208	-275.602	5.265
[illegible]	7	-10.759	-279.856	-456.478	22.206	-8.939	-281.677	4.686
[illegible]	8	-4.856	-183.649	-436.143	-16.088	-3.420	-185.085	174.899

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NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
21	9	-4.504	-254.363	15.590	-10.801	-4.038	-254.829	177.529
22	1	-3.004	-235.583	-443.187	6.953	-2.796	-235.791	1.711
22	2	-2.790	-239.002	-443.763	5.706	-2.653	-239.140	1.383
22	3	-7.157	-248.543	11.903	7.445	-6.927	-248.772	1.765
22	4	-3.206	-226.670	-897.228	-0.297	-3.206	-226.670	179.923
22	5	-7.573	-236.211	-441.561	1.442	-7.564	-236.220	0.361
22	6	-3.392	-296.735	-550.590	-23.694	-1.491	-298.637	175.411
22	7	-3.485	-301.645	-452.652	-22.497	-1.797	-303.333	175.709
22	8	-12.390	-158.945	-428.551	29.652	-6.618	-164.717	11.015
22	9	-7.370	-245.124	12.479	8.693	-7.052	-245.441	2.091
23	1	-1.595	-234.965	-441.506	8.736	-1.268	-235.291	2.141
23	2	-1.906	-238.515	-442.212	7.429	-1.673	-238.748	1.796
23	3	-3.741	-247.700	12.697	6.814	-3.551	-247.890	1.598
23	4	-6.505	-226.956	-895.357	3.112	-6.461	-227.000	0.808
23	5	-8.340	-236.141	-440.448	2.496	-8.313	-236.168	0.628
23	6	-15.042	-299.320	-551.868	-23.609	-13.095	-301.268	175.284
23	7	-14.318	-304.084	-454.021	-22.577	-12.569	-305.833	175.571
23	8	-1.297	-155.918	-424.513	32.042	5.079	-162.295	11.256
23	9	-3.430	-244.150	13.402	8.121	-3.156	-244.424	1.930
24	1	-0.518	-234.027	-449.069	4.271	-0.440	-234.105	1.047
24	2	-0.294	-238.683	-449.947	5.135	-0.184	-238.794	1.233
24	3	-9.028	-238.477	17.732	-10.087	-8.585	-238.920	177.487
24	4	1.619	-238.713	-912.621	20.751	3.397	-240.491	4.899
24	5	-7.114	-238.507	-444.941	5.528	-6.982	-238.639	1.368
24	6	-2.906	-324.634	-560.062	24.371	-1.070	-326.469	4.307
24	7	-2.821	-327.656	-461.838	22.090	-1.326	-329.152	3.872
24	8	-12.173	-133.281	-425.086	-13.992	-10.577	-134.877	173.494
24	9	-9.251	-233.821	18.611	-10.951	-8.719	-234.354	177.214
25	1	-2.023	-234.138	-448.104	4.469	-1.937	-234.224	1.102
25	2	-2.224	-238.900	-449.086	5.334	-2.104	-239.020	1.290
25	3	-4.852	-237.452	18.705	-10.224	-4.403	-237.901	177.488
25	4	-7.929	-240.332	-912.058	21.200	-5.118	-242.243	5.150
25	5	-9.557	-238.984	-444.266	5.640	-9.518	-239.023	1.408
525	6	-14.691	-327.253	-561.347	24.522	-12.778	-329.165	4.459
525	7	-13.517	-330.067	-463.148	22.235	-11.963	-331.621	3.998
525	8	-5.108	-131.268	-422.072	-13.919	-3.590	-132.786	173.778
525	9	-4.650	-232.690	19.687	-11.090	-4.112	-233.228	177.222
26	1	-7.710	-230.909	-439.395	8.772	-7.366	-231.254	2.247
26	2	-7.429	-236.752	-440.435	7.469	-7.186	-236.995	1.863
26	3	-6.540	-229.169	15.730	7.194	-6.308	-229.401	1.849
26	4	-12.448	-247.317	-895.491	2.880	-12.413	-247.352	0.702
26	5	-11.559	-239.734	-439.324	2.604	-11.529	-239.764	0.654
26	6	-6.939	-350.472	-557.340	-23.443	-5.346	-352.065	176.114
26	7	-6.178	-351.635	-459.321	-22.398	-4.732	-353.081	176.305
26	8	-17.898	-107.704	-415.818	32.066	-7.624	-117.978	17.765
26	9	-6.820	-223.327	16.770	8.497	-6.487	-223.660	2.244
27	1	-6.196	-230.270	-437.722	7.279	-5.959	-230.507	1.858
27	2	-6.437	-236.242	-438.889	6.336	-6.279	-236.401	1.503
27	3	-3.053	-228.308	16.534	7.416	-2.809	-228.552	1.883

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ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
527	4	-15.609	-247.578	-893.639	0.295	-15.609	-247.578	0.073
527	5	-12.225	-239.643	-438.215	1.675	-12.212	-239.656	0.422
527	6	-18.436	-353.023	-558.576	-23.345	-16.814	-354.644	176.028
[illegible]	7	-16.862	-354.039	-460.652	-22.155	-15.413	-355.489	176.256
[illegible]	8	-6.759	-104.678	-411.834	29.756	1.574	-113.011	15.545
527	9	-2.811	-222.336	17.701	8.659	-2.470	-222.677	2.255
528	1	-1.442	-228.472	-444.312	2.642	-1.411	-228.502	0.666
528	2	-1.282	-235.568	-445.682	3.554	-1.228	-235.621	0.869
528	3	-9.212	-219.147	21.345	-9.709	-8.763	-219.595	177.357
528	4	-0.776	-257.833	-909.119	17.754	0.444	-259.053	3.932
528	5	-8.706	-241.412	-442.092	4.489	-8.619	-241.499	1.105
528	6	-6.198	-378.009	-566.624	24.104	-4.641	-379.565	3.694
528	7	-5.635	-377.365	-468.412	21.981	-4.340	-378.660	3.372
528	8	-12.325	-81.038	-411.131	-16.124	-8.730	-84.634	167.428
528	9	-9.372	-212.051	22.715	-10.622	-8.817	-212.606	177.008
529	1	-0.660	-251.055	-420.847	13.174	0.030	-251.746	3.003
529	2	-1.070	-252.867	-420.979	11.678	-0.530	-253.408	2.650
529	3	-6.165	-253.251	-2.139	5.462	-6.045	-253.372	1.266
529	4	-2.356	-242.087	-847.583	11.259	-1.828	-242.614	2.683
529	5	-7.451	-242.471	-428.743	5.044	-7.343	-242.579	1.229
529	6	-15.465	-271.775	-528.402	-24.263	-13.188	-274.051	174.639
529	7	-15.318	-277.081	-431.332	-23.653	-13.198	-279.201	174.878
529	8	1.818	-201.514	-425.758	38.853	8.989	-208.686	10.457
529	9	-5.755	-251.439	-2.006	6.958	-5.558	-251.636	1.621
530	1	-1.364	-243.277	-427.298	-4.233	-1.290	-243.351	178.997
[illegible]	2	-1.051	-246.426	-427.646	-3.091	-1.012	-246.465	179.278
[illegible]	3	-8.152	-245.192	3.568	-8.003	-7.882	-245.462	178.068
[illegible]	4	0.477	-241.802	-863.681	5.135	0.586	-241.911	1.213
530	5	-6.623	-240.569	-432.465	0.223	-6.623	-240.569	0.055
530	6	-0.587	-296.654	-536.645	23.585	1.279	-298.521	4.526
530	7	-0.622	-300.805	-439.190	22.124	0.999	-302.427	4.193
530	8	-13.695	-169.416	-424.606	-25.584	-9.599	-173.512	170.905
530	9	-8.465	-242.044	3.916	-9.145	-8.108	-242.401	177.761
531	1	0.033	-242.673	-425.659	-2.450	0.057	-242.698	179.421
531	2	-0.178	-245.952	-426.137	-1.367	-0.171	-245.960	179.681
531	3	-4.731	-244.346	4.390	-8.634	-4.421	-244.657	177.939
531	4	-2.845	-242.114	-861.901	8.544	-2.540	-242.419	2.042
531	5	-7.398	-240.508	-431.373	1.278	-7.391	-240.515	0.314
531	6	-12.247	-299.251	-537.958	23.670	-10.307	-301.190	4.683
531	7	-11.464	-303.256	-440.587	22.044	-9.808	-304.912	4.296
531	8	-2.606	-166.402	-420.579	-23.194	0.614	-169.623	172.093
531	9	-4.519	-241.067	4.868	-9.717	-4.121	-241.465	177.651
532	1	-8.801	-233.131	-416.472	14.392	-7.881	-234.051	3.656
532	2	-8.565	-237.760	-417.036	12.841	-7.848	-238.477	3.197
532	3	-8.193	-238.281	0.414	5.357	-8.069	-238.406	1.333
532	4	-12.333	-237.198	-843.703	13.280	-11.552	-237.980	3.368
532	5	-11.961	-237.720	-426.251	5.796	-11.813	-237.868	1.469
532	6	-7.864	-323.333	-534.159	-24.461	-5.978	-325.219	175.592
[illegible]	7	-7.440	-326.341	-437.129	-23.960	-5.650	-328.132	175.727
[illegible]	8	-17.286	-133.126	-413.500	40.853	-4.328	-146.084	17.598

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ZMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	ZETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
532	9	-8.429	-233.653	0.979	6.908	-8.217	-233.864	1.755
533	1	-4.880	-232.909	-414.270	14.445	-3.964	-232.825	3.626
533	2	-5.246	-236.688	-414.983	12.896	-4.529	-237.404	3.179
533	3	-5.662	-237.656	1.016	5.078	-5.551	-237.767	1.253
533	4	-10.771	-236.312	-840.824	13.600	-9.954	-237.129	3.438
533	5	-11.187	-237.281	-424.824	5.782	-11.039	-237.429	1.464
533	6	-19.179	-325.857	-535.430	-24.436	-17.244	-327.792	175.472
533	7	-18.211	-328.780	-438.554	-23.946	-16.375	-330.616	175.616
533	8	-2.909	-129.294	-408.711	40.808	9.121	-141.325	16.426
533	9	-5.296	-232.878	1.729	6.628	-5.103	-233.071	1.667
534	1	-2.357	-223.618	-419.909	-2.793	-2.322	-223.653	179.276
534	2	-2.114	-229.739	-420.860	-1.716	-2.101	-229.752	179.568
534	3	-8.496	-229.716	6.500	-8.601	-8.163	-230.050	177.776
534	4	-1.979	-235.043	-855.402	7.920	-1.710	-235.312	1.944
534	5	-8.361	-235.021	-428.041	1.034	-8.357	-235.026	0.261
534	6	-4.174	-350.449	-543.527	23.320	-2.611	-352.013	3.835
534	7	-3.711	-352.275	-446.336	21.702	-2.364	-353.621	3.549
534	8	-13.843	-96.691	-406.547	-23.322	-7.729	-102.806	165.310
534	9	-8.739	-223.595	7.451	-9.679	-8.304	-224.030	177.425
535	1	-0.854	-222.993	-418.284	-4.287	-0.771	-223.075	178.894
535	2	-1.134	-229.244	-419.363	-3.148	-1.090	-229.287	179.209
535	3	-5.004	-228.852	7.331	-8.379	-4.691	-229.165	177.859
535	4	-5.164	-235.331	-853.655	5.335	-5.040	-235.454	1.327
535	5	-9.034	-234.939	-426.960	0.104	-9.034	-234.939	0.026
535	6	-15.679	-353.004	-544.805	23.418	-14.061	-354.622	3.952
535	7	-14.404	-354.688	-447.703	21.945	-12.994	-356.097	3.675
535	8	-2.708	-93.667	-402.581	-25.631	4.017	-100.393	165.297
535	9	-4.724	-222.601	8.409	-9.517	-4.309	-223.015	177.503
536	1	-12.820	-213.868	-409.909	13.009	-11.981	-214.706	3.687
536	2	-12.547	-221.445	-411.049	11.516	-11.914	-222.078	3.146
536	3	-7.587	-222.557	3.603	5.702	-7.436	-222.708	1.518
536	4	-20.503	-231.249	-836.986	10.809	-19.950	-231.802	2.928
536	5	-15.544	-232.361	-422.334	4.996	-15.428	-232.476	1.319
536	6	-11.542	-376.917	-541.090	-24.261	-9.938	-378.521	176.217
536	7	-10.303	-377.541	-444.249	-23.640	-8.788	-379.057	176.332
536	8	-21.714	-61.117	-396.577	38.735	2.042	-84.874	31.520
536	9	-7.860	-214.980	4.743	7.195	-7.611	-215.230	1.987
537	1	4.722	-264.437	-434.124	-10.123	5.102	-264.817	177.849
537	2	4.504	-265.698	-433.840	-8.750	4.787	-265.981	178.147
537	3	-2.294	-247.819	-6.208	-6.541	-2.120	-247.993	178.475
537	4	3.935	-267.746	-876.833	-5.524	4.047	-267.858	178.835
537	5	-2.863	-249.867	-449.201	-3.315	-2.818	-249.911	179.231
537	6	-7.476	-269.855	-548.298	23.908	-5.315	-272.016	5.164
537	7	-7.051	-273.893	-443.806	23.021	-5.079	-275.864	4.895
537	8	2.069	-221.370	-455.637	-34.347	7.230	-226.531	171.455
537	9	-2.076	-246.558	-6.493	-7.914	-1.820	-246.814	178.147
538	1	-6.173	-248.701	-423.701	18.447	-4.778	-250.096	4.325
538	2	-5.868	-251.554	-423.488	15.706	-4.737	-252.684	3.872
538	3	-5.861	-243.547	-11.106	4.459	-5.777	-243.631	1.074

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ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
538	4	-8.743	-251.466	-855.669	20.313	-7.054	-253.155	4.751
538	5	-8.736	-243.460	-443.287	8.066	-8.459	-243.737	1.966
538	6	-3.052	-294.423	-543.270	-25.553	-0.828	-296.647	175.025
[illegible]	7	-2.877	-298.023	-439.274	-25.345	-0.716	-300.183	175.127
[illegible]	8	-15.637	-178.987	-448.097	47.426	-2.866	-191.758	15.071
538	9	-6.166	-240.695	-11.319	6.200	-6.002	-240.858	1.513
539	1	0.338	-246.819	-420.805	19.797	1.914	-248.395	4.551
539	2	-0.092	-249.856	-420.777	17.997	1.198	-251.146	4.100
539	3	-3.929	-243.060	-10.603	3.771	-3.869	-243.120	0.903
539	4	-2.754	-249.456	-851.610	22.972	-0.633	-251.577	5.274
539	5	-6.591	-242.660	-441.437	8.746	-6.267	-242.984	2.119
539	6	-15.403	-297.187	-544.743	-25.899	-13.042	-299.548	174.792
539	7	-14.854	-300.756	-440.965	-25.802	-12.544	-303.066	174.884
539	8	3.143	-174.026	-442.075	49.444	16.007	-186.891	14.584
539	9	-3.498	-240.023	-10.631	5.572	-3.367	-240.155	1.349
540	1	-1.074	-232.999	-426.499	-8.859	-0.736	-233.337	177.815
540	2	-0.676	-237.627	-426.765	-7.548	-0.436	-237.867	178.177
540	3	-5.689	-236.515	-4.612	-6.665	-5.497	-236.707	178.347
540	4	-0.857	-238.339	-866.862	-3.451	-0.807	-238.389	179.167
540	5	-5.870	-237.227	-444.709	-2.568	-5.842	-237.255	179.364
540	6	1.377	-322.887	-553.965	23.576	3.082	-324.593	4.136
540	7	1.754	-325.829	-449.867	22.582	3.303	-327.378	3.925
540	8	-14.857	-132.648	-438.713	-32.203	-6.627	-140.877	165.665
540	9	-6.087	-231.887	-4.347	-7.976	-5.805	-232.169	177.979
541	1	3.149	-231.687	-424.173	-8.802	3.478	-232.017	177.856
[illegible]	2	2.896	-236.477	-424.600	-7.489	3.130	-236.711	178.209
[illegible]	3	-2.948	-235.829	-3.933	-6.965	-2.740	-236.037	178.288
541	4	0.804	-237.403	-863.864	-3.107	0.844	-237.444	179.252
541	5	-5.041	-236.756	-443.197	-2.583	-5.012	-236.784	179.361
541	6	-10.855	-325.616	-555.381	23.603	-9.094	-327.376	4.264
541	7	-9.889	-328.473	-451.448	22.596	-8.295	-330.068	4.037
541	8	0.668	-128.507	-433.555	-32.253	8.273	-136.113	166.732
541	9	-2.696	-231.039	-3.506	-8.278	-2.396	-231.339	177.926
542	1	-10.211	-216.819	-414.520	19.375	-8.410	-218.620	5.311
542	2	-9.840	-223.167	-414.993	17.574	-8.402	-224.606	4.678
542	3	-5.576	-231.541	-8.604	3.786	-5.513	-231.604	0.959
542	4	-16.587	-222.517	-844.131	22.248	-14.210	-224.894	6.096
542	5	-12.322	-230.891	-437.743	8.459	-11.996	-231.218	2.213
542	6	-6.161	-350.144	-550.374	-26.202	-4.176	-352.128	175.669
542	7	-5.201	-352.508	-446.872	-26.097	-3.251	-354.458	175.726
542	8	-20.710	-87.417	-427.070	49.168	5.349	-113.477	27.924
542	9	-5.947	-225.193	-8.131	5.587	-5.805	-225.335	1.459
543	1	-3.751	-214.958	-411.687	18.145	-2.204	-216.505	4.874
543	2	-4.114	-221.489	-412.341	16.410	-2.882	-222.721	4.293
543	3	-3.693	-231.064	-8.119	3.875	-3.627	-231.130	0.976
543	4	-10.624	-220.528	-840.154	20.291	-8.681	-222.471	5.471
543	5	-10.203	-230.103	-435.931	7.756	-9.930	-230.376	2.017
543	6	-18.488	-352.894	-551.840	-25.715	-16.522	-354.860	175.628
[illegible]	7	-17.163	-355.231	-448.547	-25.526	-15.246	-357.148	175.706
[illegible]	8	-2.004	-82.495	-421.150	46.964	19.600	-104.099	24.703

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E 351

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
543	9	-3.330	-224.533	-7.465	5.610	-3.188	-224.675	1.452
544	1	-2.594	-200.756	-416.736	-10.221	-2.068	-201.282	177.055
544	2	-2.238	-208.895	-417.706	-8.853	-1.859	-209.273	177.551
544	3	-6.351	-224.853	-2.421	-6.298	-6.170	-225.034	178.350
544	4	-3.907	-208.509	-854.130	-5.917	-3.735	-208.680	178.344
544	5	-8.020	-224.467	-438.845	-3.362	-7.968	-224.519	179.110
544	6	-2.100	-378.645	-561.076	23.743	-0.609	-380.137	3.594
544	7	-1.193	-380.426	-457.530	22.871	0.180	-381.800	3.439
544	8	-16.068	-40.537	-416.911	-34.273	8.088	-64.694	144.822
544	9	-6.707	-216.715	-1.451	-7.666	-6.428	-216.994	177.912
545	1	1.722	-275.479	-402.513	27.276	4.380	-278.137	5.566
545	2	1.073	-276.208	-401.547	25.242	3.352	-278.487	5.159
545	3	-6.211	-246.722	-27.200	5.959	-6.064	-246.869	1.418
545	4	1.261	-285.700	-805.179	33.182	5.048	-289.487	6.511
545	5	-6.024	-256.214	-430.832	13.899	-5.254	-256.984	3.170
545	6	-18.562	-266.693	-515.388	-25.102	-16.048	-269.207	174.280
545	7	-18.463	-270.033	-412.378	-25.130	-15.977	-272.519	174.351
545	8	8.629	-239.730	-452.665	59.868	22.307	-253.408	12.869
545	9	-5.563	-245.993	-28.166	7.993	-5.297	-246.258	1.902
546	1	-4.023	-254.423	-407.229	-15.831	-3.026	-255.420	176.396
546	2	-3.581	-257.004	-406.604	-14.205	-2.787	-257.798	176.801
546	3	-7.085	-239.944	-20.834	-4.496	-6.999	-240.031	178.894
546	4	-3.787	-263.174	-819.181	-16.185	-2.781	-264.180	176.443
546	5	-7.291	-246.113	-433.410	-6.476	-7.115	-246.289	178.448
546	6	1.047	-292.366	-524.826	25.064	3.173	-294.492	4.847
546	7	1.187	-295.458	-421.512	24.704	3.230	-297.502	4.728
546	8	-17.279	-187.781	-447.516	-43.209	-6.954	-198.106	166.561
546	9	-7.527	-237.363	-21.458	-6.121	-7.364	-237.525	178.475
547	1	2.477	-252.555	-404.381	-14.481	3.296	-253.375	176.760
547	2	2.182	-255.320	-403.943	-12.915	2.828	-255.967	177.136
547	3	-5.146	-239.452	-20.304	-5.183	-5.031	-239.567	178.733
547	4	2.176	-261.191	-815.227	-13.527	2.869	-261.884	177.067
547	5	-5.152	-245.323	-431.589	-5.796	-5.012	-245.463	178.618
547	6	-11.313	-295.144	-526.340	24.717	-9.177	-297.280	4.940
547	7	-10.799	-298.205	-423.249	24.246	-8.768	-300.237	4.788
547	8	1.499	-182.823	-441.503	-41.190	10.286	-191.610	167.959
547	9	-4.852	-236.687	-20.743	-6.749	-4.655	-236.883	178.333
548	1	-9.220	-231.340	-393.576	24.469	-6.556	-234.003	6.212
548	2	-8.901	-235.923	-393.191	22.463	-6.700	-238.124	5.597
548	3	-5.703	-235.880	-24.823	3.482	-5.650	-235.932	0.866
548	4	-14.243	-235.758	-793.664	30.434	-10.138	-239.864	7.682
548	5	-11.045	-235.715	-425.296	11.454	-10.463	-236.297	2.911
548	6	-5.561	-320.519	-520.597	-26.942	-3.273	-322.807	175.145
548	7	-4.933	-323.472	-418.000	-27.040	-2.654	-325.751	175.182
548	8	-18.242	-132.139	-433.983	56.793	5.236	-155.618	22.461
548	9	-6.021	-231.296	-25.208	5.488	-5.888	-231.430	1.395
549	1	-1.407	-229.159	-390.465	23.297	0.950	-231.518	5.781
549	2	-1.933	-233.954	-390.293	21.233	-0.006	-235.881	5.186
549	3	-5.088	-235.719	-24.612	1.617	-5.076	-235.731	0.402

ELEMENT	LOAD COMB	X-STRESS RADIAL	Y-STRESS RADIAL	TAU-STRESS HOOP	Z-STRESS SHEAR	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
549	4	-5.392	-233.281	-789.112	29.533	-1.606	-236.867	7.288
549	5	-8.547	-234.846	-423.431	5.587	-8.107	-235.285	2.522
549	6	-19.487	-323.732	-521.555	-19.472	-15.559	-325.531	174.517
549	7	-18.530	-326.556	-430.236	-25.524	-15.911	-329.475	174.559
549	8	3.330	-126.489	-427.324	56.522	24.555	-147.714	22.549
549	9	-4.562	-230.925	-24.794	3.531	-4.512	-230.934	0.931
550	1	-5.142	-210.729	-395.256	-14.392	-4.111	-211.759	175.560
550	2	-4.773	-217.380	-395.464	-13.233	-3.362	-218.176	175.505
550	3	-7.572	-231.486	-19.131	-4.351	-7.562	-231.595	178.733
550	4	-6.421	-213.104	-302.707	-13.947	-5.484	-214.041	175.156
550	5	-9.314	-227.210	-425.374	-5.365	-9.157	-227.368	179.459
550	6	-3.047	-351.897	-533.248	24.497	-1.335	-353.609	3.997
550	7	-2.344	-354.549	-430.439	24.042	-0.711	-356.282	3.385
550	8	-17.526	-76.985	-421.577	-41.100	3.490	-97.902	152.916
550	9	-8.035	-224.834	-18.923	-6.510	-7.840	-225.030	178.281
551	1	1.307	-208.881	-392.472	-15.822	2.491	-210.066	175.719
551	2	0.936	-215.716	-392.862	-14.197	1.962	-216.643	175.266
551	3	-5.782	-231.005	-18.626	-4.861	-5.677	-231.110	178.754
551	4	-0.483	-211.143	-798.834	-15.904	2.710	-212.337	175.706
551	5	-7.202	-225.432	-424.598	-6.568	-7.005	-226.628	179.285
551	6	-15.385	-354.663	-534.562	24.984	-13.555	-356.493	4.189
551	7	-14.316	-357.388	-432.167	24.612	-12.559	-359.145	4.082
551	8	1.177	-71.965	-415.773	-43.302	21.286	-92.073	155.091
551	9	-5.411	-224.170	-18.235	-5.495	-5.219	-224.363	178.303
552	1	-12.055	-189.236	-382.409	20.559	-9.619	-191.681	6.655
552	2	-11.624	-197.373	-382.812	19.955	-9.713	-199.785	5.755
552	3	-4.397	-228.427	-22.909	1.285	-4.392	-228.435	0.338
552	4	-20.537	-197.559	-778.569	26.128	-16.545	-191.561	8.686
552	5	-13.310	-219.123	-418.656	9.447	-12.962	-213.471	2.358
552	6	-5.235	-381.251	-528.409	-29.719	-3.893	-383.402	173.494
552	7	-4.861	-383.673	-425.470	-29.797	-2.531	-385.003	175.529
552	8	-23.252	-22.922	-403.365	53.496	33.415	-76.578	45.095
552	9	-4.838	-219.792	-22.506	3.275	-4.788	-219.840	0.873
553	1	5.559	-259.451	-384.305	-11.574	7.251	-259.935	177.633
553	2	5.269	-259.139	-382.631	-9.794	6.513	-259.436	177.963
553	3	-2.707	-224.047	-32.353	3.271	-2.559	-224.095	0.346
553	4	8.162	-298.420	-767.950	-14.378	9.357	-299.116	177.231
553	5	-2.815	-243.323	-417.672	-1.322	-0.807	-243.335	179.687
553	6	-6.682	-234.611	-488.062	32.993	-2.002	-239.291	9.073
553	7	-6.542	-237.172	-385.635	33.211	-1.912	-241.824	7.597
553	8	5.930	-250.374	-455.514	-41.772	12.567	-257.013	170.973
553	9	-2.408	-224.359	-34.027	1.491	-2.398	-224.368	0.382
554	1	-7.463	-243.715	-373.722	24.320	-4.384	-245.294	5.933
554	2	-7.030	-245.997	-372.190	22.779	-4.927	-248.149	5.398
554	3	-3.995	-225.354	-38.232	1.014	-3.957	-226.392	0.519
554	4	-11.497	-254.022	-749.135	31.954	-7.322	-258.168	7.387
554	5	-3.372	-234.389	-412.177	11.222	-7.815	-234.945	2.835
554	6	-1.330	-275.245	-484.912	-27.329	1.457	-278.243	174.257
554	7	-1.208	-277.997	-392.898	-27.960	1.736	-280.792	174.293
554	8	-17.044	-151.313	-446.794	57.152	0.353	-223.732	17.342

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E 353

ELEMENT	LOAD CASE	RADIAL	AXIAL	HOOP	SHEAR	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
554	9	-4.369	-224.232	-39.753	4.056	-4.294	-224.157	1.057
555	1	3.279	-241.587	-379.524	23.719	2.581	-243.392	5.546
555	2	-0.291	-244.224	-369.339	21.529	1.594	-246.111	5.205
555	3	-5.501	-227.100	-38.583	-1.175	-5.495	-227.105	179.696
555	4	-1.588	-251.109	-741.291	31.856	2.414	-255.111	7.152
555	5	-6.799	-233.985	-410.534	3.151	-6.431	-234.353	2.393
555	6	-18.215	-279.704	-487.511	-32.591	-14.190	-283.730	172.380
555	7	-17.723	-282.487	-385.971	-32.867	-13.704	-286.506	173.028
555	8	5.268	-176.651	-439.576	58.637	23.267	-193.849	15.346
555	9	-4.932	-224.563	-39.863	1.014	-4.927	-224.568	0.254
556	1	-4.518	-225.868	-375.541	-15.378	-3.454	-226.931	176.244
556	2	-4.034	-230.145	-374.636	-13.498	-3.231	-230.948	175.595
556	3	-5.591	-226.830	-33.316	0.619	-5.589	-226.832	0.160
556	4	-5.721	-231.932	-754.885	-19.441	-4.228	-233.425	175.370
556	5	-7.278	-228.617	-413.566	-4.323	-7.194	-228.701	178.881
556	6	1.496	-307.705	-498.124	31.771	4.727	-310.936	5.806
556	7	2.003	-310.506	-396.280	31.739	5.194	-313.697	5.741
556	8	-18.214	-131.958	-434.032	-46.307	-1.429	-148.743	160.272
556	9	-6.075	-222.553	-34.222	-1.260	-6.067	-222.560	179.665
557	1	3.258	-223.791	-372.493	-15.457	4.444	-224.978	175.875
557	2	2.896	-228.285	-371.802	-14.645	3.820	-229.209	176.389
557	3	-5.009	-226.817	-33.114	-1.237	-5.002	-226.824	179.680
557	4	3.087	-229.342	-750.433	-19.170	4.657	-230.913	175.316
557	5	-4.819	-227.874	-411.746	-5.763	-4.670	-228.023	178.521
557	6	-12.496	-311.115	-500.180	29.265	-9.693	-313.918	5.508
557	7	-11.759	-313.922	-398.576	29.002	-9.000	-316.681	5.433
557	8	3.355	-125.318	-427.363	-45.718	13.433	-141.396	162.112
557	9	-4.648	-222.323	-33.805	-3.049	-4.605	-222.366	179.197
558	1	-9.799	-200.531	-362.249	20.791	-7.560	-202.870	6.146
558	2	-9.355	-207.422	-361.618	18.585	-7.607	-209.169	5.342
558	3	-3.151	-228.495	-38.195	-2.599	-3.121	-228.516	179.339
558	4	-15.747	-199.563	-729.438	28.294	-12.446	-202.865	8.544
558	5	-10.343	-219.628	-406.014	7.010	-10.309	-219.863	1.918
558	6	-3.212	-345.785	-495.097	-33.234	0.170	-349.970	174.528
558	7	-3.027	-349.734	-393.992	-33.414	1.174	-352.915	174.560
558	8	-20.595	-56.171	-420.283	54.619	15.799	-102.565	33.675
558	9	-3.595	-221.696	-38.826	-0.493	-3.594	-221.697	179.870
559	1	-2.096	-198.534	-359.194	19.402	-0.198	-200.432	5.587
559	2	-2.601	-205.561	-358.802	17.319	-1.134	-207.028	4.842
559	3	-4.713	-228.886	-38.475	-3.375	-4.662	-229.937	179.137
559	4	-6.885	-195.704	-724.584	26.637	-3.199	-199.390	7.878
559	5	-8.996	-219.029	-404.357	5.942	-8.829	-219.197	1.619
559	6	-13.857	-350.707	-497.743	-33.824	-15.435	-354.130	174.222
559	7	-13.687	-353.677	-396.921	-34.024	-15.266	-357.099	174.258
559	8	2.413	-60.225	-413.224	53.015	32.674	-90.481	29.712
559	9	-4.208	-221.860	-38.868	-1.292	-4.200	-221.858	179.660
560	1	-6.341	-179.624	-353.409	-18.984	-4.296	-181.580	173.822
560	2	-5.929	-188.729	-363.488	-17.290	-4.345	-190.313	174.704
560	3	-6.711	-229.165	-33.751	-1.549	-6.701	-229.176	179.601

E 354

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	X-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
560	4	-9.182	-172.239	-737.092	-20.916	-6.024	-175.437	172.152
560	5	-9.964	-213.715	-407.356	-7.373	-5.536	-212.983	177.919
560	6	-3.174	-334.153	-539.379	28.976	-0.393	-335.334	4.324
560	7	-2.066	-387.229	-408.947	28.951	0.133	-389.395	4.176
560	8	-19.271	-5.952	-405.535	-50.179	37.444	-63.653	131.521
560	9	-7.123	-220.061	-33.673	-3.443	-7.057	-220.127	179.074
561	1	3.946	-255.472	-352.034	21.090	5.550	-257.175	4.617
561	2	3.312	-254.751	-349.265	18.309	4.676	-256.115	4.147
561	3	-4.045	-205.922	-49.689	-5.305	-3.905	-206.061	178.495
561	4	3.975	-276.342	-696.196	29.834	7.115	-279.482	6.008
561	5	-3.381	-227.513	-396.619	5.719	-3.235	-227.659	1.461
561	6	-15.806	-211.197	-444.597	-38.020	-8.665	-218.247	169.363
561	7	-15.559	-213.515	-343.595	-38.072	-8.489	-220.585	169.480
561	8	10.957	-243.795	-459.200	57.290	23.248	-256.085	12.108
561	9	-3.410	-206.643	-52.458	-3.023	-3.365	-206.688	179.148
562	1	-3.062	-238.604	-356.826	-12.148	-2.437	-239.229	177.055
562	2	-2.412	-240.271	-354.580	-10.100	-1.984	-240.699	177.573
562	3	-2.671	-212.498	-45.538	8.155	-2.355	-212.815	2.222
562	4	-3.913	-253.034	-709.357	-18.083	-2.607	-254.339	175.870
562	5	-4.172	-225.261	-400.316	0.172	-4.172	-225.261	0.044
562	6	9.072	-254.527	-458.513	39.208	13.802	-260.256	8.313
562	7	8.290	-257.080	-357.317	39.473	14.037	-262.827	8.284
562	8	-13.854	-187.577	-451.082	-46.125	-7.067	-199.364	165.666
562	9	-3.321	-210.831	-47.784	5.135	-3.141	-211.010	1.684
563	1	4.709	-235.430	-353.729	-13.334	5.449	-237.171	176.833
563	2	4.409	-239.335	-351.726	-11.456	4.949	-238.876	177.301
563	3	-4.078	-212.822	-45.747	4.991	-3.959	-212.941	1.369
563	4	5.949	-250.109	-704.601	-18.378	7.251	-251.421	175.915
563	5	-2.536	-224.395	-398.622	-1.322	-2.522	-224.412	179.504
563	6	-8.679	-253.419	-461.215	34.553	-3.959	-253.138	7.755
563	7	-8.290	-260.993	-360.297	34.959	-3.556	-265.716	7.724
563	8	4.234	-181.520	-443.882	-45.259	14.674	-191.360	167.010
563	9	-3.779	-210.916	-47.749	3.074	-3.733	-210.962	0.850
564	1	-7.577	-215.319	-344.368	21.535	-5.457	-218.539	5.958
564	2	-7.210	-220.541	-342.381	19.192	-5.460	-222.272	5.126
564	3	-1.631	-219.634	-51.659	-5.394	-1.497	-219.768	178.583
564	4	-13.343	-220.794	-634.270	30.482	-8.956	-225.131	8.188
564	5	-7.763	-219.888	-393.548	5.795	-7.605	-220.046	1.554
564	6	0.532	-297.961	-455.930	-39.173	5.589	-303.016	173.546
564	7	1.194	-300.721	-355.540	-39.167	6.193	-305.719	172.727
564	8	-18.312	-124.471	-438.439	58.745	7.791	-150.565	23.950
564	9	-2.097	-215.412	-53.645	-3.051	-2.054	-215.456	179.180
565	1	5.752	-213.993	-341.159	21.390	3.911	-216.142	5.634
565	2	5.132	-219.478	-339.441	19.356	1.365	-220.161	4.594
565	3	-4.306	-220.275	-52.163	-5.769	-4.152	-220.429	178.471
565	4	-1.897	-217.300	-679.233	30.730	1.396	-221.795	7.955
565	5	-6.395	-219.297	-391.355	5.705	-6.234	-219.450	1.534
565	6	-18.387	-302.401	-459.238	-39.173	-13.109	-307.673	172.308
565	7	-17.525	-305.180	-359.239	-39.081	-12.310	-310.395	172.399
565	8	5.730	-117.937	-430.790	58.447	39.846	-141.053	21.579

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ELEMENT	LOAD COMB	X-STRESS RADIAL	X-STRESS AXIAL	THETA-STRESS HOOP	X-STRESS SHEAR	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
565	9	-3.715	-215.739	-53.831	-3.434	-3.670	-215.845	179.072
566	1	-5.102	-194.277	-345.111	-15.793	-3.792	-195.585	175.253
566	2	-4.570	-201.171	-343.949	-13.337	-3.522	-202.142	175.393
566	3	-4.348	-224.749	-47.821	3.617	-4.299	-224.819	1.340
566	4	-7.604	-191.078	-691.213	-21.301	-5.163	-193.519	173.463
566	5	-7.383	-214.656	-335.185	-3.345	-7.311	-214.727	175.337
566	6	1.918	-342.897	-473.340	33.270	5.289	-347.069	5.445
566	7	1.786	-349.749	-373.002	33.478	5.364	-349.926	5.422
566	8	-19.364	-53.867	-421.435	-47.815	12.617	-90.850	146.222
566	9	-4.878	-217.356	-49.283	1.671	-4.865	-217.369	0.449
567	1	2.607	-192.124	-342.076	-17.213	4.117	-193.534	174.987
567	2	2.186	-199.256	-341.155	-15.239	3.333	-200.402	175.598
567	3	-5.895	-225.102	-48.162	2.850	-5.853	-225.139	0.745
567	4	2.250	-188.166	-686.530	-23.010	4.992	-190.907	173.206
567	5	-5.831	-214.313	-393.537	-4.921	-5.714	-214.129	178.646
567	6	-14.935	-347.797	-475.234	32.777	-11.739	-350.994	5.570
567	7	-13.900	-350.680	-375.974	32.962	-10.705	-353.876	5.538
567	8	3.671	-52.840	-414.344	-49.545	32.451	-81.620	149.948
567	9	-5.474	-217.971	-49.083	0.875	-5.471	-217.975	0.236
568	1	-11.137	-170.694	-332.812	20.519	-9.540	-173.291	7.212
568	2	-10.623	-180.115	-331.970	18.220	-8.686	-182.052	6.067
568	3	-2.206	-230.460	-53.481	-5.514	-2.073	-230.593	178.617
568	4	-19.462	-157.539	-666.620	28.945	-13.639	-163.362	11.373
568	5	-11.246	-207.894	-388.231	5.211	-10.909	-208.021	1.515
568	6	-2.438	-385.413	-469.798	-33.352	1.463	-389.315	174.265
568	7	-1.174	-388.524	-370.354	-33.299	2.593	-392.372	174.321
568	8	-22.667	5.351	-409.513	57.137	50.025	-67.521	51.315
568	9	-3.700	-221.038	-54.423	-3.215	-3.673	-221.086	179.156
569	1	4.457	-255.138	-339.751	-19.722	5.751	-266.432	175.246
569	2	4.162	-254.247	-336.215	-16.527	5.177	-265.062	176.486
569	3	-5.946	-205.097	-60.014	5.233	-5.319	-205.234	1.500
569	4	7.339	-290.972	-664.500	-26.324	9.692	-293.274	175.000
569	5	-2.822	-232.333	-389.299	-4.557	-2.329	-232.114	179.362
569	6	-10.341	-237.973	-420.402	37.395	-3.502	-214.812	10.364
569	7	-10.379	-210.881	-320.333	37.563	-3.573	-217.583	10.270
569	8	6.519	-255.595	-468.486	-54.165	17.232	-267.405	165.814
569	9	-5.541	-206.189	-63.562	3.025	-5.496	-206.235	0.353
570	1	-6.945	-240.687	-329.874	23.465	-4.612	-243.019	5.576
570	2	-6.480	-242.095	-326.298	21.233	-4.317	-243.958	5.251
570	3	-1.287	-211.612	-65.277	-5.454	-1.245	-211.754	179.513
570	4	-11.521	-255.643	-643.545	32.317	-7.135	-259.973	7.324
570	5	-6.329	-225.160	-392.525	5.319	-6.145	-225.342	1.653
570	6	2.272	-249.135	-413.729	-40.634	9.692	-255.555	171.333
570	7	2.595	-252.302	-314.124	-40.362	9.331	-258.248	171.223
570	8	-16.823	-193.328	-463.444	61.284	2.363	-212.520	17.399
570	9	-1.751	-210.204	-68.354	-3.231	-1.707	-210.248	179.157
571	1	3.925	-239.013	-326.354	24.409	5.373	-240.461	5.727
571	2	3.278	-239.771	-323.257	21.352	4.253	-241.677	5.242
571	3	-4.243	-212.166	-65.758	-5.705	-3.337	-212.422	178.431

MENT	LOAD CASE	RADIAL	AXIAL	BODY	SHEAR	PRIN-STRESS	PRIN-STRESS	ANGLE
571	4	1.913	-231.378	-639.225	34.325	5.474	-255.439	7.568
571	5	-4.409	-224.442	-380.929	5.559	-4.225	-224.644	1.734
571	6	-17.497	-353.819	-417.354	-40.917	-23.523	-360.721	170.450
[illegible]	7	-15.821	-236.560	-317.973	-40.481	-22.173	-251.323	172.573
[illegible]	8	10.206	-186.280	-455.215	52.180	23.231	-214.304	15.155
[illegible]	9	-3.397	-210.577	-69.055	-3.249	-3.346	-211.528	179.121
572	1	-4.600	-215.580	-329.618	-17.391	-3.378	-217.223	175.152
572	2	-4.007	-219.940	-325.959	-15.846	-2.352	-221.097	175.325
572	3	-3.212	-217.592	-61.612	5.405	-3.075	-217.719	1.443
572	4	-6.473	-221.408	-549.300	-25.517	-3.485	-224.396	173.321
572	5	-5.677	-219.050	-383.953	-4.265	-5.592	-219.135	178.355
572	6	5.194	-297.935	-432.673	36.654	9.563	-302.275	6.798
572	7	5.711	-300.609	-333.055	36.899	10.393	-304.392	6.773
572	8	-19.092	-122.776	-444.024	-52.751	3.027	-144.895	157.251
572	9	-3.805	-213.322	-64.270	3.260	-3.754	-213.373	0.891
573	1	3.830	-213.361	-325.459	-18.036	5.317	-214.848	175.235
573	2	3.375	-217.984	-324.070	-15.882	4.510	-219.018	175.915
573	3	-5.879	-219.212	-62.097	5.032	-5.760	-218.331	1.357
573	4	4.948	-218.135	-644.369	-25.259	7.774	-220.962	173.617
573	5	-4.307	-218.463	-382.396	-4.355	-4.218	-218.551	178.835
573	6	-13.741	-302.362	-436.027	36.755	-9.134	-306.969	7.144
573	7	-13.023	-305.085	-336.686	36.986	-8.411	-309.696	7.106
573	8	5.956	-116.238	-436.370	-53.048	25.773	-136.054	159.516
573	9	-5.425	-213.588	-64.486	2.877	-5.385	-213.728	0.791
574	1	-9.934	-189.215	-317.190	24.161	-6.735	-192.414	7.542
574	2	-9.430	-196.234	-314.746	21.698	-5.343	-198.721	6.539
[illegible]	3	-1.752	-224.809	-67.427	-5.551	-1.614	-224.947	178.575
[illegible]	4	-15.984	-183.235	-624.364	33.758	-10.295	-189.825	11.245
574	5	-9.286	-211.811	-377.045	5.508	-9.998	-212.020	1.838
574	6	-0.375	-343.544	-429.312	-41.211	4.522	-348.522	173.249
574	7	0.474	-346.327	-332.462	-42.366	5.231	-351.055	173.385
574	8	-20.582	-53.181	-432.045	52.167	27.373	-121.153	37.658
574	9	-2.256	-217.790	-69.861	-3.033	-2.212	-217.834	179.179
575	1	-0.035	-186.541	-313.708	23.503	2.880	-189.457	7.073
575	2	-0.645	-193.840	-311.561	21.098	1.528	-196.115	6.157
575	3	-4.538	-225.455	-67.922	-5.681	-4.392	-225.611	178.528
575	4	-3.391	-179.471	-619.019	33.126	2.634	-185.497	13.309
575	5	-7.293	-211.095	-375.380	5.356	-7.085	-211.293	1.734
575	6	-20.210	-348.332	-432.916	-40.303	-15.332	-353.210	173.099
575	7	-19.011	-350.997	-334.301	-39.994	-14.261	-355.748	173.226
575	8	6.529	-46.129	-423.906	50.329	46.575	-86.175	33.314
575	9	-3.927	-218.165	-70.059	-3.256	-3.877	-218.215	179.126
576	1	-6.553	-163.909	-315.673	-19.041	-4.232	-166.181	173.197
576	2	-6.021	-173.799	-315.173	-15.952	-4.345	-175.475	174.320
576	3	-4.380	-230.350	-63.958	5.314	-4.255	-230.375	1.343
576	4	-10.255	-143.531	-629.590	-26.949	-5.198	-153.558	159.352
576	5	-8.614	-205.583	-378.375	-4.782	-8.499	-215.699	178.510
576	6	0.349	-392.576	-448.550	37.243	3.910	-395.137	5.337
576	7	1.596	-395.200	-349.713	37.222	5.057	-398.662	5.313
[illegible]	8	-20.542	17.331	-412.272	-54.254	55.225	-53.335	125.215

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MENT	LOAD COMB	(-STRESS (RADIAL)	(-STRESS (AXIAL)	THETA-STRESS (HOOP)	(-STRESS (SHEAR)	MAJOR PRIN-STRESS	MINOR PRIN-STRESS	PRIN-STRESS ANGLE
576	9	-4.912	-220.961	-65.459	3.124	-4.867	-221.006	0.328
577	1	4.386	-269.639	-314.784	25.831	7.295	-272.148	5.329
577	2	4.208	-268.218	-309.633	23.335	6.192	-270.203	4.360
577	3	-3.455	-204.536	-79.021	-5.829	-3.086	-204.705	178.341
577	4	5.189	-296.238	-601.521	36.027	9.435	-300.485	6.722
577	5	-2.473	-232.556	-370.359	6.853	-2.159	-232.751	1.797
577	6	-16.046	-201.205	-371.020	-41.955	-6.982	-210.269	157.810
577	7	-15.487	-205.290	-272.552	-41.056	-6.974	-213.602	158.289
577	8	12.342	-264.552	-486.847	63.283	26.593	-278.402	12.259
577	9	-2.777	-205.955	-84.152	-3.332	-2.723	-206.011	179.060
578	1	-5.154	-244.263	-317.354	-22.230	-3.105	-246.313	174.733
578	2	-4.500	-245.568	-312.934	-19.871	-2.873	-247.195	175.319
578	3	-2.953	-210.122	-75.108	5.558	-2.804	-210.271	1.535
578	4	-6.312	-251.631	-611.615	-31.417	-2.503	-255.441	173.087
578	5	-4.764	-226.186	-373.788	-5.987	-4.503	-226.348	178.452
578	6	7.754	-247.665	-387.798	39.379	13.687	-253.598	8.558
578	7	7.785	-251.013	-289.111	39.285	13.618	-256.845	8.444
578	8	-19.543	-196.712	-473.666	-59.298	-1.527	-214.727	163.101
578	9	-3.607	-208.813	-79.527	3.199	-3.557	-208.868	0.893
579	1	4.706	-241.530	-313.868	-21.298	6.532	-243.416	175.096
579	2	4.248	-243.175	-309.740	-18.953	5.692	-244.618	175.645
579	3	-5.702	-210.750	-75.566	5.315	-5.554	-210.898	1.484
579	4	7.120	-257.880	-606.298	-29.929	10.434	-261.214	173.639
579	5	-2.851	-225.466	-372.115	-5.640	-2.708	-225.608	178.549
579	6	-12.022	-252.355	-391.493	39.145	-5.807	-258.571	9.022
579	7	-11.637	-255.679	-293.034	39.154	-5.505	-261.810	8.897
579	8	7.494	-183.649	-455.402	-58.403	23.497	-205.652	164.576
579	9	-5.244	-209.175	-79.594	2.981	-5.201	-209.219	0.837
580	1	-8.695	-214.499	-304.555	26.200	-5.412	-217.783	7.142
580	2	-8.202	-219.695	-300.342	23.679	-5.571	-221.326	6.340
580	3	-1.046	-217.449	-80.647	-5.709	-0.895	-217.600	179.489
580	4	-14.456	-219.079	-586.342	35.239	-8.227	-225.308	9.752
580	5	-7.300	-217.834	-366.647	6.851	-7.277	-218.057	1.962
580	6	1.709	-295.344	-383.972	-42.639	7.700	-301.335	171.996
580	7	2.125	-298.159	-285.937	-41.555	7.820	-303.803	172.266
580	8	-18.454	-123.021	-461.861	63.829	11.771	-153.246	25.339
580	9	-1.539	-213.254	-84.961	-3.188	-1.491	-213.302	179.137
581	1	2.376	-211.534	-300.819	26.334	5.571	-214.729	6.916
581	2	1.714	-216.021	-296.908	23.827	4.291	-218.598	6.172
581	3	-3.908	-218.111	-81.117	-5.893	-3.747	-218.272	178.428
581	4	0.574	-214.945	-580.721	36.562	5.640	-221.011	9.395
581	5	-5.048	-217.035	-364.929	6.951	-4.820	-217.263	1.876
581	6	-18.821	-300.223	-387.395	-42.231	-12.619	-306.429	171.646
581	7	-17.757	-302.958	-290.027	-41.189	-11.938	-308.787	171.844
581	8	9.925	-115.631	-453.325	53.625	36.524	-142.230	22.690
581	9	-3.246	-213.524	-85.027	-3.375	-3.191	-213.578	179.080
582	1	-6.463	-195.959	-303.075	-21.337	-3.964	-198.457	173.315
582	2	-5.848	-193.130	-299.884	-19.039	-3.939	-195.089	174.254
582	3	-3.520	-223.794	-77.330	5.544	-3.381	-223.933	1.441

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ELEMENT	LOAD COMB	X-STRESS (AXIAL)	Y-STRESS (AXIAL)	ZETA-STRESS (BOND)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
582	4	-9.455	-180.285	-590.363	-30.224	-4.250	-185.282	170.246
582	5	-7.129	-210.700	-367.759	-5.673	-6.370	-210.859	178.405
582	6	3.942	-347.032	-424.325	38.797	8.079	-351.257	6.233
	7	4.677	-349.138	-305.637	33.317	8.836	-353.345	6.139
	8	-21.032	-47.471	-439.902	-58.251	25.294	-83.799	141.413
582	9	-4.136	-216.572	-80.472	3.226	-4.237	-216.621	0.872
583	1	3.427	-183.291	-299.638	-21.384	5.361	-185.845	173.374
583	2	2.925	-190.795	-296.735	-19.513	4.393	-192.761	174.275
583	3	-6.298	-224.441	-77.742	5.414	-5.154	-224.575	1.421
583	4	4.015	-176.341	-585.110	-30.856	9.148	-181.474	170.555
583	5	-5.209	-209.988	-356.117	-5.822	-5.044	-210.153	178.372
583	6	-16.007	-351.729	-408.499	39.594	-11.377	-356.359	6.652
583	7	-14.824	-353.818	-310.535	39.589	-10.262	-358.380	6.573
583	8	6.107	-40.408	-431.736	-59.297	46.545	-80.846	145.708
583	9	-5.798	-216.938	-80.645	3.048	-5.754	-216.992	0.827
584	1	-11.124	-156.361	-290.673	25.549	-6.727	-160.757	9.726
584	2	-10.620	-166.473	-287.676	23.145	-7.256	-169.838	8.271
584	3	-1.502	-231.103	-82.752	-5.627	-1.364	-231.241	178.596
584	4	-18.943	-137.717	-565.669	35.532	-9.125	-147.535	15.446
584	5	-9.825	-202.347	-360.745	6.759	-9.588	-202.584	2.008
584	6	-1.110	-394.699	-400.833	-42.218	3.368	-399.087	173.944
584	7	-0.156	-396.262	-303.365	-41.319	4.107	-400.526	174.107
584	8	-21.199	26.202	-428.489	63.355	70.145	-65.142	55.255
584	9	-2.305	-220.990	-95.749	-3.123	-1.961	-221.035	179.183
585	1	6.107	-274.402	-303.915	-24.571	8.243	-276.538	175.031
585	2	5.634	-272.930	-297.813	-22.091	7.375	-274.671	175.494
585	3	-4.350	-202.603	-98.438	5.474	-4.798	-202.755	1.585
585	4	9.717	-303.457	-571.574	-34.177	13.403	-307.144	173.843
585	5	-0.953	-233.131	-352.299	-6.611	-0.680	-233.319	178.370
585	6	-9.374	-199.303	-342.559	41.555	-1.255	-208.222	11.850
585	7	-9.941	-204.535	-245.312	41.303	-1.657	-212.909	11.421
585	8	9.815	-256.413	-500.235	-52.572	23.369	-279.356	167.797
585	9	-4.477	-204.275	-94.541	2.394	-4.432	-204.121	0.359
586	1	-7.705	-245.201	-294.937	26.315	-4.591	-248.215	5.388
586	2	-7.217	-246.389	-288.639	24.428	-4.748	-248.859	5.772
586	3	-0.365	-209.591	-93.453	-6.111	-0.137	-209.769	178.328
586	4	-12.417	-261.388	-552.230	37.096	-7.019	-267.395	8.278
586	5	-5.565	-225.139	-356.994	6.556	-5.359	-225.383	1.708
586	6	3.699	-243.629	-334.180	-42.397	10.961	-250.891	170.414
586	7	3.797	-247.782	-237.236	-41.393	10.433	-254.419	170.392
586	8	-16.584	-198.329	-498.201	62.994	3.108	-218.023	17.363
586	9	-0.853	-208.402	-99.701	-3.514	-0.790	-208.465	179.302
587	1	4.054	-242.076	-291.055	27.319	7.053	-245.072	6.258
587	2	3.389	-243.556	-285.115	24.852	5.355	-246.033	5.690
587	3	-3.439	-210.303	-93.927	-6.476	-3.237	-210.526	178.208
587	4	3.501	-257.659	-546.483	37.854	8.377	-263.335	8.383
587	5	-3.328	-224.406	-355.395	6.524	-3.135	-224.593	1.589
587	6	-17.093	-248.618	-338.312	-42.668	-9.460	-256.231	169.883
587	7	-16.292	-252.506	-241.451	-40.952	-9.234	-259.464	170.471
	8	11.691	-190.945	-489.541	61.272	29.298	-208.552	15.739

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560

E 359

ELEMENT	LOAD COMB	[illegible] RADIAL	[illegible] AXIAL	[illegible] HOOP	[illegible] SHEAR	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
587	9	-2.775	-208.822	-99.868	-4.009	-2.697	-208.900	178.885
588	1	-5.329	-214.611	-293.604	-24.132	-3.557	-217.381	173.463
588	2	-5.658	-218.864	-297.452	-21.728	-3.467	-221.056	174.239
588	3	-2.711	-216.243	-90.131	5.558	-2.567	-216.332	1.430
588	4	-8.502	-220.418	-555.230	-33.335	-3.200	-225.720	171.120
588	5	-5.555	-217.797	-357.959	-6.548	-5.347	-219.005	178.207
588	6	6.983	-296.476	-355.472	40.827	12.390	-301.873	7.530
588	7	7.397	-299.239	-259.249	40.453	12.546	-304.487	7.332
588	8	-20.686	-121.669	-474.381	-62.135	8.852	-151.218	154.555
588	9	-3.381	-211.990	-95.333	3.124	-3.335	-212.036	0.352
589	1	4.736	-211.659	-288.992	-24.048	7.376	-214.390	173.734
589	2	4.248	-216.205	-284.055	-21.580	6.341	-218.298	174.461
589	3	-5.567	-216.304	-90.618	5.385	-5.430	-217.041	1.458
589	4	6.506	-216.312	-549.702	-33.512	11.438	-221.243	171.629
589	5	-3.309	-217.010	-356.264	-6.546	-3.108	-217.211	178.247
589	6	-13.565	-331.385	-360.465	41.207	-7.781	-307.169	7.989
589	7	-12.554	-304.068	-263.409	40.820	-7.054	-309.679	7.825
589	8	7.703	-114.270	-465.791	-62.317	33.910	-140.477	157.191
589	9	-5.079	-212.357	-95.455	2.917	-5.038	-212.398	0.805
590	1	-9.722	-182.562	-280.145	27.165 ✓	-5.553	-186.731	8.725
590	2	-9.250	-189.770	-275.157	24.688	-5.935	-193.086	7.649
590	3	-0.710	-223.924	-95.539	-6.274	-0.534	-224.101	178.391
590	4	-16.325	-174.345	-530.588	37.397	-7.950	-183.319	12.622
590	5	-7.785	-209.399	-350.970	6.433	-7.580	-209.304	1.828
590	6	9.747	-345.723	-352.062	-42.957	5.996	-350.972	173.035
590	7	1.272	-347.279	-255.402	-41.142	6.063	-352.070	173.358
590	8	-19.440	-45.132	-463.701	62.415	31.526	-95.249	38.735
590	9	-1.181	-215.715	-100.537	-3.797	-1.115	-216.783	178.991
591	1	2.101	-179.430	-276.305	26.977	6.025	-183.354	8.276
591	2	1.415	-186.931	-271.622	24.602	4.551	-190.066	7.292
591	3	-3.784	-224.633	-95.004	-6.263	-3.606	-224.810	178.375
591	4	-0.314	-170.506	-524.907	37.405	7.539	-178.462	11.858
591	5	-5.514	-203.312	-349.299	6.639	-5.297	-203.527	1.875
591	6	-20.094	-350.715	-356.159	-42.487	-14.721	-356.088	172.793
591	7	-18.657	-352.108	-259.583	-40.900	-13.723	-357.052	173.108
591	8	9.970	-39.788	-455.124	62.534	52.755	-81.574	34.358
591	9	-3.099	-217.132	-100.687	-3.788	-3.032	-217.199	178.986
592	1	-7.599	-151.756	-277.652	-24.642	-3.503	-155.852	170.562
592	2	-6.949	-162.038	-273.753	-22.181	-3.839	-165.148	172.018
592	3	-3.312	-230.557	-92.350	5.638	-3.172	-230.697	1.420
592	4	-11.563	-133.122	-533.357	-34.513	-2.448	-142.238	165.205
592	5	-7.926	-201.641	-351.954	-6.593	-7.695	-201.872	178.023
592	6	3.371	-398.713	-374.319	41.068	7.527	-402.868	5.775
592	7	4.544	-398.831	-277.284	40.548	8.580	-402.867	5.693
592	8	-22.614	30.730	-440.075	-52.311	71.837	-63.721	123.413
592	9	-3.952	-220.275	-96.249	3.177	-3.915	-220.322	0.841
593	1	5.091	-275.236	-283.993	27.205	7.707	-277.951	5.492
593	2	4.477	-273.796	-275.805	24.359	6.680	-275.999	5.065
593	3	-3.158	-201.211	-106.126	-7.232	-2.890	-201.279	177.895

E 360

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
593	4	5.608	-303.724	-515.723	37.812	13.153	-308.280	6.869
593	5	-2.[illegible]	-232.940	-345.043	5.670	-1.895	-231.080	1.418
[illegible]	6	-14.852	-135.976	-284.486	-41.886	-5.634	-205.194	167.539
[illegible]	7	-13.834	-203.036	-189.090	-39.399	-5.957	-210.913	168.534
[illegible]	8	11.858	-263.474	-531.055	53.685	23.844	-275.461	11.544
593	9	-2.543	-202.451	-114.312	-4.935	-2.421	-202.573	179.565
594	1	-5.900	-246.423	-284.687	-26.513	-3.012	-249.311	173.783
594	2	-5.224	-247.740	-277.370	-24.009	-2.870	-250.094	174.400
594	3	-1.770	-207.570	-102.495	5.956	-1.598	-207.742	1.555
594	4	-7.200	-254.759	-523.370	-36.817	-2.040	-269.918	172.022
594	5	-3.746	-224.589	-348.495	-6.851	-3.534	-224.801	178.235
594	6	9.538	-244.564	-304.048	42.436	16.437	-251.464	9.235
594	7	9.229	-249.630	-209.222	41.239	15.640	-255.041	8.836
594	8	-19.018	-194.822	-513.868	-63.453	1.491	-215.331	152.088
594	9	-2.446	-206.253	-109.812	3.452	-2.388	-206.311	0.970
595	1	5.852	-243.298	-280.833	-25.120	8.551	-246.007	174.079
595	2	5.375	-244.908	-273.827	-23.586	7.578	-247.111	174.563
595	3	-4.837	-208.268	-102.938	5.591	-4.683	-208.422	1.573
595	4	8.598	-260.443	-517.709	-36.060	13.445	-265.191	172.499
595	5	-1.514	-223.803	-346.820	-6.882	-1.301	-224.016	178.228
595	6	-11.274	-249.566	-308.263	42.765	-3.832	-257.009	9.872
595	7	-10.678	-254.467	-212.513	41.781	-3.717	-261.429	9.460
595	8	9.271	-187.419	-505.159	-64.155	28.352	-206.501	163.438
595	9	-4.359	-206.659	-109.944	3.056	-4.313	-206.705	0.865
596	1	-8.635	-213.374	-272.638	27.124	-5.102	-216.907	7.420
[illegible]	2	-8.192	-217.566	-255.414	24.804	-5.292	-220.464	5.664
[illegible]	3	-0.037	-215.390	-107.852	-7.368	0.213	-215.241	178.048
596	4	-14.171	-218.025	-499.393	37.524	-7.490	-224.706	10.100
596	5	-6.018	-216.450	-341.831	5.331	-5.883	-216.585	1.450
596	6	2.400	-293.778	-298.305	-41.985	8.237	-299.615	172.035
596	7	2.529	-296.596	-203.347	-39.253	7.593	-301.760	172.649
596	8	-16.070	-121.724	-505.124	57.770	9.385	-147.179	23.779
596	9	-0.481	-211.799	-115.076	-5.047	-0.351	-211.919	178.632
597	1	3.442	-210.180	-258.756	27.205	5.653	-213.590	7.145
597	2	2.777	-214.554	-261.832	24.903	5.593	-217.469	5.451
597	3	-3.556	-215.800	-108.388	-7.540	-3.289	-217.066	177.977
597	4	2.243	-213.603	-493.707	37.857	8.690	-220.050	9.665
597	5	-4.090	-215.749	-340.263	5.423	-3.952	-215.888	1.454
597	6	-18.281	-298.764	-303.034	-41.543	-12.257	-304.788	171.749
597	7	-16.863	-301.415	-207.555	-38.825	-11.561	-306.617	172.368
597	8	10.939	-114.651	-496.743	57.445	33.251	-136.962	21.226
597	9	-2.891	-212.326	-115.312	-5.238	-2.760	-212.457	178.568
598	1	-7.315	-181.398	-269.374	-26.176	-3.462	-185.151	171.625
598	2	-6.627	-188.513	-263.297	-23.563	-3.599	-191.542	172.777
598	3	-2.498	-223.509	-104.394	5.743	-2.349	-223.658	1.487
598	4	-10.354	-174.514	-521.207	-36.374	-2.665	-182.213	168.249
598	5	-6.235	-209.509	-342.804	-6.967	-5.996	-209.748	178.339
598	6	6.370	-347.293	-322.368	42.253	11.348	-352.271	6.713
[illegible]	7	6.973	-347.836	-226.340	41.284	11.713	-352.576	6.553
[illegible]	8	-21.784	-46.440	-480.159	-63.764	30.832	-99.057	140.471

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562

C 361

ELEMENT	LOAD COMB	[illegible] RADIAL	[illegible] AXIAL	[illegible] HOOP	[illegible] SHEAR	[illegible] PRIN-STRESS	[illegible] PRIN-STRESS	PRIN-STRESS ANGLE
598	9	-3.186	-216.193	-111.372	3.230	-3.137	-216.342	0.868
599	1	4.502	-179.173	-255.552	-16.363	3.229	-181.302	171.949
599	2	4.030	-185.681	-239.793	-13.849	5.383	-188.534	172.943
599	3	-5.566	-224.211	-105.334	5.754	-5.414	-224.362	1.636
599	4	5.627	-170.197	-455.605	-18.355	11.952	-177.422	158.753
599	5	-3.969	-208.726	-341.147	-5.752	-3.746	-209.949	179.111
599	6	-14.491	-352.306	-325.549	42.733	-6.169	-357.628	7.039
599	7	-12.397	-351.551	-230.597	41.525	-7.384	-337.535	6.359
599	8	6.537	-39.237	-471.534	-53.594	51.370	-83.770	144.377
599	9	-5.296	-216.752	-111.104	3.243	-5.047	-216.752	0.377
600	1	-10.206	-149.208	-257.479	27.941	-5.036	-153.317	10.700
600	2	-9.817	-158.322	-251.512	24.583	-5.822	-162.317	9.194
600	3	-0.441	-231.794	-110.109	-7.115	-0.222	-232.013	178.240
600	4	-17.414	-127.753	-477.491	37.354	-5.957	-139.210	17.751
600	5	-8.038	-201.225	-336.088	5.556	-7.878	-201.385	1.546
600	6	-1.085	-396.729	-317.305	-42.245	3.375	-401.189	173.372
600	7	-0.562	-395.223	-221.763	-39.752	3.403	-399.134	174.305
600	8	-16.824	27.353	-470.937	58.852	58.126	-57.336	55.286
600	9	-0.839	-221.632	-115.075	-4.755	-0.727	-221.782	178.756
601	1	5.906	-275.137	-274.955	-27.149	9.496	-277.776	174.552
601	2	5.418	-274.240	-255.658	-24.684	8.572	-276.394	175.011
601	3	-4.055	-197.247	-114.380	5.520	-3.835	-197.467	1.931
601	4	10.692	-305.340	-488.693	-17.392	15.054	-309.702	171.345
601	5	0.218	-229.347	-337.415	-5.177	0.385	-228.514	178.453
601	6	-9.439	-202.502	-252.799	43.141	-0.153	-209.885	12.145
601	7	-9.266	-209.345	-158.951	41.153	-1.050	-217.961	11.132
601	8	11.353	-249.755	-547.755	-61.377	15.139	-253.632	167.116
601	9	-3.555	-199.134	-123.637	4.355	-3.492	-199.278	1.193
602	1	-7.553	-245.134	-267.513	26.425	-4.761	-249.039	5.273
602	2	-7.237	-246.646	-257.838	24.125	-4.790	-249.093	5.743
602	3	2.773	-116.261	-119.305	-3.339	1.123	-116.397	177.635
602	4	-12.273	-252.549	-471.368	35.932	-5.935	-267.393	8.219
602	5	-4.259	-222.254	-332.784	4.257	-4.176	-222.147	1.102
602	6	4.239	-243.423	-241.923	-39.555	10.403	-249.583	171.142
602	7	3.992	-249.679	-148.229	-35.122	9.022	-254.716	172.155
602	8	-13.951	-139.240	-550.305	51.724	3.172	-203.394	15.273
602	9	2.344	-204.609	-128.330	-5.219	0.534	-204.798	179.258
603	1	4.174	-242.362	-253.701	26.242	5.919	-244.806	5.393
603	2	3.612	-243.768	-254.355	24.158	5.952	-246.125	5.526
603	3	-3.312	-207.005	-119.345	-8.924	-2.922	-207.395	177.496
603	4	4.027	-258.273	-465.793	35.359	9.139	-263.384	7.871
603	5	-2.897	-221.510	-331.383	3.336	-2.923	-221.579	1.219
603	6	-15.177	-248.119	-246.306	-37.951	-9.153	-254.145	171.375
603	7	-13.722	-254.335	-152.137	-34.216	-9.335	-258.792	172.152
603	8	5.335	-132.347	-542.611	49.556	21.395	-134.539	13.336
603	9	-2.750	-205.199	-119.191	-5.243	-2.512	-205.337	178.339
604	1	-6.814	-215.149	-253.652	-27.211	-3.237	-216.775	172.615
604	2	-6.141	-217.313	-255.212	-24.719	-3.239	-220.371	173.419
604	3	-1.352	-214.736	-116.677	5.335	-1.371	-214.373	1.716

E 363

ELEMENT	LOAD COMB	[illegible] RADIAL	[illegible] AXIAL	[illegible] SHEAR	[illegible] BENDING	[illegible] PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
604	4	-3.978	-215.254	-472.393	-37.642	-2.437	-225.595	170.142
604	5	-4.199	-215.322	-333.858	-6.529	-4.139	-215.323	179.237
604	6	3.573	-235.191	-355.523	43.062	14.559	-331.177	7.914
[illegible]	7	8.517	-298.053	-172.241	41.149	13.399	-333.531	7.547
[illegible]	8	-19.600	-119.845	-524.618	-62.351	13.673	-152.122	154.233
[illegible]	9	-2.235	-210.517	-125.119	3.902	-2.162	-210.591	1.073
605	1	5.257	-210.062	-253.791	-27.131	8.623	-213.428	172.927
605	2	4.819	-214.614	-351.955	-24.503	7.548	-217.348	173.575
605	3	-5.075	-215.590	-117.190	5.223	-4.891	-215.774	1.691
605	4	7.417	-214.551	-466.780	-37.290	13.512	-220.746	178.717
605	5	-2.477	-215.629	-332.315	-6.447	-2.282	-215.832	179.259
605	6	-12.130	-300.191	-270.840	43.502	-5.704	-306.617	3.403
605	7	-10.897	-322.798	-176.340	41.770	-5.037	-308.658	7.985
605	8	7.423	-112.756	-516.201	-63.187	34.531	-139.864	155.780
605	9	-4.637	-211.038	-125.326	3.712	-4.570	-211.105	1.030
606	1	-8.706	-179.953	-252.270	25.024	-4.940	-183.859	8.451
606	2	-8.389	-185.361	-243.856	24.028	-5.211	-190.137	7.531
606	3	0.506	-224.368	-121.918	-3.737	0.845	-224.707	177.778
606	4	-14.890	-171.830	-449.467	36.567	-6.788	-179.932	12.493
606	5	-5.995	-209.237	-327.529	3.801	-5.924	-209.308	1.071
606	6	0.042	-343.155	-253.423	-38.338	4.273	-347.387	173.703
606	7	0.138	-342.845	-165.215	-34.595	3.592	-346.300	174.297
606	8	-13.136	-51.755	-517.708	48.928	20.114	-85.065	34.247
606	9	0.188	-217.399	-130.333	-5.740	0.396	-217.608	179.227
607	1	3.192	-176.251	-248.499	25.432	6.992	-180.661	8.181
607	2	2.513	-184.283	-240.361	24.355	5.542	-187.213	7.315
[illegible]	3	-3.595	-225.305	-122.555	-8.475	-3.251	-225.639	177.314
[illegible]	4	1.492	-157.453	-443.951	[illegible]	9.311	-175.272	11.877
607	5	-4.603	-209.636	-325.145	4.343	-4.515	-208.778	1.219
607	6	-19.425	-347.364	-254.479	-38.390	-14.950	-352.429	173.322
607	7	-17.599	-347.179	-170.138	-35.351	-13.805	-350.972	173.911
607	8	10.675	-45.456	-510.090	51.354	41.245	-75.825	30.547
607	9	-2.903	-218.293	-130.594	-5.333	-2.715	-218.283	179.198
608	1	-3.386	-148.227	-248.562	-27.147	-3.293	-153.119	159.175
608	2	-7.558	-157.804	-241.287	-24.707	-3.705	-161.756	172.391
608	3	-2.591	-233.165	-119.495	6.697	-2.396	-233.360	1.562
608	4	-12.131	-128.325	-450.605	-37.529	-1.002	-139.355	163.523
608	5	-7.254	-202.585	-328.815	-6.224	-6.857	-203.783	179.187
608	6	5.823	-394.958	-284.534	42.625	10.305	-399.439	6.003
608	7	6.725	-391.163	-189.402	40.656	10.337	-395.275	5.775
608	8	-23.276	17.370	-493.229	-61.385	51.709	-67.615	125.840
608	9	-3.308	-223.388	-126.370	4.255	-3.226	-223.471	1.107
609	1	4.132	-271.479	-250.451	24.355	6.270	-273.516	5.013
609	2	3.759	-271.177	-248.611	22.759	5.530	-273.048	4.703
609	3	-3.292	-193.995	-130.369	-10.356	-2.731	-194.446	175.898
609	4	4.967	-305.356	-440.437	35.425	3.215	-305.014	5.520
609	5	-2.293	-223.674	-322.194	2.313	-2.059	-223.698	1.597
609	6	-10.352	-305.979	-186.553	-33.155	-5.357	-311.462	172.312
609	7	-9.276	-217.514	-95.111	-23.621	-5.414	-221.375	172.314
[illegible]	8	5.353	-230.495	-589.791	38.624	12.493	-236.535	3.232

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ELM	LOAD COMB	Y-STRESS (RADIAL)	X-STRESS (AXIAL)	THETA-STRESS HOOP	XY-STRESS SHEAR	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
509	9	-2.919	-194.137	-142.209	-9.749	-2.519	-194.586	177.386
510	1	-5.753	-243.535	-155.645	-27.035	-2.718	-246.542	173.593
510	2	-5.177	-245.466	-242.274	-24.787	-3.546	-247.995	174.171
510	3	-0.232	-203.096	-127.339	7.757	0.263	-203.392	2.135
510	4	-7.145	-252.337	-446.065	-37.532	-1.697	-257.785	171.773
510	5	-2.201	-219.967	-324.501	-5.137	-1.079	-220.088	179.549
510	6	9.671	-249.817	-208.368	40.955	15.986	-255.131	3.752
510	7	3.384	-257.284	-115.131	38.054	14.217	-262.617	7.979
510	8	-15.234	-175.685	-572.284	-55.930	2.337	-193.257	162.559
510	9	-0.809	-201.136	-138.180	5.509	-1.658	-201.288	1.574
511	1	6.082	-240.374	-255.847	-27.323	9.174	-243.357	173.749
511	2	5.666	-242.589	-245.259	-24.954	8.150	-245.072	174.316
511	3	-4.312	-204.028	-127.918	7.171	-4.055	-204.236	2.054
511	4	9.135	-257.973	-440.550	-37.644	14.339	-263.177	172.129
511	5	-0.343	-219.412	-323.210	-5.519	-0.704	-219.552	178.554
511	6	-9.758	-254.535	-212.541	42.572	-2.575	-261.728	9.590
511	7	-8.824	-261.628	-120.166	39.340	-2.654	-267.788	8.767
511	8	8.539	-169.370	-562.513	-58.988	26.321	-187.151	163.225
511	9	-3.897	-201.814	-138.506	4.895	-3.790	-201.931	1.390
512	1	-7.532	-211.937	-249.298	23.701	-4.820	-214.649	6.528
512	2	-7.264	-215.152	-239.305	22.206	-4.930	-218.497	6.001
512	3	1.390	-214.381	-132.722	-10.678	1.907	-214.908	177.173
512	4	-12.811	-216.651	-424.451	34.582	-7.103	-222.359	9.371
512	5	-4.155	-214.870	-313.868	1.697	-4.152	-214.884	0.461
512	6	1.301	-292.704	-200.270	-31.935	4.730	-296.133	173.371
512	7	1.997	-295.753	-109.176	-27.093	3.450	-298.216	174.825
512	8	-10.022	-119.381	-567.312	35.493	1.297	-129.901	16.514
512	9	1.112	-210.155	-143.715	-9.134	1.510	-210.554	177.515
513	1	3.605	-208.993	-245.722	23.734	5.222	-211.610	6.283
513	2	3.271	-213.425	-234.965	22.261	5.335	-215.691	5.810
513	3	-3.512	-215.517	-133.520	-10.841	-3.957	-215.070	177.280
513	4	2.978	-212.433	-419.159	34.871	9.432	-217.938	8.970
513	5	-3.603	-214.525	-317.715	1.759	-3.589	-214.540	0.490
513	6	-15.793	-296.948	-203.914	-31.427	-12.312	-300.319	173.697
513	7	-13.869	-299.412	-111.458	-25.604	-11.412	-301.869	174.722
513	8	8.461	-114.342	-560.825	35.061	17.765	-123.647	14.863
513	9	-2.975	-211.084	-144.277	-9.368	-2.556	-211.505	177.427
514	1	-7.547	-181.263	-245.208	-27.323	-3.351	-185.462	171.268
514	2	-6.873	-187.897	-235.349	-24.982	-3.499	-191.281	172.285
514	3	-1.386	-225.018	-130.738	7.314	-1.147	-225.257	1.671
514	4	-10.422	-173.957	-425.002	-37.955	-2.071	-182.308	167.570
514	5	-4.935	-211.079	-320.390	-5.533	-4.783	-211.230	178.448
514	6	7.818	-339.927	-224.777	42.022	12.819	-344.928	6.790
514	7	6.019	-339.279	-131.374	39.333	10.444	-342.733	6.409
514	8	-20.177	-61.168	-543.203	-58.497	21.311	-102.557	144.654
514	9	-2.061	-218.385	-140.597	4.573	-1.946	-218.499	1.316
515	1	4.346	-178.131	-241.459	-26.915	3.233	-181.019	171.792
515	2	4.024	-185.222	-231.879	-24.553	7.136	-183.192	172.531
515	3	-5.472	-225.954	-131.351	7.575	-5.212	-226.215	1.955

ELEMENT	LOAD COMB	r-STRESS RADIAL	z-STRESS AXIAL	THETA-STRESS HOOP	rz-STRESS SHEAR	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
615	4	5.944	-159.592	-419.559	-37.275	13.531	-177.179	168.494
615	5	-3.553	-210.527	-329.031	-5.046	-3.433	-210.550	179.604
615	6	-11.674	-344.549	-229.930	41.351	-6.615	-349.708	5.974
[illegible]	7	-9.741	-342.531	-135.395	38.427	-5.362	-347.012	6.500
[illegible]	8	3.711	-54.854	-533.527	-55.171	37.774	-89.917	148.757
[illegible]	9	-5.151	-219.066	-140.331	5.323	-5.219	-219.133	1.422
616	1	-7.988	-149.333	-234.631	24.305	-3.926	-153.396	9.439
616	2	-7.395	-159.332	-224.718	22.580	-4.540	-161.646	8.391
616	3	1.152	-236.029	-135.371	-13.142	1.585	-236.462	177.556
616	4	-14.593	-127.961	-433.274	35.387	-4.792	-137.949	15.890
616	5	-5.551	-205.690	-314.427	2.264	-5.626	-205.715	0.648
616	6	-3.582	-383.701	-217.590	-33.566	-0.740	-386.643	174.991
616	7	-3.647	-377.778	-124.381	-29.017	-1.419	-380.015	175.591
616	8	-7.978	-3.028	-538.472	38.990	33.565	-44.573	46.816
616	9	1.049	-227.062	-145.784	-8.517	1.367	-227.380	177.864
617	1	6.922	-265.104	-252.874	-25.748	9.338	-267.519	174.640
617	2	6.500	-265.188	-239.891	-23.817	8.565	-268.252	175.045
617	3	-3.443	-187.882	-137.120	9.062	-2.999	-188.326	2.806
617	4	10.708	-296.559	-416.141	-36.348	14.949	-300.800	173.344
617	5	0.763	-218.253	-313.370	-3.469	0.818	-218.308	179.093
617	6	-7.988	-224.466	-153.749	37.597	-1.644	-230.810	9.577
617	7	-7.346	-238.630	-64.333	33.670	-2.544	-243.432	8.116
617	8	10.299	-193.752	-606.805	-47.109	20.650	-204.103	167.607
617	9	-3.121	-185.798	-150.104	7.131	-2.745	-187.074	2.219
618	1	-5.532	-239.374	-247.527	20.946	-4.762	-241.245	5.102
[illegible]	2	-6.396	-241.897	-233.982	19.959	-4.715	-243.579	4.812
[illegible]	3	2.255	-200.372	-142.096	-13.493	3.023	-201.140	176.485
[illegible]	4	-11.121	-257.592	-401.447	32.236	-6.975	-261.738	7.329
618	5	-2.469	-216.067	-309.552	-0.226	-2.469	-216.067	179.939
618	6	2.779	-255.247	-139.095	-24.749	5.132	-257.595	174.570
618	7	2.085	-254.153	-46.743	-19.295	3.449	-255.530	175.918
618	8	-7.319	-159.049	-615.680	21.851	-4.715	-162.143	8.058
618	9	2.019	-167.849	-155.631	-11.515	2.530	-169.511	175.713
619	1	3.012	-235.812	-244.326	19.845	4.543	-238.443	4.598
619	2	2.742	-239.470	-230.951	19.114	4.241	-240.369	4.484
619	3	-3.722	-201.782	-143.118	-13.337	-2.828	-202.676	176.164
619	4	3.426	-253.706	-396.534	31.559	7.243	-257.523	6.396
619	5	-3.037	-216.318	-308.701	-0.892	-3.034	-216.022	179.759
619	6	-10.279	-258.429	-141.913	-21.023	-8.510	-260.198	175.191
619	7	-8.241	-266.726	-52.166	-15.054	-7.357	-267.600	176.678
619	8	3.051	-155.946	-610.986	15.631	4.574	-157.468	5.562
619	9	-3.452	-199.124	-155.493	-12.606	-2.643	-199.933	176.329
620	1	-6.261	-211.597	-243.277	-26.439	-2.911	-214.947	172.779
620	2	-5.721	-215.918	-230.828	-24.387	-2.928	-218.710	173.469
620	3	0.030	-223.223	-140.540	3.564	0.381	-223.569	2.323
620	4	-8.390	-217.394	-421.599	-37.169	-1.976	-223.807	170.210
620	5	-2.539	-214.694	-311.411	-4.118	-2.539	-214.774	178.397
620	6	3.304	-294.439	-153.524	38.953	13.236	-299.370	7.215
620	7	7.747	-297.421	-72.566	35.343	11.785	-301.461	5.532
[illegible]	8	-14.345	-117.239	-592.770	-50.532	5.900	-137.785	157.567

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E 365

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (CIRC.)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
620	9	-0.569	-209.897	-153.193	6.511	-0.300	-209.106	1.815
621	1	4.873	-209.559	-239.715	-26.405	3.290	-211.376	173.054
621	2	4.610	-213.189	-227.505	-24.332	3.235	-215.874	173.202
621	3	-4.854	-214.351	-141.409	8.522	-4.522	-214.686	2.303
621	4	7.383	-213.194	-395.367	-35.932	13.397	-219.139	173.754
621	5	-2.081	-214.357	-110.273	-4.347	-1.724	-214.434	178.603
621	6	-9.805	-298.513	-167.253	39.463	-3.525	-303.891	7.627
621	7	-7.144	-301.125	-76.133	35.334	-2.339	-305.413	6.350
621	8	3.356	-111.397	-386.201	-53.924	23.059	-131.139	159.339
621	9	-4.592	-209.822	-153.613	6.428	-4.391	-210.023	1.791
622	1	-5.588	-192.652	-233.365	19.792	-4.489	-194.851	5.339
622	2	-6.700	-198.565	-221.289	19.040	-4.729	-190.536	5.910
622	3	1.963	-226.759	-146.102	-13.147	2.714	-227.513	176.721
622	4	-12.593	-173.887	-381.379	31.235	-6.755	-179.725	10.586
622	5	-3.932	-211.992	-306.192	-0.952	-3.927	-211.986	179.737
622	6	-3.745	-329.962	-154.022	-21.486	-2.336	-331.371	176.248
622	7	-4.131	-327.295	-53.124	-15.305	-3.389	-328.038	177.259
622	8	-3.661	-76.101	-592.659	15.034	-0.270	-79.492	11.939
622	9	1.972	-223.747	-158.777	-12.395	2.660	-221.435	176.824
623	1	3.006	-180.093	-230.798	20.317	5.365	-182.442	6.435
623	2	2.486	-195.231	-218.291	19.965	4.575	-188.320	5.973
623	3	-4.027	-228.165	-147.124	-12.611	-3.319	-228.873	176.789
623	4	2.232	-159.392	-376.520	32.427	7.941	-175.902	10.328
623	5	-4.481	-211.927	-305.354	-0.150	-4.481	-211.927	179.958
623	6	-16.833	-333.143	-155.821	-24.161	-14.998	-334.977	175.557
623	7	-14.482	-329.849	-65.534	-18.543	-13.395	-330.935	176.646
623	8	7.259	-72.338	-588.213	21.368	11.624	-78.323	14.217
623	9	-3.507	-222.013	-159.631	-11.559	-2.885	-222.613	176.354
624	1	-9.337	-155.334	-210.173	-35.747	-1.852	-159.413	172.334
624	2	-7.542	-162.806	-216.495	-23.343	-1.963	-166.385	171.463
624	3	-1.339	-239.722	-144.919	9.133	-1.036	-242.255	2.001
624	4	-11.601	-133.855	-381.929	-35.577	-1.484	-143.972	164.553
624	5	-5.449	-211.751	-308.349	-3.559	-5.338	-211.922	179.227
624	6	7.440	-359.673	-177.008	36.372	11.242	-372.273	5.551
624	7	7.300	-359.374	-84.451	33.072	10.250	-362.924	5.096
624	8	-21.153	-35.113	-572.277	-46.602	13.937	-75.355	139.239
624	9	-2.084	-231.930	-156.597	7.270	-1.854	-232.160	1.810
625	1	1.809	-255.840	-243.166	15.357	2.806	-256.837	3.552
625	2	1.929	-258.478	-227.367	16.066	2.917	-259.465	3.517
625	3	-3.833	-182.353	-150.729	-15.245	-2.340	-183.646	175.153
625	4	3.256	-287.611	-375.165	28.408	5.004	-290.359	5.526
625	5	-2.505	-211.486	-299.527	-2.574	-2.456	-211.525	179.224
625	6	-2.402	-244.823	-81.486	-9.589	-2.015	-245.212	177.715
625	7	-0.339	-261.624	4.569	-2.880	-0.107	-261.656	179.365
625	8	-5.229	-151.853	-655.590	-3.111	-5.153	-151.929	178.785
625	9	-3.954	-179.715	-166.527	-15.255	-2.639	-181.029	175.375
626	1	-4.414	-234.134	-241.614	-23.939	-2.148	-236.450	174.356
626	2	-4.127	-237.759	-126.772	-21.587	-2.149	-239.747	174.755
626	3	1.752	-196.299	-148.532	11.432	2.410	-196.956	3.293

E 366

ELEMENT	LOAD COMB	[illegible] RADIAL	[illegible] AXIAL	[illegible] SHEAR	[illegible] SHEAR	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
626	4	-6.048	-254.217	-373.457	-34.152	-1.431	-258.834	172.303
626	5	-0.158	-212.745	-301.377	-1.142	-0.152	-212.752	179.692
626	6	5.732	-270.737	-123.347	29.752	9.889	-273.894	6.054
[illegible]	7	5.372	-281.011	-15.472	24.717	7.492	-283.123	4.897
[illegible]	8	-6.657	-131.941	-637.041	-31.459	0.923	-139.402	165.653
[illegible]	9	1.465	-192.723	-153.534	13.330	1.993	-193.124	1.965
627	1	5.227	-231.631	-238.437	-24.030	7.540	-234.245	174.255
627	2	5.027	-235.343	-223.759	-22.442	7.085	-237.421	174.711
627	3	-4.213	-137.699	-149.697	12.589	-3.541	-138.277	3.123
627	4	9.485	-250.342	-374.626	-34.840	13.093	-254.953	173.466
627	5	-0.741	-212.698	-303.544	-1.808	-0.725	-212.713	179.511
627	6	-6.353	-273.939	-126.777	33.488	-2.225	-279.066	7.326
627	7	-4.979	-285.593	-13.999	28.758	-2.042	-285.528	5.832
627	8	4.223	-128.813	-632.270	-37.688	14.158	-138.748	165.232
627	9	-3.999	-193.999	-154.374	9.001	-3.574	-194.413	2.706
628	1	-5.582	-210.152	-234.034	14.774	-4.520	-211.214	4.139
628	2	-5.678	-214.471	-218.711	15.025	-4.603	-215.546	4.095
628	3	2.812	-212.658	-154.519	-15.660	3.944	-213.790	175.864
628	4	-10.779	-214.985	-361.176	37.135	-7.242	-218.522	3.433
628	5	-2.288	-213.172	-296.984	-3.581	-2.227	-213.233	179.027
628	6	-3.332	-292.617	-93.697	-6.072	-3.204	-292.744	178.798
628	7	-4.114	-295.847	-3.058	1.260	-4.110	-295.850	0.208
628	8	-0.099	-115.575	-643.301	-9.234	0.634	-115.310	175.456
628	9	2.908	-208.339	-169.843	-15.911	4.100	-209.531	175.716
629	1	2.072	-208.090	-231.374	14.754	3.102	-209.121	3.996
[illegible]	2	1.872	-212.444	-215.127	15.027	2.921	-213.492	3.991
[illegible]	3	-4.359	-214.351	-155.313	-15.317	-3.175	-215.536	175.715
[illegible]	4	2.187	-211.514	-355.785	37.316	5.523	-214.951	7.172
629	5	-4.144	-213.422	-295.473	-3.529	-3.935	-213.481	179.034
629	6	-10.391	-294.331	-92.186	-5.552	-11.293	-294.439	179.990
629	7	-7.305	-296.797	-4.213	1.551	-7.897	-296.305	1.307
629	8	0.461	-115.025	-641.082	-9.559	1.270	-115.835	175.232
629	9	-4.150	-209.337	-171.061	-15.090	-3.910	-211.247	175.557
630	1	-6.852	-196.965	-230.472	-23.993	-3.710	-199.126	172.540
630	2	-6.340	-192.126	-216.038	-22.432	-3.672	-194.756	173.212
630	3	-0.200	-229.571	-154.088	13.713	3.521	-229.072	2.673
630	4	-9.551	-178.478	-351.577	-35.025	-2.577	-185.452	168.738
630	5	-3.210	-214.322	-299.537	-1.877	-3.194	-214.939	179.492
630	6	6.961	-318.145	-112.298	32.897	10.255	-321.439	5.718
630	7	6.636	-313.934	-22.536	29.191	9.395	-316.395	4.337
630	8	-14.779	-98.274	-626.367	-37.172	-0.628	-112.426	159.158
630	9	-0.511	-223.409	-168.532	9.153	-0.136	-223.784	2.347
631	1	2.338	-184.395	-237.319	-22.868	5.591	-187.148	173.136
631	2	2.941	-189.593	-213.048	-21.337	5.214	-192.266	173.703
631	3	-5.982	-229.359	-153.097	11.250	-5.419	-230.532	2.859
631	4	5.359	-174.594	-355.777	-33.333	11.229	-180.755	159.630
631	5	-3.754	-214.869	-293.325	-1.276	-3.759	-214.875	179.709
631	6	-6.152	-321.351	-115.210	33.211	-3.282	-324.221	5.426
631	7	-3.739	-316.516	-25.152	25.152	-1.733	-318.525	4.559
[illegible]	8	-3.829	-95.141	-621.354	-31.339	6.175	-105.147	152.554

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E 367

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
631	9	-5.985	-224.670	-159.368	9.888	-5.539	-225.117	2.584
632	1	-5.220	-162.298	-202.277	16.085	-3.550	-163.928	5.787
632	2	-5.634	-168.332	-207.501	16.172	-4.081	-169.905	5.588
632	3	2.282	-244.666	-159.592	-14.331	3.198	-245.571	176.541
632	4	-11.691	-138.733	-342.855	28.179	-5.722	-144.703	11.361
632	5	-3.774	-215.066	-234.936	-2.875	-3.735	-215.106	179.220
632	6	-11.229	-342.111	-101.338	-10.092	-10.922	-342.418	178.254
632	7	-11.672	-330.394	-11.574	-3.267	-11.639	-331.017	179.413
632	8	5.575	-78.592	-628.986	-2.592	5.554	-78.772	179.240
632	9	2.696	-238.531	-174.359	-14.969	3.521	-239.556	176.464
633	1	5.764	-242.835	-236.416	-18.972	7.204	-244.245	175.660
633	2	5.546	-248.091	-219.665	-18.362	6.858	-249.414	175.880
633	3	-3.452	-175.334	-155.834	13.691	-2.369	-176.418	4.526
633	4	9.596	-277.754	-353.318	-30.551	12.810	-280.969	173.995
633	5	0.597	-204.997	-289.487	1.492	0.608	-205.008	0.416
633	6	-4.716	-286.381	-51.481	19.504	-3.372	-287.726	3.942
633	7	-3.621	-305.871	31.913	13.335	-3.034	-306.458	2.521
633	8	5.538	-85.538	-668.072	-12.295	7.159	-87.168	172.445
633	9	-3.234	-170.048	-172.586	13.081	-2.214	-171.068	4.455
634	1	-4.857	-226.365	-233.576	10.527	-4.359	-227.463	2.707
634	2	-5.036	-231.730	-225.961	11.719	-4.432	-232.334	2.951
634	3	3.364	-193.005	-160.858	-17.241	4.866	-194.507	175.020
634	4	-9.540	-247.113	-341.586	23.805	-7.178	-249.475	5.666
634	5	-1.140	-208.388	-286.483	-5.154	-1.011	-208.516	178.576
634	6	-3.315	-287.522	-31.813	9.530	-2.993	-287.944	1.928
634	7	-4.544	-299.443	51.477	17.523	-3.506	-300.480	3.388
634	8	2.910	-100.699	-634.591	-32.077	11.037	-109.826	154.117
634	9	1.543	-188.240	-179.473	-18.433	5.199	-189.995	174.559
635	1	0.136	-225.569	-231.583	8.595	0.453	-225.896	2.177
635	2	0.411	-230.234	-213.913	10.194	0.852	-230.684	2.526
635	3	-4.937	-194.578	-162.413	-18.135	-3.111	-196.693	174.597
635	4	1.300	-244.139	-337.788	22.423	3.331	-246.220	5.177
635	5	-4.040	-208.931	-286.288	-5.921	-3.577	-209.101	178.351
635	6	-1.534	-297.160	-31.277	16.389	-1.597	-288.097	3.273
635	7	1.316	-298.393	52.701	24.594	3.135	-300.101	4.669
635	8	-10.049	-103.502	-685.524	-42.040	5.079	-119.631	159.011
635	9	-5.203	-190.313	-180.083	-19.734	-3.123	-192.393	173.981
636	1	-4.744	-209.569	-230.430	-20.343	-2.743	-211.570	174.382
636	2	-4.546	-213.990	-213.527	-19.477	-2.733	-215.796	174.732
636	3	1.733	-211.515	-161.058	13.143	2.540	-212.323	3.513
636	4	-7.030	-215.387	-342.027	-31.923	-2.253	-220.164	171.485
636	5	-0.750	-212.912	-299.558	0.713	-0.748	-212.915	0.192
636	6	4.235	-294.462	-51.016	23.298	6.042	-296.258	4.433
636	7	3.091	-297.567	34.534	17.461	4.102	-298.578	3.312
636	8	-5.233	-112.991	-671.565	-18.351	-2.026	-116.197	170.353
636	9	1.535	-207.054	-177.961	12.277	2.255	-207.814	3.356
637	1	2.907	-207.513	-227.777	-20.364	4.360	-209.465	174.522
637	2	3.012	-211.972	-210.954	-19.475	4.752	-213.722	174.865
637	3	-5.434	-223.209	-162.330	12.987	-4.625	-224.018	3.563

E 368

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	XY-STRESS (HOOP)	XZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
637	4	5.923	-211.935	-337.690	-31.697	10.441	-216.453	171.888
637	5	-3.512	-213.173	-289.056	0.755	-2.509	-213.175	0.288
637	6	-2.851	-295.203	-52.611	23.820	-1.929	-298.124	4.612
[illegible]	7	-0.726	-298.547	33.631	17.952	0.351	-299.525	3.437
[illegible]	8	-4.653	-112.415	-669.271	-19.325	-1.292	-115.775	170.134
[illegible]	9	-5.528	-208.751	-179.153	12.098	-4.811	-239.468	3.395
638	1	-4.132	-191.201	-224.159	8.544	-3.742	-191.590	2.609
638	2	-4.731	-195.225	-206.643	10.110	-4.196	-195.760	3.329
638	3	2.771	-230.717	-167.009	-17.932	4.140	-232.086	175.633
638	4	-10.053	-180.818	-325.345	22.082	-7.253	-183.627	7.251
638	5	-2.560	-216.310	-285.710	-5.960	-2.394	-216.476	178.404
638	6	-13.165	-298.749	-35.726	15.704	-12.304	-299.610	3.138
638	7	-14.018	-293.522	50.273	33.902	-11.989	-295.552	4.853
638	8	10.985	-125.370	-681.573	-41.354	22.547	-136.931	164.380
638	9	3.370	-226.693	-134.524	-19.498	5.011	-228.334	175.189
639	1	0.917	-189.798	-222.190	10.308	1.473	-190.354	3.085
639	2	0.763	-193.722	-204.611	11.501	1.440	-194.400	3.372
639	3	-5.499	-232.580	-168.538	-17.422	-4.170	-234.008	175.640
639	4	0.848	-177.887	-321.583	23.707	3.940	-180.978	7.428
639	5	-5.413	-216.845	-285.510	-5.215	-5.284	-216.973	178.587
639	6	-11.348	-298.284	-35.197	9.657	-11.023	-298.608	1.925
639	7	-8.421	-292.170	51.475	17.503	-7.345	-293.246	3.516
639	8	-1.914	-128.156	-682.579	-32.184	5.817	-135.888	156.491
639	9	-5.344	-228.756	-186.107	-18.615	-3.803	-230.295	175.269
640	1	-7.534	-174.298	-221.847	-18.975	-5.402	-176.430	173.589
[illegible]	2	-7.022	-177.903	-204.874	-18.395	-5.065	-179.861	173.925
[illegible]	3	-0.358	-249.431	-167.533	13.738	3.496	-250.186	3.146
[illegible]	4	-10.591	-149.595	-326.493	-30.785	-4.078	-155.108	168.054
640	5	-3.327	-221.123	-289.151	1.348	-3.819	-221.131	0.355
640	6	6.116	-304.537	-52.139	18.751	7.245	-305.655	3.443
640	7	6.009	-290.497	36.348	12.524	6.545	-291.033	2.433
640	8	-15.381	-139.649	-672.727	-11.774	-14.276	-140.755	174.534
640	9	-0.769	-245.826	-194.505	13.157	-0.065	-246.530	3.264
641	1	-3.735	-229.784	-230.645	5.836	-3.645	-229.935	1.478
641	2	-2.350	-237.996	-211.179	8.388	-2.524	-238.332	2.161
641	3	-8.353	-170.597	-157.346	-18.217	-6.351	-172.999	173.697
641	4	-1.043	-266.785	-319.026	21.658	0.709	-268.539	4.629
641	5	-5.246	-199.776	-275.193	-5.447	-6.093	-199.929	178.389
641	6	8.784	-334.546	19.735	43.487	14.207	-339.969	7.107
641	7	11.655	-356.731	98.357	52.895	19.099	-364.175	8.011
641	8	-27.406	-14.182	-715.139	-74.425	53.924	-95.513	132.461
641	9	-8.999	-162.775	-186.813	-21.269	-6.111	-165.663	172.258
642	1	-2.142	-218.215	-228.756	-13.353	-1.319	-219.037	176.477
642	2	-2.439	-224.729	-209.991	-13.851	-1.579	-225.590	176.445
642	3	3.246	-183.715	-165.749	15.442	4.644	-190.114	4.860
642	4	-4.387	-240.738	-322.197	-26.152	-1.329	-243.597	173.760
642	5	1.297	-204.724	-277.964	4.151	1.380	-204.809	1.154
642	6	-2.366	-316.361	1.655	1.386	-2.355	-316.372	0.344
642	7	-4.354	-329.314	32.295	-5.427	-4.253	-329.405	179.043
[illegible]	8	8.010	-57.502	-702.289	15.627	11.547	-61.038	12.752

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E 369

ELEMENT	LOAD COMB	A-STRESS (RADIAL)	B-STRESS (AXIAL)	THETA-STRESS (HOOP)	L.-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
542	9	3.543	-182.201	-184.524	15.950	5.277	-183.735	5.171
543	1	2.849	-215.313	-226.772	-15.286	3.933	-217.978	176.138
543	2	2.996	-223.235	-227.945	-15.336	4.039	-224.175	176.137
543	3	-5.052	-190.682	-157.298	15.548	-3.755	-191.975	4.755
543	4	6.440	-237.823	-318.452	-22.529	9.504	-241.397	173.548
543	5	-1.608	-205.271	-277.795	3.435	-1.551	-205.323	1.957
543	6	-0.613	-315.927	2.088	8.693	-0.374	-316.166	1.573
543	7	1.179	-327.980	93.400	1.544	1.197	-327.988	0.295
543	8	-4.930	-60.279	-703.245	5.654	-4.356	-60.852	5.785
543	9	-5.199	-134.257	-186.113	15.548	-3.842	-135.624	4.957
544	1	-3.375	-207.430	-224.637	2.040	-3.355	-207.450	0.572
544	2	-4.066	-211.339	-204.918	5.222	-3.935	-212.030	1.439
544	3	2.458	-210.457	-172.094	-19.322	4.197	-212.196	174.855
544	4	-8.498	-212.383	-307.696	16.993	-7.091	-213.790	4.732
544	5	-1.973	-210.941	-274.872	-7.551	-1.701	-211.213	177.933
544	6	-14.135	-293.154	23.296	44.242	-7.288	-300.001	8.797
544	7	-15.183	-296.506	104.421	53.298	-5.424	-306.255	10.376
544	8	13.633	-109.944	-721.647	-79.473	52.511	-148.822	153.932
544	9	3.148	-205.988	-191.863	-22.535	5.543	-208.382	173.927
545	1	-2.083	-206.965	-223.652	0.561	-2.081	-206.966	0.157
545	2	-1.672	-211.171	-203.672	3.779	-1.603	-211.239	1.033
545	3	-7.445	-212.823	-174.022	-21.205	-5.279	-214.990	174.166
545	4	-0.758	-210.254	-304.790	15.397	3.440	-211.454	4.315
545	5	-6.532	-211.905	-275.140	-9.085	-6.131	-212.308	177.471
545	6	-1.338	-290.103	25.251	43.306	4.527	-296.468	9.361
545	7	1.309	-292.457	109.177	52.415	10.381	-301.529	9.819
545	8	-15.629	-116.839	-725.683	-81.775	19.730	-162.448	150.850
545	9	-7.357	-208.517	-194.002	-24.422	-4.929	-211.545	173.153
546	1	-5.357	-199.229	-223.312	-15.395	-4.146	-199.450	175.464
546	2	-5.254	-200.569	-203.918	-15.517	-4.029	-201.894	175.488
546	3	1.153	-232.424	-173.347	15.455	2.131	-233.442	3.769
546	4	-8.146	-187.254	-309.331	-27.319	-3.925	-191.475	171.371
546	5	-1.729	-219.129	-278.861	3.153	-1.533	-219.355	0.831
546	6	1.429	-271.605	11.088	7.943	1.658	-272.835	1.659
546	7	3.477	-265.893	95.102	8.953	3.430	-265.886	0.205
546	8	-4.282	-153.352	-719.439	5.929	-4.261	-154.072	2.124
546	9	1.050	-229.984	-192.842	15.577	2.395	-231.029	3.840
547	1	-0.319	-196.819	-221.340	-13.631	0.622	-197.760	176.050
547	2	0.237	-199.161	-201.797	-14.125	1.233	-200.157	175.967
547	3	-7.102	-234.374	-174.861	15.965	-5.986	-235.490	3.999
547	4	2.753	-184.327	-305.623	-26.194	5.351	-187.925	172.178
547	5	-4.587	-219.540	-279.687	3.898	-4.516	-219.611	1.038
547	6	3.217	-272.155	11.535	1.897	3.230	-272.170	0.394
547	7	6.048	-254.543	96.199	-5.445	6.139	-254.653	179.847
547	8	-17.163	-166.611	-722.359	15.096	-15.653	-168.120	5.711
547	9	-7.659	-232.332	-194.404	15.461	-6.458	-233.233	4.173
549	1	-1.591	-187.662	-218.319	1.333	-1.573	-187.680	0.564
549	2	-2.771	-188.187	-199.066	4.534	-2.660	-188.298	1.400
549	3	3.062	-254.725	-175.225	-20.770	4.725	-256.388	175.423

E370

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
648	4	-9.028	-159.288	-294.219	16.307	-6.290	-161.026	6.084
648	5	-2.193	-225.825	-275.379	-8.997	-1.832	-226.187	177.700
648	6	-24.062	-254.251	29.785	33.907	-19.172	-259.152	8.287
648	7	-24.778	-238.086	113.118	42.655	-16.665	-246.299	10.899
648	8	24.465	-211.694	-733.396	-70.075	43.693	-230.922	164.656
648	9	4.242	-254.099	-199.478	-23.472	5.357	-256.215	174.850
649	1	5.054	-196.062	-220.118	-1.586	5.067	-196.075	179.548
649	2	5.284	-208.312	-200.143	-2.944	5.325	-208.353	179.210
649	3	-3.068	-147.033	-166.334	21.786	0.156	-150.258	8.419
649	4	9.338	-238.429	-295.475	-13.575	10.080	-239.171	176.873
649	5	0.984	-177.150	-261.567	11.155	1.680	-177.846	3.569
649	6	3.663	-386.915	46.496	-7.399	3.983	-387.055	178.915
649	7	5.364	-411.525	121.704	-14.743	5.885	-412.045	177.977
649	8	-4.218	99.710	-713.100	41.854	114.470	-18.978	70.575
649	9	-3.298	-134.763	-186.309	23.144	0.656	-138.738	9.697
650	1	-1.238	-198.444	-220.576	-3.743	-1.167	-198.515	178.913
650	2	-2.021	-206.404	-199.279	0.574	-2.020	-206.406	0.161
650	3	4.434	-177.859	-172.856	-19.944	6.591	-180.015	173.828
650	4	-6.095	-220.099	-286.828	11.508	-5.478	-220.717	3.069
650	5	0.360	-191.554	-260.405	-9.009	0.782	-191.976	177.318
650	6	-13.112	-330.773	73.027	64.612	-0.473	-343.413	11.068
650	7	-14.527	-343.835	148.311	73.610	1.079	-359.592	12.045
650	8	18.065	-11.649	-741.715	-106.584	110.822	-104.406	138.968
650	9	5.217	-169.898	-194.153	-24.252	8.517	-173.197	172.256
651	1	-4.806	-199.749	-220.826	-8.636	-4.424	-200.131	177.468
651	2	-3.719	-207.184	-199.121	-3.654	-3.654	-207.249	178.971
651	3	-7.725	-181.193	-175.381	-23.593	-4.547	-184.371	172.360
651	4	-2.599	-219.487	-285.065	7.653	-2.328	-219.757	2.021
651	5	-6.605	-193.496	-261.325	-12.375	-5.789	-194.312	176.228
651	6	11.238	-323.731	79.052	73.643	25.714	-339.206	11.867
651	7	14.195	-335.749	155.205	82.983	32.855	-354.431	12.687
651	8	-31.161	-25.486	-751.863	-124.851	95.669	-153.317	134.349
651	9	-8.812	-173.759	-197.086	-28.575	-3.969	-178.602	170.414
652	1	-1.253	-200.631	-220.874	-5.739	-1.398	-200.797	178.352
652	2	-1.693	-205.301	-199.650	-7.030	-1.450	-205.543	178.024
652	3	3.714	-201.499	-174.769	21.210	5.884	-203.668	5.839
652	4	-3.995	-207.489	-290.081	-19.119	-2.215	-209.270	174.679
652	5	1.412	-203.687	-265.199	9.121	1.817	-204.092	2.541
652	6	-5.259	-289.329	63.853	-7.507	-5.361	-289.528	178.487
652	7	-6.970	-293.081	142.061	-15.483	-6.135	-293.916	176.911
652	8	11.345	-98.171	-744.868	38.314	23.418	-110.244	17.490
652	9	4.154	-196.829	-195.393	22.501	6.642	-199.318	6.310
653	1	0.007	-200.284	-219.874	-7.204	3.256	-200.543	177.942
653	2	0.669	-204.689	-198.443	-8.449	1.015	-205.036	177.647
653	3	-6.223	-204.011	-176.722	19.214	-4.374	-205.860	5.497
653	4	3.710	-205.458	-287.242	-20.131	5.530	-207.378	174.552
653	5	-3.182	-204.780	-255.520	7.332	-2.301	-205.061	2.137
653	6	6.991	-286.384	55.693	-8.306	7.226	-286.619	178.379
653	7	9.479	-289.125	145.693	-15.181	10.353	-289.999	176.907
653	8	-18.145	-105.229	-749.875	35.572	-5.398	-117.976	19.663

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F 371

MENT	LOAD COMB	[illegible] RADIAL	[illegible] AXIAL	[illegible] SHEAR	[illegible] SHEAR	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
553	9	-6.885	-199.635	-198.153	20.459	-4.717	-201.754	5.391
554	1	1.217	-221.659	-218.722	-9.331	1.134	-222.135	177.224
554	2	-0.756	-202.223	-195.237	-6.332	-1.623	-201.137	178.553
554	3	4.417	-231.496	-181.879	-15.555	5.749	-233.123	174.351
554	4	-5.283	-187.996	-277.313	3.342	-5.127	-188.151	1.673
554	5	-0.109	-217.264	-253.115	-13.131	2.591	-213.133	178.552
554	6	-25.461	-235.955	93.739	53.743	-4.991	-255.123	16.532
554	7	-26.432	-223.262	157.537	77.574	-0.251	-254.631	13.775
554	8	30.953	-204.400	-770.372	-120.217	91.502	-254.943	157.194
554	9	5.732	-230.927	-224.323	-28.304	9.129	-234.265	171.175
555	1	-2.952	-202.333	-218.861	-9.259	-3.627	-202.653	177.689
555	2	-2.463	-202.474	-195.034	-3.392	-2.387	-202.551	179.385
555	3	-7.572	-234.402	-184.287	-23.907	-5.179	-235.395	174.245
555	4	-1.819	-135.880	-275.700	6.949	-1.559	-137.141	2.147
555	5	-7.028	-218.809	-263.954	-13.056	-5.225	-219.612	175.493
555	6	-1.146	-233.255	94.371	59.015	12.707	-244.108	13.430
555	7	2.310	-221.613	174.010	55.670	22.657	-239.960	15.335
555	8	-19.289	-215.623	-779.850	-107.225	28.924	-262.537	156.324
555	9	-9.162	-234.261	-207.114	-28.074	-4.728	-237.695	173.326
556	1	-5.336	-204.255	-220.347	-5.354	-5.154	-204.429	178.315
556	2	-5.268	-201.079	-197.659	-7.670	-4.968	-201.378	177.760
556	3	1.223	-259.195	-194.925	15.379	2.743	-259.710	4.356
556	4	-8.398	-173.316	-291.540	-19.344	-6.051	-176.153	173.254
556	5	-1.901	-230.933	-269.807	7.704	-1.642	-231.192	1.924
556	6	3.219	-188.470	94.406	-15.657	3.245	-190.298	174.405
556	7	-1.553	-170.277	166.441	-28.945	3.621	-174.452	171.152
556	8	-3.439	-302.756	-791.555	13.740	4.297	-312.493	3.213
556	9	1.152	-251.373	-227.613	21.594	1.34[illegible]	-253.154	4.332
557	1	-6.633	-164.455	-211.372	-17.135	-4.843	-165.124	171.372
557	2	-4.542	-161.352	-189.724	-11.311	-3.965	-162.765	175.454
557	3	-7.351	-131.373	-171.214	-27.360	-1.391	-137.333	169.111
557	4	-3.115	-225.349	-251.502	-2.115	-3.114	-225.352	175.303
557	5	-5.924	-159.337	-242.992	-15.771	-4.111	-161.131	171.731
557	6	33.273	-432.352	115.002	93.337	49.339	-452.123	12.355
557	7	33.152	-457.495	194.086	102.373	53.633	-473.121	11.325
557	8	-52.031	134.339	-745.795	-157.334	271.115	-328.611	115.345
557	9	-9.332	-115.952	-193.462	-33.531	2.133	-125.651	173.389
559	1	4.129	-178.708	-213.472	8.253	4.501	-179.032	2.591
559	2	2.961	-189.281	-191.493	5.333	3.123	-189.429	1.338
559	3	7.472	-162.749	-172.775	15.736	11.590	-166.859	3.738
559	4	0.956	-204.445	-257.219	-5.355	1.135	-204.534	179.307
559	5	5.456	-177.913	-246.511	15.127	6.373	-179.317	4.331
559	6	-14.373	-355.933	101.895	-31.822	-11.513	-358.790	174.359
559	7	-16.371	-380.345	173.554	-39.839	-13.334	-384.952	173.317
559	8	31.352	51.249	-745.472	90.222	123.959	-37.257	51.234
559	9	9.639	-152.176	-194.754	13.711	13.937	-157.493	10.143
559	1	0.710	-179.416	-213.583	3.423	0.771	-179.431	1.392
559	2	1.392	-159.343	-191.219	1.134	1.393	-159.349	1.340
559	3	-4.575	-155.643	-175.183	13.339	-1.231	-163.334	8.254

E 372

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
659	4	4.562	-203.359	-355.389	-9.359	4.974	-203.771	177.455
659	5	-1.404	-179.459	-349.333	12.854	-0.479	-180.384	4.111
[illegible]	6	9.685	-359.395	137.539	-23.212	11.137	-361.447	176.421
[illegible]	7	11.640	-373.347	180.060	-30.966	14.115	-375.822	175.430
[illegible]	8	-16.812	49.402	-755.022	54.639	38.973	-56.383	58.349
659	9	-5.257	-155.516	-157.557	25.551	-1.030	-159.742	9.391
660	1	2.087	-193.326	-214.576	-19.290	3.973	-195.212	174.415
660	2	0.570	-197.335	-190.967	-12.329	1.333	-198.398	176.457
660	3	5.523	-196.573	-180.470	-27.774	9.271	-200.321	172.315
660	4	-3.528	-198.423	-258.156	-1.894	-3.510	-198.441	179.443
660	5	1.424	-197.161	-247.659	-17.338	2.927	-198.664	175.047
660	6	-26.295	-280.136	133.434	106.536	12.493	-318.896	20.006
660	7	-27.631	-283.499	205.453	115.985	17.118	-328.249	21.097
660	8	35.707	-95.256	-781.220	-174.653	156.750	-216.300	145.276
660	9	7.040	-192.064	-204.079	-34.734	12.926	-197.950	170.383
661	1	-5.856	-195.156	-215.833	-19.706	-3.836	-197.196	174.119
661	2	-4.537	-198.980	-191.595	-12.733	-3.707	-199.811	176.269
661	3	-8.359	-199.919	-183.323	-28.219	-4.288	-203.989	171.791
661	4	-3.479	-198.234	-257.272	-2.133	-3.456	-198.258	179.372
661	5	-7.301	-199.173	-248.999	-17.619	-5.697	-200.777	174.796
661	6	14.744	-269.945	143.188	106.577	50.222	-305.422	18.411
661	7	18.141	-272.206	216.144	115.948	58.761	-312.826	19.307
661	8	-37.341	-112.977	-796.772	-175.224	104.100	-254.418	141.089
661	9	-9.688	-196.104	-207.561	-35.193	-3.265	-202.527	169.657
662	1	-0.589	-208.236	-218.130	2.049	-0.569	-208.256	0.565
[illegible]	2	-1.129	-206.529	-193.839	-0.396	-1.128	-206.530	179.389
[illegible]	3	4.136	-229.717	-185.065	22.755	5.330	-231.911	5.505
662	4	-3.541	-193.894	-263.395	-11.424	-2.957	-194.577	176.576
662	5	1.624	-217.081	-254.520	11.728	3.252	-217.708	3.061
662	6	-7.228	-192.732	136.781	-26.979	-3.384	-196.576	171.890
662	7	-8.684	-184.441	212.461	-35.012	-1.966	-191.159	169.138
662	8	13.829	-255.646	-804.739	66.999	29.568	-271.385	13.219
662	9	4.676	-231.423	-209.406	25.202	7.336	-234.083	5.025
663	1	-4.179	-208.986	-218.340	3.842	-4.137	-209.058	1.074
663	2	-2.850	-206.829	-193.614	0.314	-2.847	-206.832	0.229
663	3	-7.948	-232.612	-187.455	22.483	-5.720	-234.840	5.659
663	4	-0.204	-192.857	-261.649	-9.835	0.296	-193.358	177.085
663	5	-5.302	-218.640	-255.490	11.833	-4.647	-219.295	3.165
663	6	17.168	-186.725	142.415	-37.848	23.968	-193.524	169.316
663	7	20.144	-177.378	218.943	-46.227	30.365	-187.598	167.494
663	8	-35.331	-267.390	-814.292	33.270	-10.271	-292.450	17.338
663	9	-9.277	-234.769	-212.181	25.511	-6.427	-237.619	6.375
664	1	3.137	-220.131	-217.604	-15.435	4.341	-221.335	175.812
664	2	0.858	-212.591	-191.981	-10.089	1.334	-213.067	177.299
664	3	4.711	-261.572	-191.812	-26.539	7.331	-264.191	174.363
664	4	-3.623	-185.261	-253.035	0.414	-3.622	-185.262	0.131
664	5	0.229	-234.241	-252.865	-16.035	1.321	-235.333	176.106
664	6	-42.602	-109.265	162.822	96.177	25.855	-177.723	35.443
[illegible]	7	-43.449	-89.920	238.768	105.487	41.330	-174.701	38.739
[illegible]	8	51.745	-404.663	-831.932	-159.443	101.327	-454.846	162.529

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E 373

ELEMENT	LOAD COMB	RADIAL	AXIAL	[illegible]	[illegible]	PRIN-STRESS	PRIN-STRESS	ANGLE
664	9	5.991	-269.112	-217.434	-32.885	12.353	-272.975	173.300
665	1	-1.155	-145.148	-204.153	12.411	-1.193	-146.111	4.897
665	2	-0.509	-166.705	-182.447	7.692	-0.153	-167.251	2.644
665	3	-6.460	-126.261	-172.131	26.149	-1.121	-131.722	11.792
665	4	3.130	-193.903	-242.723	-2.734	3.172	-193.941	179.190
665	5	-2.820	-153.459	-232.356	15.672	-1.125	-155.171	5.377
665	6	9.707	-542.298	121.609	-65.345	17.453	-550.244	173.231
665	7	11.485	-553.259	136.514	-74.555	20.346	-577.713	172.373
665	8	-19.719	336.124	-725.402	122.315	374.223	-57.713	72.742
665	9	-7.208	-104.604	-193.997	32.358	1.751	-113.363	16.135
666	1	1.613	-167.611	-205.284	-24.664	5.134	-171.132	171.874
666	2	-0.913	-181.142	-183.099	-15.738	0.445	-182.505	175.246
666	3	4.374	-159.399	-175.932	-29.160	9.411	-164.436	170.199
666	4	-5.374	-195.372	-236.884	-5.339	-5.225	-195.522	178.400
666	5	-0.091	-173.629	-230.717	-18.730	1.917	-175.527	173.909
666	6	-46.191	-417.374	150.339	142.462	2.192	-465.748	18.755
666	7	-48.589	-432.778	214.443	152.274	4.443	-485.812	19.202
666	8	57.138	132.172	-754.730	-220.447	318.273	-128.962	130.170
666	9	5.906	-145.368	-200.118	-38.086	15.874	-154.836	155.749
667	1	-11.001	-170.624	-208.736	-25.831	-6.925	-174.721	171.033
667	2	-9.651	-183.202	-194.663	-16.459	-8.103	-184.749	174.630
667	3	-11.377	-163.215	-180.263	-28.518	-6.197	-168.395	169.706
667	4	-9.135	-195.154	-237.029	-5.391	-8.924	-196.365	178.075
667	5	-10.862	-175.168	-232.630	-19.349	-8.849	-178.180	173.741
667	6	10.584	-402.798	154.434	151.739	62.103	-452.317	18.075
667	7	15.000	-417.042	229.518	161.222	63.530	-470.572	13.367
667	8	-41.379	108.282	-775.682	-131.152	175.332	-228.529	126.005
667	9	-11.727	-151.633	-204.335	-37.339	-1.303	-150.362	155.556
668	1	3.194	-191.145	-211.222	10.135	3.717	-191.669	2.956
668	2	1.874	-195.711	-186.560	5.373	2.055	-195.901	1.731
668	3	3.649	-194.313	-182.124	25.591	9.871	-197.542	7.178
668	4	-0.381	-196.933	-242.383	-4.735	0.035	-197.075	178.605
668	5	1.692	-195.556	-237.927	14.318	4.738	-196.552	4.229
668	6	-19.542	-280.077	167.171	-55.345	-8.273	-291.247	168.490
668	7	-21.562	-283.152	235.452	-63.993	-6.746	-297.978	166.964
668	8	33.512	-92.162	-795.290	127.893	95.533	-154.183	29.291
668	9	5.957	-189.744	-206.766	19.709	11.356	-194.133	8.404
669	1	-4.761	-192.993	-212.479	9.579	-4.255	-193.489	2.935
669	2	-3.235	-196.873	-197.191	5.574	-3.175	-197.034	1.547
669	3	-8.233	-197.667	-184.942	25.146	-4.952	-200.948	7.434
669	4	-0.043	-196.785	-241.535	-5.136	0.035	-196.914	178.534
669	5	-5.041	-197.579	-239.285	14.535	-3.949	-198.572	4.293
669	6	21.473	-269.946	175.839	-55.303	31.515	-260.289	169.508
669	7	24.135	-271.331	245.072	-64.221	37.441	-285.147	168.215
669	8	-39.525	-119.879	-810.783	127.321	39.237	-137.642	35.926
669	9	-9.759	-193.785	-212.129	29.252	-5.221	-198.324	8.818
670	1	-4.240	-215.391	-218.027	-27.232	-0.646	-219.275	172.342
670	2	-7.217	-211.698	-188.677	-17.149	-5.773	-213.143	175.212
670	3	-3.219	-231.666	-191.139	-29.431	0.513	-235.337	172.775

E 374

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
670	4	-11.663	-198.536	-236.478	-6.993	-11.401	-198.767	177.859
670	5	-7.663	-219.474	-238.929	-19.175	-5.933	-220.204	174.844
670	6	-65.945	-146.947	198.395	158.411	56.437	-270.329	37.914
[illegible]	7	-68.552	-138.324	255.810	168.243	68.384	-275.261	39.142
[illegible]	8	64.139	-313.026	-834.432	-240.235	130.363	-429.855	154.066
670	9	-0.040	-235.849	-217.479	-39.213	6.309	-242.205	170.391
671	1	-17.163	-219.020	-217.604	-26.304	-13.791	-222.392	172.696
671	2	-15.178	-213.815	-190.309	-17.534	-14.635	-215.359	174.959
671	3	-19.374	-235.579	-194.547	-30.797	-15.072	-239.881	172.049
671	4	-15.453	-199.300	-236.662	-7.139	-15.179	-199.574	177.739
671	5	-18.649	-221.064	-240.899	-20.372	-16.619	-223.094	174.309
671	6	-3.217	-131.180	213.498	139.105	85.007	-219.405	32.571
671	7	0.187	-121.345	282.937	147.662	99.097	-220.256	33.815
671	8	-40.896	-338.699	-857.756	-218.587	74.686	-454.293	152.131
671	9	-20.358	-240.784	-221.841	-39.568	-13.471	-247.672	170.125
672	1	-1.313	-240.152	-219.840	11.329	-0.777	-240.588	2.759
672	2	-1.903	-226.695	-191.685	6.458	-1.717	-226.880	1.644
672	3	3.011	-266.611	-195.270	25.167	5.340	-268.940	5.287
672	4	-4.387	-200.506	-241.608	-4.331	-4.292	-200.602	178.735
672	5	0.527	-240.422	-245.193	14.377	1.382	-241.277	3.403
672	6	-9.557	-3.707	222.498	-69.989	63.417	-76.683	133.803
672	7	-10.729	17.362	295.089	-78.862	83.420	-76.786	129.950
672	8	13.848	-544.568	-881.501	124.449	40.328	-571.047	12.012
672	9	3.601	-290.068	-223.425	30.039	6.747	-283.214	5.978
673	1	-5.569	-140.319	-196.548	-13.447	-4.241	-141.648	174.356
[illegible]	2	-16.843	-172.233	-177.836	3.949	-15.743	-172.333	1.455
[illegible]	3	-8.793	-137.127	-175.765	-10.375	-7.950	-137.960	175.407
[illegible]	4	-26.314	-201.098	-219.890	18.301	-14.418	-202.994	5.914
673	5	-19.254	-165.992	-217.818	3.976	-19.147	-166.099	1.540
673	6	-225.957	-747.504	87.862	323.283	-72.114	-902.248	25.578
673	7	-234.376	-777.460	141.719	337.371	-72.843	-938.994	25.585
673	8	235.539	555.275	-640.711	-389.184	315.457	-24.642	123.365
673	9	2.489	-135.213	-194.477	-27.772	9.229	-141.952	165.359
674	1	3.693	-152.458	-201.034	23.647	5.994	-165.758	7.944
674	2	0.850	-177.793	-177.603	17.294	2.509	-179.451	5.479
674	3	3.733	-161.527	-178.011	32.000	9.713	-167.507	10.585
674	4	-1.141	-190.971	-220.122	7.309	-0.860	-191.252	2.202
674	5	1.740	-174.706	-220.530	22.015	4.446	-177.411	7.006
674	6	-49.781	-454.345	169.362	-90.881	-30.303	-473.823	167.903
674	7	-52.736	-468.482	229.412	-99.672	-30.076	-491.143	167.191
674	8	66.004	171.864	-750.087	165.605	292.793	-54.924	53.862
674	9	6.576	-146.193	-201.442	38.354	15.665	-155.281	13.331
675	1	-9.923	-155.472	-203.499	22.481	-5.759	-158.636	8.012
675	2	-7.895	-179.353	-179.184	16.573	-6.302	-181.436	5.455
675	3	-12.018	-165.341	-181.343	32.643	-5.357	-172.002	11.532
675	4	-4.914	-191.761	-220.316	6.327	-4.700	-191.975	1.937
675	5	-9.047	-177.249	-222.476	22.396	-6.116	-180.181	7.456
675	6	8.972	-439.793	183.368	-91.615	23.354	-454.176	170.006
675	7	10.836	-452.764	244.416	-90.723	27.957	-469.886	169.312
[illegible]	8	-32.510	147.770	-772.028	155.901	237.714	-122.454	60.213

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E 375

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
675	9	-13.255	-150.362	-205.659	38.550	-3.011	-161.305	14.604
676	1	9.535	-197.722	-201.358	-18.624	10.343	-199.459	174.534
676	2	-2.420	-192.415	-177.350	-5.754	-2.245	-192.595	178.266
676	3	6.529	-191.931	-182.484	-14.320	7.529	-193.032	175.752
676	4	-12.199	-192.793	-214.244	4.089	-12.125	-192.835	1.236
676	5	-3.249	-192.309	-218.678	-4.976	-3.119	-192.440	178.493
676	6	-205.378	-278.974	133.719	231.468	-8.558	-477.194	40.374
676	7	-214.407	-382.195	242.505	241.322	-4.515	-491.977	41.033
676	8	245.717	-36.241	-751.466	-295.395	418.571	-259.094	149.665
676	9	17.545	-187.238	-206.502	-27.672	21.218	-190.911	172.438
677	1	-12.994	-192.979	-206.569	-18.530	-11.106	-194.867	174.192
677	2	-15.290	-195.764	-180.733	-8.109	-15.924	-196.130	177.413
677	3	-15.191	-197.236	-187.293	-15.513	-13.978	-198.548	175.163
677	4	-18.835	-194.313	-215.018	0.133	-18.836	-194.313	0.043
677	5	-17.736	-195.785	-221.578	-7.270	-17.440	-196.081	177.665
677	6	-80.326	-247.571	214.175	184.558	38.670	-366.568	32.812
677	7	-80.940	-249.101	274.474	192.469	45.010	-375.053	33.201
677	8	56.753	-132.834	-805.483	-242.788	222.598	-298.678	145.664
677	9	-11.895	-194.450	-213.129	-25.934	-8.282	-198.063	172.369
678	1	-3.863	-218.305	-211.708	23.301	-1.361	-220.808	6.130
678	2	-5.897	-210.034	-183.679	15.722	-4.536	-211.444	4.651
678	3	-1.848	-225.745	-190.194	33.291	2.996	-230.590	8.281
678	4	-8.333	-197.551	-220.766	5.334	-8.154	-197.741	1.764
678	5	-4.295	-213.222	-227.281	22.403	-1.909	-215.598	6.052
678	6	-41.031	-65.359	246.387	-94.266	41.649	-148.051	139.695
678	7	-43.229	-55.631	310.738	-103.595	54.341	-153.203	136.713
678	8	41.675	-399.041	-360.733	171.086	100.294	-457.660	13.313
678	9	3.134	-233.955	-213.123	39.872	5.787	-240.559	9.403
679	1	-15.399	-221.451	-214.298	24.029	-14.203	-224.237	6.613
679	2	-14.361	-213.209	-185.327	15.438	-13.501	-213.569	4.729
679	3	-18.124	-229.652	-193.612	31.928	-13.293	-234.374	8.394
679	4	-11.135	-198.371	-220.993	5.719	-11.950	-198.547	1.757
679	5	-15.179	-215.824	-229.284	21.109	-13.260	-218.243	5.371
679	6	13.575	-49.627	251.415	-114.372	105.472	-133.424	143.772
679	7	25.493	-39.679	326.799	-124.173	121.559	-134.844	142.244
679	8	-63.357	-424.713	-884.040	192.736	20.146	-509.216	23.424
679	9	-20.131	-238.904	-222.584	39.518	-13.212	-245.824	9.931
680	1	-15.038	-248.055	-216.687	-19.502	-13.417	-249.676	175.248
680	2	-19.207	-229.958	-187.046	-11.254	-13.607	-230.557	176.351
680	3	-15.535	-260.770	-198.890	-18.134	-14.201	-262.104	175.793
680	4	-23.493	-205.078	-216.793	-4.225	-23.395	-205.176	178.567
680	5	-19.821	-235.392	-228.537	-11.135	-19.252	-236.460	177.265
680	6	-97.394	90.944	276.364	140.278	165.619	-172.369	61.972
680	7	-99.722	113.921	340.334	145.955	185.408	-175.209	60.313
680	8	74.328	-644.897	-898.521	-197.499	125.049	-695.559	165.513
680	9	-11.355	-273.859	-228.531	-25.381	-9.789	-281.445	174.421
681	1	13.715	-46.397	-159.241	60.034	54.453	-82.134	38.764
681	2	11.871	-50.745	-145.750	50.759	37.978	-86.852	27.214
681	3	13.372	-49.129	-152.982	63.583	52.974	-88.731	31.914

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ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
681	4	9.525	-71.417	-175.367	39.797	24.959	-87.850	22.437
681	5	10.027	-59.801	-181.599	52.618	38.253	-88.035	28.217
681	6	-117.448	-322.656	210.059	-115.319	-65.596	-374.409	155.330
[illegible]	7	-121.217	-334.717	264.741	-124.949	-63.527	-392.308	155.254
[illegible]	8	164.726	264.470	-708.980	353.029	491.331	-53.135	53.389
[illegible]	9	20.217	-34.781	-176.173	73.854	70.556	-85.153	34.862
682	1	-8.247	-135.833	-190.402	-7.437	-7.815	-136.265	176.675
682	2	-13.689	-141.523	-165.209	-10.195	-12.882	-142.329	175.473
682	3	-12.779	-137.749	-175.084	-3.049	-12.704	-137.923	178.503
682	4	-16.961	-144.523	-196.334	-15.912	-15.006	-146.484	172.996
682	5	-16.051	-140.754	-200.710	-8.776	-15.436	-141.369	175.993
682	6	-119.150	-244.954	227.839	-57.559	-96.789	-267.315	153.769
682	7	-120.416	-249.738	283.109	-61.448	-95.875	-274.278	153.229
682	8	196.910	-12.162	-770.098	53.334	127.306	-32.557	28.927
682	9	-7.337	-132.059	-200.278	-0.361	-7.336	-132.059	179.861
683	1	-21.662	-139.052	-193.152	8.561	-21.041	-139.683	4.149
683	2	-22.296	-143.570	-166.856	3.793	-22.177	-143.689	1.790
683	3	-24.801	-140.643	-177.552	12.429	-23.482	-141.962	6.055
683	4	-21.545	-145.554	-191.393	-3.009	-21.472	-145.627	178.510
683	5	-24.050	-142.527	-202.090	5.625	-23.784	-142.893	2.710
683	6	-38.408	-224.989	246.935	-79.983	-8.815	-254.582	159.696
683	7	-36.256	-228.952	302.877	-85.731	-3.636	-261.572	159.168
683	8	-9.729	-40.743	-796.400	113.379	89.198	-139.671	41.106
683	9	-24.157	-135.135	-203.849	17.197	-21.585	-138.717	8.538
684	1	9.413	-187.518	-197.902	44.445	19.975	-197.179	12.141
[illegible]	2	9.243	-185.064	-171.899	34.425	6.432	-191.252	10.191
[illegible]	3	7.268	-189.557	-181.179	48.735	13.597	-200.986	13.134
[illegible]	4	-6.774	-180.655	-199.072	22.378	-3.940	-183.488	7.217
684	5	3.250	-185.148	-208.352	36.739	7.265	-192.163	10.819
684	6	-168.730	-139.712	234.352	-144.915	-9.017	-299.395	132.245
684	7	-175.513	-136.145	290.964	-155.281	0.595	-312.352	131.388
684	8	207.469	-242.356	-796.021	263.204	328.595	-364.072	24.726
684	9	16.438	-192.111	-207.131	58.806	31.377	-207.551	14.710
685	1	-12.380	-192.874	-202.611	44.520	-1.807	-203.249	13.116
685	2	-13.530	-198.413	-174.788	32.272	-7.931	-194.111	10.076
685	3	-14.452	-194.859	-185.984	48.133	-2.433	-206.879	14.032
685	4	-13.420	-182.181	-200.075	19.421	-11.432	-184.158	6.157
685	5	-14.242	-188.627	-211.270	34.444	-7.585	-195.184	10.778
685	6	-42.158	-107.321	264.770	-191.824	119.832	-269.312	139.820
685	7	-42.348	-103.061	322.999	-204.133	133.845	-278.955	139.250
685	8	18.522	-289.457	-840.051	315.311	215.885	-486.821	32.003
685	9	-13.003	-199.321	-213.806	60.543	4.941	-217.266	15.509
686	1	-15.859	-214.451	-205.812	28.355	-11.370	-218.338	7.838
685	2	-15.364	-201.873	-176.372	21.675	-12.879	-204.359	5.542
685	3	-17.533	-217.614	-190.355	30.968	-12.849	-222.298	8.600
686	4	-14.306	-187.337	-197.097	13.713	-13.226	-188.417	4.503
686	5	-16.474	-203.278	-211.379	23.006	-13.630	-205.873	5.926
686	6	-9.624	26.370	300.793	-92.734	102.337	-85.092	129.608
686	7	-7.350	38.017	359.561	-99.245	117.253	-86.193	128.604
[illegible]	8	-27.624	-487.335	-863.581	157.184	26.745	-541.706	19.015

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E377

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
686	9	-18.326	-230.192	-220.095	37.348	-11.644	-236.575	9.698
687	1	-18.793	-215.043	-205.395	22.082	-16.329	-217.502	6.341
687	2	-15.793	-201.866	-175.529	19.335	-13.681	-203.978	5.247
687	3	-19.403	-217.959	-190.232	23.793	-16.592	-220.771	5.739
687	4	-13.007	-186.883	-196.143	17.002	-11.360	-188.530	5.533
687	5	-16.617	-202.976	-210.747	20.362	-14.311	-205.232	6.309
687	6	36.286	37.649	311.264	-17.659	54.640	19.295	133.894
687	7	40.666	49.709	370.291	-20.260	65.946	24.429	129.709
687	8	-84.184	-500.894	-894.777	59.369	-72.939	-512.139	9.237
687	9	-22.393	-231.141	-220.499	25.340	-19.218	-234.315	6.379
688	1	-12.727	-241.923	-211.263	42.004	-5.271	-249.379	10.065
688	2	-14.718	-215.256	-179.306	29.731	-10.403	-219.571	8.258
688	3	-11.458	-245.013	-194.254	44.058	-3.423	-253.048	10.335
688	4	-16.804	-187.777	-200.647	16.927	-15.144	-189.437	5.600
688	5	-13.544	-217.534	-215.606	31.254	-8.862	-222.215	8.513
688	6	-50.168	269.527	336.437	-192.557	359.939	-140.579	115.151
688	7	-51.691	293.582	397.818	-203.938	388.142	-146.251	114.875
688	8	31.464	-820.222	-937.848	308.617	131.536	-920.295	17.966
688	9	-9.467	-271.680	-226.222	56.331	2.122	-283.269	11.625
689	1	-135.097	-53.159	-194.180	-67.295	-15.342	-172.913	119.333
689	2	-100.777	-57.073	-160.986	-77.743	1.831	-159.681	127.150
689	3	-137.963	-54.427	-181.503	-65.517	-18.496	-173.894	119.741
689	4	-64.045	-59.643	-171.509	-89.784	27.967	-151.655	134.298
689	5	-101.231	-56.996	-192.027	-77.558	1.535	-159.764	127.041
689	6	526.049	-129.012	387.072	-268.679	622.151	-225.115	150.318
689	7	556.621	-131.992	445.229	-277.873	654.763	-230.134	150.547
689	8	-876.971	31.466	-942.165	158.591	53.359	-903.764	80.375
689	9	-172.294	-50.512	-214.697	-55.069	-29.303	-193.493	111.364
690	1	-15.504	-167.673	-194.847	13.423	-13.305	-169.872	6.806
690	2	-19.961	-169.277	-158.821	6.220	-19.732	-169.535	2.381
690	3	-20.211	-169.554	-181.439	20.128	-17.529	-171.246	7.591
690	4	-21.692	-170.070	-188.949	-7.671	-21.297	-170.466	177.048
690	5	-21.943	-169.358	-201.358	6.337	-21.679	-169.621	2.419
690	6	-106.594	-199.042	244.701	-217.279	59.322	-374.960	141.005
690	7	-107.458	-200.064	298.232	-227.711	78.610	-386.133	140.747
690	8	79.784	-133.118	-789.753	282.038	274.115	-328.449	34.705
690	9	-15.754	-166.960	-207.465	32.331	-9.131	-173.584	11.577
691	1	-28.922	-170.909	-197.604	34.424	-21.016	-178.815	12.934
691	2	-28.572	-171.331	-170.474	20.200	-25.758	-174.134	7.901
691	3	-32.236	-171.464	-183.908	35.608	-23.557	-180.042	13.545
691	4	-26.283	-171.106	-189.330	5.232	-26.094	-171.295	2.056
691	5	-29.947	-171.239	-202.963	20.540	-25.994	-174.192	8.143
691	6	-25.857	-179.080	263.781	-239.703	149.135	-354.123	143.852
691	7	-23.299	-179.283	317.990	-252.004	152.505	-365.298	143.598
691	8	-37.850	-161.712	-816.086	342.093	247.966	-447.439	39.869
691	9	-32.586	-171.042	-211.037	39.831	-15.515	-187.112	17.873
692	1	-109.076	-213.479	-219.590	4.433	-109.692	-210.672	2.493
692	2	-87.954	-206.996	-187.668	-6.825	-97.574	-207.386	176.703
692	3	-110.418	-211.332	-205.639	5.519	-110.196	-211.643	3.177

E 378

ELEMENT	LOAD ZONE	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	ZETA-STRESS (HOOP)	XY-STRESS SHEAR	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
692	4	-65.906	-202.497	-199.519	-19.082	-63.231	-205.113	172.194
692	5	-88.360	-206.833	-218.480	-6.636	-67.989	-207.203	176.904
692	6	296.977	-142.946	337.559	-112.808	383.071	-229.041	157.973
[illegible]	7	316.305	-140.045	394.374	-122.482	406.817	-230.557	157.862
[illegible]	8	-565.499	-285.545	-939.923	247.838	-140.886	-710.158	59.728
[illegible]	9	-131.529	-214.814	-338.551	15.879	-128.239	-218.135	11.032
693	1	-89.333	-205.465	-214.249	35.526	-79.327	-215.471	15.729
693	2	-78.273	-204.605	-184.890	25.559	-72.874	-209.904	11.449
693	3	-89.752	-206.037	-201.106	36.104	-79.458	-216.390	15.913
693	4	-66.981	-202.677	-199.330	17.624	-64.735	-204.924	7.272
693	5	-78.460	-204.259	-215.545	27.049	-72.891	-209.838	11.634
693	6	122.827	-185.560	293.659	-135.153	173.551	-237.284	159.428
693	7	133.521	-185.839	348.171	-142.910	188.133	-240.451	159.086
693	8	-328.422	-225.960	-879.057	227.443	-44.049	-510.334	51.347
693	9	-100.811	-207.057	-230.465	44.971	-84.332	-223.536	20.125
694	1	-12.204	-202.416	-199.576	32.881	-6.680	-207.940	9.536
694	2	-13.844	-198.268	-172.072	21.564	-11.333	-200.779	6.610
694	3	-13.709	-203.183	-185.663	33.772	-7.869	-209.022	9.810
694	4	-14.299	-193.750	-190.647	10.136	-13.728	-194.321	3.223
694	5	-14.164	-198.664	-204.238	22.244	-11.520	-201.308	6.778
694	6	-45.720	-122.997	269.679	-182.934	102.611	-271.328	140.963
694	7	-45.616	-119.145	323.896	-192.760	113.854	-278.616	140.399
694	8	22.896	-292.402	-825.832	275.767	182.895	-452.402	30.122
694	9	-12.069	-207.330	-213.167	44.989	-2.292	-217.198	12.370
695	1	-15.131	-203.020	-199.656	26.908	-11.354	-206.798	7.991
[illegible]	2	-14.275	-198.268	-171.635	19.924	-12.142	-200.401	6.110
[illegible]	3	-15.580	-203.633	-185.541	26.596	-11.889	-207.224	7.901
[illegible]	4	-13.006	-193.305	-189.714	13.425	-10.012	-194.300	4.235
695	5	-14.311	-199.571	-203.620	20.037	-12.144	-200.737	6.153
695	6	0.185	-111.730	280.135	-107.857	55.725	-177.281	148.710
695	7	2.097	-107.462	334.618	-113.772	73.591	-178.955	147.855
695	8	-33.670	-305.976	-837.124	177.942	54.233	-393.880	26.299
695	9	-16.437	-208.286	-213.572	33.532	-10.729	-213.994	9.647
696	1	-60.134	-143.319	-194.944	71.381	-19.111	-184.342	29.885
696	2	-58.158	-134.943	-166.065	67.139	-19.134	-173.867	30.103
696	3	-60.199	-143.605	-191.749	71.458	-19.153	-184.537	29.864
696	4	-55.326	-126.360	-180.856	62.860	-19.074	-163.191	30.367
696	5	-59.037	-135.022	-196.540	67.173	-19.104	-173.955	30.034
696	6	-21.331	18.538	304.038	-10.542	21.155	-23.947	103.936
696	7	-18.257	25.531	357.955	-14.127	29.634	-22.419	105.416
696	8	-104.941	-324.315	-849.190	163.046	-18.100	-411.135	28.035
696	9	-62.264	-151.981	-210.628	75.700	-19.130	-195.116	29.575
697	1	-12.825	-57.736	-189.513	-32.401	4.140	-74.703	152.362
697	2	-37.120	-77.262	-167.744	-7.108	-35.832	-79.450	170.375
697	3	-20.647	-61.334	-172.741	-25.647	-8.355	-73.726	154.210
697	4	-37.439	-92.453	-201.566	13.401	-32.915	-96.995	18.725
697	5	-40.986	-76.524	-206.554	-5.235	-40.231	-77.280	171.789
697	6	-491.394	-434.822	139.592	462.799	0.555	-926.771	46.748
697	7	-506.830	-450.686	134.505	481.515	3.574	-961.092	45.668
[illegible]	8	508.093	364.757	-673.312	-579.129	1,019.972	-147.122	138.527

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E 379

ELEMENT	LOAD COMB	Q-STRESS (RADIAL)	Q-STRESS (AXIAL)	THETA-STRESS (HOOP)	Q-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
697	9	3.547	-41.308	-193.615	-51.140	36.791	-74.952	147.001
698	1	-22.337	7.834	-175.248	42.069	37.254	-52.319	55.032
698	2	-33.384	-1.634	-149.472	34.315	30.331	-55.313	57.412
698	3	-29.652	5.272	-161.511	45.355	35.411	-60.790	55.519
698	4	-40.034	-9.541	-175.029	22.518	2.489	-52.065	51.391
698	5	-36.302	-2.634	-135.057	33.657	18.153	-57.101	58.236
698	6	-232.533	-177.508	348.378	-109.262	-93.312	-316.730	127.371
698	7	-237.434	-184.138	305.175	-115.035	-92.724	-328.957	128.479
698	8	200.597	211.347	-754.102	208.946	414.935	-2.891	45.730
698	9	-19.165	14.741	-186.086	53.106	53.535	-57.959	53.852
699	1	-33.086	-12.930	-177.305	33.445	11.922	-57.939	53.384
699	2	-39.503	-11.378	-149.199	28.754	6.575	-57.459	58.027
699	3	-40.541	-14.678	-164.739	36.542	11.152	-66.373	54.744
699	4	-40.594	-7.535	-167.125	20.332	2.097	-50.277	64.533
699	5	-41.532	-10.885	-182.565	28.110	5.780	-58.298	59.337
699	6	-162.707	17.596	300.956	-57.537	34.531	-179.550	106.289
699	7	-164.729	18.963	357.124	-61.715	37.771	-183.537	106.949
699	8	103.403	-45.964	-817.861	133.909	182.047	-124.608	30.425
699	9	-34.124	-16.230	-192.845	41.223	17.005	-57.360	51.122
700	1	-77.243	-39.319	-190.166	12.123	-36.336	-80.824	73.517
700	2	-52.940	-47.202	-157.963	13.473	-36.296	-63.846	51.010
700	3	-83.130	-42.081	-177.845	15.597	-36.827	-88.384	71.383
700	4	-22.779	-52.300	-170.291	11.120	-19.023	-55.757	18.650
700	5	-52.970	-46.379	-190.273	13.254	-36.324	-63.525	51.469
700	6	390.913	-180.512	371.108	38.780	393.533	-193.132	3.864
700	7	412.928	-186.456	430.205	39.443	415.512	-189.040	3.749
700	8	-602.210	117.759	-920.235	-17.597	118.193	-602.645	91.407
700	9	-107.433	-34.797	-210.148	14.227	-30.109	-110.120	39.303
701	1	11.405	-2.265	-169.553	14.460	20.565	-11.424	32.348
701	2	-23.122	-7.479	-147.640	19.503	5.125	-35.725	55.240
701	3	3.429	-4.540	-156.395	19.192	19.244	-20.155	39.135
701	4	-54.081	-11.153	-174.734	10.519	-2.956	-62.393	59.070
701	5	-18.533	-9.229	-183.489	20.227	4.233	-40.993	58.336
701	6	-550.505	-104.895	186.320	115.939	-91.293	-674.109	78.490
701	7	-671.661	-108.168	239.560	119.755	-84.139	-695.670	78.571
701	8	729.234	109.602	-691.134	-96.018	743.772	95.064	171.390
701	9	36.958	3.673	-178.415	14.248	41.751	-4.129	18.876
702	1	-44.189	2.836	-178.743	-0.258	2.837	-44.191	30.315
702	2	-46.522	-4.626	-151.197	13.350	-0.795	-50.453	73.873
702	3	-51.976	-0.253	-165.817	4.309	0.123	-52.333	85.269
702	4	-43.313	-9.430	-171.187	24.108	3.094	-55.837	62.548
702	5	-48.667	-5.056	-185.827	15.158	-0.399	-53.424	72.588
702	6	-96.773	-142.755	286.372	265.383	145.592	-336.121	42.524
702	7	-95.355	-148.114	343.236	274.202	153.725	-397.126	42.253
702	8	6.305	153.621	-309.346	-290.132	385.359	-215.642	127.415
702	9	-48.544	7.229	-133.353	-9.199	3.653	-50.398	58.980
703	1	-54.285	-17.898	-180.344	-9.814	-15.888	-56.317	102.950
703	2	-52.670	-14.347	-151.679	7.722	-12.351	-54.165	79.027
703	3	-62.770	-20.129	-170.089	-4.459	-19.716	-63.222	95.914

E 38c

MBNO	LOAD COMB	(RADIAL	(AXIAL	(BEND	(SHEAR	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
703	4	-43.817	-7.446	-163.225	21.821	2.773	-54.037	54.903
703	5	-53.917	-13.375	-182.334	9.641	-11.125	-55.238	77.309
703	6	-27.252	50.361	338.773	315.569	330.524	-305.514	48.594
[illegible]	7	-22.990	54.894	355.272	327.279	345.341	-313.438	49.395
[illegible]	8	-90.422	-93.514	-351.909	-354.503	272.538	-455.475	135.121
703	9	-64.385	-23.728	-200.373	-21.014	-14.319	-73.234	112.975
704	1	-73.527	-1.719	-178.687	55.412	28.404	-103.651	61.470
704	2	-50.523	-5.945	-148.353	36.078	11.982	-78.551	63.577
704	3	-82.511	-3.137	-169.220	51.070	29.986	-115.734	61.525
704	4	-37.577	-5.830	-155.922	6.538	-8.356	-39.041	77.383
704	5	-59.565	-7.022	-177.798	31.530	7.747	-74.334	64.900
704	6	176.019	-85.765	350.301	-325.984	396.408	-305.153	145.938
704	7	187.926	-88.037	404.314	-339.531	416.426	-316.537	146.060
704	8	-351.205	88.488	-863.345	458.482	386.144	-648.860	57.569
704	9	-95.515	1.089	-199.554	90.404	46.534	-141.010	60.497
705	1	-29.682	-12.096	-177.729	-26.721	7.232	-49.011	125.889
705	2	-43.834	-12.483	-150.952	2.969	-12.223	-44.095	84.813
705	3	-37.701	-14.711	-166.127	-23.124	-0.382	-52.031	121.784
705	4	-54.863	-10.191	-169.069	34.756	3.788	-73.842	61.363
705	5	-48.729	-12.419	-134.243	8.762	-10.415	-59.733	77.119
705	6	-314.358	-19.352	274.329	557.071	409.032	-743.354	52.401
705	7	-320.383	-19.919	330.055	576.257	425.429	-765.632	52.308
705	8	271.116	-3.671	-789.402	-559.784	807.660	-540.215	140.881
705	9	-23.549	-14.324	-192.933	-52.705	33.970	-71.844	132.499
706	1	-23.031	3.593	-170.090	42.285	34.613	-54.051	53.737
[illegible]	2	-40.691	-5.589	-146.315	32.690	13.890	-60.271	59.081
[illegible]	3	-31.032	1.970	-159.870	49.237	37.398	-66.460	54.264
[illegible]	4	-55.722	-15.692	-164.553	12.465	-13.125	-59.269	74.035
706	5	-46.043	-3.031	-179.105	29.213	7.646	-61.721	61.614
706	6	-376.359	-130.697	227.319	-149.035	-100.251	-455.804	119.359
706	7	-384.388	-136.158	278.612	-155.329	-101.153	-469.992	119.690
706	8	353.050	221.779	-715.394	245.965	534.657	20.182	36.449
706	9	-13.372	11.254	-183.643	58.332	59.048	-61.156	50.913
707	1	-34.044	-9.583	-170.902	32.936	13.172	-55.900	55.200
707	2	-46.119	-10.297	-145.172	27.758	4.825	-61.243	61.416
707	3	-43.544	-12.390	-162.789	39.030	14.090	-69.935	55.914
707	4	-51.833	-7.771	-156.286	14.102	-3.544	-55.360	73.587
707	5	-49.258	-9.774	-173.835	25.344	2.509	-61.643	63.958
707	6	-275.372	-22.849	270.051	-69.788	-4.345	-293.375	104.465
707	7	-280.968	-23.347	320.457	-73.221	-3.990	-300.325	104.808
707	8	223.635	6.357	-755.403	141.236	293.182	-63.199	26.215
707	9	-31.469	-11.586	-188.511	44.129	23.706	-56.762	51.348
708	1	-88.327	-4.891	-180.046	15.743	-2.009	-90.309	79.628
708	2	-59.945	-7.619	-148.304	20.232	-1.903	-75.651	73.440
708	3	-101.021	-7.526	-172.759	20.722	-3.139	-105.408	78.046
708	4	-33.867	-3.121	-151.339	19.952	2.774	-44.743	61.418
708	5	-54.943	-7.708	-175.344	20.453	-1.150	-71.501	72.223
708	6	258.673	-53.465	368.874	133.331	298.461	-93.253	15.227
708	7	232.232	-65.714	422.429	106.465	312.195	-95.707	15.733
[illegible]	8	-473.539	50.737	-379.717	-80.979	72.740	-485.612	93.431

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ELEMENT	LOAD COMB	X-STRESS RADIAL	Y-STRESS AXIAL	TOTAL-STRESS CIRC.	Z-STRESS SHEAR	MAX PRIN-STRESS	MIN PRIN-STRESS	MAX SHEAR
708	9	-119.104	-4.498	-203.303	16.234	-2.243	-121.359	92.991
709	1	-6.559	-5.370	-166.368	19.611	13.655	-25.584	45.668
709	2	-37.782	-9.394	-144.526	23.830	4.123	-51.302	50.405
709	3	-12.498	-7.592	-157.352	35.428	15.621	-33.592	47.755
709	4	-74.327	-12.021	-152.554	22.168	-4.939	-81.412	72.282
709	5	-49.043	-10.220	-175.522	33.795	1.177	-60.341	54.553
709	6	-633.288	-85.179	193.401	121.641	-55.938	-651.530	79.525
709	7	-648.667	-87.386	242.195	124.051	-58.728	-667.335	79.629
709	8	556.517	80.735	-556.894	-70.856	565.214	72.127	173.335
709	9	18.724	-3.568	-178.994	21.239	31.564	-16.498	31.154
710	1	-53.570	-3.468	-174.861	3.845	-3.175	-53.864	35.636
710	2	-56.129	-9.089	-147.872	17.509	-3.287	-61.331	71.667
710	3	-65.379	-6.252	-166.988	7.502	-5.296	-66.046	82.753
710	4	-47.299	-12.574	-157.360	31.281	5.839	-65.714	59.516
710	5	-56.249	-9.747	-176.476	21.374	-1.415	-64.581	69.704
710	6	-105.473	-113.871	390.585	276.209	166.568	-385.313	44.564
710	7	-105.250	-117.523	342.041	283.641	172.320	-395.094	44.380
710	8	1.584	117.275	-786.430	-297.435	352.627	-233.768	129.310
710	9	-62.520	-0.642	-193.977	-6.061	-0.054	-63.109	95.542
711	1	-64.379	-15.588	-175.590	-5.519	-15.961	-65.006	96.492
711	2	-61.438	-13.651	-146.573	12.592	-10.545	-64.554	76.102
711	3	-77.372	-20.474	-169.824	-2.588	-20.357	-77.489	92.599
711	4	-43.431	-4.643	-149.044	32.894	14.148	-52.223	50.261
711	5	-59.365	-11.456	-172.195	17.713	-5.518	-65.203	71.758
711	6	-5.959	43.597	332.852	354.513	374.596	-336.958	45.997
711	7	-2.745	44.383	383.394	365.189	397.032	-344.394	46.365
711	8	-125.836	-77.599	-825.715	-391.395	131.419	-493.855	111.117
711	9	-80.313	-23.431	-138.741	-20.690	-15.574	-87.240	108.310
712	1	-60.347	-4.517	-158.333	50.106	24.905	-89.739	59.561
712	2	-59.438	-8.362	-142.519	35.419	9.773	-77.574	62.892
712	3	-72.933	-5.793	-163.368	61.124	30.459	-109.191	69.369
712	4	-44.525	-12.577	-145.805	2.427	-12.571	-44.532	39.233
712	5	-58.235	-10.209	-167.154	26.222	1.535	-63.571	65.238
712	6	-42.415	-82.323	290.984	-149.612	188.239	-312.779	137.285
712	7	-43.462	-83.857	338.462	-156.114	194.372	-319.191	137.421
712	8	-78.567	76.992	-761.842	357.395	355.412	-357.235	51.125
712	9	-73.947	-1.948	-190.181	75.901	46.286	-121.882	57.672
713	1	-37.913	-12.627	-171.305	-14.406	-6.103	-44.437	114.365
713	2	-51.669	-12.398	-145.760	10.343	-9.840	-54.226	76.111
713	3	-46.363	-15.773	-164.396	-14.750	-9.913	-52.324	111.990
713	4	-63.023	-8.165	-154.919	45.759	17.756	-38.345	60.469
713	5	-57.717	-11.540	-173.455	20.556	-3.549	-65.609	69.381
713	6	-317.357	-7.293	257.929	434.156	346.182	-670.507	53.893
713	7	-322.058	-7.354	317.325	496.136	353.979	-685.093	53.805
713	8	253.177	-16.729	-750.778	-533.676	673.548	-437.039	142.032
713	9	-32.607	-15.003	-169.841	-19.509	15.057	-54.579	129.055
714	1	-34.180	0.411	-164.479	35.712	12.795	-55.554	57.920
714	2	-49.655	-6.156	-141.300	13.972	9.592	-65.515	52.673
714	3	-42.229	0.115	-158.112	46.017	26.571	-71.575	57.377

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ELEMENT	LOAD COMB	[illegible] RADIAL	[illegible] AXIAL	[illegible] HOOP	[illegible] SHEAR	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
714	4	-63.736	-15.702	-151.829	9.012	-14.366	-65.372	79.716
714	5	-56.290	-9.328	-158.441	24.357	1.222	-66.542	66.975
714	6	-348.132	-132.333	225.575	-72.282	-110.514	-370.121	106.941
[illegible]	7	-353.881	-135.551	273.052	-73.004	-113.390	-376.243	108.335
[illegible]	8	293.702	139.114	-637.753	138.265	374.312	58.224	33.337
[illegible]	9	-26.734	6.784	-181.090	51.057	43.753	-63.712	54.086
715	1	-39.833	-9.506	-163.187	30.199	9.122	-58.462	58.331
715	2	-52.068	-12.538	-139.679	28.038	3.457	-66.224	63.212
715	3	-50.046	-12.319	-159.240	39.052	11.828	-74.695	57.741
715	4	-57.849	-7.622	-143.934	12.642	-4.624	-60.851	75.638
715	5	-55.826	-9.752	-163.496	23.656	0.225	-65.810	67.118
715	6	-285.644	-31.122	243.895	-18.538	-29.772	-286.995	94.155
715	7	-290.799	-32.272	288.308	-19.268	-30.988	-292.083	94.022
715	8	220.693	16.967	-694.782	72.483	243.850	-6.189	17.717
715	9	-37.811	-11.637	-182.749	41.213	18.515	-67.965	53.808
716	1	-78.069	-8.296	-159.999	15.152	-5.147	-81.213	78.251
716	2	-68.224	-10.035	-142.344	21.666	-2.899	-75.411	71.650
716	3	-97.703	-11.580	-168.033	29.284	-7.041	-102.242	77.388
716	4	-28.737	-7.779	-137.599	24.089	8.011	-44.528	55.754
716	5	-58.215	-9.273	-163.298	22.707	-0.361	-67.128	68.570
716	6	128.299	-41.969	322.554	144.034	210.593	-124.073	29.714
716	7	131.606	-43.480	368.312	147.665	215.728	-127.602	29.669
716	8	-280.713	31.174	-788.305	-124.500	74.777	-324.316	109.301
716	9	-107.547	-9.790	-195.688	13.770	-7.887	-109.450	92.132
717	1	-18.252	-5.298	-160.131	19.745	9.005	-32.555	54.080
717	2	-40.270	-8.952	-138.493	23.938	3.993	-53.217	61.595
[illegible]	3	-13.908	-6.720	-153.813	26.195	13.698	-40.327	52.064
[illegible]	4	-74.318	-12.690	-149.839	21.247	-6.188	-80.820	72.932
717	5	-53.955	-10.458	-165.168	23.304	-0.330	-64.083	66.511
717	6	-471.243	-79.163	205.753	100.710	-54.307	-495.599	76.404
717	7	-477.559	-80.651	250.724	103.590	-55.247	-503.052	76.221
717	8	443.567	72.126	-554.435	-71.465	456.939	58.854	169.479
717	9	2.110	-3.066	-175.461	22.302	21.676	-22.632	41.545
718	1	-51.849	-3.369	-165.708	6.381	-2.543	-52.675	82.525
718	2	-57.555	-7.663	-141.141	17.099	-2.355	-62.853	72.785
718	3	-55.631	-5.242	-161.993	7.933	-4.243	-66.631	82.728
718	4	-48.476	-11.046	-143.804	31.782	7.122	-66.645	60.246
718	5	-56.552	-8.524	-164.656	22.516	0.293	-65.471	68.391
718	6	-162.723	-88.593	262.384	224.511	101.891	-353.208	49.687
718	7	-165.831	-91.052	307.513	229.590	103.185	-360.070	49.644
718	8	72.418	88.433	-719.868	-219.708	300.280	-139.428	133.956
718	9	-59.924	-0.948	-196.559	-2.384	-0.307	-60.065	92.793
719	1	-57.385	-13.249	-164.347	0.905	-13.230	-57.403	88.825
719	2	-59.899	-12.175	-139.276	14.484	-8.123	-63.951	74.371
719	3	-73.315	-13.238	-163.058	0.915	-19.222	-73.330	89.248
719	4	-42.547	-2.976	-135.876	35.389	17.757	-63.381	59.635
719	5	-56.053	-9.039	-159.658	21.820	-0.473	-64.629	69.568
719	6	-101.346	12.815	279.294	277.850	239.389	-327.919	50.304
719	7	-103.853	11.919	322.326	282.964	242.657	-334.792	50.780
[illegible]	8	0.752	-33.317	-726.257	-295.056	269.282	-301.847	136.710

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E 383

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS HOOP	XY-STRESS SHEAR	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
719	9	-70.801	-19.312	-188.129	-12.563	-16.356	-73.747	103.095
720	1	-55.149	-6.757	-133.347	33.420	14.136	-77.[illegible]	61.392
720	2	-59.338	-9.523	-135.831	33.651	7.[illegible]	-76.[illegible]	61.[illegible]
720	3	-72.036	-7.977	-137.973	54.120	21.[illegible]	-[illegible]	61.313
720	4	-43.033	-12.952	-133.495	1.747	-12.351	-43.[illegible]	55.587
720	5	-55.731	-11.307	-155.673	22.135	-2.[illegible]	-54.[illegible]	57.[illegible]
720	6	-111.750	-65.716	246.542	-73.392	-11.638	-165.339	125.313
720	7	-114.513	-66.423	287.384	-72.599	-15.924	-165.119	125.577
720	8	14.096	53.453	-676.517	129.956	163.216	-97.660	49.306
720	9	-68.946	-5.112	-131.024	58.868	29.935	-103.993	59.232
721	1	-42.686	-13.573	-152.576	-2.599	-10.447	-42.912	94.787
721	2	-52.172	-11.395	-138.797	11.980	-8.136	-55.431	74.780
721	3	-52.021	-14.286	-159.529	-7.222	-12.951	-53.356	100.474
721	4	-56.259	-7.235	-140.525	43.305	18.013	-81.509	59.755
721	5	-56.109	-13.126	-161.357	24.102	3.191	-66.427	66.324
721	6	-235.598	-22.774	252.037	304.235	193.122	-451.494	54.639
721	7	-238.498	-23.836	295.641	306.997	194.051	-456.386	54.635
721	8	158.272	5.188	-698.753	-307.682	399.170	-234.709	141.941
721	9	-42.535	-13.564	-183.308	-21.303	-1.789	-54.310	113.251
722	1	-35.504	-4.681	-155.415	27.007	11.002	-51.188	59.855
722	2	-48.420	-9.152	-134.366	27.723	5.184	-62.758	62.653
722	3	-41.409	-4.304	-152.182	39.465	20.752	-66.465	57.589
722	4	-63.411	-17.802	-139.288	9.506	-16.257	-64.946	79.771
722	5	-56.399	-12.953	-157.104	20.246	-4.979	-64.373	68.506
722	6	-302.097	-98.593	206.239	29.257	-94.729	-305.951	82.237
722	7	-305.121	-99.120	247.356	33.014	-93.959	-310.243	81.112
722	8	235.609	88.101	-632.842	4.275	235.531	87.988	1.583
722	9	-28.493	0.157	-173.232	38.749	27.151	-55.478	55.147
723	1	-38.206	-8.535	-151.770	23.390	4.751	-51.493	51.919
723	2	-49.561	-11.039	-131.443	26.105	2.166	-62.736	63.221
723	3	-47.343	-11.763	-151.098	34.114	3.329	-68.035	53.757
723	4	-55.365	-9.903	-131.401	13.180	-6.399	-59.489	75.114
723	5	-53.767	-11.657	-151.056	21.138	-1.390	-62.444	67.739
723	6	-257.717	-56.221	201.705	59.819	-40.663	-282.975	75.458
723	7	-272.078	-57.986	239.733	63.059	-40.794	-289.271	74.749
723	8	202.865	45.233	-613.461	-23.351	207.983	40.115	159.944
723	9	-35.668	-6.290	-171.426	31.909	11.349	-57.228	55.351
724	1	-61.224	-7.161	-155.895	16.[illegible]	-2.776	-65.610	74.681
724	2	-62.449	-9.809	-133.622	21.792	-1.958	-70.300	70.188
724	3	-84.744	-10.548	-158.135	21.093	-4.873	-90.319	75.191
724	4	-28.187	-8.368	-125.427	23.427	7.159	-43.715	56.453
724	5	-50.481	-9.107	-149.930	22.723	0.935	-60.524	65.155
724	6	-65.458	-57.539	241.213	130.535	69.395	-192.094	45.868
724	7	-72.533	-59.[illegible]	273.567	133.699	67.694	-202.[illegible]	45.355
724	8	-22.894	50.722	-653.307	-117.954	128.[illegible]	-[illegible]	125.397
724	9	-83.619	-7.[illegible]	-180.399	15.[illegible]	-4.[illegible]	-86.[illegible]	78.393
725	1	-33.561	-7.283	-151.409	17.945	1.830	-43.743	53.159
725	2	-43.495	-10.457	-131.715	22.719	0.152	-53.[illegible]	54.965
725	3	-33.572	-7.717	-148.413	25.135	7.593	-43.331	59.653

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ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
725	4	-78.420	-15.974	-137.387	18.816	-10.742	-83.651	74.462
725	5	-63.335	-13.233	-154.091	21.232	-5.476	-71.351	69.931
725	6	-350.420	-74.289	184.754	108.562	-36.719	-387.990	70.910
[illegible]	7	-350.052	-74.486	324.207	110.559	-34.348	-390.190	70.375
[illegible]	8	271.648	58.574	-599.139	-86.666	302.447	27.774	150.436
725	9	-18.836	-4.539	-168.113	10.350	5.890	-33.257	54.672
725	1	-45.029	-6.136	-153.166	14.063	-1.594	-49.582	72.262
726	2	-52.853	-9.607	-132.204	21.314	-0.868	-61.593	67.705
726	3	-60.059	-9.297	-153.495	15.398	-4.062	-64.293	74.624
726	4	-43.011	-11.740	-129.375	32.635	6.811	-63.563	57.799
726	5	-50.216	-10.429	-150.665	25.728	2.988	-53.634	53.334
726	6	-193.770	-75.229	214.674	155.189	41.000	-313.000	54.869
726	7	-199.934	-77.077	252.434	156.440	38.908	-315.920	55.129
726	8	126.606	68.006	-624.405	-137.149	237.551	-42.938	141.029
726	9	-52.235	-4.826	-174.456	8.147	-3.465	-53.596	80.516
727	1	-47.659	-9.965	-149.458	10.960	-7.011	-50.624	74.913
727	2	-53.960	-11.447	-129.239	19.704	-3.720	-61.688	68.585
727	3	-65.898	-15.725	-152.352	10.977	-13.776	-67.846	79.057
727	4	-35.652	-3.848	-121.459	37.292	20.790	-60.291	56.547
727	5	-47.589	-8.125	-144.572	27.665	6.123	-61.839	62.748
727	6	-159.940	-33.044	209.818	195.625	109.165	-302.150	53.985
727	7	-167.479	-36.124	244.452	196.366	105.257	-308.860	54.246
727	8	94.590	25.367	-601.513	-169.952	233.420	-113.462	140.755
727	9	-59.606	-14.243	-172.570	1.334	-14.203	-59.646	88.317
728	1	-45.335	-9.555	-144.083	30.010	-0.603	-54.286	65.899
[illegible]	2	-52.981	-11.779	-125.713	22.290	-2.027	-62.733	66.372
[illegible]	3	-60.634	-11.318	-146.734	35.258	3.056	-79.009	62.479
[illegible]	4	-42.404	-13.616	-120.187	-1.393	-13.492	-42.528	93.746
728	5	-50.056	-13.155	-141.208	11.084	-10.082	-53.129	74.501
728	6	-190.126	-55.509	179.208	44.549	-42.193	-203.542	73.240
728	7	-196.430	-55.963	212.123	53.305	-38.024	-214.359	71.401
728	8	122.763	37.105	-556.352	-40.451	138.946	21.022	158.317
728	9	-52.987	-9.094	-165.104	32.938	8.580	-70.652	61.817
729	1	-43.669	-9.693	-148.458	15.088	-3.083	-49.279	69.605
729	2	-52.360	-10.657	-128.842	22.822	-3.595	-62.422	66.207
729	3	-56.734	-12.677	-150.179	11.602	-9.837	-59.574	76.104
729	4	-47.781	-7.210	-124.200	45.229	22.074	-77.066	57.078
729	5	-52.125	-9.230	-145.538	34.009	9.523	-70.895	61.113
729	6	-213.590	-44.547	196.669	186.215	75.430	-333.567	57.206
729	7	-218.844	-46.741	231.727	183.851	70.200	-335.736	57.341
729	8	144.294	35.167	-588.855	-140.787	240.722	-51.259	145.592
729	9	-48.013	-10.713	-159.795	3.368	-10.316	-48.410	84.141
730	1	-42.778	-9.250	-142.784	14.602	-3.782	-48.246	69.470
730	2	-53.031	-11.594	-125.245	19.217	-4.052	-60.624	68.597
730	3	-49.609	-9.396	-143.792	25.976	3.345	-52.351	63.870
730	4	-63.836	-15.931	-124.150	5.568	-15.249	-64.488	83.325
730	5	-60.354	-14.703	-142.597	10.307	-11.587	-63.471	75.814
730	6	-237.845	-60.785	150.372	90.119	-24.410	-294.200	66.463
[illegible]	7	-259.257	-60.070	194.375	99.337	-18.544	-300.532	67.455
[illegible]	8	172.722	38.272	-539.083	-91.960	219.405	-8.414	153.083

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MEMB	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	Q-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
730	9	-39.296	-7.352	-151.321	21.361	3.587	-49.337	63.521
731	1	-40.631	-7.833	-135.902	15.135	-1.235	-45.585	68.597
731	2	-51.138	-10.219	-120.952	19.332	-1.173	-53.277	67.337
731	3	-49.803	-10.334	-139.859	24.341	1.735	-61.371	64.175
731	4	-56.813	-10.367	-115.939	10.144	-8.248	-59.332	79.201
731	5	-55.479	-10.482	-135.936	15.193	-5.833	-61.179	71.153
731	6	-254.213	-54.839	142.721	99.915	-13.355	-295.497	57.452
731	7	-257.639	-56.149	170.803	106.404	-13.370	-303.468	56.721
731	8	181.949	41.333	-496.379	-93.232	228.853	-3.570	153.306
731	9	-39.298	-7.352	-155.319	23.145	1.899	-49.149	63.941
732	1	-38.324	-6.602	-136.631	16.639	0.570	-45.198	66.679
732	2	-45.898	-9.474	-120.281	22.037	2.725	-57.088	65.164
732	3	-58.238	-9.849	-141.785	21.396	-1.752	-66.335	69.263
732	4	-26.298	-8.570	-111.063	23.944	3.097	-42.966	55.157
732	5	-37.648	-8.946	-132.558	23.292	4.061	-50.655	60.819
732	6	-194.624	-61.524	153.634	124.321	12.865	-269.114	59.071
732	7	-206.437	-63.941	182.240	125.399	10.430	-280.809	59.646
732	8	152.590	55.942	-502.099	-99.638	221.505	-2.882	149.202
732	9	-49.374	-6.978	-159.136	15.988	-1.524	-54.728	71.487
733	1	-47.479	-9.753	-137.083	14.376	-3.399	-52.233	71.704
733	2	-55.355	-10.766	-121.310	19.771	-3.447	-64.183	59.588
733	3	-51.448	-10.098	-139.305	21.372	-1.037	-60.509	67.025
733	4	-73.301	-13.937	-119.220	15.475	-8.733	-77.505	75.585
733	5	-67.884	-12.269	-137.215	13.075	-6.911	-73.243	73.487
733	6	-251.618	-51.903	135.352	116.532	2.529	-305.051	65.367
733	7	-249.673	-51.072	165.851	121.305	6.393	-307.139	64.652
733	8	144.235	33.217	-493.589	-103.853	206.485	-23.230	149.052
733	9	-42.353	-3.395	-155.073	15.977	-1.753	-48.395	68.379
734	1	-36.551	-9.424	-134.581	19.753	3.153	-45.329	63.654
734	2	-45.899	-9.165	-119.292	14.564	2.941	-59.005	61.763
734	3	-52.067	-9.029	-139.488	21.327	-0.253	-61.346	67.523
734	4	-38.144	-9.332	-111.999	32.939	12.215	-59.690	55.811
734	5	-43.312	-9.134	-132.195	29.703	7.999	-63.507	59.934
734	6	-232.233	-59.925	139.561	123.274	4.316	-296.475	62.474
734	7	-241.332	-61.793	167.826	122.753	0.513	-303.639	63.089
734	8	190.555	52.751	-484.520	-79.015	226.492	16.814	155.544
734	9	-41.719	-6.238	-155.077	15.517	0.217	-43.225	68.502
735	1	-34.404	-4.997	-128.930	20.338	5.395	-44.797	52.932
735	2	-44.953	-7.782	-114.952	25.329	5.649	-57.794	53.135
735	3	-52.226	-9.946	-135.510	20.300	-1.777	-63.395	58.080
735	4	-31.213	-2.807	-104.792	37.499	23.038	-57.113	55.372
735	5	-39.486	-4.972	-125.349	32.471	14.910	-59.259	58.643
735	6	-228.649	-54.299	119.032	131.032	15.062	-298.811	61.833
735	7	-239.996	-57.393	143.873	129.279	9.123	-307.083	62.570
735	8	199.930	57.954	-441.251	-80.317	235.135	21.749	155.735
735	9	-41.677	-7.162	-149.488	15.109	-1.330	-47.489	69.211
736	1	-33.486	-9.754	-125.249	5.393	-3.319	-40.431	80.242
736	2	-49.531	-11.494	-112.521	12.173	-7.875	-53.120	73.572
736	3	-52.077	-11.162	-131.215	18.770	-3.355	-59.384	68.731

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ELEMENT	LOAD COMB	X-STRESS RADIAL	Y-STRESS AXIAL	THETA-STRESS HOOP	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
736	4	-47.070	-13.423	-105.268	-4.129	-12.910	-47.569	96.893
736	5	-49.646	-13.027	-113.803	2.367	-11.934	-49.799	86.310
736	6	-235.552	-46.614	94.139	121.173	11.543	-294.311	63.977
736	7	-241.957	-46.482	119.002	132.992	10.824	-309.154	63.136
736	8	176.694	26.011	-407.959	-153.325	372.131	-69.434	148.294
736	9	-42.062	-9.432	-143.734	11.881	-5.564	-45.330	71.953
737	1	-39.799	-5.560	-128.798	25.772	3.097	-54.457	51.292
737	2	-49.727	-8.100	-115.118	29.907	7.523	-65.350	52.417
737	3	-52.208	-6.397	-134.540	24.335	1.589	-63.195	65.701
737	4	-47.632	-5.387	-107.139	45.723	13.656	-76.877	57.397
737	5	-50.114	-6.585	-125.552	40.151	17.321	-74.020	59.230
737	6	-334.739	-52.297	111.500	107.380	-2.622	-284.415	65.174
737	7	-340.741	-55.116	136.701	101.928	-10.075	-285.782	66.160
737	8	174.258	50.812	-435.743	-30.697	181.470	43.600	156.778
737	9	-42.280	-6.757	-148.221	21.200	3.137	-52.176	64.978
738	1	-46.827	-11.213	-125.729	5.503	-10.382	-47.658	81.413
738	2	-55.495	-12.415	-113.252	12.687	-8.956	-58.954	74.750
738	3	-54.371	-11.418	-130.888	15.241	-5.968	-59.821	71.451
738	4	-63.268	-16.317	-107.780	2.329	-15.202	-63.383	87.165
738	5	-62.144	-15.320	-125.416	5.882	-14.592	-62.871	82.947
738	6	-229.037	-40.280	90.009	132.709	28.188	-297.505	62.709
738	7	-229.656	-38.819	114.356	142.607	37.350	-305.823	51.893
738	8	133.753	11.825	-407.407	-156.496	240.740	-95.161	145.642
738	9	-45.703	-10.216	-143.365	9.056	-8.039	-47.881	76.479
739	1	-41.999	-5.837	-119.770	8.290	-4.980	-43.956	77.376
739	2	-51.797	-9.384	-108.292	14.306	-4.396	-56.485	72.543
739	3	-51.654	-6.254	-115.584	17.511	-2.966	-57.961	70.221
739	4	-55.796	-8.975	-100.782	7.492	-7.805	-56.966	91.125
739	5	-55.563	-8.155	-118.174	10.287	-7.357	-57.761	78.263
739	6	-240.372	-50.851	52.608	128.202	11.709	-305.432	53.171
739	7	-244.441	-51.244	83.354	136.253	18.390	-315.075	62.597
739	8	155.787	41.529	-354.986	-139.406	256.312	-49.996	147.232
739	9	-41.365	-7.217	-136.162	10.896	-3.898	-44.992	73.990
740	1	-22.588	-4.290	-114.770	17.506	6.401	-33.280	59.729
740	2	-35.251	-7.326	-105.074	22.302	4.739	-48.377	51.486
740	3	-43.390	-7.990	-124.034	21.530	2.152	-53.562	54.711
740	4	-18.486	-5.229	-92.945	25.136	14.137	-37.853	52.386
740	5	-25.614	-5.893	-111.906	24.365	10.531	-42.038	55.215
740	6	-269.369	-60.764	57.164	113.196	-11.143	-318.990	66.329
740	7	-286.329	-63.928	75.147	114.815	-15.291	-334.967	67.742
740	8	283.406	62.714	-331.047	-81.754	310.391	35.729	161.733
740	9	-29.716	-4.954	-133.731	16.835	3.562	-38.233	53.166
741	1	-54.451	-8.688	-120.472	11.325	-6.038	-57.122	76.833
741	2	-61.162	-10.242	-109.674	17.220	-4.965	-66.429	72.953
741	3	-59.155	-10.332	-126.600	18.075	-4.113	-65.093	71.819
741	4	-73.567	-11.589	-103.702	14.575	-3.402	-76.923	77.405
741	5	-71.560	-11.497	-120.629	15.431	-3.772	-75.388	76.421
741	6	-205.242	-41.491	65.881	122.903	24.133	-271.667	51.899
741	7	-222.379	-41.513	96.720	129.251	29.439	-273.333	51.247
741	8	80.215	23.532	-364.654	-117.797	172.347	-59.299	141.729

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E 387

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	Z-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
741	9	-52.445	-3.495	-137.337	12.131	-5.345	-55.595	75.499
742	1	-30.139	-5.314	-115.433	23.131	3.157	-44.110	58.367
742	2	-42.477	-8.320	-135.796	26.337	5.937	-55.724	51.530
742	3	-45.543	-8.226	-133.337	24.335	4.091	-57.951	53.519
742	4	-35.597	-8.420	-95.355	33.773	13.445	-57.551	56.135
742	5	-38.763	-8.326	-113.327	31.259	11.331	-53.331	57.376
742	6	-263.996	-54.683	52.955	93.523	-13.384	-299.694	69.137
742	7	-274.966	-55.419	71.601	91.759	-23.311	-328.334	69.989
742	8	240.296	48.334	-331.398	-38.933	247.598	40.592	158.952
742	9	-33.204	-5.733	-133.384	21.620	6.155	-45.080	61.220
743	1	-25.353	-1.434	-138.402	25.911	15.143	-41.932	57.388
743	2	-38.815	-4.339	-100.794	28.449	11.195	-54.999	50.366
743	3	-42.850	-6.263	-118.496	25.994	7.396	-56.301	52.641
743	4	-28.323	-1.091	-93.333	37.923	25.586	-55.301	54.875
743	5	-32.358	-2.167	-106.535	35.469	21.285	-55.810	56.527
743	6	-275.819	-65.312	25.249	89.039	-32.709	-308.422	69.836
743	7	-289.701	-69.911	40.255	85.423	-40.515	-318.997	71.070
743	8	271.895	78.143	-278.490	-21.899	274.340	75.699	173.631
743	9	-29.388	-2.510	-125.104	23.456	11.084	-42.982	59.935
744	1	-35.011	-9.710	-105.555	-3.870	-9.131	-35.590	98.507
744	2	-46.189	-10.991	-99.736	5.758	-10.073	-47.107	80.940
744	3	-48.220	-11.003	-116.388	8.672	-9.081	-50.141	77.506
744	4	-43.379	-12.457	-89.382	-6.707	-11.065	-44.771	101.727
744	5	-45.410	-12.469	-106.233	-3.794	-12.037	-45.842	95.486
744	6	-251.303	-37.573	10.454	165.410	52.275	-341.852	61.463
744	7	-259.352	-37.321	14.358	179.332	62.448	-359.711	60.916
744	8	217.124	15.489	-260.337	-221.413	332.344	-139.250	145.549
744	9	-37.141	-9.722	-122.926	-1.337	-9.539	-37.076	92.005
745	1	-37.450	-3.214	-110.104	33.170	16.993	-57.559	59.648
745	2	-47.985	-5.112	-102.199	33.446	12.412	-66.503	51.022
745	3	-49.715	-6.704	-119.312	31.184	9.671	-66.091	62.035
745	4	-45.731	-3.365	-92.019	45.447	24.877	-75.575	57.598
745	5	-49.451	-4.339	-109.131	43.135	21.934	-74.954	58.472
745	6	-244.253	-55.741	27.061	53.557	-41.431	-260.573	74.205
745	7	-250.822	-59.938	43.040	50.281	-47.503	-263.257	76.129
745	8	199.621	50.928	-287.772	35.933	199.467	51.082	14.927
745	9	-39.130	-3.807	-127.216	30.908	14.117	-57.104	59.939
746	1	-47.523	-11.905	-108.534	-0.277	-11.905	-47.523	90.124
746	2	-55.517	-12.357	-101.311	9.624	-10.597	-57.175	79.109
746	3	-55.909	-12.132	-117.236	9.943	-9.979	-58.061	77.784
746	4	-60.793	-15.250	-93.020	2.397	-15.233	-60.810	88.993
746	5	-61.195	-15.025	-109.944	2.307	-14.920	-61.290	87.358
746	6	-214.908	-26.335	14.179	157.363	62.307	-303.741	60.503
746	7	-215.773	-24.161	19.797	159.240	73.454	-313.401	59.844
746	8	119.467	-4.317	-272.139	-194.452	251.455	-146.915	142.351
746	9	-47.915	-11.830	-124.459	1.241	-11.537	-47.957	88.339
747	1	-41.492	-5.742	-101.222	3.835	-5.335	-41.899	93.343
747	2	-51.122	-7.375	-95.177	11.522	-5.222	-54.021	75.972
747	3	-51.704	-8.012	-111.442	12.513	-4.582	-55.035	75.237

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ELEMENT	LOAD ZONE	X-STRESS RADIAL	Y-STRESS AXIAL	TRIA-STRESS HOOP	XY-STRESS SHEAR	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
747	4	-53.743	-7.711	-95.547	5.933	-6.357	-54.497	82.765
747	5	-54.325	-7.343	-101.809	5.930	-6.332	-55.336	81.698
747	6	-135.334	-47.395	-15.356	144.765	31.095	-314.397	51.533
[illegible]	7	-239.904	-48.833	-4.909	153.546	35.557	-325.195	50.936
[illegible]	8	163.304	40.463	-215.805	-166.775	279.511	-75.343	145.109
747	9	-42.374	-5.875	-115.484	4.827	-5.242	-42.707	83.533
748	1	-12.705	-2.975	-95.194	17.380	10.589	-26.371	52.609
748	2	-29.697	-6.284	-91.693	21.924	7.212	-42.792	59.151
748	3	-32.939	-6.231	-107.512	21.664	5.854	-45.034	60.824
748	4	-16.385	-4.759	-73.677	24.130	14.408	-35.263	51.596
748	5	-19.336	-4.906	-94.495	23.920	12.863	-37.106	53.392
748	6	-324.044	-61.270	-35.394	100.724	-27.103	-358.210	71.262
748	7	-343.671	-64.370	-26.669	101.946	-31.118	-376.923	71.935
748	8	364.682	65.331	-173.599	-67.477	379.190	50.824	167.866
748	9	-15.947	-3.123	-111.012	17.620	9.215	-28.286	54.997
749	1	-56.819	-9.495	-104.208	9.149	-7.788	-58.526	79.429
749	2	-61.905	-10.635	-98.419	15.465	-6.330	-66.210	74.447
749	3	-62.252	-10.717	-113.593	15.737	-6.291	-66.678	74.292
749	4	-71.073	-11.948	-90.055	13.375	-9.062	-73.959	77.827
749	5	-71.420	-12.030	-105.230	13.647	-9.044	-74.407	77.658
749	6	-175.194	-34.639	-7.660	128.789	41.873	-251.606	59.318
749	7	-170.966	-34.143	5.633	134.580	48.415	-253.525	58.473
749	8	43.519	13.718	-236.068	-129.113	158.589	-101.351	138.291
749	9	-57.155	-9.578	-113.382	9.421	-7.780	-58.963	79.200
750	1	-26.125	-5.426	-97.534	24.557	10.873	-42.425	56.426
[illegible]	2	-39.754	-7.652	-93.549	26.585	7.351	-54.758	60.560
[illegible]	3	-41.250	-7.639	-108.920	26.335	6.873	-55.662	61.310
[illegible]	4	-34.751	-7.393	-82.251	31.480	11.839	-55.554	56.555
750	5	-36.253	-7.778	-97.633	31.230	10.305	-56.342	57.255
750	6	-285.189	-49.039	-31.746	73.334	-28.145	-306.231	74.072
750	7	-297.268	-50.571	-20.840	71.068	-31.563	-316.277	75.025
750	8	271.745	42.535	-187.702	-14.594	272.670	41.610	175.371
750	9	-27.631	-5.311	-112.906	24.307	10.278	-43.212	57.325
751	1	-20.152	1.733	-90.173	28.456	20.599	-40.023	55.080
751	2	-35.410	-3.179	-88.384	29.472	14.296	-52.885	59.335
751	3	-37.087	-3.417	-103.081	28.896	13.190	-53.695	60.112
751	4	-27.308	-0.367	-75.766	36.511	24.915	-53.091	55.297
751	5	-29.485	-0.606	-90.463	35.934	23.691	-53.773	55.946
751	6	-306.082	-70.470	-62.071	61.124	-55.556	-320.996	76.288
751	7	-321.168	-75.256	-55.755	55.721	-52.804	-333.620	77.617
751	8	315.116	87.805	-130.889	12.976	315.854	97.067	3.256
751	9	-21.839	0.495	-104.870	27.880	19.351	-40.706	55.914
752	1	-30.742	-9.485	-89.326	-9.043	-6.158	-34.068	110.196
752	2	-43.227	-10.547	-99.019	1.840	-10.444	-43.331	86.797
752	3	-44.517	-10.807	-101.834	2.172	-10.669	-44.657	86.328
752	4	-40.405	-11.391	-76.927	-7.039	-9.964	-42.032	103.018
752	5	-41.695	-11.651	-90.742	-6.706	-10.413	-43.133	102.100
752	6	-271.604	-32.879	-71.734	196.203	68.953	-373.343	61.325
752	7	-281.252	-32.471	-65.742	200.618	79.191	-392.914	60.900
[illegible]	8	240.484	13.150	-123.274	-252.673	403.589	-150.943	147.157

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590

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ELEMENT	LOAD COMB	RADIAL	AXIAL	BODY	SHEAR	PRIN-STRESS	PRIN-STRESS	ANGLE
752	9	-32.032	-9.745	-103.141	-8.711	-6.744	-35.033	109.007
753	1	-34.240	-2.639	-92.451	37.174	21.959	-59.829	56.517
753	2	-45.624	-5.988	-90.452	36.417	15.395	-68.008	59.579
753	3	-47.913	-6.121	-104.945	36.539	15.065	-69.101	59.885
753	4	-44.559	-4.439	-78.313	44.993	24.754	-73.332	57.341
753	5	-45.948	-4.571	-93.402	45.105	24.364	-74.333	57.319
753	6	-274.764	-65.349	-62.126	39.857	-53.219	-282.394	79.580
753	7	-293.539	-68.832	-65.161	32.301	-64.085	-288.392	81.630
753	8	233.957	31.343	-138.345	62.211	255.027	50.273	18.710
753	9	-35.528	-2.751	-106.935	37.286	21.581	-59.372	56.860
754	1	-51.677	-13.351	-92.351	-4.574	-12.789	-52.239	96.854
754	2	-59.597	-13.513	-91.097	5.261	-13.018	-60.191	83.554
754	3	-60.914	-13.955	-104.774	4.947	-13.439	-61.429	84.050
754	4	-64.046	-15.772	-81.429	-0.725	-15.761	-64.057	90.861
754	5	-65.363	-16.114	-95.106	-1.040	-16.092	-65.385	91.209
754	6	-218.015	-23.544	-67.221	176.489	80.722	-322.282	59.426
754	7	-218.631	-21.597	-60.000	138.564	92.634	-332.863	58.792
754	8	113.625	-10.198	-137.011	-225.615	285.669	-182.242	142.672
754	9	-52.994	-13.693	-116.628	-4.989	-13.070	-53.618	97.123
755	1	-44.730	-5.749	-86.320	0.082	-5.749	-44.730	99.379
755	2	-54.660	-7.759	-86.196	8.642	-6.217	-56.202	79.884
755	3	-55.657	-7.852	-99.031	8.429	-6.409	-57.100	80.287
755	4	-57.105	-7.769	-75.727	4.301	-7.397	-57.477	85.053
755	5	-58.102	-7.852	-88.562	4.088	-7.532	-58.432	85.378
755	6	-245.551	-45.195	-96.412	157.910	41.629	-332.387	61.196
755	7	-249.563	-46.464	-92.380	157.625	47.971	-344.003	60.604
755	8	155.320	37.573	-84.602	-183.374	301.954	-98.070	144.387
755	9	-45.727	-5.842	-99.856	-0.131	-5.841	-45.728	90.189
756	1	-8.182	-2.814	-78.527	18.410	13.105	-24.103	49.147
756	2	-17.306	-5.879	-80.588	22.303	8.151	-41.335	57.829
756	3	-17.694	-5.739	-93.309	22.430	8.256	-41.689	58.039
756	4	-17.590	-5.166	-67.611	24.012	13.425	-36.181	52.252
756	5	-17.979	-5.025	-80.331	24.133	13.492	-36.495	52.509
756	6	-362.633	-60.345	-120.426	98.071	-31.775	-391.703	73.489
756	7	-383.433	-63.719	-119.793	99.301	-35.387	-411.759	74.076
756	8	414.214	54.209	-33.756	-63.843	425.496	52.927	169.978
756	9	-8.573	-2.675	-91.247	18.537	13.147	-24.393	49.518
757	1	-65.172	-8.292	-89.131	6.783	-7.494	-65.970	83.292
757	2	-71.433	-9.619	-88.997	13.872	-6.549	-74.404	77.914
757	3	-73.578	-9.847	-101.906	13.587	-7.071	-76.354	78.453
757	4	-78.182	-10.271	-79.253	12.229	-8.203	-80.250	80.246
757	5	-80.326	-10.499	-92.172	11.745	-8.576	-82.249	80.703
757	6	-205.587	-35.995	-95.106	140.753	43.539	-285.122	60.532
757	7	-202.294	-35.142	-90.354	147.519	50.033	-289.520	59.693
757	8	61.177	13.495	-95.207	-148.461	190.253	-103.579	138.995
757	9	-67.315	-8.319	-102.240	6.499	-7.809	-68.026	83.765
758	1	-24.099	-5.399	-80.772	28.923	15.634	-45.133	53.960
758	2	-39.979	-8.000	-88.652	30.734	10.554	-59.634	58.742
758	3	-40.300	-7.914	-95.179	31.459	11.274	-59.439	58.518

E 390

ELEMENT	LOAD COMB	X-STRESS RADIAL	Y-STRESS AXIAL	THETA-STRESS HOOP	XY-STRESS SHEAR	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
758	4	-35.854	-3.685	-70.702	34.732	15.501	-59.344	55.929
758	5	-36.175	-7.913	-83.229	35.457	15.133	-60.210	55.868
758	6	-326.353	-55.931	-120.931	74.120	-36.948	-345.346	75.635
758	7	-340.426	-57.876	-113.597	71.435	-40.842	-357.460	76.588
758	8	322.732	50.885	-40.655	-5.772	322.955	50.762	178.784
758	9	-24.419	-5.312	-93.297	25.634	15.270	-46.002	53.933
759	1	-17.570	2.109	-73.888	33.582	27.263	-42.725	53.165
759	2	-35.331	-2.111	-77.736	34.046	19.088	-56.532	57.959
759	3	-35.341	-1.875	-89.463	34.872	20.071	-57.237	57.816
759	4	-29.355	-0.088	-65.073	39.564	27.555	-56.959	55.125
759	5	-29.364	0.247	-76.750	40.490	28.554	-57.670	55.243
759	6	-352.121	-77.192	-149.835	55.726	-66.327	-362.987	78.966
759	7	-369.346	-82.299	-151.790	50.707	-73.604	-378.040	80.270
759	8	372.035	97.902	11.341	29.998	375.280	94.657	6.172
759	9	-17.579	2.445	-85.565	34.408	28.268	-43.402	53.112
760	1	-32.552	-10.035	-75.090	-13.695	-3.564	-39.023	115.289
760	2	-46.597	-10.920	-78.951	-1.606	-10.848	-46.670	92.573
760	3	-47.285	-11.392	-90.148	-3.147	-11.119	-47.558	94.973
760	4	-44.696	-11.761	-67.674	-8.240	-9.814	-46.643	103.291
760	5	-45.384	-12.233	-78.871	-9.780	-9.563	-48.054	105.272
760	6	-304.274	-30.028	-152.134	205.458	79.861	-414.165	61.859
760	7	-314.949	-29.419	-153.704	220.935	90.863	-435.233	61.435
760	8	272.043	7.766	8.393	-282.987	452.222	-172.413	147.515
760	9	-33.239	-10.508	-96.286	-15.236	-2.865	-40.882	116.639
761	1	-36.740	-0.191	-77.055	40.939	26.367	-63.298	57.027
761	2	-49.673	-3.516	-90.237	39.305	18.985	-72.175	60.010
761	3	-50.618	-3.271	-91.985	41.102	20.487	-74.377	59.970
761	4	-48.807	-2.243	-63.493	45.740	25.799	-76.850	58.438
761	5	-49.751	-1.999	-80.242	47.537	27.320	-79.072	58.334
761	6	-289.428	-61.969	-141.125	25.925	-59.051	-292.345	83.579
761	7	-298.075	-65.602	-141.878	17.592	-64.263	-299.415	85.573
761	8	242.548	73.145	-8.328	34.458	277.458	38.225	22.460
761	9	-37.685	0.055	-88.804	42.735	27.900	-65.532	56.911
762	1	-50.759	-12.548	-78.291	-6.253	-11.551	-51.756	99.062
762	2	-60.193	-12.552	-81.452	3.954	-12.225	-60.519	85.287
762	3	-62.011	-13.242	-92.807	2.456	-13.119	-62.155	87.125
762	4	-62.616	-13.967	-70.987	-0.027	-13.967	-62.616	90.033
762	5	-64.454	-14.657	-82.332	-1.525	-14.610	-64.500	91.753
762	6	-243.735	-16.991	-143.782	181.623	83.739	-344.467	50.986
762	7	-246.345	-15.058	-144.211	193.703	94.895	-356.300	60.419
762	8	148.765	-14.559	-10.672	-232.234	313.276	-179.070	144.687
762	9	-52.597	-13.238	-89.636	-7.751	-11.766	-54.068	100.750
763	1	-44.120	-4.912	-71.944	-1.255	-4.872	-44.160	91.832
763	2	-55.307	-6.958	-77.035	7.694	-5.762	-56.502	81.172
763	3	-56.511	-6.995	-87.405	6.586	-6.134	-57.372	82.550
763	4	-56.598	-6.339	-66.236	4.743	-6.441	-57.047	84.598
763	5	-57.802	-6.927	-75.505	3.635	-6.569	-58.060	85.933
763	6	-267.636	-44.774	-172.092	165.318	42.912	-355.323	62.215
763	7	-273.135	-46.216	-175.424	174.955	48.843	-368.230	61.492
763	8	135.037	39.308	38.449	-138.555	330.543	-95.197	145.721

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ELEMENT	LOAD	COMB	+STRESS RADIAL	-STRESS AXIAL	[illegible]	[illegible]	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
763	3		-45.023	-4.350	-81.314	-2.353	-4.312	-45.461	93.339
764	1		-4.133	-1.159	-61.639	11.583	17.493	-23.535	46.444
764	2		-25.399	-5.350	-70.824	13.673	11.823	-41.173	56.436
764	3		-23.649	-4.745	-81.551	14.551	13.154	-41.453	53.347
764	4		-18.153	-4.571	-83.153	15.556	15.173	-37.313	51.413
764	5		-15.413	-4.266	-83.211	15.179	15.534	-33.214	51.530
764	6		-400.667	-58.794	-199.571	91.711	-35.746	-423.716	75.552
764	7		-423.341	-61.515	-215.399	92.336	-33.474	-445.504	75.489
764	8		464.200	63.347	94.142	-50.999	470.587	56.960	172.352
764	9		-2.383	-1.753	-73.377	21.295	19.020	-23.157	45.427
765	1		-62.381	-7.285	-75.152	5.321	-6.479	-62.988	94.254
765	2		-68.535	-8.327	-79.488	13.321	-5.722	-71.240	78.499
765	3		-71.727	-8.593	-80.172	12.115	-6.348	-73.972	79.591
765	4		-72.909	-8.593	-69.124	11.676	-6.632	-74.965	80.008
765	5		-76.000	-8.955	-79.367	10.990	-7.199	-77.756	80.824
765	6		-199.736	-32.614	-163.235	138.226	45.333	-277.734	60.380
765	7		-197.052	-32.893	-154.413	144.893	51.553	-281.499	59.765
765	8		65.336	13.092	18.129	-146.745	190.770	-106.341	139.477
765	9		-65.473	-7.352	-85.836	5.136	-6.901	-65.924	84.988
766	1		-23.600	-4.914	-57.275	27.309	14.605	-43.121	54.443
766	2		-39.964	-6.945	-73.655	23.652	9.613	-56.524	59.975
766	3		-39.422	-6.875	-93.582	23.996	10.977	-57.275	59.240
766	4		-37.372	-7.123	-62.113	31.312	12.525	-57.022	57.990
766	5		-35.830	-7.255	-71.937	32.656	13.948	-57.832	57.254
766	6		-336.482	-44.760	-189.390	61.917	-32.201	-349.041	78.516
766	7		-350.519	-45.152	-195.411	59.192	-35.086	-361.686	79.392
766	8		332.991	38.370	72.255	2.299	333.039	38.852	2.448
766	9		-23.259	-4.343	-77.202	28.653	16.114	-44.217	53.316
767	1		-17.238	2.714	-60.892	10.280	26.605	-40.329	53.333
767	2		-35.136	-1.357	-69.225	11.331	18.273	-54.768	59.773
767	3		-33.964	-2.535	-78.147	34.114	20.656	-55.255	58.217
767	4		-31.431	-1.257	-57.244	38.257	23.555	-55.076	56.753
767	5		-30.369	2.564	-66.136	37.302	26.242	-55.519	55.133
767	6		-360.132	-72.541	-213.424	45.269	-35.534	-357.127	81.253
767	7		-377.147	-77.304	-225.865	42.415	-72.352	-381.439	82.456
767	8		378.775	32.702	111.711	35.759	383.177	38.300	7.219
767	9		-15.366	3.437	-69.834	34.023	29.151	-41.580	53.313
768	1		-29.522	-9.068	-62.184	-13.020	-2.738	-35.852	113.926
768	2		-44.343	-9.794	-70.414	-1.120	-9.754	-44.373	91.591
768	3		-44.343	-10.374	-79.125	-3.739	-9.973	-44.743	95.159
768	4		-42.881	-10.299	-59.453	-5.028	-9.541	-43.539	98.578
768	5		-42.880	-10.979	-68.152	-7.717	-9.115	-44.644	102.874
768	6		-315.758	-25.516	-219.543	207.152	32.289	-423.564	52.506
768	7		-327.273	-24.633	-227.502	222.135	92.651	-444.793	62.121
768	8		292.079	5.515	117.354	-176.925	462.372	-154.779	143.554
768	9		-29.522	-9.649	-72.573	-15.739	-0.997	-33.173	113.941
769	1		-36.126	0.324	-64.403	13.155	24.331	-52.183	57.754
769	2		-49.234	-2.921	-71.612	35.273	17.328	-59.994	51.235
769	3		-49.773	-3.423	-81.171	39.237	19.572	-71.753	52.634

E392

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
769	4	-48.688	-2.115	-50.540	40.267	21.113	-71.918	50.020
769	5	-49.383	-1.513	-69.801	43.029	23.711	-74.714	59.515
769	6	-290.072	-53.762	-207.691	15.386	-53.739	-291.035	86.194
[illegible]	7	-298.413	-63.250	-214.335	7.471	-63.013	-298.551	88.182
[illegible]	8	243.920	71.062	99.403	35.749	279.241	35.741	22.387
769	9	-36.801	0.812	-73.584	40.937	27.247	-63.235	57.339
770	1	-47.227	-11.172	-65.554	-5.583	-10.327	-48.072	98.505
770	2	-57.202	-11.049	-72.973	4.351	-10.542	-57.608	84.560
770	3	-59.096	-11.916	-82.020	2.175	-11.816	-59.196	87.365
770	4	-58.531	-11.871	-62.493	2.115	-11.775	-58.627	87.409
770	5	-60.425	-12.738	-71.540	-0.060	-12.738	-60.425	90.073
770	6	-248.697	-12.337	-208.789	178.983	83.961	-344.997	51.718
770	7	-252.041	-10.442	-215.586	190.591	94.492	-356.975	51.176
770	8	165.007	-15.515	96.121	-224.600	316.804	-167.312	145.947
770	9	-49.121	-12.039	-74.602	-7.759	-10.480	-50.679	101.355
771	1	-41.476	-4.017	-60.016	-1.155	-3.982	-41.512	91.765
771	2	-53.088	-5.938	-69.201	7.567	-4.753	-54.273	81.102
771	3	-54.210	-5.910	-77.236	5.922	-5.195	-54.925	83.110
771	4	-53.840	-5.887	-58.748	5.916	-5.167	-54.559	83.369
771	5	-54.961	-5.959	-66.784	4.271	-5.491	-55.330	85.065
771	6	-272.035	-41.322	-235.517	162.109	42.284	-355.642	62.717
771	7	-278.036	-42.778	-244.939	171.784	47.790	-368.605	62.200
771	8	207.484	37.538	140.789	-192.874	333.274	-88.251	146.888
771	9	-42.597	-3.990	-68.052	-2.800	-3.788	-42.799	94.127
772	1	-4.922	-2.208	-52.483	19.379	15.861	-22.992	47.002
[illegible]	2	-26.453	-4.874	-53.705	22.495	9.284	-40.612	57.812
[illegible]	3	-23.332	-4.520	-70.347	23.246	11.150	-39.003	56.015
[illegible]	4	-22.303	-4.728	-52.276	23.641	11.738	-38.670	55.142
772	5	-19.383	-4.373	-59.418	24.392	13.748	-37.205	53.389
772	6	-409.607	-53.144	-263.333	94.120	-34.290	-428.461	77.367
772	7	-432.073	-55.607	-276.556	34.503	-37.509	-450.171	77.911
772	8	467.509	55.373	194.221	-45.012	472.590	50.792	173.699
772	9	-1.801	-1.854	-59.624	20.130	18.302	-21.959	44.962
773	1	-57.984	-7.254	-63.438	5.495	-6.666	-58.573	83.887
773	2	-64.498	-8.247	-71.729	12.426	-5.524	-67.121	78.081
773	3	-67.382	-8.648	-80.260	11.451	-6.511	-70.119	79.438
773	4	-66.937	-8.521	-61.512	11.877	-6.198	-69.260	78.935
773	5	-70.421	-8.921	-70.043	13.911	-7.043	-72.300	80.231
773	6	-197.663	-28.066	-223.065	137.495	48.676	-274.405	60.831
773	7	-195.123	-28.015	-231.084	144.259	55.139	-278.279	60.039
773	8	76.779	13.523	117.345	-145.720	194.264	-103.962	141.123
773	9	-61.468	-7.655	-71.968	4.530	-7.277	-61.847	85.221
774	1	-23.822	-4.535	-56.272	25.182	12.719	-41.175	55.427
774	2	-40.242	-6.390	-66.596	25.394	8.245	-54.669	61.339
774	3	-39.148	-6.350	-74.136	28.074	9.752	-55.262	60.145
774	4	-38.925	-6.535	-55.664	27.997	9.576	-55.086	60.004
774	5	-37.931	-6.555	-63.215	29.676	11.350	-55.737	58.893
774	6	-339.166	-39.234	-251.795	55.762	-29.008	-349.191	79.908
774	7	-353.078	-40.159	-263.123	53.231	-31.415	-361.821	80.638
[illegible]	8	333.269	32.890	169.890	2.275	333.295	32.872	0.434

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E 393

MENT	LOAD COMB	[illegible] RADIAL	[illegible] AXIAL	[illegible] SHEAR	[illegible] SHEAR	[illegible] PRIN-STRESS	[illegible] PRIN-STRESS	[illegible] ANGLE
774	9	-22.729	-4.605	-63.822	26.861	14.581	-42.016	54.320
775	1	-18.157	2.507	-53.707	29.590	23.519	-39.159	54.524
775	2	-36.193	-1.278	-62.799	29.596	15.635	-53.133	60.267
775	3	-34.335	-0.354	-69.329	31.335	19.713	-53.424	59.066
775	4	-34.312	-0.614	-51.913	31.780	19.507	-53.434	53.965
775	5	-32.454	0.309	-53.444	33.939	21.553	-53.303	57.855
775	6	-362.202	-67.991	-278.717	39.355	-62.918	-367.275	82.582
775	7	-378.737	-72.456	-292.635	34.214	-68.691	-382.513	83.702
775	8	375.157	85.830	214.827	33.853	379.066	81.971	6.586
775	9	-16.299	3.431	-57.237	31.739	26.860	-39.728	53.518
776	1	-27.334	-8.111	-51.753	-11.069	-3.063	-32.383	114.515
776	2	-42.863	-8.817	-63.806	0.133	-8.817	-42.863	89.775
776	3	-42.202	-9.430	-70.206	-3.125	-9.139	-42.494	95.365
776	4	-41.998	-9.063	-53.608	-1.815	-8.964	-42.097	93.146
776	5	-41.337	-9.676	-60.007	-5.054	-8.889	-42.124	98.853
776	6	-327.139	-23.738	-290.124	196.462	72.775	-423.653	63.837
776	7	-339.350	-23.036	-293.690	210.805	82.344	-444.732	63.439
776	8	309.614	6.282	212.413	-258.243	457.435	-141.537	150.213
776	9	-26.674	-8.724	-58.152	-14.308	-0.809	-34.589	118.951
777	1	-34.083	-0.541	-53.771	35.724	22.153	-56.778	57.574
777	2	-48.787	-3.858	-65.492	34.688	15.004	-67.650	61.464
777	3	-48.820	-3.232	-72.340	37.876	18.130	-70.232	60.519
777	4	-48.470	-3.496	-54.857	36.920	17.162	-69.127	60.706
777	5	-48.502	-2.870	-61.705	40.009	20.371	-71.744	59.847
777	6	-320.449	-63.156	-275.737	36.821	-60.390	-323.215	84.111
777	7	-330.423	-66.641	-288.909	19.533	-65.202	-331.862	85.787
777	8	283.812	72.092	203.131	53.441	301.357	54.537	15.467
777	9	-34.115	3.294	-60.519	33.913	25.489	-59.520	56.861
778	1	-49.071	-11.059	-55.935	-5.342	-10.182	-49.949	98.543
778	2	-59.790	-11.173	-67.314	4.085	-10.837	-60.131	85.229
778	3	-61.941	-12.174	-74.213	1.339	-12.139	-61.975	89.493
778	4	-60.719	-11.588	-57.420	3.130	-11.396	-60.910	85.426
778	5	-61.359	-12.594	-64.319	0.371	-12.592	-62.871	89.653
778	6	-254.854	-16.403	-272.813	179.729	77.853	-359.111	52.325
778	7	-267.636	-14.493	-285.033	192.269	89.076	-371.205	61.682
778	8	179.377	-9.902	192.851	-224.067	327.972	-158.497	146.449
778	9	-51.222	-12.055	-62.834	-9.617	-10.243	-53.034	101.876
779	1	-43.809	-4.117	-51.340	-1.790	-4.037	-43.889	92.578
779	2	-56.145	-5.853	-64.163	5.865	-4.933	-57.066	82.364
779	3	-57.417	-5.856	-70.139	4.737	-5.424	-57.849	84.793
779	4	-56.835	-5.877	-54.435	5.149	-5.145	-57.566	83.216
779	5	-58.106	-5.880	-60.471	4.221	-5.572	-58.414	85.623
779	6	-268.740	-39.042	-294.808	150.934	40.638	-357.421	63.953
779	7	-294.332	-39.302	-309.221	171.119	46.569	-380.333	63.339
779	8	220.716	33.350	229.344	-191.621	340.329	-95.262	149.027
779	9	-45.080	-4.120	-57.315	-3.913	-3.748	-45.452	95.415
780	1	-8.467	-2.333	-44.227	13.707	13.258	-14.568	49.291
780	2	-29.979	-5.260	-58.899	21.395	7.511	-42.351	59.355
780	3	-35.135	-4.942	-53.338	22.350	9.649	-40.727	57.439

E 394

ELEMENT	LOAD ZONE	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	Z-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
780	4	-28.159	-5.337	-48.764	22.725	8.688	-42.175	58.336
780	5	-24.314	-5.009	-53.693	23.579	10.815	-40.141	56.131
780	6	-435.095	-49.517	-330.537	55.240	-30.337	-435.375	77.398
[illegible]	7	-438.496	-51.784	-338.284	55.577	-33.245	-457.035	77.927
[illegible]	8	461.878	49.837	277.917	-50.751	468.237	43.579	173.080
780	9	-4.622	-2.515	-49.155	19.561	15.222	-23.139	46.542
781	1	-61.776	-5.793	-54.365	4.325	-5.451	-62.128	85.608
781	2	-71.286	-7.337	-66.971	11.564	-5.067	-73.305	80.093
781	3	-75.026	-7.329	-73.327	10.134	-5.830	-76.525	81.627
781	4	-72.530	-7.194	-67.346	11.472	-5.238	-74.486	80.324
781	5	-76.271	-7.436	-63.702	10.092	-5.987	-77.720	81.828
781	6	-258.141	-31.970	-294.492	142.341	36.738	-325.951	64.233
781	7	-256.226	-32.452	-308.041	150.173	42.931	-331.611	63.344
781	8	138.655	22.020	221.181	-153.507	244.549	-83.873	145.401
781	9	-65.516	-6.026	-60.721	2.945	-5.880	-65.662	87.172
782	1	-25.413	-4.566	-47.124	27.204	14.142	-44.122	55.482
782	2	-43.479	-6.751	-61.490	29.310	9.218	-59.449	61.157
782	3	-41.729	-6.633	-66.718	31.095	11.523	-59.887	59.718
782	4	-43.093	-6.897	-51.586	29.943	9.992	-59.983	60.574
782	5	-41.344	-6.779	-56.814	32.029	12.332	-60.455	59.175
782	6	-373.303	-47.238	-318.541	68.946	-33.259	-387.282	78.538
782	7	-388.841	-48.844	-335.553	65.741	-36.575	-401.110	79.429
782	8	366.943	42.607	267.842	-8.798	367.181	42.368	178.447
782	9	-23.664	-4.448	-52.353	29.289	16.768	-44.881	54.080
783	1	-20.507	2.294	-42.581	31.168	24.080	-42.294	55.046
[illegible]	2	-40.070	-1.480	-58.374	31.720	15.352	-57.903	60.655
[illegible]	3	-37.500	-0.382	-62.685	34.443	20.183	-58.056	59.158
[illegible]	4	-39.473	-1.248	-48.710	32.936	17.719	-58.440	60.063
783	5	-36.903	-0.149	-53.020	35.558	21.589	-58.541	58.632
783	6	-395.375	-68.461	-340.294	50.418	-60.862	-402.974	81.429
783	7	-413.507	-73.193	-359.512	45.005	-67.342	-419.358	82.592
783	8	405.221	85.160	302.904	23.157	405.390	33.492	4.118
783	9	-17.937	3.392	-46.892	33.890	23.156	-42.801	53.734
784	1	-31.404	-8.090	-44.668	-10.803	-3.854	-35.541	111.412
784	2	-48.232	-8.937	-60.180	0.122	-8.836	-48.233	89.821
784	3	-47.354	-9.527	-54.627	-3.687	-9.171	-47.710	95.515
784	4	-48.146	-8.909	-51.016	-0.401	-8.905	-48.150	90.586
784	5	-47.268	-9.599	-55.463	-4.211	-9.134	-47.733	96.303
784	6	-357.665	-24.330	-338.197	192.920	53.946	-445.942	65.412
784	7	-370.218	-23.286	-356.304	208.528	74.493	-467.998	54.878
784	8	333.038	7.268	295.118	-251.152	459.501	-129.194	151.482
784	9	-30.526	-8.780	-49.114	-14.613	-1.438	-37.368	116.675
785	1	-37.572	0.804	-45.629	34.936	21.519	-58.287	59.371
785	2	-52.751	-2.131	-60.727	34.359	15.233	-70.116	63.188
785	3	-52.849	-1.334	-65.525	37.975	18.794	-72.978	62.074
785	4	-52.938	-2.034	-51.138	35.249	15.990	-70.964	62.916
785	5	-53.036	-1.237	-55.935	38.865	19.567	-73.841	61.840
785	6	-334.393	-54.524	-331.002	32.543	-50.793	-339.127	83.454
785	7	-343.448	-53.059	-348.843	24.041	-55.049	-345.459	85.218
[illegible]	8	290.009	65.113	285.288	53.048	301.894	53.228	12.628

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E 395

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
785	9	-37.571	1.601	-59.426	38.602	25.275	-61.345	58.480
786	1	-46.999	-9.449	-47.559	-4.265	-9.014	-47.434	96.109
786	2	-59.838	-9.624	-63.468	5.100	-9.111	-60.351	84.258
786	3	-61.482	-10.594	-67.331	2.194	-10.500	-61.575	87.534
786	4	-60.291	-9.704	-53.311	5.190	-9.177	-60.813	84.221
786	5	-61.935	-10.674	-58.234	2.285	-10.573	-62.036	87.452
786	6	-302.108	-15.185	-330.530	168.549	62.690	-379.384	65.201
786	7	-305.971	-13.042	-347.282	181.501	73.719	-392.733	64.451
786	8	228.223	-5.710	278.911	-204.873	346.916	-125.404	149.914
786	9	-48.643	-13.419	-52.474	-6.970	-9.187	-49.875	100.019
787	1	-42.771	-3.576	-43.915	-0.506	-3.569	-42.778	90.740
787	2	-56.744	-5.332	-60.054	7.775	-4.182	-57.894	81.585
787	3	-57.607	-5.252	-64.141	5.486	-4.693	-58.175	84.080
787	4	-57.254	-5.378	-51.292	7.901	-4.201	-58.431	81.528
787	5	-58.115	-5.308	-55.378	5.612	-4.718	-58.706	83.999
787	6	-319.397	-37.778	-349.661	156.287	31.941	-388.118	65.958
787	7	-324.748	-39.211	-368.378	167.108	37.811	-401.770	65.254
787	8	257.675	34.378	309.378	-181.557	359.167	-67.112	150.794
787	9	-43.634	-3.506	-48.001	-2.795	-3.312	-43.827	93.356
788	1	-10.659	-2.437	-37.393	20.004	13.843	-26.990	50.771
788	2	-32.711	-4.727	-55.150	23.101	8.288	-45.727	60.601
788	3	-28.141	-4.383	-58.115	24.285	10.773	-43.298	58.032
788	4	-32.579	-4.990	-46.334	23.572	8.584	-46.145	50.263
788	5	-28.110	-4.536	-49.299	24.758	11.097	-43.744	57.729
788	6	-430.811	-45.744	-372.122	84.015	-29.211	-448.344	78.212
788	7	-455.155	-47.894	-394.396	83.321	-31.507	-471.542	78.973
788	8	470.253	46.192	352.013	-45.334	475.338	41.322	173.990
788	9	-6.299	-2.142	-40.358	21.139	17.165	-25.397	47.560
789	1	-55.190	-4.701	-45.321	4.897	-4.241	-56.650	84.625
789	2	-65.472	-5.947	-61.943	11.606	-3.797	-68.621	79.508
789	3	-69.884	-5.113	-66.511	10.195	-4.523	-71.475	81.134
789	4	-66.827	-6.002	-53.028	11.993	-3.723	-69.106	79.239
789	5	-70.339	-5.169	-57.596	10.582	-4.456	-71.942	80.859
789	6	-265.152	-29.492	-342.715	133.650	30.852	-325.497	65.700
789	7	-261.743	-30.020	-359.926	141.884	37.299	-329.062	64.617
789	8	162.124	21.979	295.462	-141.253	249.731	-65.627	148.192
789	9	-59.603	-4.868	-50.889	3.475	-4.548	-59.823	86.380
790	1	-27.277	-4.117	-40.610	23.565	10.649	-42.043	58.036
790	2	-45.081	-5.719	-57.695	25.475	6.791	-57.592	53.844
790	3	-43.194	-5.697	-61.193	27.509	8.944	-57.736	62.137
790	4	-45.622	-5.885	-48.883	25.744	6.765	-58.274	63.829
790	5	-43.735	-5.864	-52.391	27.778	8.818	-58.418	62.140
790	6	-371.660	-35.665	-363.386	64.052	-23.858	-383.456	79.564
790	7	-387.020	-36.635	-384.206	60.075	-26.621	-397.034	80.336
790	8	353.652	30.338	333.730	-13.122	359.176	29.815	177.714
790	9	-25.389	-4.395	-44.109	25.699	13.074	-42.560	56.251
791	1	-23.104	1.749	-35.959	27.309	19.234	-40.591	57.273
791	2	-42.331	-1.433	-55.274	28.138	12.963	-56.428	52.903
791	3	-39.370	-0.372	-57.929	30.787	16.570	-56.314	51.174

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MENT	LOAD COMB	STRESS RADIAL	STRESS AXIAL	STRESS HOOP	STRESS SHEAR	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
791	4	-42.631	-1.353	-46.355	23.444	12.379	-57.231	62.911
791	5	-35.[illegible]	-1.177	-43.522	31.232	15.335	-57.254	61.199
791	6	-311.384	-53.159	-381.633	51.339	-32.135	-335.742	81.157
791	7	-425.593	-62.800	-425.456	45.746	-35.922	-411.593	82.323
791	8	387.774	71.404	354.413	12.799	393.195	71.282	[illegible]
791	9	-20.444	2.309	-23.614	13.358	23.124	-40.859	[illegible]
792	1	-32.614	-6.774	-38.599	-6.313	-4.962	-32.426	124.335
792	2	-47.393	-7.493	-56.761	3.231	-7.257	-47.311	88.722
792	3	-46.309	-8.121	-53.567	-1.541	-8.111	-46.320	92.352
792	4	-48.145	-7.405	-49.558	3.634	-7.073	-48.477	84.359
792	5	-46.871	-8.041	-51.464	0.021	-8.041	-46.871	93.353
792	6	-360.077	-21.398	-392.437	178.598	54.956	-436.932	58.715
792	7	-373.007	-21.148	-424.014	194.726	65.352	-459.503	55.249
792	8	335.517	8.023	359.207	-222.585	448.975	-104.334	133.215
792	9	-29.341	-7.410	-41.395	-10.491	-3.200	-33.552	111.868
793	1	-37.361	1.397	-39.655	29.456	15.525	-53.470	61.329
793	2	-52.355	-2.213	-57.383	29.346	11.310	-65.890	65.256
793	3	-52.371	-1.421	-60.564	32.739	14.585	-68.378	63.943
793	4	-52.934	-2.374	-48.831	25.225	10.996	-66.256	65.415
793	5	-52.890	-1.582	-52.013	32.619	14.261	-69.734	64.092
793	6	-331.276	-49.128	-374.774	34.599	-44.947	-335.457	93.110
793	7	-339.434	-52.795	-395.053	24.625	-50.685	-341.534	85.125
793	8	285.218	57.431	348.639	35.112	291.485	52.163	3.532
793	9	-37.367	1.139	-42.836	32.849	19.999	-56.177	60.204
794	1	-43.425	-7.553	-41.034	-1.248	-7.616	-43.469	91.397
794	2	-55.735	-7.331	-56.670	7.015	-6.395	-57.781	81.397
794	3	-57.335	-8.755	-51.382	4.165	-8.393	-58.362	85.095
794	4	-57.172	-7.745	-50.394	7.899	-6.515	-58.401	81.148
794	5	-58.373	-8.620	-53.697	5.135	-8.395	-58.899	84.163
794	6	-307.799	-13.649	-375.179	155.703	53.459	-374.908	55.584
794	7	-311.621	-11.483	-395.172	157.132	53.257	-385.172	55.360
794	8	243.739	-3.620	344.890	-191.631	339.839	-99.672	152.125
794	9	-44.626	-3.335	-44.346	-3.398	-3.298	-45.063	96.246
795	1	-40.329	-3.011	-39.333	1.403	-2.955	-40.331	87.345
795	2	-54.524	-4.527	-57.002	3.343	-3.375	-56.175	80.157
795	3	-55.138	-4.513	-55.586	5.748	-3.625	-55.222	82.536
795	4	-55.224	-4.715	-49.205	3.398	-2.917	-57.022	79.495
795	5	-55.739	-4.631	-51.790	7.503	-3.523	-56.817	81.322
795	6	-321.683	-34.469	-391.987	145.209	25.149	-392.303	57.341
795	7	-327.617	-35.632	-413.489	154.755	31.125	-394.376	55.355
795	8	267.327	31.912	370.128	-162.896	350.593	-51.353	152.925
795	9	-40.843	-2.897	-40.917	-0.791	-2.331	-40.860	91.194
796	1	-15.505	-2.703	-33.365	17.847	9.852	-29.066	54.962
796	2	-35.619	-4.614	-53.370	20.848	5.654	-45.897	53.754
796	3	-32.[illegible]	-4.351	-54.922	21.988	7.774	-44.226	51.125
796	4	-33.116	-4.833	-45.827	21.012	5.329	-48.279	54.139
796	5	-33.598	-4.570	-47.379	22.153	7.403	-45.569	51.615
796	6	-420.557	-39.773	-411.333	79.285	-23.924	-436.406	78.636
796	7	-444.209	-41.368	-436.415	77.345	-27.519	-453.457	79.522
796	8	443.555	38.518	404.752	-45.665	448.640	33.433	173.545

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ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
796	9	-10.987	-2.444	-34.917	18.988	12.746	-26.178	51.339
797	1	-50.728	-3.812	-40.260	5.638	-3.144	-51.396	83.242
[illegible]	2	-61.704	-4.992	-58.472	11.839	-2.619	-64.076	78.668
[illegible]	3	-64.608	-5.084	-61.544	10.473	-3.295	-66.397	80.306
797	4	-61.629	-5.039	-50.374	12.577	-2.370	-64.298	78.016
797	5	-64.533	-5.132	-53.447	11.211	-3.086	-66.579	79.659
797	6	-271.271	-27.137	-385.451	125.139	25.610	-324.019	67.144
797	7	-269.647	-27.494	-405.846	131.384	30.095	-327.237	66.331
797	8	183.525	21.526	358.146	-128.948	254.804	-49.752	151.067
797	9	-53.632	-3.905	-43.333	4.271	-3.540	-53.997	85.125
798	1	-29.078	-3.794	-36.049	20.231	7.419	-40.292	61.000
798	2	-46.393	-5.160	-55.461	22.140	4.476	-56.029	66.479
798	3	-44.501	-5.176	-57.573	24.007	6.192	-55.870	64.659
798	4	-47.668	-5.309	-47.709	21.976	4.031	-57.010	66.971
798	5	-45.776	-5.326	-49.820	23.842	5.714	-56.817	65.153
798	6	-365.408	-30.784	-403.251	61.312	-19.904	-376.289	79.937
798	7	-379.052	-31.237	-426.512	57.243	-22.058	-388.231	80.890
798	8	345.530	25.533	388.910	-19.299	346.690	24.373	176.561
798	9	-27.186	-3.811	-38.161	22.098	9.499	-40.497	58.937
799	1	-26.026	0.847	-33.337	22.870	13.936	-39.115	60.217
799	2	-44.254	-1.911	-53.790	24.058	8.964	-55.131	65.673
799	3	-41.685	-0.939	-55.169	26.477	12.095	-54.721	63.788
799	4	-45.752	-2.287	-46.534	23.776	8.191	-56.232	66.214
799	5	-43.183	-1.315	-47.913	26.195	11.283	-55.781	64.315
799	6	-379.144	-51.605	-420.209	50.865	-43.888	-386.861	81.373
[illegible]	7	-394.864	-55.380	-444.973	44.922	-49.536	-400.708	82.588
[illegible]	8	368.788	61.047	414.338	-0.652	368.789	61.045	179.878
[illegible]	9	-23.457	1.819	-34.716	25.289	17.453	-39.090	58.276
800	1	-30.446	-5.472	-34.397	-2.764	-5.170	-30.748	96.241
800	2	-47.371	-6.125	-54.795	6.014	-5.266	-48.230	81.870
800	3	-45.796	-6.685	-56.308	2.674	-6.503	-45.978	86.105
800	4	-48.599	-5.955	-47.720	7.447	-4.692	-49.863	80.373
800	5	-47.024	-6.515	-49.234	4.107	-6.102	-47.437	84.268
800	6	-359.781	-19.117	-420.827	164.062	47.044	-425.943	68.037
800	7	-372.287	-18.275	-444.517	176.189	54.466	-445.029	67.566
800	8	335.490	8.241	411.760	-194.303	425.887	-82.155	155.050
800	9	-28.871	-6.032	-35.910	-6.104	-4.503	-30.400	104.063
801	1	-36.921	-0.087	-35.440	23.882	11.654	-48.663	63.819
801	2	-51.656	-2.366	-55.390	24.195	7.525	-61.548	67.764
801	3	-51.567	-1.625	-57.292	27.192	10.322	-63.515	66.280
801	4	-52.494	-2.702	-47.822	23.472	6.617	-61.815	68.343
801	5	-52.405	-1.961	-49.724	26.469	9.378	-63.746	66.808
801	6	-326.054	-43.603	-413.001	35.192	-39.284	-330.373	83.003
801	7	-333.774	-46.457	-436.545	28.131	-43.728	-336.502	84.460
801	8	280.614	49.545	401.155	19.406	282.233	47.927	4.767
801	9	-36.832	0.653	-37.342	26.880	14.680	-50.859	62.443
802	1	-40.352	-5.989	-36.310	1.615	-5.913	-40.427	87.314
802	2	-54.014	-6.235	-56.245	9.045	-4.580	-55.669	79.630
[illegible]	3	-54.756	-6.986	-58.263	6.578	-6.096	-55.645	82.300

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ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
802	4	-54.572	-5.981	-48.840	10.408	-3.845	-56.708	78.405
802	5	-55.314	-6.731	-50.857	7.941	-5.466	-56.579	80.948
802	6	-309.822	-11.941	-414.147	143.912	46.227	-367.991	67.991
802	7	-315.019	-10.490	-436.741	152.692	52.881	-378.392	67.460
802	8	253.459	-1.182	399.688	-159.974	330.595	-78.318	154.258
802	9	-41.093	-6.740	-38.327	-0.850	-6.719	-41.114	91.418
803	1	-38.269	-2.629	-34.439	3.417	-2.304	-38.594	84.571
803	2	-52.683	-4.100	-55.237	10.258	-2.023	-54.760	78.552
803	3	-52.854	-3.962	-56.649	8.262	-2.504	-54.212	80.662
803	4	-53.544	-4.228	-48.357	11.419	-1.712	-56.060	77.574
803	5	-53.715	-4.091	-49.769	9.423	-2.361	-55.444	79.601
803	6	-321.745	-31.292	-428.817	134.858	21.667	-374.705	68.560
803	7	-328.356	-32.325	-452.325	142.332	25.005	-385.687	68.060
803	8	272.039	29.149	420.278	-145.181	339.872	-38.684	154.956
803	9	-38.440	-2.492	-35.851	1.421	-2.436	-38.496	87.739
804	1	-20.590	-2.816	-30.971	15.565	6.220	-29.626	59.862
804	2	-40.745	-4.413	-52.859	18.440	3.305	-48.465	67.285
804	3	-36.504	-4.239	-53.373	19.475	4.917	-45.661	64.818
804	4	-43.347	-4.643	-46.410	18.415	2.718	-50.708	68.210
804	5	-39.105	-4.469	-46.925	19.450	4.255	-47.830	65.840
804	6	-409.848	-34.063	-445.500	73.940	-20.038	-423.873	79.259
804	7	-429.081	-35.003	-471.371	72.713	-22.015	-442.070	79.872
804	8	416.411	31.621	447.739	-45.525	421.724	26.308	173.343
804	9	-16.348	-2.642	-31.486	16.600	8.463	-27.455	56.215
805	1	-45.555	-3.118	-35.774	6.508	-2.142	-46.531	81.473
805	2	-56.977	-4.225	-56.201	12.207	-1.537	-59.665	77.582
805	3	-59.257	-4.253	-58.066	10.955	-2.151	-61.358	79.140
805	4	-56.882	-4.290	-48.917	13.173	-1.175	-59.997	76.695
805	5	-59.162	-4.317	-50.782	11.921	-1.838	-61.641	78.252
805	6	-273.439	-24.927	-423.076	116.909	21.425	-319.792	68.372
805	7	-274.365	-25.401	-445.910	121.903	24.346	-324.113	67.800
805	8	198.989	20.707	410.880	-116.867	256.831	-37.135	153.667
805	9	-47.835	-3.145	-37.639	5.256	-2.535	-48.445	83.381
806	1	-30.813	-3.414	-32.974	16.813	4.574	-38.802	64.585
806	2	-47.573	-4.572	-54.372	18.761	2.462	-54.608	69.445
806	3	-45.750	-4.617	-55.424	20.375	3.766	-54.134	67.633
806	4	-49.436	-4.697	-47.558	18.372	1.880	-56.014	70.301
806	5	-47.612	-4.742	-48.611	19.986	3.129	-55.485	68.501
806	6	-357.719	-26.363	-438.367	57.652	-16.619	-367.463	80.406
806	7	-369.428	-26.646	-463.109	55.075	-18.015	-378.060	81.092
806	8	331.182	21.418	434.973	-24.039	333.036	19.563	175.588
806	9	-28.989	-3.459	-34.027	18.427	6.192	-38.641	62.355
807	1	-28.756	-0.058	-31.095	18.607	9.090	-37.904	63.818
807	2	-46.261	-2.441	-53.363	19.969	5.293	-53.996	68.826
807	3	-43.873	-1.598	-53.805	22.051	7.810	-53.281	66.894
807	4	-48.425	-2.950	-47.082	19.379	4.188	-55.563	69.779
807	5	-46.037	-2.106	-47.524	21.461	6.637	-54.781	67.832
807	6	-369.535	-45.723	-453.183	48.638	-38.575	-376.683	81.639
807	7	-382.643	-48.486	-478.840	44.764	-42.593	-388.536	82.500
807	8	349.571	51.748	455.736	-9.316	349.862	51.457	178.210

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
807	9	-26.368	0.784	-31.537	20.689	11.954	-37.538	61.636
808	1	-31.038	-4.285	-31.661	1.053	-4.244	-31.079	87.747
	2	-47.697	-4.870	-53.933	8.881	-3.102	-49.465	78.737
	3	-45.967	-5.337	-54.485	5.998	-4.470	-46.834	81.774
808	4	-49.557	-4.667	-47.762	10.723	-2.237	-51.988	77.231
808	5	-47.828	-5.134	-48.315	7.841	-3.740	-49.222	79.915
808	6	-356.155	-16.339	-454.262	151.150	41.162	-413.657	69.172
808	7	-367.488	-15.857	-479.140	160.166	46.159	-429.506	68.833
808	8	328.664	8.090	455.025	-169.055	401.339	-64.585	156.737
808	9	-29.308	-4.752	-32.214	-1.828	-4.517	-29.443	94.235
809	1	-36.351	-0.629	-32.532	18.709	7.376	-44.356	66.835
809	2	-50.697	-2.608	-54.394	19.295	4.176	-57.482	70.626
809	3	-50.500	-1.952	-55.318	21.802	6.401	-58.853	69.035
809	4	-51.889	-3.046	-47.690	18.317	3.059	-57.996	71.564
809	5	-51.692	-2.390	-48.614	20.824	5.227	-59.310	69.905
809	6	-318.424	-38.687	-446.886	33.766	-34.668	-322.442	83.213
809	7	-325.561	-40.821	-471.800	29.202	-37.857	-328.525	84.204
809	8	272.543	42.335	445.469	7.581	272.792	42.086	1.884
809	9	-36.153	0.026	-33.456	21.216	9.818	-45.945	65.226
810	1	-37.938	-4.489	-32.948	4.180	-3.975	-38.452	82.982
810	2	-51.632	-4.715	-54.845	10.887	-2.312	-54.035	77.552
810	3	-51.939	-5.327	-55.859	8.775	-3.729	-53.536	79.683
810	4	-52.569	-4.425	-48.244	12.484	-1.380	-55.614	76.294
810	5	-52.876	-5.037	-49.258	10.372	-2.884	-55.028	78.278
810	6	-307.897	-9.681	-448.372	133.624	41.432	-359.011	69.067
	7	-313.730	-8.778	-472.611	140.208	45.886	-368.395	68.700
	8	256.630	0.067	445.624	-141.187	319.111	-62.412	156.129
810	9	-38.244	-5.101	-33.962	2.069	-4.972	-38.373	86.441
811	1	-36.690	-2.335	-31.750	5.255	-1.549	-37.476	81.494
811	2	-51.006	-3.667	-54.366	11.473	-1.033	-53.641	77.069
811	3	-50.860	-3.519	-54.898	9.740	-1.593	-52.786	78.816
811	4	-52.264	-3.827	-48.282	12.843	-0.632	-55.459	76.031
811	5	-52.118	-3.679	-48.814	11.110	-1.252	-54.545	77.679
811	6	-318.425	-28.332	-461.164	125.543	18.453	-365.211	69.561
811	7	-325.163	-29.234	-485.851	131.253	20.591	-374.988	69.212
811	8	271.441	26.428	462.314	-129.413	327.135	-29.266	156.714
811	9	-36.543	-2.187	-32.282	3.522	-1.829	-36.901	84.206
812	1	-25.368	-2.738	-29.595	13.328	3.429	-31.537	65.164
812	2	-44.591	-4.084	-53.103	16.028	1.490	-50.166	70.821
812	3	-40.763	-3.978	-52.893	16.917	2.618	-47.360	68.696
812	4	-47.936	-4.297	-47.529	15.924	0.896	-53.130	71.938
812	5	-44.109	-4.191	-47.318	16.813	1.946	-50.247	69.944
812	6	-398.881	-29.198	-475.815	67.811	-17.151	-410.927	79.927
812	7	-414.420	-29.825	-502.039	67.219	-18.415	-425.830	80.366
812	8	390.329	26.215	483.974	-44.198	395.617	20.927	173.177
812	9	-21.540	-2.633	-29.384	14.217	4.986	-29.160	61.810
813	1	-41.126	-2.611	-32.504	7.293	-1.276	-42.461	79.628
	2	-52.606	-3.638	-54.822	12.559	-0.604	-55.639	76.421
	3	-54.235	-3.621	-55.753	11.457	-1.149	-56.708	77.821

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E 400

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
813	4	-52.840	-3.726	-48.270	13.642	-0.191	-56.375	75.473
813	5	-54.469	-3.709	-49.201	12.539	-0.780	-57.398	76.854
813	6	-269.422	-22.793	-456.018	109.829	19.025	-311.241	69.155
813	7	-271.906	-23.299	-480.403	113.787	20.916	-316.122	68.764
813	8	204.982	19.490	455.200	-106.476	253.442	-28.969	155.528
813	9	-42.755	-2.595	-33.435	6.190	-1.662	-43.688	81.432
814	1	-32.390	-2.971	-30.904	13.650	2.386	-37.749	68.569
814	2	-48.540	-3.932	-54.024	15.501	0.925	-53.397	72.600
814	3	-46.830	-3.993	-54.301	16.822	1.823	-52.646	70.926
814	4	-50.884	-4.035	-47.980	15.068	0.392	-55.311	73.624
814	5	-49.173	-4.096	-48.257	16.389	1.232	-54.503	71.988
814	6	-348.646	-22.082	-469.646	51.866	-14.043	-356.686	81.188
814	7	-358.587	-22.272	-495.227	50.367	-14.891	-365.968	81.663
814	8	315.808	17.628	474.258	-25.429	317.961	15.474	175.160
814	9	-30.680	-3.032	-31.181	14.972	3.521	-37.235	66.358
815	1	-31.158	-0.819	-29.699	14.719	5.148	-37.125	67.931
815	2	-47.923	-2.886	-53.545	16.083	2.267	-53.077	72.231
815	3	-45.765	-2.187	-53.336	17.781	4.147	-52.100	70.391
815	4	-50.586	-3.440	-48.026	15.424	1.157	-55.184	73.400
815	5	-48.428	-2.741	-47.817	17.122	2.963	-54.133	71.573
815	6	-359.070	-40.740	-482.560	43.830	-34.815	-364.994	82.302
815	7	-369.913	-42.730	-508.590	41.461	-37.558	-375.085	82.889
815	8	330.468	43.986	491.090	-13.716	331.124	43.331	177.265
815	9	-29.000	-0.120	-29.491	16.417	7.303	-36.424	65.667
816	1	-32.005	-3.223	-29.843	4.296	-2.595	-32.633	81.688
816	2	-48.272	-3.694	-53.719	11.395	-0.950	-51.016	76.460
816	3	-46.475	-4.063	-53.590	9.019	-2.224	-48.314	78.479
816	4	-50.717	-3.507	-48.277	13.349	0.005	-54.230	75.255
816	5	-48.920	-3.876	-48.148	10.973	-1.345	-51.451	77.011
816	6	-350.549	-12.871	-483.616	141.525	38.597	-402.019	70.014
816	7	-360.536	-12.618	-509.063	148.166	41.928	-415.083	69.789
816	8	318.706	6.771	491.457	-149.465	378.761	-53.283	158.110
816	9	-30.209	-3.592	-29.713	1.920	-3.454	-30.346	85.893
817	1	-35.645	-1.109	-30.472	14.140	3.941	-40.696	70.343
817	2	-49.388	-2.828	-53.992	14.732	1.440	-53.658	73.836
817	3	-49.058	-2.275	-54.199	16.709	3.079	-54.413	72.230
817	4	-51.011	-3.303	-47.984	13.790	0.396	-54.710	74.983
817	5	-50.681	-2.750	-48.192	15.767	1.971	-55.403	73.329
817	6	-306.600	-34.405	-476.895	28.244	-31.505	-309.500	84.138
817	7	-312.986	-35.956	-502.609	25.402	-33.646	-315.296	84.804
817	8	259.922	36.113	483.369	2.388	259.948	36.087	0.611
817	9	-35.315	-0.556	-30.679	16.117	5.766	-41.638	68.579
818	1	-36.209	-3.418	-30.568	6.491	-2.180	-37.448	79.199
818	2	-49.582	-3.547	-54.135	12.820	-0.218	-52.912	75.441
818	3	-49.520	-4.055	-54.418	11.063	-1.506	-52.069	77.024
818	4	-51.040	-3.270	-48.198	14.468	0.769	-55.081	74.397
818	5	-50.978	-3.778	-48.481	12.711	-0.572	-54.184	75.845
818	6	-300.189	-6.523	-478.192	129.436	42.382	-349.095	69.301
818	7	-305.945	-5.899	-503.358	134.508	45.570	-357.415	69.060
818	8	251.248	-0.864	484.134	-130.304	306.491	-56.107	157.025

E 401

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
818	9	-36.147	-3.927	-30.851	4.735	-3.245	-36.828	81.810
819	1	-35.698	-1.627	-29.749	6.636	-0.380	-36.945	79.358
	2	-49.769	-2.722	-53.928	12.264	0.282	-52.774	76.232
	3	-49.314	-2.551	-53.823	10.856	-0.154	-51.712	77.547
819	4	-51.564	-2.899	-48.482	13.640	0.662	-55.126	75.363
819	5	-51.109	-2.728	-48.377	12.232	0.188	-54.026	76.588
819	6	-313.097	-22.971	-489.416	116.144	17.795	-353.865	70.658
819	7	-319.566	-23.726	-514.726	120.437	19.103	-362.396	70.423
819	8	266.891	22.012	498.050	-114.965	312.406	-23.502	158.401
819	9	-35.243	-1.456	-29.645	5.227	-0.666	-36.034	81.402
820	1	-29.598	-2.524	-28.756	11.162	1.483	-33.607	70.245
820	2	-47.995	-3.634	-53.694	13.561	0.183	-51.812	74.278
820	3	-44.667	-3.587	-53.022	14.279	0.887	-49.142	72.596
820	4	-51.778	-3.813	-48.744	13.484	-0.282	-55.309	75.326
820	5	-48.450	-3.766	-48.072	14.201	0.364	-52.581	73.778
820	6	-389.027	-24.443	-502.994	59.476	-14.986	-398.484	80.965
820	7	-401.498	-24.844	-529.231	59.272	-15.737	-410.605	81.265
820	8	367.321	21.307	515.525	-40.023	371.890	16.738	173.487
820	9	-26.270	-2.478	-28.084	11.879	2.437	-31.186	67.519
821	1	-42.263	-2.852	-29.607	8.422	-1.127	-43.988	78.429
821	2	-53.844	-3.833	-52.232	13.760	-0.297	-57.380	75.588
821	3	-55.347	-3.869	-52.573	12.737	-0.890	-58.326	76.835
821	4	-54.493	-3.903	-46.668	14.951	0.184	-58.581	74.707
821	5	-55.996	-3.939	-47.009	13.928	-0.447	-59.488	75.923
821	6	-273.211	-22.233	-459.754	112.753	20.981	-316.425	69.030
821	7	-275.769	-22.625	-483.280	116.208	22.630	-321.025	68.722
	8	205.723	18.232	464.316	-106.701	254.010	-30.054	155.651
	9	-43.766	-2.888	-29.948	7.399	-1.590	-45.064	80.049
822	1	-35.270	-3.442	-28.453	12.906	1.133	-39.846	70.478
822	2	-51.722	-4.643	-51.980	15.081	-0.226	-56.139	73.676
822	3	-49.975	-4.667	-51.674	16.148	0.499	-55.141	72.258
822	4	-54.665	-4.806	-46.957	14.807	-0.740	-58.731	74.645
822	5	-52.917	-4.830	-46.652	15.873	-0.063	-57.685	73.283
822	6	-358.620	-27.275	-475.870	57.252	-17.661	-368.234	80.468
822	7	-367.597	-27.618	-500.479	56.555	-18.457	-376.758	80.799
822	8	318.902	22.304	485.069	-33.278	322.590	18.616	173.676
822	9	-33.523	-3.466	-28.147	13.973	2.026	-39.015	68.541
823	1	-34.791	-1.764	-27.679	13.058	2.774	-39.330	70.832
823	2	-51.943	-3.882	-51.796	14.572	0.190	-56.016	74.383
823	3	-49.806	-3.263	-51.119	15.969	1.688	-54.758	72.770
823	4	-55.220	-4.476	-47.245	14.039	-0.850	-58.845	75.520
823	5	-53.083	-3.858	-46.567	15.437	0.582	-57.524	73.951
823	6	-371.599	-42.917	-486.703	44.715	-36.942	-377.573	82.389
823	7	-381.279	-44.560	-511.450	43.274	-39.087	-386.751	82.792
823	8	334.547	43.995	498.465	-18.771	335.755	42.788	176.318
823	9	-32.654	-1.146	-27.002	14.456	4.480	-38.282	68.730
824	1	-35.217	-4.064	-27.872	4.211	-3.505	-35.776	82.435
824	2	-52.142	-4.838	-51.977	11.059	-2.380	-54.600	77.470
	3	-50.186	-5.172	-51.407	8.715	-3.543	-51.814	79.416

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E402

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
824	4	-55.309	-4.739	-47.459	13.150	-1.524	-58.524	76.261
824	5	-53.353	-5.072	-46.890	10.806	-2.754	-55.661	77.942
824	6	-367.775	-19.741	-486.962	136.839	27.616	-415.133	70.910
824	7	-377.073	-19.675	-511.181	142.590	30.241	-426.991	70.706
824	8	329.148	12.414	497.888	-143.944	394.799	-43.228	158.865
824	9	-33.261	-4.398	-27.302	1.867	-4.273	-33.381	86.313
825	1	-41.228	-2.470	-28.734	17.207	4.056	-47.765	69.198
825	2	-57.126	-4.626	-52.915	18.926	1.484	-63.237	72.104
825	3	-56.351	-4.061	-52.527	20.809	3.209	-63.622	70.741
825	4	-59.742	-5.221	-48.007	18.207	0.300	-65.263	73.130
825	5	-58.967	-4.656	-47.619	20.091	1.968	-65.591	71.752
825	6	-355.363	-44.498	-488.929	53.641	-35.502	-364.358	80.480
825	7	-362.430	-46.039	-513.688	51.736	-37.794	-370.675	80.945
825	8	300.319	44.066	498.887	-18.752	301.684	42.701	175.836
825	9	-40.453	-1.905	-28.346	19.091	5.949	-48.307	67.636
826	1	-42.724	-4.487	-29.090	4.799	-3.894	-43.317	82.954
826	2	-58.005	-5.186	-53.149	10.184	-3.290	-59.901	79.456
826	3	-57.743	-5.571	-52.946	8.592	-4.192	-59.121	80.884
826	4	-60.292	-5.073	-48.225	11.707	-2.693	-62.672	78.511
826	5	-60.030	-5.458	-48.023	10.115	-3.643	-61.844	79.829
826	6	-345.315	-18.792	-487.262	109.402	14.473	-378.582	73.087
826	7	-351.415	-18.611	-511.332	113.438	16.376	-386.403	72.858
826	8	285.320	10.326	495.709	-111.582	324.899	-29.252	160.470
826	9	-42.461	-4.872	-28.887	3.207	-4.600	-42.733	85.157
827	1	-41.434	-2.110	-28.244	5.940	-1.232	-42.311	81.594
827	2	-57.021	-3.357	-52.634	11.091	-1.155	-59.223	78.770
827	3	-56.433	-3.191	-52.172	9.780	-1.451	-58.173	79.913
827	4	-59.552	-3.567	-48.073	12.441	-0.927	-62.192	78.018
827	5	-58.964	-3.401	-47.611	11.130	-1.254	-61.111	79.083
827	6	-349.749	-26.520	-493.011	106.268	5.287	-381.557	73.336
827	7	-356.265	-27.271	-516.972	109.854	6.037	-389.574	73.132
827	8	293.310	24.798	503.604	-105.277	329.665	-11.555	160.949
827	9	-40.846	-1.943	-27.782	4.629	-1.400	-41.389	83.305
828	1	-31.195	-2.984	-26.492	12.824	1.973	-36.154	68.862
828	2	-49.638	-4.211	-51.343	16.032	0.877	-54.727	72.391
828	3	-46.283	-4.180	-50.349	16.579	1.564	-52.028	70.889
828	4	-53.916	-4.407	-47.197	16.220	0.432	-58.757	73.382
828	5	-50.561	-4.376	-46.203	16.766	1.058	-56.006	72.009
828	6	-392.458	-27.263	-499.894	77.136	-11.639	-408.083	78.549
828	7	-403.687	-27.679	-524.581	77.530	-12.320	-419.047	78.794
828	8	366.249	23.342	515.432	-55.747	375.084	14.507	170.994
828	9	-27.840	-2.953	-25.498	13.370	2.867	-33.662	66.472
829	1	-48.904	-1.940	-29.246	6.138	-1.151	-49.693	82.675
829	2	-63.726	-2.840	-53.728	10.388	-1.116	-65.450	80.579
829	3	-64.293	-2.773	-53.533	9.511	-1.336	-65.730	81.409
829	4	-65.860	-2.961	-48.798	11.398	-0.959	-67.862	80.038
829	5	-66.428	-2.894	-48.603	10.521	-1.197	-68.125	80.837
829	6	-344.222	-19.603	-495.634	89.170	3.277	-367.103	75.608
829	7	-348.745	-20.075	-519.781	91.792	3.822	-372.643	75.407
829	8	268.539	17.443	504.683	-85.534	294.907	-8.924	162.867

E 403

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
829	9	-49.472	-1.873	-29.051	5.261	-1.298	-50.046	83.767
830	1	-37.284	-3.045	-27.319	14.953	2.565	-42.895	69.431
	2	-53.597	-4.079	-52.022	18.055	1.805	-59.482	71.949
	3	-51.916	-4.094	-51.389	18.876	2.458	-58.469	70.855
830	4	-56.948	-4.248	-47.446	18.168	1.407	-62.605	72.706
830	5	-55.267	-4.263	-46.813	18.988	2.029	-61.560	71.664
830	6	-358.970	-23.621	-497.748	77.711	-6.488	-376.103	77.567
830	7	-366.877	-23.897	-522.297	77.721	-7.107	-383.667	77.809
830	8	313.428	19.102	511.480	-51.126	322.056	10.473	170.421
830	9	-35.602	-3.060	-26.686	15.773	3.330	-41.993	67.944
831	1	-36.153	-0.707	-26.511	16.040	5.474	-42.334	68.926
831	2	-52.742	-2.283	-51.540	18.921	4.023	-59.049	71.565
831	3	-50.775	-1.756	-50.656	20.010	5.374	-57.906	70.385
831	4	-56.311	-2.770	-47.326	18.866	3.209	-62.291	72.413
831	5	-54.344	-2.243	-46.442	19.955	4.521	-61.109	71.273
831	6	-362.992	-31.259	-503.467	74.737	-15.199	-379.052	77.872
831	7	-371.256	-32.451	-527.884	74.317	-16.866	-386.841	78.156
831	8	320.563	33.375	519.233	-45.137	327.490	26.448	171.275
831	9	-34.186	-0.180	-25.626	17.130	6.952	-41.319	67.393
832	1	-36.151	-3.517	-26.928	1.805	-3.418	-36.251	86.842
832	2	-52.659	-4.212	-52.012	6.536	-3.346	-53.525	82.449
832	3	-50.737	-4.432	-51.234	4.875	-3.925	-51.245	84.053
832	4	-56.207	-4.219	-47.834	7.964	-3.026	-57.400	81.482
832	5	-54.285	-4.439	-47.056	6.304	-3.654	-55.070	82.902
832	6	-361.472	-17.637	-505.247	93.221	6.010	-385.121	75.765
[illegible]	7	-369.597	-17.667	-529.222	96.934	7.265	-394.530	75.575
	8	318.798	11.270	519.847	-100.599	348.783	-18.714	163.402
	9	-34.229	-3.737	-26.150	0.145	-3.737	-34.230	89.727
833	1	-43.715	-0.552	-27.498	17.133	5.421	-49.689	70.777
833	2	-59.268	-1.713	-52.551	19.738	4.405	-65.387	72.776
833	3	-58.523	-1.304	-51.960	20.943	5.542	-65.370	71.896
833	4	-62.431	-2.100	-47.922	19.726	3.776	-68.308	73.409
833	5	-61.686	-1.692	-47.331	20.931	4.888	-68.266	72.547
833	6	-352.441	-23.062	-504.713	70.883	-8.456	-367.048	78.356
833	7	-358.459	-23.925	-529.313	70.205	-9.789	-372.595	78.615
833	8	289.825	24.537	518.867	-37.957	295.149	19.213	172.015
833	9	-42.969	-0.144	-26.907	18.338	6.635	-49.749	69.711
834	1	-43.572	-3.743	-27.997	3.829	-3.378	-43.937	84.557
834	2	-59.147	-4.271	-53.177	8.279	-3.049	-60.369	81.604
834	3	-58.396	-4.538	-52.678	7.084	-3.622	-59.312	82.630
834	4	-62.317	-4.268	-48.597	9.409	-2.781	-63.804	81.019
834	5	-61.566	-4.535	-48.098	8.214	-3.375	-62.726	81.965
834	6	-352.709	-14.700	-507.971	90.217	7.871	-375.282	75.953
834	7	-358.693	-14.579	-532.183	93.215	9.049	-382.321	75.776
834	8	290.424	7.399	520.962	-92.353	317.894	-20.070	163.435
834	9	-42.821	-4.010	-27.499	2.634	-3.832	-42.999	86.134
835	1	-42.626	-1.485	-27.529	4.762	-0.940	-43.170	83.481
835	2	-58.386	-2.459	-52.961	9.094	-1.017	-59.827	80.992
	3	-57.453	-2.327	-52.313	8.065	-1.172	-58.609	81.845

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E404

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
835	4	-61.682	-2.615	-48.568	10.149	-0.919	-63.377	80.517
835	5	-60.749	-2.483	-48.021	9.120	-1.089	-62.143	81.308
835	6	-355.193	-20.519	-512.653	89.074	1.711	-377.424	75.986
835	7	-361.364	-21.095	-536.569	91.823	2.101	-384.562	75.822
835	8	295.426	19.538	526.729	-88.766	321.519	-6.554	153.619
835	9	-41.693	-1.353	-26.832	3.733	-1.010	-42.036	84.756
836	1	-32.481	-2.570	-25.861	12.918	2.236	-37.288	69.590
836	2	-49.729	-3.520	-51.479	16.038	1.500	-54.751	72.616
836	3	-46.973	-3.529	-50.480	16.465	2.006	-52.508	71.418
836	4	-53.869	-3.678	-47.467	16.444	1.229	-58.777	73.382
836	5	-51.112	-3.686	-46.468	16.871	1.702	-56.502	72.284
836	6	-371.482	-21.468	-514.389	75.734	-5.784	-387.166	78.299
836	7	-380.490	-21.718	-538.585	76.157	-6.221	-395.986	78.498
836	8	338.697	17.784	532.518	-53.640	347.425	9.056	170.757
836	9	-29.725	-2.579	-24.861	13.345	2.882	-35.187	67.742
837	1	-48.137	-1.658	-28.065	6.222	-0.840	-48.956	82.505
837	2	-62.467	-2.485	-53.537	10.245	-0.783	-64.169	80.569
837	3	-62.380	-2.420	-53.096	9.564	-0.931	-63.869	81.152
837	4	-65.688	-2.591	-48.870	11.087	-0.699	-67.580	80.318
837	5	-65.602	-2.526	-48.429	10.407	-0.853	-67.275	80.869
837	6	-334.773	-17.854	-513.679	84.889	3.451	-356.079	75.910
837	7	-338.952	-18.288	-537.964	87.085	3.835	-361.077	75.745
837	8	258.262	16.148	527.251	-80.504	282.586	-8.175	163.187
837	9	-48.051	-1.594	-27.624	5.541	-0.942	-48.703	83.290
838	1	-39.301	-2.634	-26.720	13.486	1.791	-43.727	71.831
838	2	-55.307	-3.344	-52.379	16.114	1.247	-59.899	74.095
838	3	-53.721	-3.399	-51.656	16.656	1.614	-58.735	73.247
838	4	-59.056	-3.486	-47.944	16.555	1.072	-63.614	74.605
838	5	-57.469	-3.540	-47.222	17.097	1.422	-62.433	73.811
838	6	-356.076	-16.935	-515.769	67.106	-4.139	-368.871	79.204
838	7	-362.852	-17.019	-540.224	67.121	-4.449	-375.423	79.392
838	8	304.272	12.508	532.550	-42.314	310.285	6.495	171.912
838	9	-37.714	-2.689	-25.998	14.027	2.236	-42.640	70.652
839	1	-38.368	-0.379	-26.260	14.415	4.471	-43.218	71.402
839	2	-54.559	-1.536	-52.173	16.926	3.406	-59.501	73.721
839	3	-52.792	-1.193	-51.302	17.633	4.256	-58.242	72.824
839	4	-58.433	-1.838	-48.032	17.292	3.027	-63.298	74.286
839	5	-56.667	-1.494	-47.160	17.998	3.857	-62.019	73.438
839	6	-358.581	-22.769	-520.520	65.976	-10.272	-371.078	79.274
839	7	-365.525	-23.548	-544.671	65.742	-11.345	-377.728	79.484
839	8	309.252	24.651	538.474	-38.751	314.434	19.469	172.383
839	9	-36.601	-0.036	-25.389	15.122	5.407	-42.045	70.202
840	1	-38.071	-2.960	-26.795	3.297	-2.653	-38.378	84.681
840	2	-54.336	-3.478	-52.830	7.956	-2.262	-55.552	81.313
840	3	-52.523	-3.600	-52.034	6.791	-2.674	-53.448	82.242
840	4	-58.244	-3.596	-48.773	8.956	-2.165	-59.674	80.925
840	5	-56.431	-3.718	-47.977	7.791	-2.590	-57.558	81.766
840	6	-359.682	-13.640	-523.763	93.513	10.014	-383.336	75.805
840	7	-366.665	-13.645	-547.518	96.555	11.037	-391.349	75.660
840	8	311.167	7.979	540.404	-97.506	339.818	-20.671	163.625

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
840	9	-36.258	-3.082	-25.999	2.131	-2.946	-36.394	86.338
841	1	-43.931	-0.556	-26.759	14.540	3.355	-48.355	73.080
[illegible]	2	-58.572	-1.541	-52.715	16.484	2.880	-62.994	74.984
[illegible]	3	-57.614	-1.256	-52.041	17.183	3.569	-62.440	74.313
841	4	-62.463	-1.811	-48.200	17.018	2.636	-56.912	75.350
841	5	-61.505	-1.526	-47.526	17.715	3.316	-66.347	74.713
841	6	-335.980	-19.668	-521.536	55.441	-10.232	-345.416	80.341
841	7	-340.850	-20.292	-546.076	54.838	-11.170	-349.972	80.556
841	8	269.385	20.740	539.089	-26.228	272.122	18.003	174.043
841	9	-42.973	-0.270	-26.085	15.238	4.609	-47.853	72.242
842	1	-43.540	-2.990	-27.275	4.674	-2.458	-44.072	83.508
842	2	-58.317	-3.290	-53.361	9.092	-1.827	-59.780	80.856
842	3	-57.309	-3.437	-52.762	8.271	-2.195	-58.550	81.465
842	4	-62.218	-3.415	-48.925	9.856	-1.807	-63.826	80.733
842	5	-61.209	-3.562	-48.326	9.034	-2.179	-62.592	81.298
842	6	-338.116	-9.502	-524.912	90.485	13.765	-361.384	75.579
842	7	-343.072	-9.351	-549.073	93.075	14.851	-367.275	75.423
842	8	272.740	3.212	541.225	-90.806	300.479	-24.526	163.013
842	9	-42.532	-3.137	-26.676	3.853	-2.763	-42.906	84.465
843	1	-42.931	-1.212	-27.224	5.302	-0.549	-43.595	82.869
843	2	-57.943	-2.097	-53.555	9.537	-0.512	-59.527	80.570
843	3	-56.831	-1.997	-52.889	8.817	-0.614	-58.214	81.086
843	4	-61.896	-2.198	-49.361	10.291	-0.474	-63.621	80.488
843	5	-60.784	-2.098	-48.696	9.570	-0.577	-62.306	80.967
843	6	-341.952	-18.441	-529.968	87.796	3.849	-364.242	75.754
[illegible]	7	-347.037	-18.959	-553.711	90.161	4.186	-370.182	75.602
[illegible]	8	278.490	17.887	546.392	-86.151	304.395	-8.017	163.264
[illegible]	9	-41.820	-1.113	-26.558	4.581	-0.603	-42.329	83.657
844	1	-35.359	-2.283	-26.122	11.631	1.397	-39.040	72.440
844	2	-52.338	-3.050	-52.692	14.211	0.753	-56.142	75.014
844	3	-50.086	-3.067	-51.809	14.432	1.008	-54.162	74.227
844	4	-56.412	-3.207	-48.662	14.894	0.677	-60.298	75.378
844	5	-54.161	-3.225	-47.780	15.115	0.922	-58.309	74.655
844	6	-370.114	-17.639	-533.323	64.061	-6.357	-381.397	80.012
844	7	-377.689	-17.788	-557.210	64.300	-6.646	-388.832	80.168
844	8	329.560	14.115	552.692	-43.191	335.367	8.308	172.342
844	9	-33.108	-2.300	-25.240	11.852	1.731	-37.140	71.212
845	1	-47.293	-1.001	-27.285	6.594	-0.080	-48.214	82.048
845	2	-60.380	-1.803	-53.668	10.613	0.060	-62.244	80.040
845	3	-59.731	-1.733	-53.123	10.129	-0.015	-61.449	80.372
845	4	-64.763	-1.840	-49.133	11.265	0.115	-66.719	80.149
845	5	-64.114	-1.770	-48.587	10.781	0.041	-65.925	80.460
845	6	-310.963	-16.540	-530.621	85.214	6.344	-333.847	74.967
845	7	-313.957	-17.027	-554.885	87.213	6.693	-337.678	74.784
845	8	231.660	16.346	547.684	-80.043	258.156	-10.149	161.684
845	9	-46.643	-0.931	-26.739	6.110	-0.129	-47.446	82.516
846	1	-40.872	-2.311	-26.547	12.099	1.170	-44.354	73.945
846	2	-56.315	-2.855	-53.188	14.095	0.633	-59.804	76.098
[illegible]	3	-54.805	-2.880	-52.484	14.335	0.814	-58.500	75.546

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ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	Z-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
846	4	-60.488	-3.041	-48.785	14.961	0.621	-64.151	76.243
846	5	-58.978	-3.067	-48.081	15.201	0.798	-62.844	75.731
846	6	-347.772	-13.404	-534.773	53.632	-5.011	-356.164	81.107
846	7	-353.320	-13.409	-559.113	53.395	-5.219	-361.511	81.279
846	8	290.026	9.225	554.004	-29.912	293.177	6.074	173.986
846	9	-39.362	-2.336	-25.843	12.339	1.398	-43.098	73.157
847	1	-40.273	-0.537	-25.508	12.722	3.186	-43.998	73.682
847	2	-55.950	-1.666	-53.395	14.538	1.982	-59.599	75.912
847	3	-54.338	-1.445	-52.625	14.878	2.452	-58.236	75.319
847	4	-60.177	-1.830	-49.241	15.393	1.982	-63.989	76.090
847	5	-58.565	-1.609	-48.471	15.734	2.447	-62.622	75.539
847	6	-351.591	-22.352	-539.884	50.957	-14.646	-359.298	81.400
847	7	-357.262	-23.022	-563.799	50.494	-15.560	-364.724	81.594
847	8	295.737	23.895	559.186	-25.289	298.069	21.563	174.730
847	9	-38.661	-0.317	-25.738	13.063	3.710	-42.688	72.865
848	1	-39.589	-1.986	-26.929	3.601	-1.644	-39.931	84.578
848	2	-55.371	-1.955	-53.818	8.300	-0.695	-56.631	81.367
848	3	-53.707	-2.032	-53.119	7.565	-0.948	-54.792	81.840
848	4	-59.577	-2.140	-49.771	8.754	-0.835	-60.882	81.523
848	5	-57.913	-2.217	-49.072	8.018	-1.086	-59.045	81.968
848	6	-352.766	-2.019	-540.723	94.372	21.760	-376.546	75.857
848	7	-358.534	-1.746	-564.163	97.215	23.023	-383.303	75.706
848	8	298.756	-2.914	558.628	-98.180	327.895	-32.053	163.469
848	9	-37.925	-2.063	-26.230	2.865	-1.836	-38.153	85.459
849	1	-48.337	-1.238	-27.424	13.909	2.562	-52.138	74.716
849	2	-62.412	-2.367	-54.456	14.970	1.158	-65.937	75.748
849	3	-61.228	-2.167	-53.798	15.287	1.555	-64.950	76.314
849	4	-67.554	-2.584	-50.065	16.208	1.234	-71.373	76.741
849	5	-66.369	-2.384	-49.406	15.525	1.631	-70.386	76.340
849	6	-331.639	-23.231	-543.398	38.290	-18.548	-336.322	83.027
849	7	-334.940	-23.807	-567.798	37.129	-19.437	-339.310	83.288
849	8	251.725	23.125	561.514	-7.464	251.969	22.881	178.132
849	9	-47.153	-1.038	-26.766	14.226	2.996	-51.188	74.162
850	1	-47.328	-3.271	-27.865	5.299	-2.642	-47.957	83.236
850	2	-61.974	-3.184	-54.943	10.963	-1.206	-63.952	79.773
850	3	-60.688	-3.266	-54.346	10.307	-1.472	-62.482	80.126
850	4	-67.012	-3.539	-50.653	11.327	-1.578	-68.972	80.178
850	5	-65.725	-3.621	-50.056	10.671	-1.838	-67.508	80.517
850	6	-341.243	-2.619	-545.087	114.852	32.659	-376.522	72.924
850	7	-345.024	-2.137	-569.075	118.126	34.617	-381.779	72.716
850	8	265.267	-5.584	561.896	-117.318	309.016	-49.333	159.549
850	9	-46.042	-3.353	-27.268	4.643	-2.853	-46.541	83.863
851	1	-46.981	-0.916	-27.902	5.198	-0.337	-47.560	83.641
851	2	-62.107	-1.720	-55.247	10.225	-0.036	-63.792	80.645
851	3	-60.755	-1.659	-54.633	9.658	-0.121	-62.294	80.949
851	4	-67.120	-1.753	-51.119	10.599	-0.077	-68.796	81.015
851	5	-65.768	-1.692	-50.505	10.032	-0.158	-67.302	81.306
851	6	-350.024	-16.510	-550.607	102.603	12.527	-379.062	74.198
851	7	-354.086	-16.989	-574.236	105.435	13.271	-384.347	73.986
851	8	276.087	16.473	567.492	-103.585	312.351	-19.791	160.705

E 407

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
851	9	-45.629	-0.855	-27.288	4.631	-0.381	-46.103	84.156
852	1	-40.622	-2.250	-27.213	11.006	0.682	-43.555	75.079
	2	-59.434	-3.038	-55.168	12.727	-0.298	-62.174	77.853
	3	-57.358	-3.021	-54.409	12.805	-0.154	-60.224	77.382
852	4	-63.749	-3.238	-51.091	13.769	-0.252	-66.734	77.765
852	5	-61.672	-3.221	-50.332	13.846	-0.107	-64.786	77.324
852	6	-412.025	-18.030	-561.510	47.165	-12.462	-417.593	83.268
852	7	-419.541	-18.199	-585.419	46.818	-12.810	-424.930	83.433
852	8	363.479	14.593	581.434	-25.042	365.267	12.804	175.915
852	9	-38.546	-2.232	-26.454	11.084	0.883	-41.662	74.298
853	1	-57.602	-1.266	-29.190	6.752	-0.468	-58.400	83.260
853	2	-71.031	-2.167	-56.657	11.439	-0.316	-72.882	80.811
853	3	-69.782	-2.127	-56.096	11.066	-0.363	-71.546	80.942
853	4	-77.809	-2.178	-52.470	11.832	-0.370	-79.617	81.312
853	5	-76.560	-2.138	-51.909	11.459	-0.414	-78.285	81.441
853	6	-331.936	-18.752	-554.323	98.073	9.424	-360.113	73.970
853	7	-333.138	-19.270	-578.254	100.452	10.125	-362.534	73.688
853	8	226.944	18.215	568.856	-94.470	263.352	-18.191	158.924
853	9	-56.353	-1.227	-28.628	6.378	-0.498	-57.082	83.484
854	1	-47.739	-3.372	-27.961	14.459	0.924	-52.036	73.451
854	2	-65.121	-4.027	-56.013	16.059	-0.063	-69.085	76.134
854	3	-63.400	-4.009	-55.352	16.048	0.049	-67.459	75.806
854	4	-70.276	-4.403	-51.711	17.738	0.069	-74.749	75.847
854	5	-68.555	-4.385	-51.049	17.727	0.185	-73.127	75.539
854	6	-394.122	-16.967	-563.946	49.516	-10.574	-400.515	82.643
	7	-399.548	-16.891	-588.324	48.573	-10.821	-405.618	82.877
	8	324.277	10.422	582.925	-18.422	325.355	9.344	176.652
854	9	-46.018	-3.354	-27.300	14.448	1.078	-50.451	72.944
855	1	-47.437	-1.032	-28.022	14.413	3.080	-51.549	74.076
855	2	-65.390	-2.600	-56.363	15.359	0.955	-68.945	76.965
855	3	-63.591	-2.436	-55.682	15.440	1.240	-67.268	76.604
855	4	-70.523	-2.655	-52.229	17.056	1.389	-74.569	76.657
855	5	-68.724	-2.492	-51.548	17.137	1.679	-72.896	76.319
855	6	-404.680	-31.306	-569.931	37.003	-27.674	-408.312	84.394
855	7	-410.438	-32.203	-593.949	35.595	-28.883	-413.759	84.670
855	8	337.005	32.953	588.973	-4.239	337.064	32.894	179.201
855	9	-45.638	-0.868	-27.341	14.494	3.414	-49.921	73.538
856	1	-47.830	-3.876	-29.076	2.956	-3.678	-48.028	86.168
856	2	-65.677	-4.230	-57.250	8.964	-2.949	-66.958	81.867
856	3	-63.893	-4.169	-56.635	8.484	-2.987	-65.075	82.069
856	4	-70.896	-4.796	-53.362	8.687	-3.673	-72.018	82.636
856	5	-69.111	-4.735	-52.746	8.208	-3.705	-70.141	82.847
856	6	-403.247	-11.940	-568.412	118.158	20.969	-436.158	74.435
856	7	-408.799	-11.638	-591.739	121.992	22.839	-443.277	74.218
856	8	334.235	3.263	583.989	-127.549	377.685	-40.187	161.188
856	9	-46.046	-3.815	-28.461	2.477	-3.670	-46.191	86.654
857	1	-55.688	-0.763	-28.588	17.759	4.479	-60.930	73.555
857	2	-70.697	-2.122	-56.767	18.467	2.535	-75.354	75.846
	3	-69.016	-1.985	-56.148	18.346	2.707	-73.709	75.652

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E408

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
857	4	-77.536	-2.134	-52.527	20.989	3.314	-82.985	75.447
857	5	-75.855	-1.997	-51.908	20.867	3.490	-81.343	75.265
857	6	-359.826	-26.924	-567.296	37.116	-22.836	-363.914	83.714
857	7	-362.152	-27.722	-591.507	34.989	-24.101	-365.773	84.090
857	8	263.354	28.716	584.950	4.866	263.455	28.615	1.187
857	9	-54.007	-0.626	-27.969	17.638	4.675	-59.308	73.271
858	1	-53.861	-3.699	-29.184	2.374	-3.587	-53.973	87.295
858	2	-69.290	-3.642	-57.260	7.462	-2.805	-70.128	83.596
858	3	-67.620	-3.588	-56.703	7.230	-2.782	-68.426	83.637
858	4	-75.782	-4.257	-53.175	6.949	-3.588	-76.450	84.501
858	5	-74.111	-4.203	-52.617	6.717	-3.563	-74.751	84.560
858	6	-365.392	-3.877	-566.355	99.740	21.814	-391.084	75.555
858	7	-368.230	-3.301	-590.041	103.053	23.788	-395.321	75.271
858	8	274.588	-5.499	581.916	-108.251	311.549	-42.460	161.148
858	9	-52.191	-3.645	-28.626	2.142	-3.551	-52.285	87.477
859	1	-52.917	-0.630	-29.305	3.404	-0.410	-53.138	86.290
859	2	-68.668	-1.564	-57.533	8.211	-0.574	-69.658	83.124
859	3	-67.010	-1.532	-57.017	7.977	-0.575	-67.968	83.153
859	4	-74.972	-1.487	-53.576	7.918	-0.643	-75.816	83.919
859	5	-73.315	-1.455	-53.060	7.683	-0.642	-74.128	83.964
859	6	-370.308	-18.573	-569.761	95.802	5.827	-394.709	75.710
859	7	-373.412	-19.189	-592.964	98.752	6.481	-399.082	75.428
859	8	282.657	19.646	584.889	-100.942	316.931	-14.628	161.245
859	9	-51.260	-0.599	-28.789	3.170	-0.401	-51.457	86.433
860	1	-40.921	-2.194	-27.574	14.134	2.415	-45.531	71.936
860	2	-59.868	-2.864	-56.231	16.076	1.356	-64.090	75.287
860	3	-58.187	-2.841	-55.701	15.861	1.382	-62.410	75.090
860	4	-63.771	-3.102	-52.016	17.952	1.811	-68.685	74.691
860	5	-62.089	-3.078	-51.486	17.737	1.842	-67.010	74.494
860	6	-414.955	-15.750	-575.745	55.798	-8.098	-422.607	82.191
860	7	-422.156	-15.826	-599.328	55.035	-8.504	-429.478	82.421
860	8	366.121	12.077	596.171	-26.157	368.043	10.155	175.797
860	9	-39.239	-2.170	-27.044	13.919	2.473	-43.884	71.547
861	1	-61.311	-0.751	-29.635	4.502	-0.418	-61.643	85.771
861	2	-74.046	-1.583	-57.804	8.945	-0.495	-75.134	83.065
861	3	-72.157	-1.579	-57.280	8.810	-0.496	-73.241	82.990
861	4	-82.618	-1.487	-53.738	8.737	-0.556	-83.548	83.922
861	5	-80.729	-1.483	-53.214	8.602	-0.560	-81.652	83.875
861	6	-324.603	-16.739	-568.722	90.270	7.776	-349.119	74.805
861	7	-324.063	-17.290	-592.365	92.840	8.618	-349.972	74.407
861	8	207.096	17.318	583.398	-91.812	244.243	-19.828	157.972
861	9	-59.422	-0.747	-29.111	4.367	-0.424	-59.745	85.766
862	1	-49.573	-2.640	-28.176	15.230	1.868	-54.082	73.507
862	2	-66.080	-2.904	-56.779	16.219	1.016	-70.001	76.410
862	3	-54.404	-2.860	-56.277	15.889	0.999	-68.265	76.345
862	4	-71.786	-3.311	-52.443	18.651	1.438	-76.537	75.710
862	5	-70.111	-3.267	-51.941	18.321	1.424	-74.803	75.634
862	6	-380.245	-8.603	-575.133	39.307	-4.491	-384.357	84.028
862	7	-384.298	-8.327	-599.102	37.621	-4.599	-388.026	84.341
862	8	302.944	2.684	594.480	-4.025	302.998	2.630	179.232

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
862	9	-47.897	-2.596	-27.674	14.900	1.864	-52.359	73.330
863	1	-48.647	0.419	-28.324	16.253	5.314	-53.543	73.237
	2	-65.472	-0.833	-57.074	16.963	3.347	-69.653	76.153
	3	-63.810	-0.812	-56.514	16.631	3.308	-67.931	76.083
863	4	-70.996	-0.551	-52.874	19.613	4.541	-76.089	75.444
863	5	-69.334	-0.530	-52.415	19.280	4.504	-74.369	75.365
863	6	-385.110	-23.283	-578.510	35.402	-19.852	-388.542	84.464
863	7	-389.420	-24.193	-601.984	33.350	-21.172	-392.440	84.825
863	8	310.899	27.785	597.341	3.227	310.936	27.749	0.653
863	9	-46.985	0.440	-27.864	15.920	5.289	-51.834	73.061
864	1	-46.836	-3.331	-29.351	0.840	-3.315	-46.853	88.893
864	2	-64.267	-3.248	-57.986	6.540	-2.554	-64.960	83.950
864	3	-62.645	-3.123	-57.557	6.511	-2.419	-63.349	83.829
864	4	-69.356	-3.947	-54.057	5.373	-3.508	-69.795	85.335
864	5	-67.735	-3.822	-53.628	5.344	-3.378	-68.178	85.253
864	6	-394.194	-3.005	-577.950	109.130	25.379	-422.579	75.420
864	7	-399.172	-2.400	-600.792	113.179	27.613	-429.186	75.147
864	8	326.195	-5.718	593.512	-123.466	367.085	-46.608	161.676
864	9	-45.215	-3.206	-28.922	0.811	-3.191	-45.230	88.893
865	1	-57.204	0.284	-28.561	17.372	5.126	-62.046	74.425
865	2	-70.780	-0.820	-57.254	17.127	3.147	-74.748	76.956
865	3	-68.804	-0.807	-56.773	16.602	3.029	-72.641	76.986
865	4	-78.780	-0.561	-52.948	20.460	4.467	-83.809	76.191
865	5	-76.804	-0.548	-52.466	19.935	4.348	-81.702	76.198
865	6	-335.297	-20.612	-577.399	18.980	-19.471	-336.438	86.560
865	7	-335.707	-21.412	-601.329	15.943	-20.605	-336.514	87.103
	8	230.021	24.425	596.004	25.489	233.134	21.312	6.963
	9	-55.228	0.297	-28.080	16.848	5.009	-59.940	74.374
866	1	-55.171	-3.504	-29.592	1.943	-3.431	-55.244	87.849
866	2	-69.534	-3.188	-58.186	7.310	-2.392	-70.330	83.786
866	3	-67.654	-3.043	-57.742	7.377	-2.212	-68.486	83.568
866	4	-76.938	-3.981	-54.137	6.220	-3.455	-77.464	85.161
866	5	-75.058	-3.837	-53.693	6.287	-3.287	-75.609	84.993
866	6	-347.451	1.176	-577.134	104.183	29.937	-376.212	74.567
866	7	-348.729	1.982	-600.446	107.898	32.519	-379.266	74.197
866	8	249.547	-10.978	592.518	-115.010	293.054	-54.485	159.279
866	9	-53.291	-3.359	-29.148	2.010	-3.279	-53.372	87.698
867	1	-54.347	-0.378	-30.172	2.930	-0.220	-54.505	86.901
867	2	-69.095	-1.348	-58.849	7.941	-0.429	-70.013	83.402
867	3	-67.274	-1.359	-58.473	7.964	-0.410	-68.222	83.207
867	4	-76.245	-1.161	-54.982	7.147	-0.486	-76.919	84.610
867	5	-74.424	-1.172	-54.605	7.170	-0.477	-75.119	84.461
867	6	-353.678	-18.876	-579.866	98.807	8.109	-380.664	74.724
867	7	-355.273	-19.575	-602.560	102.076	9.026	-383.875	74.347
867	8	258.886	20.739	593.494	-106.076	299.282	-19.657	159.152
867	9	-52.526	-0.390	-29.796	2.953	-0.223	-52.692	86.768
868	1	-42.730	-2.384	-28.721	13.724	1.841	-46.956	72.885
868	2	-61.786	-2.741	-57.934	14.735	0.731	-65.259	76.737
	3	-60.441	-2.696	-57.629	14.319	0.659	-63.797	76.810

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E 410

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
868	4	-65.543	-3.112	-53.696	17.105	1.266	-69.923	75.639
868	5	-64.198	-3.067	-53.391	16.689	1.192	-68.458	75.682
868	6	-419.357	-10.080	-588.159	37.860	-6.607	-422.830	84.759
868	7	-426.101	-9.887	-611.296	36.297	-6.745	-429.243	85.053
868	8	366.468	4.997	606.828	-6.157	366.572	4.892	179.024
868	9	-41.385	-2.339	-28.416	13.308	1.764	-45.490	72.859
869	1	-62.908	-0.427	-30.116	3.864	-0.189	-63.146	86.474
869	2	-73.840	-1.293	-58.759	8.452	-0.321	-74.812	83.441
869	3	-71.454	-1.325	-58.325	8.508	-0.308	-72.471	83.180
869	4	-84.009	-1.086	-54.778	7.830	-0.353	-84.741	84.652
869	5	-81.622	-1.118	-54.345	7.886	-0.353	-82.387	84.457
869	6	-293.410	-16.916	-578.787	91.982	10.887	-321.214	73.181
869	7	-290.495	-17.564	-602.015	94.846	12.158	-320.218	72.600
869	8	165.456	18.455	592.970	-95.799	212.702	-28.791	153.748
869	9	-60.521	-0.459	-29.683	3.920	-0.204	-60.776	86.281
870	1	-51.234	-2.571	-28.868	14.945	1.652	-55.457	74.219
870	2	-66.949	-2.640	-58.031	14.997	0.685	-70.275	77.497
870	3	-65.250	-2.552	-57.691	14.406	0.598	-68.402	77.659
870	4	-73.259	-3.155	-53.684	18.049	1.218	-77.633	76.377
870	5	-71.559	-3.068	-53.343	17.457	1.124	-75.752	76.494
870	6	-367.784	-4.875	-587.062	21.518	-3.604	-369.055	86.618
870	7	-370.552	-4.428	-610.687	18.936	-3.452	-371.528	87.047
870	8	283.628	-1.516	605.749	16.280	284.555	-2.443	3.257
870	9	-49.534	-2.484	-28.527	14.354	1.549	-53.567	74.305
871	1	-50.431	0.541	-29.488	15.924	5.107	-54.997	74.000
871	2	-66.526	-0.809	-58.727	15.623	2.715	-70.051	77.284
871	3	-64.884	-0.878	-58.455	14.989	2.458	-68.221	77.452
871	4	-72.589	-0.348	-54.573	18.969	4.329	-77.267	76.146
871	5	-70.947	-0.416	-54.301	18.334	4.064	-75.428	76.265
871	6	-373.928	-24.894	-589.709	16.183	-24.146	-374.677	87.351
871	7	-376.998	-25.945	-612.680	13.150	-25.452	-377.491	87.856
871	8	292.807	30.125	606.499	25.140	295.191	27.740	5.418
871	9	-48.789	0.473	-29.216	15.290	4.833	-53.149	74.085
872	1	-48.186	-3.158	-30.759	0.415	-3.154	-48.189	89.471
872	2	-65.231	-2.809	-59.779	6.496	-2.140	-65.900	84.121
872	3	-63.735	-2.618	-59.519	6.788	-1.873	-64.480	83.737
872	4	-70.550	-3.659	-55.994	4.673	-3.334	-70.875	86.022
872	5	-69.054	-3.468	-55.734	4.966	-3.095	-69.428	85.694
872	6	-388.856	2.156	-587.548	115.450	33.700	-420.399	74.718
872	7	-392.980	3.006	-609.742	120.038	36.552	-426.526	74.386
872	8	316.192	-11.354	600.111	-132.461	363.056	-58.217	160.517
872	9	-46.689	-2.967	-30.499	0.707	-2.955	-46.700	89.072
873	1	-59.172	0.482	-29.300	16.985	4.980	-63.670	75.170
873	2	-71.143	-0.704	-58.513	15.616	2.602	-74.450	78.043
873	3	-68.852	-0.775	-58.175	14.764	2.288	-71.917	78.275
873	4	-80.459	-0.267	-54.234	19.719	4.319	-85.045	76.906
873	5	-78.168	-0.338	-53.895	18.866	3.994	-82.501	77.067
873	6	-308.139	-21.827	-588.621	-2.375	-21.807	-308.159	90.475
873	7	-306.358	-22.769	-612.175	-6.528	-22.618	-306.508	91.318
873	8	192.356	26.505	606.317	49.801	206.162	12.700	15.493

E411

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
873	9	-56.882	0.412	-28.961	16.133	4.642	-61.113	75.306
874	1	-56.624	-3.313	-30.566	1.406	-3.276	-56.661	88.489
[illegible]	2	-69.815	-2.720	-59.593	7.093	-1.978	-70.557	84.030
[illegible]	3	-67.739	-2.505	-59.274	7.411	-1.673	-68.570	83.599
874	4	-78.165	-3.676	-55.662	5.450	-3.280	-78.562	85.837
874	5	-76.089	-3.461	-55.342	5.768	-3.005	-76.545	85.487
874	6	-327.687	6.571	-587.073	109.252	39.112	-360.228	73.413
874	7	-327.274	7.637	-609.884	113.469	42.460	-362.097	72.939
874	8	222.024	-16.853	600.670	-122.759	273.861	-68.690	157.107
874	9	-54.548	-3.097	-30.247	1.724	-3.039	-54.606	88.082
875	1	-55.928	-0.094	-31.676	2.351	0.003	-56.027	87.593
875	2	-69.552	-1.112	-60.661	7.618	-0.275	-70.390	83.724
875	3	-67.566	-1.168	-60.412	7.862	-0.249	-68.485	83.338
875	4	-77.606	-0.803	-57.024	6.330	-0.285	-78.125	85.319
875	5	-75.621	-0.858	-56.775	6.575	-0.285	-76.194	85.012
875	6	-334.984	-19.367	-588.156	102.657	11.084	-365.436	73.477
875	7	-334.920	-20.179	-610.138	106.355	12.390	-367.489	72.974
875	8	232.294	22.148	598.292	-112.470	281.137	-26.694	156.526
875	9	-53.942	-0.150	-31.427	2.595	-0.025	-54.067	87.244
876	1	-44.378	-2.331	-30.435	13.563	1.664	-48.374	73.585
876	2	-63.320	-2.478	-60.038	13.685	0.457	-66.257	77.889
876	3	-62.229	-2.397	-59.922	13.071	0.333	-64.960	78.199
876	4	-67.057	-2.951	-55.948	16.590	1.087	-71.096	76.317
876	5	-65.965	-2.870	-55.831	15.975	0.943	-69.780	76.571
876	6	-419.363	-6.081	-598.228	21.083	-5.009	-420.436	87.087
[illegible]	7	-425.579	-5.708	-620.714	18.653	-4.881	-426.406	87.461
[illegible]	8	362.136	0.452	613.202	13.222	362.618	-0.029	2.091
[illegible]	9	-43.287	-2.250	-30.319	12.949	1.493	-47.031	73.871
877	1	-64.660	-0.128	-31.129	3.216	0.031	-64.820	87.153
877	2	-73.573	-1.052	-60.164	8.003	-0.179	-74.446	83.776
877	3	-70.737	-1.121	-59.833	8.225	-0.162	-71.696	83.352
877	4	-85.362	-0.728	-56.344	6.974	-0.157	-85.933	85.320
877	5	-82.526	-0.798	-56.013	7.197	-0.169	-83.155	85.005
877	6	-258.338	-17.565	-588.021	94.703	15.219	-291.123	70.904
877	7	-252.773	-18.335	-610.714	97.945	17.198	-288.307	70.059
877	8	118.914	20.074	600.180	-100.985	181.923	-42.934	148.038
877	9	-61.824	-0.197	-30.798	3.439	-0.006	-62.016	86.815
878	1	-53.027	-2.504	-30.120	14.702	1.462	-56.994	74.899
878	2	-67.773	-2.339	-59.731	13.751	0.432	-70.546	78.601
878	3	-66.004	-2.211	-59.540	12.933	0.311	-68.526	78.964
878	4	-74.814	-2.972	-55.493	17.408	1.023	-78.810	77.072
878	5	-73.045	-2.843	-55.302	16.590	0.879	-76.768	77.351
878	6	-352.139	-0.420	-597.582	2.519	-0.402	-352.157	89.589
878	7	-353.444	0.237	-620.712	-1.063	0.240	-353.447	90.172
878	8	260.222	-6.569	613.891	38.088	265.553	-11.900	7.968
878	9	-51.257	-2.376	-29.929	13.884	1.292	-54.926	75.199
879	1	-52.352	0.698	-31.286	15.640	4.966	-56.620	74.736
[illegible]	2	-67.525	-0.743	-60.840	14.272	2.178	-70.448	78.428
[illegible]	3	-65.845	-0.885	-60.720	13.381	1.762	-68.494	78.804

3667

F412

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
879	4	-74.277	-0.116	-56.916	18.283	4.146	-78.540	76.876
879	5	-72.597	-0.258	-56.795	17.392	3.706	-76.561	77.159
879	6	-359.338	-26.307	-598.499	-4.034	-25.258	-359.387	90.694
879	7	-360.986	-27.515	-620.762	-8.130	-27.317	-361.184	91.396
879	8	270.325	32.323	611.140	48.309	279.758	22.891	11.047
879	9	-50.672	0.555	-31.166	14.749	4.499	-54.615	75.032
880	1	-49.677	-3.029	-32.868	-0.036	-3.029	-49.677	90.045
880	2	-66.248	-2.423	-62.081	6.452	-1.777	-66.894	84.284
880	3	-64.833	-2.179	-61.948	7.001	-1.406	-65.606	83.700
880	4	-71.891	-3.413	-58.647	4.044	-3.175	-72.129	86.631
880	5	-70.475	-3.169	-58.514	4.593	-2.857	-70.787	86.113
880	6	-382.005	7.113	-594.479	122.269	42.343	-417.235	73.926
880	7	-385.217	8.214	-615.781	127.479	45.908	-422.911	73.527
880	8	304.032	-16.862	601.697	-142.062	357.886	-70.716	159.239
880	9	-48.262	-2.785	-32.736	0.512	-2.779	-48.268	89.354
881	1	-61.264	0.662	-30.571	16.689	4.873	-65.476	75.837
881	2	-71.417	-0.631	-60.217	14.179	2.103	-74.152	79.083
881	3	-68.808	-0.771	-60.012	13.059	1.649	-71.229	79.499
881	4	-82.135	-0.028	-56.069	18.994	4.152	-86.316	77.585
881	5	-79.526	-0.168	-55.865	17.873	3.671	-83.366	77.875
881	6	-277.176	-23.511	-598.908	-23.981	-21.264	-279.424	95.353
881	7	-272.971	-24.625	-621.969	-29.316	-21.211	-276.385	96.642
881	8	149.931	29.071	614.141	74.597	185.504	-6.501	25.495
881	9	-58.656	0.522	-30.366	15.568	4.368	-62.502	76.124
882	1	-58.245	-3.153	-32.147	0.811	-3.142	-58.257	89.156
882	2	-70.112	-2.311	-61.488	6.825	-1.631	-70.792	84.308
882	3	-67.845	-2.041	-61.279	7.345	-1.231	-68.655	83.707
882	4	-79.465	-3.403	-57.810	4.679	-3.116	-79.753	86.492
882	5	-77.199	-3.133	-57.601	5.200	-2.769	-77.562	86.003
882	6	-305.277	11.434	-595.563	114.401	48.435	-342.278	72.077
882	7	-303.006	12.745	-617.697	119.165	52.670	-342.931	71.477
882	8	190.993	-22.172	605.503	-130.709	253.066	-84.245	154.597
882	9	-55.978	-2.883	-31.938	1.331	-2.850	-56.011	88.564
883	1	-57.673	0.198	-33.874	1.730	0.249	-57.725	88.288
883	2	-70.005	-0.903	-62.968	7.271	-0.146	-70.762	84.058
883	3	-67.847	-1.001	-62.808	7.697	-0.126	-68.722	83.515
883	4	-79.041	-0.460	-59.773	5.527	-0.073	-79.428	85.995
883	5	-76.883	-0.558	-59.613	5.954	-0.096	-77.345	85.566
883	6	-313.307	-20.500	-593.645	106.775	14.300	-348.108	71.948
883	7	-311.419	-21.462	-614.637	110.955	16.123	-349.006	71.286
883	8	201.823	24.328	597.904	-119.252	261.727	-35.575	153.328
883	9	-55.515	0.099	-33.714	2.157	0.183	-55.599	87.782
884	1	-46.062	-2.302	-32.848	13.461	1.507	-49.872	74.199
884	2	-64.718	-2.222	-62.606	12.647	0.240	-67.180	78.982
884	3	-63.785	-2.103	-62.616	11.853	0.096	-65.985	79.488
884	4	-68.610	-2.811	-58.915	16.087	0.911	-72.333	76.970
884	5	-67.678	-2.692	-58.925	15.293	0.726	-71.097	77.397
884	6	-416.206	-1.796	-604.830	3.495	-1.766	-416.236	89.516
884	7	-421.772	-1.213	-626.362	0.117	-1.213	-421.772	89.984
884	8	353.942	-4.499	613.602	33.696	357.083	-7.639	5.324

E413

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
884	9	-45.130	-2.183	-32.858	12.667	1.274	-48.588	74.731
885	1	-66.647	0.156	-32.715	2.496	0.249	-66.740	87.863
[illegible]	2	-73.398	-0.834	-62.051	7.490	-0.069	-74.163	84.167
[illegible]	3	-70.156	-0.937	-61.812	7.854	-0.057	-71.036	83.606
885	4	-86.820	-0.397	-58.508	6.074	0.027	-87.245	85.999
885	5	-83.577	-0.500	-58.269	6.439	-0.004	-84.074	85.594
885	6	-220.842	-18.418	-596.262	97.499	20.904	-260.165	68.035
885	7	-212.437	-19.321	-618.281	101.160	23.966	-255.725	66.833
885	8	69.007	21.892	604.711	-106.422	154.448	-63.549	141.240
885	9	-63.404	0.052	-32.477	2.860	0.181	-63.533	87.424
886	1	-54.904	-2.451	-31.977	14.576	1.327	-58.682	75.467
886	2	-68.463	-2.061	-61.885	12.609	0.252	-70.777	79.602
886	3	-66.581	-1.894	-61.810	11.595	0.121	-68.597	80.138
886	4	-76.368	-2.807	-57.929	16.849	0.868	-80.044	77.693
886	5	-74.485	-2.641	-57.854	15.836	0.694	-77.821	78.104
886	6	-332.549	3.868	-606.131	-16.584	4.683	-333.364	92.815
886	7	-332.183	4.739	-628.543	-21.220	6.071	-333.514	93.589
886	8	231.962	-11.466	618.067	60.296	246.079	-25.582	13.176
886	9	-53.021	-2.285	-31.902	13.563	1.112	-56.419	75.934
887	1	-54.366	0.877	-33.786	15.484	4.921	-58.410	75.363
887	2	-68.377	-0.668	-63.422	13.049	1.759	-70.805	79.460
887	3	-66.602	-0.869	-63.394	11.943	1.233	-68.705	80.015
887	4	-75.977	0.111	-59.977	17.687	4.021	-79.888	77.533
887	5	-74.202	-0.089	-59.949	16.580	3.450	-77.742	77.947
887	6	-340.375	-27.958	-603.869	-24.109	-26.109	-342.225	94.387
[illegible]	7	-340.371	-29.344	-625.098	-29.321	-26.604	-343.111	95.338
[illegible]	8	242.454	34.840	609.832	71.604	264.754	12.540	17.298
[illegible]	9	-52.591	0.675	-33.758	14.377	4.308	-56.224	75.819
888	1	-51.218	-2.967	-35.740	-0.601	-2.960	-51.225	90.714
888	2	-67.143	-2.126	-64.880	6.248	-1.531	-67.738	84.559
888	3	-65.759	-1.839	-64.809	6.996	-1.082	-66.516	83.826
888	4	-73.227	-3.243	-62.078	3.336	-3.085	-73.386	87.277
888	5	-71.843	-2.956	-62.007	4.083	-2.715	-72.084	86.619
888	6	-372.035	11.586	-597.475	128.110	50.435	-410.884	73.130
888	7	-374.202	12.933	-617.513	133.927	54.748	-416.017	72.660
888	8	288.081	-21.969	596.555	-150.739	349.286	-83.173	157.901
888	9	-49.833	-2.680	-35.669	0.145	-2.680	-49.834	89.823
889	1	-63.488	0.850	-32.404	16.584	4.873	-67.511	76.364
889	2	-71.658	-0.551	-62.377	12.988	1.746	-73.956	79.965
889	3	-68.734	-0.746	-62.279	11.652	1.194	-70.675	80.539
889	4	-83.834	0.200	-58.505	18.448	4.072	-87.705	78.147
889	5	-80.909	0.004	-58.408	17.112	3.475	-84.380	78.536
889	6	-243.237	-25.237	-607.959	-44.335	-16.565	-251.909	101.067
889	7	-236.420	-26.531	-630.352	-50.840	-14.865	-248.086	102.924
889	8	103.732	31.691	618.981	98.367	172.467	-37.043	34.944
889	9	-60.564	0.655	-32.306	15.247	4.242	-64.151	76.760
890	1	-59.994	-2.906	-34.334	0.193	-2.906	-59.995	89.806
[illegible]	2	-70.368	-1.765	-63.822	6.519	-1.151	-70.982	84.619
[illegible]	3	-67.905	-1.455	-63.689	7.195	-0.685	-68.675	83.890

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E NIN

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
890	4	-80.787	-2.967	-60.577	3.947	-2.767	-80.987	87.103
890	5	-78.324	-2.656	-60.443	4.624	-2.375	-78.606	86.515
890	6	-279.830	17.357	-601.762	119.293	59.318	-321.791	70.621
890	7	-275.541	18.929	-622.982	124.597	64.574	-321.186	69.880
890	8	156.118	-28.445	606.010	-138.333	230.125	-102.452	151.853
890	9	-57.531	-2.596	-34.200	0.869	-2.582	-57.545	89.093
891	1	-59.647	0.597	-36.827	0.859	0.609	-59.660	89.182
891	2	-70.509	-0.523	-65.761	6.602	0.093	-71.127	84.657
891	3	-68.160	-0.659	-65.626	7.178	0.095	-68.915	83.996
891	4	-80.632	0.045	-63.285	4.434	0.288	-80.875	86.863
891	5	-78.283	-0.090	-63.150	5.010	0.229	-78.603	86.348
891	6	-288.597	-20.294	-595.142	109.275	18.579	-327.471	70.417
891	7	-284.685	-21.382	-614.784	113.941	21.077	-327.145	69.562
891	8	167.203	25.242	590.770	-124.787	239.785	-47.339	149.815
891	9	-57.298	0.461	-36.691	1.435	0.497	-57.334	88.577
892	1	-47.610	-2.303	-36.026	13.463	1.395	-51.309	74.637
892	2	-65.691	-1.983	-65.618	11.708	0.100	-67.775	79.909
892	3	-64.828	-1.825	-65.671	10.754	-0.039	-66.613	80.574
892	4	-69.929	-2.699	-62.655	15.671	0.773	-73.403	77.502
892	5	-69.066	-2.541	-62.708	14.717	0.569	-72.176	78.066
892	6	-407.517	2.685	-606.495	-14.069	3.167	-407.999	91.962
892	7	-412.220	3.501	-626.650	-18.428	4.317	-413.036	92.533
892	8	339.577	-9.765	606.078	54.389	347.849	-18.037	8.648
892	9	-46.746	-2.144	-36.078	12.510	1.124	-50.016	75.354
893	1	-69.399	0.396	-34.994	1.882	0.447	-69.450	88.456
893	2	-73.934	-0.732	-64.548	7.353	-0.001	-74.666	84.320
893	3	-70.296	-0.871	-64.372	7.855	0.006	-71.174	83.624
893	4	-89.089	-0.169	-61.446	5.512	0.170	-89.429	86.466
893	5	-85.450	-0.308	-61.270	6.015	0.113	-85.873	85.978
893	6	-183.302	-20.686	-603.922	105.565	31.253	-235.242	63.802
893	7	-171.880	-21.773	-625.084	109.842	36.208	-229.862	62.172
893	8	17.050	25.219	606.658	-117.629	138.834	-96.565	134.005
893	9	-65.760	0.257	-34.818	2.384	0.343	-65.846	87.934
894	1	-57.859	-2.548	-34.679	14.381	0.967	-61.375	76.262
894	2	-70.268	-1.932	-64.759	11.419	-0.075	-72.126	80.760
894	3	-68.200	-1.725	-64.743	10.253	-0.179	-69.746	81.427
894	4	-79.306	-2.821	-61.328	16.156	0.451	-82.579	78.548
894	5	-77.239	-2.613	-61.313	14.990	0.285	-80.137	79.055
894	6	-315.173	7.946	-613.476	-35.450	11.790	-319.017	96.188
894	7	-312.920	9.067	-634.927	-41.098	14.230	-318.083	97.160
894	8	203.204	-16.532	618.495	81.948	230.400	-43.728	18.359
894	9	-55.791	-2.340	-34.663	13.216	0.748	-58.881	76.843
895	1	-57.550	0.925	-37.285	15.035	4.564	-61.190	76.393
895	2	-70.429	-0.709	-66.770	11.497	1.138	-72.276	80.873
895	3	-68.472	-0.945	-66.749	10.233	0.570	-69.989	81.569
895	4	-79.186	0.161	-64.151	16.632	3.506	-82.532	78.627
895	5	-77.229	-0.075	-64.130	15.367	2.872	-80.178	79.140
895	6	-323.635	-29.528	-606.277	-45.342	-22.696	-330.467	98.568
895	7	-321.726	-31.046	-626.068	-51.615	-22.153	-330.619	99.776
895	8	213.822	36.860	602.237	95.314	255.394	-4.711	23.564

E415

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
895	9	-55.593	0.688	-37.263	13.770	3.877	-58.782	76.962
896	1	-53.917	-2.814	-39.511	-0.926	-2.798	-53.934	91.038
	2	-69.440	-1.670	-68.357	5.523	-1.048	-70.052	94.551
	3	-68.015	-1.348	-68.262	7.430	-0.530	-68.833	83.716
896	4	-76.198	-2.900	-66.506	3.157	-2.765	-76.333	87.538
896	5	-74.773	-2.579	-66.411	4.063	-2.351	-75.001	86.788
896	6	-368.311	17.487	-597.583	138.855	62.266	-413.091	72.126
896	7	-369.375	19.108	-615.996	145.398	67.499	-417.766	71.591
896	8	276.055	-28.447	585.510	-164.309	347.808	-100.200	156.409
896	9	-52.492	-2.493	-39.417	-0.019	-2.493	-52.492	90.022
897	1	-66.379	1.026	-34.866	16.218	4.725	-70.078	77.151
897	2	-72.527	-0.560	-65.093	11.303	1.173	-74.261	81.280
897	3	-69.273	-0.805	-65.065	9.789	0.566	-70.645	82.020
897	4	-86.282	0.347	-61.663	17.351	3.693	-89.628	79.085
897	5	-83.028	0.102	-61.635	15.837	3.017	-85.943	79.570
897	6	-209.458	-28.435	-616.511	-69.545	-4.802	-233.090	108.768
897	7	-199.872	-29.970	-638.081	-77.330	-0.044	-229.798	111.156
897	8	55.925	35.962	621.501	126.905	173.241	-81.352	42.751
897	9	-63.124	0.780	-34.838	14.704	4.002	-66.345	77.644
898	1	-62.592	-3.016	-37.326	-0.063	-3.016	-62.592	90.061
898	2	-71.644	-1.747	-66.882	6.559	-1.136	-72.254	84.684
898	3	-68.971	-1.406	-66.774	7.329	-0.620	-69.757	83.879
898	4	-83.231	-3.051	-64.284	3.729	-2.878	-83.405	87.342
898	5	-80.559	-2.711	-64.176	4.499	-2.452	-80.818	86.702
898	6	-258.773	19.593	-607.558	124.498	67.150	-306.330	69.094
	7	-252.451	21.350	-627.655	130.216	73.389	-304.490	68.216
	8	124.020	-31.397	603.789	-145.185	210.985	-118.362	149.078
	9	-59.919	-2.676	-37.218	0.706	-2.667	-59.928	89.293
899	1	-62.329	0.461	-40.739	0.997	0.476	-62.345	89.090
899	2	-71.793	-0.872	-69.279	7.158	-0.157	-72.509	84.293
899	3	-69.229	-1.030	-69.088	7.815	-0.146	-70.114	83.546
899	4	-83.125	-0.238	-67.854	4.786	0.037	-83.401	86.706
899	5	-80.561	-0.396	-67.662	5.442	-0.028	-80.929	86.133
899	6	-266.230	-24.480	-593.582	117.306	23.083	-313.794	67.929
899	7	-260.208	-25.736	-611.476	122.385	26.505	-312.449	66.884
899	8	133.340	29.738	577.356	-133.794	225.011	-61.932	145.582
899	9	-59.765	0.303	-40.548	1.654	0.348	-59.810	88.424
900	1	-50.906	-2.353	-40.213	13.460	1.128	-54.388	75.497
900	2	-68.768	-1.747	-69.415	10.539	-0.129	-70.386	81.270
900	3	-67.852	-1.545	-69.409	9.427	-0.230	-69.167	82.063
900	4	-73.736	-2.616	-67.545	15.066	0.444	-76.796	78.519
900	5	-72.821	-2.413	-67.539	13.955	0.251	-75.486	79.187
900	6	-408.053	7.976	-605.386	-35.923	11.056	-411.133	94.899
900	7	-411.751	9.078	-623.766	-41.441	13.120	-415.793	95.571
900	8	330.845	-16.104	592.441	79.978	348.394	-33.653	12.375
900	9	-49.991	-2.150	-40.206	12.349	0.848	-52.991	76.347
901	1	-70.541	0.635	-37.487	1.045	0.651	-70.557	89.159
901	2	-72.701	-0.530	-67.131	6.400	0.032	-73.265	84.970
	3	-68.793	-0.590	-66.998	6.962	0.014	-69.497	84.222

3667

F46

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
901	4	-89.155	0.105	-64.556	4.378	0.319	-89.370	87.198
901	5	-85.247	-0.053	-64.422	4.940	0.231	-85.533	86.692
901	6	-140.376	-21.057	-609.429	102.231	37.648	-199.082	60.133
901	7	-126.214	-22.237	-629.525	106.646	44.417	-192.870	57.994
901	8	-36.427	26.313	605.541	-116.096	115.202	-125.317	127.439
901	9	-66.633	0.476	-37.353	1.536	0.514	-66.671	88.629
902	1	-58.950	-2.329	-37.535	14.170	1.018	-62.299	76.795
902	2	-69.396	-1.412	-67.455	10.231	0.094	-70.902	81.624
902	3	-67.150	-1.177	-67.450	8.948	0.014	-68.342	82.411
902	4	-79.465	-2.386	-64.727	15.388	0.571	-82.424	79.116
902	5	-77.219	-2.152	-64.722	14.105	0.410	-79.782	79.701
902	6	-279.878	13.923	-614.801	-54.057	23.553	-289.508	100.101
902	7	-275.454	15.282	-634.989	-60.662	27.432	-287.603	101.325
902	8	158.858	-22.894	611.468	103.135	205.442	-69.479	24.307
902	9	-56.704	-2.095	-37.530	12.887	0.793	-59.593	77.366
903	1	-58.744	1.104	-41.109	15.218	4.751	-62.392	76.521
903	2	-69.580	-0.563	-69.951	10.826	1.094	-71.238	81.291
903	3	-67.439	-0.825	-69.854	9.431	0.484	-68.749	82.095
903	4	-79.415	0.383	-68.457	16.434	3.635	-82.667	78.807
903	5	-77.274	0.121	-68.361	15.039	2.941	-80.094	79.381
903	6	-287.006	-29.898	-599.901	-61.092	-16.120	-300.784	102.709
903	7	-282.848	-31.523	-617.768	-68.332	-14.146	-300.225	104.268
903	8	167.630	37.819	583.474	114.313	234.180	-28.729	30.206
903	9	-56.603	0.842	-41.012	13.823	3.996	-59.757	77.149
904	1	-54.566	-2.669	-44.018	-1.396	-2.631	-54.604	91.540
904	2	-68.496	-1.423	-71.907	5.832	-0.920	-68.999	85.067
904	3	-66.989	-1.099	-71.682	6.771	-0.410	-67.678	84.192
904	4	-75.977	-2.661	-71.472	2.406	-2.582	-76.055	88.122
904	5	-74.470	-2.337	-71.247	3.345	-2.182	-74.624	87.350
904	6	-339.330	19.598	-586.299	134.042	64.131	-383.863	71.622
904	7	-338.713	21.307	-602.323	140.595	69.705	-387.112	71.004
904	8	240.341	-30.490	559.058	-150.029	314.561	-104.710	155.119
904	9	-53.059	-2.344	-43.792	-0.457	-2.340	-53.063	90.516
905	1	-67.433	1.244	-37.557	15.745	4.682	-70.871	77.683
905	2	-71.037	-0.337	-67.834	10.240	1.115	-72.491	81.922
905	3	-67.525	-0.603	-67.836	8.677	0.503	-68.632	82.730
905	4	-86.074	0.637	-64.982	16.458	3.656	-89.093	79.506
905	5	-82.562	0.371	-64.984	14.895	2.966	-85.156	80.120
905	6	-163.157	-28.030	-621.524	-81.282	10.101	-201.290	115.133
905	7	-150.805	-29.646	-642.082	-89.654	17.977	-198.428	117.976
905	8	-1.103	36.126	619.271	139.303	158.053	-123.030	48.805
905	9	-63.921	0.978	-37.559	14.182	3.942	-66.885	78.196
906	1	-63.304	-2.176	-40.488	-0.063	-2.176	-63.304	90.060
906	2	-70.252	-0.418	-69.759	6.713	0.220	-70.892	84.558
906	3	-67.400	-0.070	-69.625	7.511	0.756	-68.227	83.711
906	4	-82.845	-1.722	-67.994	3.830	-1.542	-83.026	87.302
906	5	-79.993	-1.374	-67.861	4.628	-1.103	-80.264	86.642
906	6	-220.298	29.991	-606.951	127.469	83.479	-273.786	67.236
906	7	-211.725	32.008	-625.618	133.364	90.800	-270.517	66.210
906	8	77.052	-41.111	593.659	-148.545	177.834	-141.893	145.845

E 417

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
906	9	-60.451	-1.829	-40.354	0.733	-1.819	-60.460	89.283
907	1	-63.421	2.682	-44.818	-0.542	2.689	-63.427	90.556
[illegible]	2	-70.887	1.212	-72.553	5.311	1.601	-71.276	85.809
[illegible]	3	-68.139	0.909	-72.259	6.046	1.435	-68.664	85.032
907	4	-83.273	2.444	-72.405	2.636	2.525	-83.354	88.240
907	5	-80.525	2.141	-72.100	3.371	2.278	-80.662	87.668
907	6	-230.270	-23.925	-584.715	111.155	24.559	-278.755	66.433
907	7	-221.996	-25.818	-600.473	116.466	28.361	-276.176	65.052
907	8	88.204	35.362	554.936	-131.186	195.604	-72.036	140.693
907	9	-60.673	2.379	-44.514	0.093	2.379	-60.673	89.915
908	1	-51.665	-2.317	-45.159	13.065	0.928	-54.911	76.048
908	2	-67.588	-1.498	-73.193	9.403	-0.186	-68.900	82.057
908	3	-66.527	-1.270	-73.000	8.228	-0.248	-67.549	82.923
908	4	-73.491	-2.459	-72.950	14.172	0.263	-76.214	79.123
908	5	-72.430	-2.231	-72.758	12.997	0.097	-74.759	79.840
908	6	-372.792	12.017	-590.738	-50.391	18.507	-379.282	97.338
908	7	-374.515	13.322	-606.446	-56.590	21.411	-382.603	98.134
908	8	287.415	-20.729	560.789	95.763	314.751	-48.065	15.931
908	9	-50.605	-2.088	-44.967	11.890	0.668	-53.362	76.943
909	1	-83.604	2.169	-41.077	0.109	2.169	-83.604	89.927
909	2	-80.641	0.833	-67.702	6.734	1.386	-81.194	85.306
909	3	-75.502	0.570	-67.306	7.498	1.302	-76.234	84.424
909	4	-102.350	1.902	-67.158	3.992	2.055	-102.503	87.810
909	5	-97.212	1.639	-66.761	4.756	1.867	-97.440	87.251
909	6	-62.423	-22.105	-558.076	124.915	84.266	-168.795	49.583
[illegible]	7	-40.474	-23.788	-574.136	130.631	98.766	-163.029	46.827
[illegible]	8	-164.174	31.837	534.967	-144.965	108.817	-241.154	117.969
[illegible]	9	-78.465	1.906	-40.681	0.873	1.916	-78.474	89.377
910	1	-66.100	-4.132	-40.580	16.799	0.128	-70.362	75.766
910	2	-75.581	-3.241	-68.315	11.787	-1.369	-77.454	80.975
910	3	-72.918	-2.907	-68.157	10.237	-1.441	-74.384	81.849
910	4	-87.756	-4.645	-67.148	18.032	-0.901	-91.500	78.271
910	5	-85.093	-4.311	-66.990	16.481	-1.078	-88.327	78.900
910	6	-271.958	10.881	-578.367	-70.555	27.504	-288.581	103.257
910	7	-264.813	12.655	-595.325	-78.804	33.474	-285.632	104.798
910	8	129.179	-24.458	559.813	129.758	203.152	-98.431	29.687
910	9	-63.437	-3.799	-40.422	15.249	-0.126	-67.110	76.457
911	1	-66.281	0.313	-44.781	16.290	4.084	-70.052	76.965
911	2	-76.240	-1.768	-71.029	10.496	-0.317	-77.692	82.128
911	3	-73.672	-2.035	-70.701	8.885	-0.949	-74.758	83.033
911	4	-88.240	-0.843	-71.423	16.947	2.327	-91.412	79.401
911	5	-85.672	-1.109	-71.096	15.336	1.585	-88.367	80.031
911	6	-281.302	-38.834	-556.655	-85.973	-11.444	-308.692	107.671
911	7	-274.420	-40.649	-570.786	-94.786	-7.047	-308.023	109.520
911	8	139.426	45.953	522.088	146.269	246.244	-60.864	36.140
911	9	-63.712	0.047	-44.454	14.679	3.264	-66.929	77.638
912	1	-57.670	-4.202	-46.964	-6.642	-3.389	-58.482	96.976
912	2	-73.273	-1.981	-72.271	2.388	-1.864	-73.390	87.683
[illegible]	3	-71.886	-1.467	-71.842	4.392	-1.194	-72.159	86.444

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E 418

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
912	4	-80.780	-3.982	-73.548	-2.728	-3.885	-80.877	92.032
912	5	-79.393	-3.468	-73.119	-1.224	-3.448	-79.413	90.923
912	6	-375.408	35.820	-542.243	170.112	97.068	-436.655	70.199
[illegible]	7	-375.345	38.750	-554.749	179.877	105.973	-442.568	69.508
[illegible]	8	273.244	-53.662	498.826	-216.622	381.162	-161.580	153.518
912	9	-56.283	-3.688	-46.535	-5.137	-3.190	-56.780	95.527
913	1	-87.881	0.858	-43.359	25.527	7.677	-94.701	75.043
913	2	-89.961	-1.692	-71.014	16.897	1.431	-93.086	79.524
913	3	-85.214	-2.050	-70.702	14.433	0.382	-87.648	80.428
913	4	-110.532	-0.412	-70.555	26.759	5.745	-116.690	77.040
913	5	-105.785	-0.771	-70.243	24.295	4.577	-111.133	77.585
913	6	-163.364	-46.841	-580.818	-126.388	34.067	-244.273	122.626
913	7	-144.714	-49.214	-597.032	-139.791	50.756	-244.685	125.570
913	8	-58.776	56.877	554.765	219.313	225.859	-227.758	52.385
913	9	-83.134	0.499	-43.047	23.063	6.438	-89.073	75.561
914	1	-80.194	-5.056	-46.123	-6.789	-4.447	-80.802	95.121
914	2	-86.175	-3.047	-72.318	2.027	-2.998	-86.225	88.603
914	3	-82.344	-2.512	-71.813	3.436	-2.365	-82.491	87.539
914	4	-103.238	-5.138	-73.104	-3.280	-5.028	-103.348	91.913
914	5	-99.406	-4.603	-72.599	-1.871	-4.566	-99.443	91.130
914	6	-226.022	30.674	-557.438	156.522	104.742	-300.091	64.676
914	7	-212.480	33.584	-571.426	165.728	116.956	-295.852	63.294
914	8	35.769	-49.998	519.400	-201.132	198.539	-212.768	141.018
914	9	-76.362	-4.521	-45.619	-5.380	-4.120	-76.763	94.259
915	1	-79.152	2.222	-49.937	-5.240	2.559	-79.488	93.669
[illegible]	2	-85.760	0.410	-74.490	2.746	0.497	-85.848	88.176
[illegible]	3	-82.101	0.095	-73.790	3.974	0.287	-82.293	87.238
[illegible]	4	-102.299	1.660	-76.827	-1.839	1.692	-102.332	91.013
915	5	-98.640	1.345	-76.127	-0.611	1.349	-98.644	90.350
915	6	-236.431	-31.054	-532.251	143.091	42.381	-309.867	62.832
915	7	-223.567	-33.135	-543.442	151.213	50.343	-307.045	61.099
915	8	50.696	42.308	478.765	-181.126	227.677	-134.673	135.663
915	9	-75.493	1.908	-49.237	-4.013	2.115	-75.701	92.960
916	1	-56.586	-4.259	-48.331	18.795	1.791	-62.637	72.154
916	2	-75.994	-2.871	-73.997	13.229	-0.551	-78.314	80.053
916	3	-75.115	-2.462	-73.587	11.523	-0.678	-76.899	81.199
916	4	-81.689	-4.546	-75.456	20.155	0.402	-86.638	76.205
916	5	-80.811	-4.137	-75.046	18.449	0.071	-85.019	77.150
916	6	-445.638	20.008	-551.073	-78.188	32.787	-458.416	99.281
916	7	-449.091	22.262	-563.434	-87.415	37.952	-464.780	100.175
916	8	357.804	-35.510	505.023	144.223	405.021	-82.726	18.127
916	9	-55.708	-3.850	-47.920	17.089	1.274	-60.833	73.306
917	1	-98.236	2.250	-46.782	-5.381	2.537	-98.523	93.057
917	2	-95.764	0.744	-72.953	1.500	0.768	-95.787	89.109
917	3	-89.956	0.453	-72.383	2.600	0.528	-90.031	88.353
917	4	-120.688	1.895	-73.919	-2.633	1.951	-120.745	91.230
917	5	-114.881	1.603	-73.349	-1.533	1.623	-114.901	90.754
917	6	-92.230	-25.210	-557.886	122.121	67.914	-185.356	52.672
917	7	-67.128	-27.042	-571.762	129.320	83.778	-177.949	49.405
[illegible]	8	-170.740	35.627	518.112	-157.068	120.373	-255.486	118.348

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E 419

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
917	9	-92.428	1.958	-46.212	-4.281	2.152	-92.622	92.592
918	1	-74.708	-3.940	-46.031	22.952	2.852	-81.500	73.515
918	2	-83.591	-2.575	-72.546	16.167	0.531	-86.698	79.121
918	3	-80.446	-2.200	-72.151	14.090	0.259	-82.906	80.096
918	4	-98.090	-4.119	-73.160	24.576	1.919	-104.130	76.194
918	5	-94.945	-3.744	-72.765	22.498	1.504	-100.193	76.869
918	6	-272.986	20.080	-563.456	-95.354	48.374	-301.280	106.526
918	7	-263.145	22.220	-577.584	-106.599	57.643	-298.568	108.381
918	8	105.819	-34.576	526.457	175.824	224.941	-153.698	34.118
918	9	-71.562	-3.564	-45.636	20.874	2.332	-77.459	74.225
919	1	-73.826	3.259	-50.081	24.381	10.324	-80.890	73.841
919	2	-83.252	0.841	-74.843	16.829	4.084	-86.495	79.093
919	3	-80.263	0.375	-74.233	14.583	2.931	-82.819	80.057
919	4	-97.302	2.603	-77.109	25.906	8.921	-103.620	76.294
919	5	-94.313	2.136	-76.499	23.660	7.628	-99.804	76.933
919	6	-282.052	-41.031	-536.520	-107.808	0.153	-323.237	110.908
919	7	-272.782	-43.825	-547.675	-120.050	7.580	-324.188	113.180
919	8	118.731	56.783	483.109	194.358	284.568	-109.053	40.472
919	9	-70.836	2.793	-49.471	22.135	8.935	-76.979	74.491
920	1	-63.110	-4.855	-53.381	-9.744	-3.268	-64.697	99.248
920	2	-77.649	-2.913	-76.612	-0.811	-2.904	-77.658	90.622
920	3	-75.885	-2.402	-75.772	0.787	-2.394	-75.893	89.386
920	4	-86.970	-4.934	-80.281	-6.856	-4.365	-87.540	94.745
920	5	-85.206	-4.423	-79.441	-5.257	-4.082	-85.547	93.708
920	6	-363.297	29.671	-512.570	154.625	83.217	-416.843	70.899
920	7	-360.883	32.517	-521.322	164.580	92.288	-420.654	70.040
920	8	243.380	-48.301	445.573	-207.134	350.866	-155.787	152.574
920	9	-61.346	-4.344	-52.542	-8.145	-3.203	-62.487	97.974
921	1	-92.048	3.735	-45.542	25.306	10.010	-98.323	76.073
921	2	-92.396	1.510	-72.492	16.993	4.490	-95.376	80.052
921	3	-87.288	1.037	-72.128	14.612	3.392	-89.643	80.846
921	4	-114.505	3.331	-72.819	26.569	9.040	-120.315	77.872
921	5	-109.498	2.859	-72.455	24.188	7.845	-114.484	78.352
921	6	-136.562	-36.677	-570.893	-120.921	44.208	-217.449	123.779
921	7	-115.304	-39.451	-585.623	-134.032	61.917	-216.673	127.100
921	8	-101.645	53.148	536.619	212.078	201.511	-250.008	55.024
921	9	-86.941	3.263	-45.178	22.925	8.755	-92.433	76.527
922	1	-81.249	-4.775	-49.013	-8.247	-3.896	-82.129	96.085
922	2	-86.932	-2.802	-74.468	-0.105	-2.802	-86.932	90.072
922	3	-83.071	-2.295	-73.867	1.297	-2.274	-83.092	89.080
922	4	-104.329	-4.788	-76.228	-5.426	-4.493	-104.624	93.111
922	5	-100.468	-4.281	-75.627	-4.023	-4.113	-100.636	92.391
922	6	-221.923	30.445	-547.863	141.870	94.128	-285.607	65.825
922	7	-207.737	33.266	-560.173	150.820	105.812	-280.283	64.312
922	8	27.949	-48.884	499.653	-188.026	181.444	-202.378	140.774
922	9	-77.388	-4.268	-48.412	-6.844	-3.633	-78.024	95.301
923	1	-80.743	2.658	-54.921	-6.984	3.239	-81.323	94.754
923	2	-86.727	0.894	-77.684	0.563	0.897	-86.731	89.631
923	3	-82.974	0.561	-76.669	1.828	0.601	-83.014	88.746

E 420

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
923	4	-103.874	2.218	-81.940	-4.208	2.385	-104.041	92.268
923	5	-100.121	1.886	-80.925	-2.943	1.971	-100.206	91.651
923	6	-227.003	-29.546	-505.899	132.467	36.937	-293.486	63.348
[illegible]	7	-213.087	-31.683	-513.961	140.612	44.942	-289.714	61.412
[illegible]	8	35.127	41.748	433.524	-173.533	212.002	-135.126	134.453
923	9	-76.989	2.325	-53.906	-5.719	2.736	-77.399	94.103
924	1	-57.968	-4.012	-54.308	20.977	3.184	-65.164	71.066
924	2	-75.184	-2.571	-77.365	14.744	0.308	-78.064	78.949
924	3	-74.016	-2.175	-76.507	12.863	0.058	-76.249	80.148
924	4	-82.197	-4.190	-81.333	22.406	1.787	-88.175	75.061
924	5	-81.028	-3.794	-80.475	20.525	1.321	-86.144	76.004
924	6	-406.584	21.380	-510.742	-87.806	38.694	-423.899	101.155
924	7	-407.673	23.625	-518.988	-98.143	44.908	-428.956	102.235
924	8	308.062	-36.357	440.615	161.397	371.873	-100.167	21.572
924	9	-56.799	-3.616	-53.450	19.096	2.530	-62.946	72.158
925	1	-98.506	2.222	-48.747	-5.222	2.492	-98.777	92.960
925	2	-95.390	0.798	-74.551	1.195	0.813	-95.405	89.288
925	3	-89.569	0.517	-73.955	2.230	0.572	-89.624	88.582
925	4	-120.538	1.901	-76.116	-2.668	1.959	-120.596	91.248
925	5	-114.717	1.620	-75.520	-1.633	1.642	-114.740	90.804
925	6	-80.385	-23.735	-553.977	113.687	65.102	-169.224	51.995
925	7	-54.530	-25.485	-566.772	120.428	81.292	-161.308	48.438
925	8	-185.144	33.803	507.651	-146.669	107.350	-258.690	116.631
925	9	-92.685	1.941	-48.151	-4.187	2.126	-92.870	92.528
926	1	-77.062	-3.999	-49.318	21.839	2.030	-83.092	74.564
[illegible]	2	-84.559	-2.399	-74.824	14.867	0.208	-87.166	80.052
[illegible]	3	-81.179	-1.996	-74.264	12.853	0.037	-83.213	81.007
[illegible]	4	-100.185	-4.040	-76.632	23.013	1.183	-105.409	77.209
926	5	-96.805	-3.637	-76.072	20.998	0.876	-101.319	77.867
926	6	-250.272	24.472	-549.369	-100.591	57.364	-283.164	108.106
926	7	-238.552	26.831	-561.531	-111.751	67.620	-279.340	110.051
926	8	72.621	-39.807	500.371	178.575	203.621	-170.807	36.263
926	9	-73.682	-3.596	-48.758	19.825	1.622	-78.902	75.250
927	1	-76.645	3.352	-55.548	23.084	9.535	-82.829	75.004
927	2	-84.402	1.253	-78.213	15.527	3.981	-87.130	80.035
927	3	-81.121	0.823	-77.212	13.377	2.952	-83.250	80.959
927	4	-99.816	2.887	-82.653	24.215	8.310	-105.240	77.376
927	5	-96.536	2.457	-81.653	22.065	7.153	-101.232	77.986
927	6	-254.678	-34.912	-505.055	-109.850	10.579	-300.170	112.495
927	7	-243.162	-37.454	-512.738	-121.814	19.121	-299.737	114.912
927	8	78.754	49.882	430.566	192.858	257.716	-129.079	42.859
927	9	-73.365	2.921	-54.548	20.934	8.289	-78.732	75.620
928	1	-66.331	-4.427	-60.218	-8.552	-3.267	-67.491	97.723
928	2	-79.169	-2.521	-80.790	-0.561	-2.517	-79.173	90.420
928	3	-77.084	-2.045	-79.432	0.859	-2.035	-77.094	89.344
928	4	-90.009	-4.408	-87.195	-5.875	-4.007	-90.411	93.908
928	5	-87.924	-3.932	-85.837	-4.454	-3.696	-88.160	93.027
928	6	-335.996	29.622	-472.478	138.687	75.277	-382.651	71.407
928	7	-331.205	32.345	-476.912	147.526	84.577	-383.537	70.469
[illegible]	8	202.204	-46.999	379.081	-185.042	300.686	-145.481	151.977

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E421

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
928	9	-64.246	-3.950	-58.860	-7.131	-3.118	-65.078	96.654
929	1	-92.409	3.625	-47.829	23.263	8.964	-97.748	77.075
929	2	-92.156	1.486	-74.348	15.250	3.907	-94.577	80.979
929	3	-87.012	1.034	-73.923	13.038	2.925	-88.902	81.751
929	4	-114.633	3.226	-75.394	24.138	7.979	-119.386	79.862
929	5	-109.489	2.775	-74.969	21.926	6.906	-113.620	79.331
929	6	-125.708	-35.251	-566.238	-118.267	46.140	-207.100	124.536
929	7	-103.748	-37.929	-579.770	-130.657	63.899	-205.577	127.931
929	8	-115.219	51.129	524.354	203.030	187.361	-251.451	56.138
929	9	-87.265	3.174	-47.405	21.051	7.834	-91.925	77.518
930	1	-81.909	-3.851	-52.484	-7.238	-3.185	-82.575	95.253
930	2	-86.985	-2.085	-76.953	0.115	-2.085	-86.985	89.921
930	3	-83.065	-1.657	-76.174	1.368	-1.634	-83.088	89.037
930	4	-104.765	-3.749	-79.947	-4.597	-3.540	-104.974	92.600
930	5	-100.845	-3.321	-79.168	-3.344	-3.206	-100.960	91.962
930	6	-211.468	27.853	-534.441	128.555	83.820	-267.435	66.474
930	7	-196.505	30.281	-544.775	136.584	94.408	-260.632	64.850
930	8	13.862	-43.223	473.821	-169.560	157.266	-186.626	139.777
930	9	-77.989	-3.423	-51.705	-5.986	-2.945	-78.467	94.561
931	1	-82.215	2.690	-61.143	-6.338	3.161	-82.685	94.246
931	2	-87.260	0.913	-81.642	0.580	0.917	-87.264	89.627
931	3	-83.368	0.577	-80.175	1.733	0.613	-83.404	88.817
931	4	-105.127	2.242	-88.318	-3.738	2.372	-105.257	91.991
931	5	-101.236	1.906	-86.851	-2.585	1.971	-101.300	91.435
931	6	-211.441	-29.783	-472.329	121.605	31.170	-272.394	63.378
931	7	-196.253	-31.935	-476.589	129.044	38.883	-267.073	61.242
931	8	12.781	42.081	376.410	-158.955	187.060	-132.198	132.367
931	9	-78.323	2.355	-59.676	-5.185	2.687	-78.655	93.662
932	1	-61.965	-3.898	-61.943	19.929	2.282	-68.147	72.766
932	2	-77.320	-2.405	-82.062	13.494	-0.049	-79.676	80.093
932	3	-75.750	-2.013	-80.606	11.668	-0.210	-77.552	81.219
932	4	-86.118	-4.006	-89.077	20.930	1.021	-91.146	76.494
932	5	-84.549	-3.613	-87.621	19.103	0.668	-88.831	77.365
932	6	-377.347	22.547	-466.502	-93.161	43.186	-397.986	102.491
932	7	-375.771	24.812	-470.009	-103.448	49.949	-400.908	103.658
932	8	262.450	-37.354	367.059	164.517	335.116	-110.020	23.830
932	9	-60.396	-3.506	-60.488	18.102	1.765	-65.668	73.763
933	1	-95.243	1.540	-50.319	-3.552	1.671	-95.373	92.099
933	2	-92.369	0.423	-76.020	2.234	0.477	-92.423	88.621
933	3	-86.804	0.212	-75.418	3.110	0.323	-86.915	87.955
933	4	-116.561	1.233	-78.002	-0.944	1.241	-116.568	90.459
933	5	-110.996	1.022	-77.400	-0.068	1.022	-110.996	90.035
933	6	-80.303	-18.927	-554.453	104.232	59.040	-158.271	53.202
933	7	-55.339	-20.245	-566.561	110.025	73.623	-149.208	49.530
933	8	-175.934	26.273	503.431	-130.863	90.539	-240.200	116.155
933	9	-89.678	1.329	-49.717	-2.677	1.408	-89.756	91.683
934	1	-79.527	-3.530	-53.261	18.975	0.943	-84.002	76.731
934	2	-85.560	-1.935	-77.624	12.114	-0.215	-87.280	81.921
934	3	-81.921	-1.560	-76.830	10.284	-0.265	-83.216	82.821

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
934	4	-102.369	-3.451	-80.849	19.471	0.243	-106.063	79.255
934	5	-98.729	-3.076	-80.055	17.641	0.073	-101.879	79.876
934	6	-226.235	25.059	-533.647	-102.625	61.643	-262.819	109.620
[illegible]	7	-212.564	27.302	-543.602	-113.025	72.168	-257.430	111.650
[illegible]	8	37.609	-39.128	470.550	172.697	176.148	-177.667	38.737
934	9	-75.888	-3.155	-52.467	17.145	0.683	-79.727	77.378
935	1	-79.986	2.884	-62.402	19.809	7.376	-84.477	77.224
935	2	-85.917	0.996	-82.568	12.547	2.771	-87.692	81.947
935	3	-82.292	0.618	-81.044	10.624	1.958	-83.632	82.812
935	4	-102.877	2.418	-89.683	20.268	6.185	-106.644	79.472
935	5	-99.252	2.041	-88.160	18.346	5.261	-102.473	80.044
935	6	-225.083	-31.634	-467.942	-109.009	17.375	-274.093	114.208
935	7	-211.085	-33.883	-471.494	-119.947	26.637	-271.606	116.774
935	8	34.789	44.714	367.581	182.462	222.281	-142.777	45.779
935	9	-76.361	2.506	-60.879	17.886	6.373	-80.227	77.801
936	1	-70.624	-3.771	-68.229	-5.356	-3.344	-71.051	94.552
936	2	-81.870	-1.853	-85.821	1.347	-1.830	-81.893	89.035
936	3	-79.417	-1.416	-83.830	2.452	-1.339	-79.494	88.201
936	4	-94.427	-3.575	-95.377	-2.638	-3.498	-94.503	91.662
936	5	-91.974	-3.138	-93.386	-1.534	-3.112	-92.000	90.989
936	6	-312.248	30.798	-427.953	119.038	68.058	-349.508	72.619
936	7	-304.929	33.386	-427.551	125.989	75.149	-346.693	71.660
936	8	162.181	-46.487	304.191	-153.058	243.083	-127.389	152.148
936	9	-68.172	-3.334	-66.238	-4.252	-3.056	-68.449	93.736
937	1	-89.319	2.808	-49.903	19.293	6.685	-93.196	78.637
[illegible]	2	-89.702	0.897	-76.315	11.909	2.436	-91.242	82.635
[illegible]	3	-84.827	0.520	-75.849	9.997	1.675	-85.982	83.407
937	4	-111.141	2.334	-77.913	19.536	5.604	-114.410	80.500
937	5	-106.265	1.958	-77.447	17.624	4.756	-109.063	80.980
937	6	-133.333	-32.120	-567.381	-112.091	40.259	-205.713	122.851
937	7	-112.601	-34.410	-580.118	-122.999	55.557	-202.569	126.183
937	8	-97.597	45.149	519.478	184.493	171.594	-224.042	55.575
937	9	-84.443	2.431	-49.437	17.380	5.779	-87.791	79.096
938	1	-82.368	-3.262	-57.022	-4.739	-2.979	-82.651	93.416
938	2	-86.941	-1.757	-80.283	1.657	-1.725	-86.973	88.886
938	3	-82.966	-1.391	-79.226	2.665	-1.304	-83.053	88.130
938	4	-105.025	-3.166	-84.869	-2.041	-3.125	-105.066	91.148
938	5	-101.050	-2.799	-83.812	-1.033	-2.788	-101.061	90.603
938	6	-202.677	23.796	-518.354	114.080	71.298	-250.179	67.393
938	7	-187.102	25.858	-526.294	120.687	80.323	-241.567	65.710
938	8	2.300	-36.820	441.892	-145.604	129.652	-164.172	138.825
938	9	-78.393	-2.896	-55.965	-3.732	-2.712	-78.577	92.823
939	1	-83.493	2.225	-68.811	-3.790	2.392	-83.660	92.526
939	2	-87.638	0.625	-86.505	2.139	0.677	-87.690	88.612
939	3	-83.607	0.337	-84.439	3.042	0.447	-83.718	87.927
939	4	-106.169	1.765	-96.173	-1.141	1.777	-106.181	90.606
939	5	-102.139	1.476	-94.107	-0.238	1.477	-102.139	90.132
939	6	-196.337	-27.091	-430.612	106.605	24.395	-247.824	64.221
[illegible]	7	-179.993	-28.983	-430.287	112.581	31.068	-240.045	61.924
[illegible]	8	-8.452	37.627	305.788	-134.252	150.802	-121.627	130.131

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E423

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
939	9	-79.462	1.936	-66.744	-2.887	2.039	-79.564	92.029
940	1	-67.164	-3.602	-70.847	17.159	0.734	-71.501	75.817
940	2	-80.913	-2.034	-87.684	10.892	-0.557	-82.399	82.280
940	3	-78.902	-1.649	-85.510	9.248	-0.557	-79.994	83.267
940	4	-91.657	-3.583	-98.188	17.552	-0.214	-95.026	79.134
940	5	-89.647	-3.198	-96.014	15.909	-0.363	-92.481	79.896
940	6	-354.577	24.410	-417.568	-93.990	46.439	-376.607	103.191
940	7	-350.315	26.665	-415.767	-103.490	53.207	-376.856	104.384
940	8	221.080	-38.642	284.517	157.544	295.386	-112.947	25.251
940	9	-65.153	-3.217	-68.672	15.516	0.452	-68.823	76.693
941	1	-94.069	1.518	-54.859	-3.086	1.618	-94.169	91.847
941	2	-92.164	0.615	-79.636	1.500	0.639	-92.188	89.074
941	3	-86.795	0.424	-78.794	2.221	0.481	-86.851	88.542
941	4	-115.649	1.334	-83.097	-1.073	1.344	-115.659	90.526
941	5	-110.280	1.143	-82.256	-0.352	1.145	-110.281	90.181
941	6	-96.873	-14.938	-543.726	82.287	36.014	-147.827	58.233
941	7	-72.974	-16.060	-553.660	86.914	46.937	-135.972	54.064
941	8	-153.339	21.565	477.693	-104.009	70.002	-201.775	114.971
941	9	-88.700	1.328	-54.018	-2.365	1.390	-88.762	91.504
942	1	-79.972	-3.190	-59.056	17.261	0.511	-83.674	77.895
942	2	-85.454	-1.740	-81.684	11.211	-0.264	-86.930	82.502
942	3	-81.755	-1.403	-80.500	9.573	-0.278	-82.879	83.298
942	4	-102.588	-3.108	-87.019	17.798	-0.020	-105.677	80.155
942	5	-98.888	-2.772	-85.836	16.160	-0.128	-101.532	80.707
942	6	-216.536	22.810	-509.428	-89.787	52.747	-246.474	108.440
942	7	-202.225	24.853	-516.195	-99.089	62.012	-239.383	110.556
942	8	25.017	-35.543	425.554	152.868	150.576	-161.101	39.398
942	9	-76.272	-2.853	-57.873	15.622	0.332	-79.458	78.473
943	1	-81.312	2.112	-71.548	18.129	5.882	-85.081	78.254
943	2	-86.263	0.547	-88.269	11.656	2.084	-87.801	82.484
943	3	-82.487	0.245	-86.013	9.921	1.418	-83.660	83.256
943	4	-103.938	1.646	-98.995	18.623	4.835	-107.127	80.284
943	5	-100.162	1.345	-96.738	16.888	4.081	-102.898	80.797
943	6	-208.550	-26.669	-416.292	-96.564	15.035	-250.255	113.359
943	7	-193.315	-28.450	-414.295	-106.437	23.742	-245.508	116.121
943	8	11.732	36.736	281.148	163.173	187.886	-139.417	47.190
943	9	-77.536	1.811	-69.292	16.394	5.065	-80.790	78.774
944	1	-73.798	-3.277	-79.680	-4.223	-3.025	-74.050	93.415
944	2	-82.552	-1.569	-92.587	0.678	-1.563	-82.558	89.520
944	3	-79.684	-1.188	-89.623	1.528	-1.158	-79.714	88.885
944	4	-96.893	-3.082	-106.809	-2.300	-3.025	-96.950	91.403
944	5	-94.025	-2.701	-103.845	-1.450	-2.678	-94.048	90.910
944	6	-269.867	27.546	-356.230	86.688	50.969	-293.290	74.880
944	7	-259.549	29.849	-348.591	91.792	56.509	-286.208	73.805
944	8	103.818	-41.316	187.852	-112.234	164.902	-102.400	151.442
944	9	-70.930	-2.897	-76.716	-3.373	-2.730	-71.097	92.832
945	1	-87.868	2.792	-54.693	16.929	5.850	-90.926	79.760
945	2	-89.447	1.050	-80.178	10.788	2.318	-90.716	83.295
945	3	-84.783	0.696	-79.450	9.147	1.663	-85.751	83.960

EH24

ELEMT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
945	4	-110.045	2.409	-83.326	17.324	5.017	-112.654	81.437
945	5	-105.381	2.055	-82.599	15.683	4.297	-107.624	81.862
945	6	-153.815	-28.971	-556.945	-92.031	19.810	-292.597	117.926
[illegible]	7	-134.459	-31.117	-567.468	-101.314	30.941	-196.518	121.489
[illegible]	8	-69.677	41.432	493.364	154.463	150.027	-178.272	54.891
945	9	-83.204	2.438	-53.966	15.287	5.085	-85.851	80.176
946	1	-80.972	-2.603	-63.237	-3.960	-2.403	-81.171	92.885
946	2	-86.399	-1.393	-84.863	1.123	-1.378	-86.414	89.242
946	3	-82.601	-1.097	-83.400	1.943	-1.051	-82.647	88.635
946	4	-103.805	-2.521	-91.628	-1.855	-2.487	-103.839	91.049
946	5	-100.007	-2.225	-90.165	-1.035	-2.214	-100.018	90.607
946	6	-216.834	19.151	-496.621	90.428	49.817	-247.500	71.267
946	7	-202.316	20.805	-501.365	95.720	56.242	-237.753	69.685
946	8	22.641	-29.558	398.592	-115.932	115.375	-122.292	141.344
946	9	-77.174	-2.307	-61.774	-3.140	-2.175	-77.305	92.398
947	1	-83.124	2.000	-78.895	-3.353	2.132	-83.256	92.252
947	2	-87.582	0.625	-92.992	1.487	0.650	-87.607	89.034
947	3	-83.619	0.372	-90.125	2.244	0.432	-83.679	88.470
947	4	-105.903	1.619	-106.561	-1.246	1.634	-105.918	90.664
947	5	-101.940	1.367	-103.694	-0.489	1.369	-101.942	90.271
947	6	-201.745	-23.185	-377.404	86.702	11.986	-236.916	67.919
947	7	-185.718	-24.831	-371.167	91.641	16.664	-227.214	65.638
947	8	-1.197	32.452	214.888	-109.893	126.800	-95.546	130.647
947	9	-79.161	1.748	-76.029	-2.596	1.831	-79.245	91.836
948	1	-70.180	-3.244	-83.138	15.744	0.273	-73.698	77.403
[illegible]	2	-81.907	-1.945	-95.120	9.981	-0.718	-83.134	82.991
[illegible]	3	-79.516	-1.610	-91.906	8.476	-0.698	-80.428	83.861
948	4	-94.212	-3.295	-110.563	16.076	-0.536	-96.971	80.262
948	5	-91.821	-2.960	-107.349	14.572	-0.631	-94.149	80.921
948	6	-320.782	19.852	-343.792	-86.517	40.566	-341.496	103.464
948	7	-314.031	21.789	-334.416	-95.255	46.926	-339.169	104.783
948	8	173.211	-32.321	163.437	144.807	248.012	-107.121	27.318
948	9	-67.789	-2.909	-79.924	14.239	0.078	-70.777	78.150
949	1	-89.569	1.148	-59.140	-1.696	1.180	-89.601	91.071
949	2	-89.618	0.559	-83.387	1.741	0.592	-89.651	88.894
949	3	-84.711	0.421	-82.339	2.263	0.481	-84.771	88.478
949	4	-111.230	1.067	-88.121	-0.042	1.067	-111.230	90.021
949	5	-106.323	0.929	-87.073	0.479	0.931	-106.325	89.744
949	6	-127.364	-9.534	-540.057	62.580	17.500	-154.399	66.636
949	7	-106.211	-10.295	-548.284	65.897	23.247	-139.754	63.023
949	8	-105.217	14.252	460.916	-77.215	52.141	-143.106	116.137
949	9	-84.662	1.010	-58.092	-1.174	1.027	-84.678	90.785
950	1	-79.736	-2.851	-65.716	14.190	-0.315	-82.271	79.869
950	2	-85.145	-1.480	-86.554	9.051	-0.512	-86.114	83.895
950	3	-81.455	-1.170	-84.915	7.682	-0.442	-82.183	84.583
950	4	-102.250	-2.732	-94.240	14.522	-0.656	-104.326	81.864
950	5	-98.559	-2.422	-92.601	13.152	-0.655	-100.326	82.348
950	6	-214.837	21.798	-485.389	-76.991	44.642	-237.681	106.526
950	7	-200.510	23.692	-488.735	-84.784	52.143	-228.962	108.550
[illegible]	8	23.697	-33.396	378.348	129.292	127.556	-137.255	38.774

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ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
950	9	-76.045	-2.541	-64.076	12.821	-0.369	-78.217	80.384
951	1	-82.159	1.489	-82.423	14.773	4.022	-84.692	80.272
951	2	-86.470	0.402	-95.223	9.404	1.409	-87.476	83.891
951	3	-82.590	0.188	-92.084	7.975	0.949	-83.351	84.546
951	4	-104.605	1.158	-110.170	15.108	3.274	-106.721	82.027
951	5	-100.725	0.944	-107.030	13.679	2.752	-102.533	82.469
951	6	-197.695	-18.514	-358.103	-80.509	12.345	-228.555	110.972
951	7	-181.678	-19.735	-349.737	-88.638	19.347	-220.762	113.794
951	8	-3.303	25.504	182.255	135.013	146.880	-124.679	48.045
951	9	-78.279	1.275	-79.284	13.344	3.453	-80.457	80.727
952	1	-77.013	-2.493	-93.166	-2.125	-2.433	-77.074	91.632
952	2	-83.890	-0.898	-100.909	1.042	-0.885	-83.903	89.280
952	3	-80.661	-0.577	-96.807	1.591	-0.545	-80.693	88.862
952	4	-99.760	-2.173	-120.481	-0.745	-2.168	-99.766	90.438
952	5	-96.532	-1.852	-116.379	-0.197	-1.852	-96.532	90.120
952	6	-239.049	26.510	-278.335	56.946	38.207	-250.745	78.393
952	7	-226.301	28.541	-262.560	60.064	41.988	-239.748	77.380
952	8	58.872	-37.902	58.606	-71.803	97.071	-76.100	151.987
952	9	-73.785	-2.172	-89.064	-1.577	-2.137	-73.820	91.261
953	1	-83.694	2.229	-59.609	13.299	4.241	-85.706	81.399
953	2	-87.573	0.727	-84.590	8.399	1.519	-88.365	84.614
953	3	-83.373	0.433	-83.618	7.095	1.029	-83.970	85.194
953	4	-106.263	1.852	-89.163	13.562	3.527	-107.938	82.958
953	5	-102.063	1.557	-88.191	12.257	2.988	-103.493	83.344
953	6	-191.293	-25.239	-554.651	-73.761	2.793	-219.325	110.809
953	7	-174.934	-27.052	-563.342	-81.126	8.773	-210.760	113.826
953	8	-14.392	35.509	476.379	122.998	136.062	-114.945	50.733
953	9	-79.494	1.935	-58.637	11.995	3.665	-81.224	81.792
954	1	-79.249	-1.812	-70.902	-2.159	-1.752	-79.310	91.596
954	2	-85.937	-0.926	-90.759	1.783	-0.888	-85.975	88.799
954	3	-82.361	-0.709	-88.786	2.375	-0.640	-82.430	88.335
954	4	-102.438	-1.736	-100.120	-0.315	-1.735	-102.439	90.179
954	5	-98.861	-1.519	-98.147	0.276	-1.519	-98.862	89.837
954	6	-238.187	14.168	-474.402	71.418	32.978	-256.996	75.244
954	7	-225.187	15.363	-475.492	75.326	37.004	-246.828	73.971
954	8	52.277	-21.552	350.611	-88.826	111.554	-80.828	146.283
954	9	-75.673	-1.596	-68.930	-1.567	-1.563	-75.706	91.212
955	1	-82.659	1.602	-91.513	-1.750	1.639	-82.696	91.190
955	2	-87.765	0.395	-101.362	2.095	0.445	-87.814	88.639
955	3	-83.896	0.184	-97.490	2.651	0.268	-83.979	88.196
955	4	-105.727	1.229	-119.712	0.135	1.229	-105.727	89.927
955	5	-101.858	1.018	-115.840	0.691	1.023	-101.863	89.615
955	6	-213.332	-20.561	-315.551	70.172	2.276	-236.171	71.972
955	7	-197.975	-21.975	-302.207	73.900	4.938	-224.889	69.988
955	8	13.517	28.294	106.750	-86.231	107.453	-65.640	132.551
955	9	-78.790	1.391	-87.642	-1.195	1.409	-78.808	90.854
956	1	-73.888	-2.829	-97.979	12.824	-0.586	-76.132	80.076
956	2	-84.593	-1.773	-104.585	7.721	-1.059	-85.307	84.718
956	3	-81.882	-1.486	-100.138	6.452	-0.971	-82.396	85.440

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
956	4	-98.213	-2.926	-125.795	12.841	-1.225	-99.914	82.457
956	5	-95.502	-2.639	-121.348	11.572	-1.218	-96.922	83.002
956	6	-306.753	15.868	-263.851	-78.201	33.824	-324.709	102.932
[illegible]	7	-298.262	17.497	-245.817	-85.699	39.257	-320.022	104.247
[illegible]	8	146.424	-26.519	27.960	126.897	213.511	-93.606	27.864
956	9	-71.177	-2.542	-93.531	11.555	-0.649	-73.070	80.695
957	1	-84.076	0.936	-64.922	-0.493	0.939	-84.079	90.332
957	2	-86.765	0.595	-88.658	1.904	0.636	-86.806	88.751
957	3	-82.434	0.496	-87.317	2.244	0.557	-82.495	88.451
957	4	-106.024	0.960	-95.035	0.805	0.966	-106.030	89.568
957	5	-101.693	0.862	-93.694	1.145	0.875	-101.706	89.360
957	6	-169.426	-5.127	-538.873	44.609	6.203	-180.756	75.748
957	7	-151.871	-5.633	-545.056	46.772	8.046	-165.551	73.697
957	8	-40.924	8.568	442.749	-53.047	42.358	-74.713	122.495
957	9	-79.745	0.837	-63.581	-0.153	0.838	-79.745	90.109
958	1	-78.409	-2.329	-74.333	10.881	-0.804	-79.935	82.018
958	2	-84.493	-1.103	-93.095	6.733	-0.563	-85.033	85.413
958	3	-80.936	-0.839	-90.863	5.654	-0.442	-81.334	85.981
958	4	-101.015	-2.173	-103.731	11.016	-0.960	-102.228	83.716
958	5	-97.459	-1.908	-101.499	9.937	-0.886	-98.481	84.124
958	6	-225.658	19.806	-458.740	-62.940	35.004	-240.856	103.575
958	7	-212.264	21.459	-457.938	-69.115	40.368	-231.173	105.300
958	8	40.027	-29.618	322.526	103.668	114.565	-104.156	35.716
958	9	-74.853	-2.065	-72.101	9.802	-0.768	-76.150	82.462
959	1	-82.229	0.681	-96.555	11.265	2.184	-83.732	82.398
[illegible]	2	-86.532	0.011	-104.519	7.034	0.579	-87.100	85.383
[illegible]	3	-82.646	-0.113	-100.237	5.921	0.309	-83.068	85.917
959	4	-104.693	0.409	-124.849	11.445	1.641	-105.925	83.856
959	5	-100.807	0.284	-120.567	10.332	1.329	-101.852	84.223
959	6	-197.668	-11.780	-287.315	-63.972	8.107	-217.556	107.269
959	7	-181.628	-12.453	-270.944	-70.311	12.953	-207.035	109.867
959	8	-3.552	15.415	59.423	105.945	112.300	-100.437	47.557
959	9	-78.342	0.555	-92.273	10.152	1.841	-79.628	82.783
960	1	-79.361	-1.165	-110.652	-1.000	-1.152	-79.373	90.732
960	2	-84.924	0.215	-111.907	0.770	0.222	-84.930	89.481
960	3	-81.427	0.440	-106.330	1.095	0.455	-81.442	89.233
960	4	-101.871	-0.651	-138.334	-0.220	-0.651	-101.871	90.125
960	5	-98.374	-0.426	-132.757	0.104	-0.426	-98.374	89.938
960	6	-217.558	24.356	-181.194	32.075	28.537	-221.739	82.574
960	7	-203.131	25.887	-155.092	33.770	30.763	-208.007	81.784
960	8	27.334	-31.641	-104.406	-39.905	47.464	-51.772	153.231
960	9	-75.864	-0.940	-105.076	-0.674	-0.934	-75.870	90.516
961	1	-79.520	1.554	-66.387	9.500	2.652	-80.619	83.405
961	2	-86.066	0.286	-90.900	5.749	0.667	-86.447	86.207
961	3	-82.369	0.056	-89.583	4.782	0.333	-82.645	86.690
961	4	-102.738	1.155	-97.349	9.553	2.026	-103.609	84.789
961	5	-99.040	0.925	-96.032	8.587	1.657	-99.772	85.126
961	6	-235.781	-21.764	-555.709	-57.407	-7.338	-250.207	104.106
961	7	-222.723	-23.224	-562.151	-62.918	-5.038	-240.909	106.121
[illegible]	8	48.901	29.578	457.966	93.359	133.097	-54.618	42.046

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ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
961	9	-75.823	1.324	-65.070	8.533	2.257	-76.755	83.762
962	1	-78.208	-0.961	-81.361	-0.005	-0.961	-78.208	90.004
962	2	-86.455	-0.385	-99.106	2.914	-0.286	-86.554	88.063
962	3	-83.094	-0.250	-96.442	3.270	-0.121	-83.223	87.742
962	4	-102.114	-0.871	-111.889	1.721	-0.842	-102.143	89.026
962	5	-98.753	-0.736	-109.224	2.077	-0.692	-98.797	88.786
962	6	-266.187	9.500	-449.744	55.103	20.106	-276.793	79.105
962	7	-254.804	10.233	-446.194	57.652	22.230	-266.802	78.244
962	8	87.639	-13.753	291.826	-63.907	118.516	-44.630	154.212
962	9	-74.847	-0.826	-78.696	0.350	-0.824	-74.848	89.728
963	1	-83.243	1.128	-108.666	0.197	1.128	-83.243	89.865
963	2	-89.132	0.018	-113.019	3.224	0.135	-89.248	87.931
963	3	-85.318	-0.152	-107.787	3.575	-0.002	-85.468	87.600
963	4	-106.953	0.705	-137.763	2.041	0.743	-106.992	88.914
963	5	-103.139	0.533	-132.531	2.392	0.589	-103.194	88.678
963	6	-229.012	-19.371	-236.657	57.398	-4.684	-243.699	75.647
963	7	-214.174	-20.604	-213.943	60.001	-3.514	-231.264	74.101
963	8	29.950	25.605	-34.165	-66.006	93.820	-38.263	135.942
963	9	-79.428	0.957	-103.434	0.548	0.960	-79.432	89.608
964	1	-79.604	-2.713	-118.152	8.984	-1.677	-80.640	83.423
964	2	-89.368	-1.839	-117.743	4.681	-1.589	-89.618	86.947
964	3	-86.242	-1.581	-111.631	3.707	-1.419	-86.404	87.497
964	4	-104.756	-2.897	-146.681	8.562	-2.182	-105.471	85.228
964	5	-101.630	-2.638	-140.569	7.588	-2.060	-102.208	85.641
964	6	-297.123	12.560	-160.619	-68.523	27.045	-311.608	101.935
964	7	-286.462	14.018	-131.113	-74.434	31.446	-303.890	103.177
964	8	119.051	-22.380	-149.818	104.829	174.786	-78.115	27.998
964	9	-76.478	-2.455	-112.040	8.010	-1.598	-77.335	83.893
965	1	-78.381	1.097	-73.034	0.787	1.105	-78.389	89.432
965	2	-83.746	0.839	-96.397	2.343	0.904	-83.810	88.414
965	3	-80.008	0.748	-94.648	2.511	0.826	-80.086	88.220
965	4	-100.616	1.222	-104.945	1.858	1.256	-100.650	88.955
965	5	-96.879	1.130	-103.196	2.026	1.172	-96.921	88.816
965	6	-211.949	-3.287	-543.605	30.448	1.064	-216.302	81.865
965	7	-198.049	-3.787	-547.291	31.628	1.232	-203.069	80.981
965	8	24.352	6.955	424.798	-33.142	49.919	-18.610	142.353
965	9	-74.644	1.005	-71.285	0.955	1.017	-74.656	89.276
966	1	-77.166	-1.694	-86.069	7.135	-1.026	-77.835	84.646
966	2	-84.161	-0.577	-102.359	3.877	-0.397	-84.341	87.350
966	3	-80.761	-0.361	-99.331	3.103	-0.242	-80.880	87.792
966	4	-100.036	-1.453	-116.874	6.924	-0.969	-100.520	86.002
966	5	-96.636	-1.237	-113.845	6.150	-0.842	-97.031	86.326
966	6	-241.120	18.642	-429.096	-51.401	28.443	-250.921	100.796
966	7	-228.835	20.062	-423.020	-55.959	32.064	-240.838	102.105
966	8	61.462	-26.492	254.319	79.777	108.580	-73.610	30.567
966	9	-73.766	-1.479	-83.040	6.362	-0.923	-74.321	85.008
967	1	-82.861	-0.267	-116.027	7.329	0.378	-83.506	84.967
967	2	-87.170	-0.307	-117.610	4.183	-0.305	-87.372	87.243
967	3	-83.254	-0.534	-111.763	3.405	-0.394	-83.394	87.646

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
967	4	-105.499	-0.501	-145.253	7.236	-0.005	-105.996	86.076
967	5	-101.583	-0.529	-139.406	6.458	-0.118	-101.994	86.358
967	6	-198.729	-4.996	-195.062	-49.024	6.702	-210.428	103.422
[illegible]	7	-182.517	-5.074	-167.951	-53.521	9.818	-197.410	105.550
[illegible]	8	-4.190	4.884	-103.627	77.564	78.043	-77.349	46.574
967	9	-78.944	-0.295	-110.180	6.552	0.246	-79.486	85.270
968	1	-82.118	1.422	-135.055	-1.367	1.445	-82.140	90.937
968	2	-86.580	2.147	-127.554	-0.217	2.148	-86.581	90.140
968	3	-82.813	2.172	-119.934	0.031	2.172	-82.813	89.979
968	4	-104.612	2.174	-163.435	-1.097	2.185	-104.623	90.588
968	5	-100.844	2.199	-155.815	-0.848	2.206	-100.851	90.471
968	6	-200.662	15.682	-51.234	19.665	17.455	-202.435	84.848
968	7	-184.652	15.986	-11.011	21.024	18.165	-186.831	84.081
968	8	0.007	-14.185	-325.352	-26.820	20.654	-34.832	142.410
968	9	-78.350	1.447	-127.436	-1.118	1.463	-78.365	90.802
969	1	-77.993	0.398	-76.916	5.496	0.782	-78.376	86.009
969	2	-86.246	-0.558	-100.886	2.774	-0.468	-86.336	88.147
969	3	-82.838	-0.691	-99.018	2.144	-0.635	-82.894	88.505
969	4	-101.950	-0.089	-110.169	5.230	0.178	-102.218	87.068
969	5	-98.543	-0.222	-108.301	4.600	-0.007	-98.757	87.326
969	6	-266.078	-17.531	-560.701	-43.565	-10.116	-273.493	99.659
969	7	-254.747	-18.449	-563.907	-47.278	-9.341	-263.856	100.904
969	8	88.002	21.409	433.418	66.107	128.724	-19.313	31.633
969	9	-74.585	0.265	-75.048	4.866	0.580	-74.900	86.295
970	1	-81.298	0.329	-97.569	3.484	0.478	-81.447	87.560
[illegible]	2	-89.706	0.480	-112.258	5.044	0.762	-89.988	86.808
[illegible]	3	-86.225	0.500	-108.513	5.064	0.795	-86.520	86.669
970	4	-106.109	0.471	-130.256	5.218	0.726	-106.364	87.203
970	5	-102.628	0.491	-126.511	5.238	0.756	-102.893	87.099
970	6	-273.796	3.298	-415.491	34.340	7.490	-277.989	83.039
970	7	-261.685	3.351	-405.009	34.877	7.864	-266.198	82.627
970	8	87.397	-2.915	205.455	-30.003	96.456	-11.974	163.199
970	9	-77.817	0.349	-93.824	3.504	0.506	-77.974	87.438
971	1	-88.729	0.625	-134.958	3.425	0.756	-88.860	87.808
971	2	-93.617	-0.453	-131.004	5.457	-0.134	-93.936	86.659
971	3	-89.448	-0.589	-123.683	5.520	-0.247	-89.789	86.458
971	4	-113.225	0.106	-165.508	5.434	0.366	-113.485	87.260
971	5	-109.055	-0.029	-158.187	5.498	0.247	-109.332	87.120
971	6	-218.150	-19.478	-117.934	43.145	-10.512	-227.115	78.261
971	7	-200.945	-20.583	-80.995	44.130	-10.364	-211.164	76.962
971	8	1.415	24.351	-247.537	-40.410	54.889	-29.122	127.078
971	9	-84.559	0.489	-127.637	3.488	0.632	-84.702	87.655
972	1	-92.277	-3.333	-148.687	3.358	-3.207	-92.404	87.840
972	2	-98.816	-2.330	-137.719	0.309	-2.329	-98.817	89.816
972	3	-94.717	-2.036	-129.084	-0.232	-2.035	-94.717	90.144
972	4	-118.596	-3.601	-178.343	2.344	-3.554	-118.644	88.832
972	5	-114.497	-3.307	-169.708	1.802	-3.278	-114.526	89.071
972	6	-254.442	14.072	-5.511	-52.810	24.085	-264.455	100.736
972	7	-237.736	15.836	41.316	-56.276	27.764	-249.664	101.967
[illegible]	8	33.270	-25.977	-417.586	70.691	80.294	-73.001	33.631

E 429

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAX.PRIN PRIN-STRESS	MIN.PRIN PRIN-STRESS	PRIN-STRESS ANGLE
972	9	-88.178	-3.039	-140.052	2.815	-2.946	-88.271	88.108
973	1	-72.326	4.444	-84.493	4.677	4.728	-72.610	86.526
973	2	-79.220	3.854	-108.346	5.124	4.169	-79.535	86.483
973	3	-75.999	3.567	-106.090	4.957	3.875	-76.307	86.448
973	4	-94.074	5.192	-119.546	6.011	5.555	-94.437	86.547
973	5	-90.854	4.905	-117.290	5.843	5.260	-91.209	86.521
973	6	-232.439	-4.737	-569.397	14.990	-3.754	-233.421	86.249
973	7	-221.223	-6.390	-570.576	14.282	-5.445	-222.169	86.213
973	8	64.963	18.235	421.798	-4.255	65.348	17.851	174.839
973	9	-69.105	4.157	-82.237	4.510	4.433	-69.382	86.490
974	1	-78.881	-0.500	-104.138	2.215	-0.437	-78.944	88.382
974	2	-84.960	0.467	-117.072	0.012	0.467	-84.960	89.991
974	3	-81.402	0.600	-112.837	-0.378	0.602	-81.404	90.264
974	4	-101.654	-0.061	-137.378	1.476	-0.039	-101.675	89.167
974	5	-98.096	0.071	-133.142	1.085	0.083	-98.108	89.366
974	6	-226.421	17.499	-391.861	-38.386	23.397	-232.319	98.735
974	7	-212.795	18.507	-378.118	-40.877	25.519	-219.807	99.733
974	8	39.273	-21.796	159.166	50.862	68.062	-50.585	29.510
974	9	-75.324	-0.366	-99.903	1.824	-0.322	-75.368	88.606
975	1	-87.527	-1.422	-146.402	2.137	-1.369	-87.580	88.578
975	2	-89.476	-1.070	-138.229	0.417	-1.068	-89.478	89.729
975	3	-85.114	-0.974	-129.947	0.072	-0.974	-85.114	89.950
975	4	-109.913	-1.570	-177.207	1.676	-1.544	-109.939	89.113
975	5	-105.551	-1.475	-168.925	1.331	-1.458	-105.568	89.267
975	6	-161.040	4.555	-54.877	-29.394	9.618	-166.103	99.773
975	7	-141.460	5.273	-11.202	-31.422	11.719	-147.906	101.592
975	8	-61.501	-9.449	-353.626	40.185	12.401	-83.352	61.464
975	9	-83.165	-1.327	-138.120	1.792	-1.288	-83.204	88.746
976	1	-88.055	8.049	-172.965	-4.603	8.269	-88.275	92.736
976	2	-88.978	7.381	-151.984	-3.507	7.509	-89.105	92.082
976	3	-84.555	6.939	-141.194	-3.136	7.047	-84.662	91.961
976	4	-109.847	9.588	-202.519	-5.200	9.814	-110.073	92.488
976	5	-105.424	9.145	-191.729	-4.830	9.349	-105.628	92.410
976	6	-142.388	-1.056	148.297	13.851	0.288	-143.733	84.455
976	7	-121.740	-3.681	210.366	16.098	-1.525	-123.896	82.372
976	8	-84.581	24.229	-665.876	-29.598	31.759	-92.111	104.273
976	9	-83.632	7.607	-162.174	-4.233	7.803	-83.828	92.651
977	1	-97.979	-6.453	-97.826	2.267	-6.396	-98.035	88.581
977	2	-104.201	-6.204	-115.752	1.762	-6.172	-104.233	88.969
977	3	-99.635	-5.863	-112.299	1.524	-5.838	-99.660	89.069
977	4	-125.693	-7.888	-132.591	2.586	-7.831	-125.750	88.743
977	5	-121.127	-7.547	-129.138	2.347	-7.499	-121.176	88.816
977	6	-256.704	-4.575	-476.963	-6.295	-4.417	-256.861	91.429
977	7	-238.335	-2.712	-469.303	-7.268	-2.488	-238.559	91.765
977	8	19.511	-13.172	275.988	13.738	24.518	-18.180	20.026
977	9	-93.413	-6.112	-94.373	2.028	-6.065	-93.460	88.669
978	1	-107.270	3.592	-126.319	14.335	5.408	-109.087	82.764
978	2	-110.153	2.479	-129.860	12.406	3.830	-111.503	83.788
978	3	-104.855	2.214	-123.657	11.542	3.444	-106.085	83.916

E430

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
978	4	-135.189	3.767	-159.359	16.599	5.722	-137.144	83.281
978	5	-129.891	3.501	-153.155	15.735	5.332	-131.722	83.362
978	6	-207.098	-15.844	-246.865	-15.357	-14.619	-208.323	94.562
[illegible]	7	-183.329	-17.752	-218.885	-20.652	-15.215	-185.866	97.003
[illegible]	8	-64.741	28.654	-73.121	58.661	56.935	-93.022	64.260
978	9	-101.973	3.327	-120.115	13.441	5.015	-103.661	82.839
979	1	-116.493	0.599	-165.652	10.309	1.500	-117.393	85.006
979	2	-115.067	0.032	-148.992	9.149	0.755	-115.790	85.483
979	3	-108.913	-0.053	-138.953	8.554	0.615	-109.582	85.534
979	4	-144.059	0.386	-196.106	12.083	1.390	-145.063	85.251
979	5	-137.906	0.300	-186.067	11.488	1.249	-138.854	85.280
979	6	-139.169	-9.863	77.268	-7.141	-9.470	-139.562	93.151
979	7	-109.142	-10.503	133.612	-10.776	-9.340	-110.305	96.163
979	8	-170.116	13.109	-562.581	37.728	20.574	-177.581	78.808
979	9	-110.339	0.513	-155.613	9.715	1.358	-111.184	85.029
980	1	-135.249	-9.025	-185.083	-6.332	-8.708	-135.566	92.864
980	2	-130.630	-7.312	-159.768	-6.231	-6.998	-130.944	92.885
980	3	-123.317	-6.673	-147.969	-5.968	-6.369	-123.622	92.921
980	4	-165.424	-10.268	-215.054	-7.800	-9.877	-165.815	92.871
980	5	-158.111	-9.629	-203.255	-7.537	-9.247	-158.492	92.898
980	6	-105.930	19.253	212.417	-7.268	19.674	-106.351	93.312
980	7	-68.216	23.118	281.568	-5.504	23.448	-68.547	93.436
980	8	-262.515	-48.336	-775.354	-9.831	-47.886	-262.965	92.622
980	9	-127.936	-8.386	-173.284	-6.069	-8.079	-128.244	92.899
981	1	-113.152	2.982	-118.993	4.948	3.192	-113.363	87.564
[illegible]	2	-118.623	3.152	-129.572	1.421	3.169	-118.639	89.331
[illegible]	3	-113.210	3.016	-124.381	0.866	3.022	-113.216	89.573
981	4	-144.082	3.836	-154.504	3.949	3.941	-144.187	88.471
981	5	-138.669	3.699	-149.313	3.394	3.780	-138.750	88.635
981	6	-264.108	7.517	-368.940	-59.457	19.961	-276.552	101.821
981	7	-241.331	6.909	-349.240	-63.863	22.375	-256.797	103.613
981	8	-15.025	-0.155	89.801	83.101	75.842	-91.023	47.556
981	9	-107.740	2.845	-113.801	4.392	3.019	-107.914	87.729
982	1	-122.652	-2.389	-140.840	-1.256	-2.376	-122.665	90.598
982	2	-121.925	-1.809	-139.525	0.668	-1.805	-121.929	89.681
982	3	-115.518	-1.616	-132.142	0.841	-1.610	-115.524	89.576
982	4	-152.077	-2.640	-174.496	-0.346	-2.639	-152.078	90.132
982	5	-145.669	-2.447	-167.113	-0.173	-2.447	-145.669	90.069
982	6	-160.946	7.519	-176.185	34.405	14.274	-167.701	78.891
982	7	-130.120	8.636	-140.130	36.536	17.669	-139.153	76.114
982	8	-162.096	-15.558	-196.816	-43.690	-3.521	-174.134	105.404
982	9	-116.245	-2.196	-133.456	-1.083	-2.186	-116.255	90.544
983	1	-132.701	-6.686	-185.874	-5.410	-6.454	-132.933	92.454
983	2	-127.036	-4.830	-161.338	-2.644	-4.772	-127.094	91.239
983	3	-119.674	-4.324	-149.554	-2.183	-4.283	-119.715	91.084
983	4	-161.597	-7.292	-216.515	-4.997	-7.041	-161.758	91.852
983	5	-154.234	-6.697	-204.731	-4.536	-6.557	-154.374	91.759
983	6	-82.350	25.378	196.665	44.333	41.277	-98.249	70.272
[illegible]	7	-44.482	28.751	265.279	48.257	52.720	-68.440	63.597
[illegible]	8	-282.246	-48.649	-759.247	-67.067	-30.763	-300.132	104.932

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E431

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
983	9	-125.338	-6.180	-174.090	-4.949	-5.975	-125.544	92.374
984	1	-133.506	14.441	-211.034	-7.952	14.867	-133.933	93.068
984	2	-123.933	10.001	-172.790	-8.540	10.544	-124.475	93.633
984	3	-116.218	8.881	-158.479	-8.172	9.413	-116.749	93.721
984	4	-160.120	15.301	-239.547	-10.391	15.915	-160.734	93.378
984	5	-152.405	14.181	-225.235	-10.023	14.782	-153.096	93.431
984	6	-9.743	-62.887	418.790	-22.692	-1.372	-71.258	159.751
984	7	31.854	-70.594	506.243	-21.119	36.037	-74.777	168.796
984	8	-368.784	114.517	-1,089.520	3.263	114.539	-368.806	89.613
984	9	-125.791	13.321	-196.722	-7.584	13.733	-126.203	93.111
985	1	-143.416	-5.068	-128.993	-7.181	-4.696	-143.788	92.963
985	2	-143.926	-3.598	-138.038	-2.625	-3.549	-143.976	91.071
985	3	-136.565	-3.219	-132.217	-1.885	-3.193	-136.591	90.810
985	4	-178.888	-5.433	-166.062	-6.139	-5.216	-179.105	92.024
985	5	-171.526	-5.054	-160.241	-5.400	-4.879	-171.701	91.856
985	6	-214.374	20.362	-354.470	75.516	42.558	-236.569	73.621
985	7	-179.285	23.012	-330.799	81.509	51.766	-208.039	70.568
985	8	-159.976	-38.267	44.193	-108.379	25.173	-223.417	120.343
985	9	-136.054	-4.689	-123.171	-6.441	-4.374	-136.369	92.800
986	1	-165.916	4.387	-158.805	23.463	7.561	-169.090	82.297
986	2	-155.583	1.783	-152.444	13.762	2.978	-156.777	85.039
986	3	-146.110	1.331	-143.698	11.687	2.252	-147.031	85.495
986	4	-200.311	3.866	-193.866	23.331	6.498	-202.943	83.563
986	5	-190.838	3.414	-185.120	21.256	5.713	-193.137	83.827
986	6	-42.346	-42.781	-106.995	-149.139	106.575	-191.703	135.041
986	7	8.313	-46.251	-61.745	-163.882	147.169	-185.107	139.726
986	8	-424.366	62.261	-328.877	240.506	161.066	-523.170	67.666
986	9	-156.443	3.935	-150.059	21.388	6.739	-159.247	82.532
987	1	-179.333	-4.364	-217.277	24.243	-1.067	-182.630	82.255
987	2	-162.118	-3.164	-180.532	15.511	-1.665	-163.618	84.478
987	3	-151.333	-2.827	-166.028	13.485	-1.612	-152.548	84.853
987	4	-212.859	-4.734	-248.315	24.898	-1.797	-215.796	83.272
987	5	-202.074	-4.396	-233.811	22.873	-1.784	-204.686	83.485
987	6	68.028	16.307	381.476	-129.747	174.467	-90.131	140.636
987	7	128.356	18.521	469.165	-143.818	227.386	-80.507	145.449
987	8	-591.122	-31.512	-1,064.167	220.223	44.756	-667.391	70.897
987	9	-168.547	-4.026	-202.773	22.217	-1.079	-171.495	92.443
988	1	-214.229	-8.695	-246.013	-18.647	-7.017	-215.907	95.142
988	2	-183.419	-6.475	-195.703	-11.327	-5.753	-184.141	93.648
988	3	-169.647	-5.806	-178.500	-9.752	-5.227	-170.225	93.394
988	4	-248.101	-9.563	-275.904	-18.799	-8.091	-249.573	94.478
988	5	-234.329	-8.894	-258.702	-17.225	-7.586	-235.637	94.344
988	6	274.008	29.251	595.702	111.058	316.888	-13.628	21.112
988	7	355.583	33.517	703.140	122.509	396.887	-7.786	18.631
988	8	-930.624	-59.066	-1,395.679	-182.691	-22.320	-967.370	101.372
988	9	-200.456	-8.026	-228.811	-17.073	-6.523	-201.960	95.031
989	1	-126.423	-2.951	-120.999	21.090	0.551	-129.926	80.569
989	2	-131.408	0.210	-134.543	8.590	0.769	-131.966	86.281
989	3	-125.335	0.654	-129.546	6.368	0.975	-125.656	87.113

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
989	4	-160.363	-1.758	-158.826	18.667	0.408	-162.530	83.377
989	5	-154.290	-1.315	-153.829	16.444	0.432	-156.038	83.933
989	6	-274.204	55.344	-427.753	-205.311	153.826	-372.685	115.625
	7	-247.513	58.975	-410.195	-221.999	175.486	-364.023	117.691
	8	-41.624	-72.789	152.262	298.958	242.157	-356.571	43.508
989	9	-120.350	-2.508	-116.003	18.868	0.438	-123.297	81.121
990	1	-159.229	5.571	-159.562	-18.915	7.714	-161.372	96.464
990	2	-146.348	3.695	-152.111	-9.547	4.300	-146.953	93.626
990	3	-136.979	3.250	-143.226	-7.747	3.676	-137.405	93.152
990	4	-190.371	5.796	-194.144	-17.863	7.409	-191.985	95.161
990	5	-181.002	5.351	-185.259	-16.063	6.726	-182.376	94.891
990	6	15.348	-27.352	-87.536	149.370	144.886	-156.889	40.932
990	7	66.589	-30.470	-41.106	162.692	187.835	-151.716	36.695
990	8	-472.104	47.756	-353.655	-227.814	133.461	-557.809	110.616
990	9	-149.859	5.126	-150.677	-17.116	6.994	-151.727	96.227
991	1	-176.416	-6.933	-233.034	-18.157	-5.009	-178.340	96.047
991	2	-154.719	-3.052	-187.367	-7.805	-2.652	-155.120	92.938
991	3	-143.668	-2.337	-171.243	-5.954	-2.087	-143.919	92.408
991	4	-206.444	-6.296	-262.534	-16.314	-4.975	-207.765	94.629
991	5	-195.393	-5.581	-246.410	-14.463	-4.486	-196.489	94.332
991	6	156.779	63.149	526.908	168.992	285.321	-65.392	37.258
991	7	220.402	68.440	626.741	183.018	342.584	-53.742	33.727
991	8	-685.743	-93.282	-1,278.397	-248.440	-2.892	-776.133	109.993
991	9	-165.365	-6.218	-216.911	-16.306	-4.565	-167.019	95.790
992	1	-194.534	24.402	-277.499	4.187	24.482	-194.614	88.904
	2	-159.447	14.825	-208.618	-3.106	14.881	-159.502	91.021
	3	-146.254	12.722	-188.104	-3.995	12.822	-146.354	91.438
992	4	-220.832	24.612	-303.874	0.711	24.614	-220.834	89.834
992	5	-207.639	22.508	-283.361	-0.177	22.509	-207.639	90.044
992	6	383.151	-145.347	900.444	-131.576	414.096	-176.292	166.765
992	7	463.453	-160.261	1,032.687	-139.202	493.111	-189.919	167.973
992	8	-1,000.574	238.932	-1,840.020	164.672	260.436	-1,022.078	82.560
992	9	-181.341	22.298	-256.986	3.298	22.351	-181.395	89.072
993	1	-155.284	-9.097	-122.868	-30.604	-2.948	-161.433	101.359
993	2	-156.327	-5.673	-139.047	-14.538	-4.283	-157.718	95.462
993	3	-148.448	-4.900	-134.206	-11.516	-3.982	-149.366	94.558
993	4	-194.029	-9.281	-162.774	-28.393	-5.016	-198.295	98.543
993	5	-186.150	-8.508	-157.933	-25.371	-4.955	-189.703	97.971
993	6	-241.565	51.396	-480.131	258.736	202.239	-392.408	59.758
993	7	-203.895	56.844	-464.476	281.132	236.363	-383.415	57.439
993	8	-162.559	-85.883	207.703	-388.472	266.137	-514.581	132.182
993	9	-147.405	-8.324	-118.027	-27.582	-3.053	-152.675	100.817
994	1	-217.062	8.420	-170.090	59.562	23.187	-231.829	76.076
994	2	-187.195	4.301	-160.788	31.464	9.338	-192.233	80.904
994	3	-173.340	3.500	-151.205	25.855	7.202	-177.043	81.850
994	4	-252.295	7.986	-206.174	57.229	20.014	-264.323	78.131
994	5	-238.440	7.185	-196.591	51.620	17.593	-248.848	78.601
994	6	252.042	-65.532	-67.854	-443.789	564.595	-378.086	144.843
994	7	333.525	-71.409	-17.039	-484.482	656.145	-394.029	146.340
	8	-913.404	100.291	-406.817	686.621	446.874	-1,259.987	63.217

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E433

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAJOR PRIN-STRESS	MINOR PRIN-STRESS	PRIN-STRESS ANGLE
994	9	-203.207	7.619	-160.507	53.953	20.625	-216.212	76.447
995	1	-241.618	-12.084	-272.472	62.836	3.991	-257.693	75.649
	2	-199.238	-7.445	-209.377	35.005	-1.256	-205.428	79.973
	3	-182.985	-6.397	-189.649	29.255	-1.676	-187.705	80.834
995	4	-275.322	-12.292	-301.169	61.485	1.370	-288.385	77.471
995	5	-259.068	-11.244	-281.440	55.735	0.713	-271.026	77.891
995	6	452.489	69.964	798.506	-434.025	735.525	-213.071	146.891
995	7	551.538	77.284	924.284	-475.316	845.593	-216.771	148.257
995	8	-1,216.795	-116.069	-1,707.313	684.690	212.032	-1,544.897	64.396
995	9	-225.364	-11.035	-252.743	57.085	3.220	-239.620	75.978
996	1	-322.451	-11.921	-331.180	-46.667	-5.059	-329.313	98.364
996	2	-243.854	-8.440	-240.534	-25.620	-5.684	-246.610	96.139
996	3	-220.172	-7.501	-215.293	-21.327	-5.383	-222.290	95.670
996	4	-354.166	-12.817	-357.673	-45.437	-6.873	-360.111	97.454
996	5	-330.485	-11.877	-332.432	-41.144	-6.650	-335.713	97.241
996	6	1,018.729	48.348	1,233.227	329.430	1,119.998	-52.920	17.087
996	7	1,171.334	54.585	1,399.004	360.474	1,277.582	-51.662	16.422
996	8	-2,106.790	-90.525	-2,380.995	-516.817	34.228	-2,231.544	103.571
996	9	-298.770	-10.981	-305.939	-42.374	-4.872	-304.879	98.204
997	1	-73.520	-13.190	114.520	78.083	40.351	-127.063	55.561
997	2	-109.563	-7.044	-23.409	39.203	6.228	-122.836	71.295
997	3	-109.055	-5.810	-41.811	31.661	3.125	-117.991	74.239
997	4	-113.267	-12.734	59.361	73.747	26.248	-152.250	62.139
997	5	-112.758	-11.500	40.959	66.206	21.216	-145.475	63.703
997	6	-783.429	96.787	-2,432.909	-620.388	417.322	-1,103.963	117.324
997	7	-798.382	105.750	-2,588.402	-675.538	466.528	-1,159.161	118.105
	8	701.756	-150.374	3,158.125	944.808	1,312.124	-760.742	32.863
	9	-73.012	-11.955	96.118	70.541	34.380	-119.348	56.700
998	1	-199.173	24.152	-109.340	-57.601	38.133	-213.155	103.643
998	2	-172.870	13.779	-127.736	-32.600	19.310	-178.400	99.627
998	3	-160.247	11.606	-123.781	-27.377	15.862	-164.504	98.836
998	4	-232.106	23.822	-147.200	-56.684	35.815	-244.099	101.946
998	5	-219.484	21.649	-143.245	-51.462	32.173	-230.008	101.557
998	6	210.691	-160.708	-502.343	388.218	455.338	-405.355	32.218
998	7	284.357	-176.283	-492.190	425.613	537.973	-429.899	30.790
998	8	-813.920	256.056	272.476	-616.504	537.334	-1,095.197	114.524
998	9	-186.551	21.978	-105.385	-52.378	34.395	-198.968	103.336
999	1	-249.722	-22.336	-315.631	-54.331	-10.020	-262.037	102.771
999	2	-197.128	-10.169	-225.111	-29.059	-5.756	-201.540	98.634
999	3	-179.520	-7.906	-200.664	-23.976	-4.619	-182.807	97.806
999	4	-279.170	-20.484	-338.284	-52.431	-10.261	-289.393	101.033
999	5	-261.562	-18.221	-313.838	-47.349	-9.333	-270.451	100.632
999	6	633.371	197.114	1,253.328	398.055	869.146	-38.660	30.639
999	7	743.760	213.868	1,414.946	434.870	988.037	-30.409	29.324
999	8	-1,450.128	-293.180	-2,359.497	-618.539	-24.763	-1,718.544	113.458
999	9	-232.114	-20.073	-291.185	-49.249	-9.192	-242.995	102.458
1000	1	-389.277	27.809	-483.631	124.381	62.085	-423.553	74.593
1000	2	-269.854	17.377	-289.569	72.452	34.618	-287.095	76.614
	3	-239.021	15.019	-247.054	61.378	29.071	-253.073	77.104

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E434

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
.000	4	-412.680	28.355	-484.715	123.718	60.689	-445.014	75.353
.000	5	-381.847	25.997	-442.200	112.643	55.040	-410.891	75.542
.000	6	1,691.902	-156.568	2,963.257	-799.331	1,989.608	-454.275	159.572
.000	7	1,898.589	-173.132	3,261.514	-878.343	2,220.850	-495.393	159.852
.000	8	-3,080.715	261.819	-4,827.790	1,286.170	699.430	-3,518.326	71.209
.000	9	-358.445	25.452	-441.117	113.307	56.399	-389.393	74.723

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SUPPORT REACTIONS *
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NODE	LD COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
1	1	0.000	48.394
1	2	0.000	48.394
1	3	0.000	1,254.007
1	4	0.000	48.588
1	5	0.000	1,254.201
1	6	0.000	1,254.189
1	7	0.000	1,254.194
1	8	0.000	1,254.210
1	9	0.000	1,254.008
4	1	0.000	173.395
4	2	0.000	173.405
4	3	0.000	7,809.033
4	4	0.000	168.313
4	5	0.000	7,803.942
4	6	0.000	7,804.278
4	7	0.000	7,804.130
4	8	0.000	7,803.720
4	9	0.000	7,809.024
7	1	0.000	324.378
7	2	0.000	324.361
7	3	0.000	14,135.425
7	4	0.000	333.367
7	5	0.000	14,144.432
7	6	0.000	14,143.837
7	7	0.000	14,144.098
7	8	0.000	14,144.825
7	9	0.000	14,135.443
10	1	0.000	446.896
10	2	0.000	446.904
10	3	0.000	20,431.295
10	4	0.000	442.837
10	5	0.000	20,427.228
10	6	0.000	20,427.496
10	7	0.000	20,427.379

NODE	LD COMB	X-FORCE REACTION (RADIAL)	Z-FORCE REACTION (AXIAL)
10	8	0.000	20,427.050
10	9	0.000	20,431.287
13	1	0.000	597.240
13	2	0.000	597.241
13	3	0.000	26,709.127
13	4	0.000	597.058
13	5	0.000	26,708.944
13	6	0.000	26,708.956
13	7	0.000	26,708.951
13	8	0.000	26,708.936
13	9	0.000	26,709.126
16	1	0.000	728.106
16	2	0.000	728.105
16	3	0.000	32,987.431
16	4	0.000	728.244
16	5	0.000	32,987.570
16	6	0.000	32,987.561
16	7	0.000	32,987.565
16	8	0.000	32,987.576
16	9	0.000	32,987.431
19	1	0.000	878.552
19	2	0.000	878.552
19	3	0.000	39,278.632
19	4	0.000	878.550
19	5	0.000	39,278.630
19	6	0.000	39,278.630
19	7	0.000	39,278.630
19	8	0.000	39,278.630
19	9	0.000	39,278.632
22	1	0.000	1,005.297
22	2	0.000	1,005.297
22	3	0.000	45,545.290
22	4	0.000	1,005.304
22	5	0.000	45,545.297
22	6	0.000	45,545.297
22	7	0.000	45,545.297
22	8	0.000	45,545.297
22	9	0.000	45,545.290
25	1	0.000	1,159.701
25	2	0.000	1,159.701
25	3	0.000	51,839.625
25	4	0.000	1,159.695
25	5	0.000	51,839.619
25	6	0.000	51,839.619
25	7	0.000	51,839.619
25	8	0.000	51,839.619
25	9	0.000	51,839.625
28	1	0.000	1,282.612

NODE	LD COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
28	2	0.000	1,282.612
28	3	0.000	58,102.846
[illegible]	4	0.000	1,282.616
[illegible]	5	0.000	58,102.850
28	6	0.000	58,102.849
28	7	0.000	58,102.850
28	8	0.000	58,102.850
28	9	0.000	58,102.846
31	1	0.000	1,440.855
31	2	0.000	1,440.855
31	3	0.000	64,410.835
31	4	0.000	1,440.852
31	5	0.000	64,410.833
31	6	0.000	64,410.833
31	7	0.000	64,410.833
31	8	0.000	64,410.833
31	9	0.000	64,410.835
34	1	0.000	1,559.930
34	2	0.000	1,559.930
34	3	0.000	70,679.655
34	4	0.000	1,559.932
34	5	0.000	70,679.658
34	6	0.000	70,679.657
34	7	0.000	70,679.658
34	8	0.000	70,679.658
[illegible]	9	0.000	70,679.655
[illegible]	1	0.000	1,721.995
37	2	0.000	1,721.995
37	3	0.000	76,981.890
37	4	0.000	1,721.982
37	5	0.000	76,981.878
37	6	0.000	76,981.878
37	7	0.000	76,981.878
37	8	0.000	76,981.877
37	9	0.000	76,981.890
40	1	0.000	1,837.165
40	2	0.000	1,837.165
40	3	0.000	83,237.311
40	4	0.000	1,837.078
40	5	0.000	83,237.224
40	6	0.000	83,237.229
40	7	0.000	83,237.227
40	8	0.000	83,237.220
40	9	0.000	83,237.311
43	1	0.000	2,002.999
43	2	0.000	2,002.999
43	3	0.000	89,555.795
43	4	0.000	2,003.005
[illegible]	5	0.000	89,555.800

E 438

ODE	LD COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
43	6	0.000	89,555.799
43	7	0.000	89,555.800
43	8	0.000	89,555.800
43	9	0.000	89,555.795
46	1	0.000	2,113.385
46	2	0.000	2,113.385
46	3	0.000	95,827.947
46	4	0.000	2,113.581
46	5	0.000	95,828.143
46	6	0.000	95,828.130
46	7	0.000	95,828.136
46	8	0.000	95,828.152
46	9	0.000	95,827.947
49	1	0.000	2,283.554
49	2	0.000	2,283.554
49	3	0.000	102,084.878
49	4	0.000	2,283.560
49	5	0.000	102,084.884
49	6	0.000	102,084.883
49	7	0.000	102,084.883
49	8	0.000	102,084.884
49	9	0.000	102,084.878
52	1	0.000	2,392.677
52	2	0.000	2,392.677
52	3	0.000	108,368.117
52	4	0.000	2,392.466
52	5	0.000	108,367.906
52	6	0.000	108,367.920
52	7	0.000	108,367.914
52	8	0.000	108,367.897
52	9	0.000	108,368.117
55	1	0.000	2,564.653
55	2	0.000	2,564.653
55	3	0.000	114,698.600
55	4	0.000	2,564.755
55	5	0.000	114,698.702
55	6	0.000	114,698.696
55	7	0.000	114,698.698
55	8	0.000	114,698.707
55	9	0.000	114,698.601
58	1	0.000	2,668.402
58	2	0.000	2,668.402
58	3	0.000	120,888.089
58	4	0.000	2,668.512
58	5	0.000	120,888.200
58	6	0.000	120,888.192
58	7	0.000	120,888.196
58	8	0.000	120,888.205
58	9	0.000	120,888.090

NODE	LD COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
61	1	0.000	2,847.526
61	2	0.000	2,847.526
[illegible]	3	0.000	127,243.602
[illegible]	4	0.000	2,847.299
61	5	0.000	127,243.375
61	6	0.000	127,243.390
61	7	0.000	127,243.383
61	8	0.000	127,243.365
61	9	0.000	127,243.602
64	1	0.000	2,945.592
64	2	0.000	2,945.592
64	3	0.000	133,502.726
64	4	0.000	2,945.717
64	5	0.000	133,502.851
64	6	0.000	133,502.843
64	7	0.000	133,502.847
64	8	0.000	133,502.857
64	9	0.000	133,502.727
67	1	0.000	3,126.819
67	2	0.000	3,126.819
67	3	0.000	139,850.030
67	4	0.000	3,126.943
67	5	0.000	139,850.154
67	6	0.000	139,850.146
67	7	0.000	139,850.150
[illegible]	8	0.000	139,850.160
[illegible]	9	0.000	139,850.031
70	1	0.000	3,224.923
70	2	0.000	3,224.923
70	3	0.000	146,045.937
70	4	0.000	3,224.655
70	5	0.000	146,045.668
70	6	0.000	146,045.686
70	7	0.000	146,045.678
70	8	0.000	146,045.656
70	9	0.000	146,045.936
73	1	0.000	3,407.839
73	2	0.000	3,407.839
73	3	0.000	152,383.863
73	4	0.000	3,407.976
73	5	0.000	152,383.999
73	6	0.000	152,383.991
73	7	0.000	152,383.994
73	8	0.000	152,384.005
73	9	0.000	152,383.863
76	1	0.000	3,500.100
76	2	0.000	3,500.100
76	3	0.000	158,642.600
[illegible]	4	0.000	3,500.244

E440

NODE	LD COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
76	5	0.000	158,642.744
76	6	0.000	158,642.735
76	7	0.000	158,642.739
76	8	0.000	158,642.751
76	9	0.000	158,642.601
79	1	0.000	3,691.240
79	2	0.000	3,691.241
79	3	0.000	164,933.143
79	4	0.000	3,690.946
79	5	0.000	164,932.848
79	6	0.000	164,932.867
79	7	0.000	164,932.859
79	8	0.000	164,932.835
79	9	0.000	164,933.142
82	1	0.000	3,777.292
82	2	0.000	3,777.292
82	3	0.000	171,172.794
82	4	0.000	3,777.451
82	5	0.000	171,172.953
82	6	0.000	171,172.942
82	7	0.000	171,172.947
82	8	0.000	171,172.960
82	9	0.000	171,172.794
85	1	0.000	3,970.004
85	2	0.000	3,970.004
85	3	0.000	177,532.133
85	4	0.000	3,970.162
85	5	0.000	177,532.291
85	6	0.000	177,532.280
85	7	0.000	177,532.285
85	8	0.000	177,532.298
85	9	0.000	177,532.133
88	1	0.000	4,057.160
88	2	0.000	4,057.160
88	3	0.000	183,719.665
88	4	0.000	4,056.823
88	5	0.000	183,719.328
88	6	0.000	183,719.350
88	7	0.000	183,719.341
88	8	0.000	183,719.313
88	9	0.000	183,719.664
91	1	0.000	4,251.024
91	2	0.000	4,251.023
91	3	0.000	190,056.356
91	4	0.000	4,251.194
91	5	0.000	190,056.527
91	6	0.000	190,056.515
91	7	0.000	190,056.521
91	8	0.000	190,056.534

E441

NODE	LD COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
91	9	0.000	190,056.356
[illegible]	1	0.000	4,331.801
[illegible]	2	0.000	4,331.801
94	3	0.000	196,315.428
94	4	0.000	4,331.981
94	5	0.000	196,315.608
94	6	0.000	196,315.596
94	7	0.000	196,315.601
94	8	0.000	196,315.616
94	9	0.000	196,315.429
97	1	0.000	4,534.955
97	2	0.000	4,534.956
97	3	0.000	202,674.452
97	4	0.000	4,534.595
97	5	0.000	202,674.090
97	6	0.000	202,674.114
97	7	0.000	202,674.104
97	8	0.000	202,674.075
97	9	0.000	202,674.451
100	1	0.000	4,608.992
100	2	0.000	4,608.991
100	3	0.000	208,835.625
100	4	0.000	4,609.184
100	5	0.000	208,835.818
[illegible]	6	0.000	208,835.805
[illegible]	7	0.000	208,835.811
[illegible]	8	0.000	208,835.826
100	9	0.000	208,835.625
103	1	0.000	4,813.188
103	2	0.000	4,813.188
103	3	0.000	215,206.725
103	4	0.000	4,813.380
103	5	0.000	215,206.916
103	6	0.000	215,206.903
103	7	0.000	215,206.909
103	8	0.000	215,206.925
103	9	0.000	215,206.725
106	1	0.000	4,889.394
106	2	0.000	4,889.395
106	3	0.000	221,471.284
106	4	0.000	4,888.987
106	5	0.000	221,470.876
106	6	0.000	221,470.903
106	7	0.000	221,470.891
106	8	0.000	221,470.858
106	9	0.000	221,471.283
[illegible]	1	0.000	5,094.208
[illegible]	2	0.000	5,094.207

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NODE	LD COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
109	3	0.000	227,829.016
109	4	0.000	5,094.412
109	5	0.000	227,829.221
109	6	0.000	227,829.207
109	7	0.000	227,829.213
109	8	0.000	227,829.230
109	9	0.000	227,829.017
112	1	0.000	5,163.502
112	2	0.000	5,163.502
112	3	0.000	234,064.231
112	4	0.000	5,163.716
112	5	0.000	234,064.446
112	6	0.000	234,064.431
112	7	0.000	234,064.438
112	8	0.000	234,064.455
112	9	0.000	234,064.231
115	1	0.000	5,378.651
115	2	0.000	5,378.652
115	3	0.000	240,384.907
115	4	0.000	5,378.203
115	5	0.000	240,384.459
115	6	0.000	240,384.489
115	7	0.000	240,384.476
115	8	0.000	240,384.439
115	9	0.000	240,384.906
118	1	0.000	5,440.591
118	2	0.000	5,440.591
118	3	0.000	246,592.089
118	4	0.000	5,440.712
118	5	0.000	246,592.210
118	6	0.000	246,592.202
118	7	0.000	246,592.206
118	8	0.000	246,592.216
118	9	0.000	246,592.089
121	1	0.000	5,657.319
121	2	0.000	5,657.317
121	3	0.000	252,928.117
121	4	0.000	5,658.577
121	5	0.000	252,929.377
121	6	0.000	252,929.294
121	7	0.000	252,929.331
121	8	0.000	252,929.432
121	9	0.000	252,928.120
124	1	0.000	5,730.865
124	2	0.000	5,730.847
124	3	0.000	259,138.436
124	4	0.000	5,740.264
124	5	0.000	259,147.853
124	6	0.000	259,147.232

NODE	LD COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
124	7	0.000	259,147.505
124	8	0.000	259,148.264
[illegible]	9	0.000	259,138.454
127	1	0.000	5,916.448
127	2	0.000	5,916.494
127	3	0.000	265,607.794
127	4	0.000	5,892.465
127	5	0.000	265,583.765
127	6	0.000	265,585.352
127	7	0.000	265,584.655
127	8	0.000	265,582.716
127	9	0.000	265,607.747
130	1	0.000	5,483.548
130	2	0.000	5,484.624
130	3	0.000	272,572.968
130	4	0.000	4,927.589
130	5	0.000	272,015.932
130	6	0.000	272,052.705
130	7	0.000	272,036.556
130	8	0.000	271,991.604
130	9	0.000	272,571.891
133	1	0.000	4,302.387
133	2	0.000	4,306.163
133	3	0.000	275,274.969
[illegible]	4	0.000	2,352.335
[illegible]	5	0.000	273,321.141
133	6	0.000	273,450.123
133	7	0.000	273,393.481
133	8	0.000	273,235.811
133	9	0.000	275,271.193
136	1	0.000	20,198.785
136	2	0.000	20,168.159
136	3	0.000	232,163.506
136	4	0.000	36,016.574
136	5	0.000	248,011.922
136	6	0.000	246,965.689
136	7	0.000	247,425.142
136	8	0.000	248,704.078
136	9	0.000	232,194.133
139	1	0.000	523,989.108
139	2	0.000	522,918.588
139	3	0.000	-140,393.655
139	4	0.000	1,076,886.250
139	5	0.000	413,574.006
139	6	0.000	377,003.855
139	7	0.000	393,063.632
139	8	0.000	437,767.739
[illegible]	9	0.000	-139,323.136

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NODE	LD COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
140	1	0.000	-531,999.278
140	2	0.000	-530,889.917
140	3	0.000	639,907.911
140	4	0.000	-1,104,957.137
140	5	0.000	65,840.691
140	6	0.000	103,737.713
140	7	0.000	87,095.242
140	8	0.000	40,769.140
140	9	0.000	638,798.550
145	1	0.000	20,160.419
145	2	0.000	20,141.287
145	3	0.000	482,601.207
145	4	0.000	30,041.531
145	5	0.000	492,501.451
145	6	0.000	491,847.887
145	7	0.000	492,134.900
145	8	0.000	492,933.829
145	9	0.000	482,620.338
148	1	0.000	3,440.114
148	2	0.000	3,445.522
148	3	0.000	276,599.581
148	4	0.000	647.225
148	5	0.000	273,801.283
148	6	0.000	273,986.014
148	7	0.000	273,904.891
148	8	0.000	273,679.069
148	9	0.000	276,594.173
151	1	0.000	6,643.473
151	2	0.000	6,644.109
151	3	0.000	310,800.287
151	4	0.000	6,314.145
151	5	0.000	310,470.323
151	6	0.000	310,492.072
151	7	0.000	310,482.505
151	8	0.000	310,455.953
151	9	0.000	310,799.651
154	1	0.000	7,259.041
154	2	0.000	7,258.721
154	3	0.000	322,128.643
154	4	0.000	7,417.341
154	5	0.000	322,287.263
154	6	0.000	322,276.538
154	7	0.000	322,281.128
154	8	0.000	322,294.500
154	9	0.000	322,128.963
157	1	0.000	5,581.517
157	2	0.000	5,585.174
157	3	0.000	328,354.360
157	4	0.000	3,730.533

NODE	LD COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
157	5	0.000	326,499.719
157	6	0.000	326,623.517
[illegible]	7	0.000	326,569.796
[illegible]	8	0.000	326,417.056
157	9	0.000	328,350.703
160	1	0.000	-5,566.178
160	2	0.000	-5,538.919
160	3	0.000	334,084.799
160	4	0.000	-19,162.053
160	5	0.000	320,461.665
160	6	0.000	321,378.279
160	7	0.000	320,983.920
160	8	0.000	319,845.609
160	9	0.000	334,057.540
163	1	0.000	-62,587.725
163	2	0.000	-62,434.742
163	3	0.000	332,660.521
163	4	0.000	-136,730.247
163	5	0.000	258,365.015
163	6	0.000	263,443.961
163	7	0.000	261,295.962
163	8	0.000	254,907.597
163	9	0.000	332,507.537
166	1	0.000	-18,154.011
[illegible]	2	0.000	-18,103.828
[illegible]	3	0.000	268,660.310
[illegible]	4	0.000	-46,460.738
166	5	0.000	240,303.399
166	6	0.000	242,089.888
166	7	0.000	241,264.934
166	8	0.000	239,169.245
166	9	0.000	268,610.126
170	1	0.000	4,435.978
170	2	0.000	4,286.655
170	3	0.000	275,514.140
170	4	0.000	-2,232.820
170	5	0.000	268,994.664
170	6	0.000	266,425.332
170	7	0.000	266,135.469
170	8	0.000	272,369.352
170	9	0.000	275,663.463
175	1	0.000	27,143.345
175	2	0.000	26,566.577
175	3	0.000	274,393.185
175	4	0.000	44,224.245
175	5	0.000	292,050.853
175	6	0.000	280,832.246
175	7	0.000	281,006.137
[illegible]	8	0.000	305,085.819

E 446

NODE	LD COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
175	9	0.000	274,969.953
181	1	0.000	72,930.838
181	2	0.000	72,026.690
181	3	0.000	229,188.542
181	4	0.000	139,851.407
181	5	0.000	297,013.258
181	6	0.000	278,213.911
181	7	0.000	279,698.632
181	8	0.000	317,447.000
181	9	0.000	230,092.590
188	1	0.000	61,656.239
188	2	0.000	60,715.388
188	3	0.000	268,559.502
188	4	0.000	114,645.379
188	5	0.000	322,489.493
188	6	0.000	303,430.013
188	7	0.000	304,472.331
188	8	0.000	343,752.730
188	9	0.000	269,500.354
195	1	0.000	102,193.400
195	2	0.000	103,858.686
195	3	0.000	253,349.847
195	4	0.000	177,070.020
195	5	0.000	326,561.180
195	6	0.000	355,199.834
195	7	0.000	358,447.691
195	8	0.000	288,925.738
195	9	0.000	251.684.561
202	1	0.000	193,291.831
202	2	0.000	201,705.654
202	3	0.000	248,224.635
202	4	0.000	309,160.213
202	5	0.000	355,679.194
202	6	0.000	508,305.072
202	7	0.000	516,790.517
202	8	0.000	165,526.886
202	9	0.000	239,810.812
209	1	0.000	264,832.761
209	2	0.000	283,347.567
209	3	0.000	236,364.805
209	4	0.000	376,085.450
209	5	0.000	329,102.689
209	6	0.000	669,301.759
209	7	0.000	683,634.715
209	8	0.000	-89,331.733
209	9	0.000	217,850.000
216	1	0.000	174,507.279
216	2	0.000	189,406.437

NODE	LD COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
216	3	0.000	172,250.833
216	4	0.000	226,086.455
[illegible]	5	0.000	208,930.851
	6	0.000	483,841.019
216	7	0.000	494,229.179
216	8	0.000	-127,789.973
216	9	0.000	157,351.675
223	1	0.000	141,446.378
223	2	0.000	156,264.921
223	3	0.000	166,720.674
223	4	0.000	159,779.696
223	5	0.000	170,235.449
223	6	0.000	444,654.243
223	7	0.000	453,990.790
223	8	0.000	-164,663.481
223	9	0.000	151,902.131
230	1	0.000	96,881.489
230	2	0.000	109,082.719
230	3	0.000	138,700.314
230	4	0.000	91,341.458
230	5	0.000	120,959.053
230	6	0.000	347,532.337
230	7	0.000	354,596.760
230	8	0.000	-154,788.624
230	9	0.000	126,499.084
[illegible]	1	0.000	143,579.502
237	2	0.000	167,533.911
237	3	0.000	281,239.973
237	4	0.000	82,101.555
237	5	0.000	195,807.617
237	6	0.000	642,162.910
237	7	0.000	654,504.473
237	8	0.000	-345,561.793
237	9	0.000	257,285.564
244	1	0.000	-21,379.176
244	2	0.000	-11,024.392
244	3	0.000	155,980.493
244	4	0.000	-149,668.155
244	5	0.000	17,336.730
244	6	0.000	213,356.187
244	7	0.000	215,619.913
244	8	0.000	-216,681.272
244	9	0.000	145,625.709
251	1	0.000	-91,150.334
251	2	0.000	-93,426.712
251	3	0.000	1,850.488
251	4	0.000	-176,977.574
[illegible]	5	0.000	-81,700.372
[illegible]	6	0.000	-121,347.586

NODE	LD COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
251	7	0.000	-125,288.284
251	8	0.000	-30,254.241
251	9	0.000	4,126.867

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568TANK7

****

[illegible].4
[illegible]C

FINITE ELEMENT ANALYSIS

01/30/86 00:54:47

****
WARNINGS *
****

NO WARNINGS *

ITS DEFINITION *

GROUP	UNIT
TES	FEET
ENT PROPERTIES	INCHES
ES	LBS
ES	DEGREES
PLACEMENTS	INCHES
AMIC PROPERTIES	FORCE

OAD COMBINATION INFORMATION *

B	A G	B H	C I	D J	E K	F L
	1.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000
	00	1.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000
	1.000	1.000	0.000	1.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000
	1.000	1.000	0.000	0.000	0.000	1.000
	0.000	0.000	0.000	0.000	0.000	0.000
	1.000	1.000	0.000	1.000	0.000	1.000
	0.000	0.000	0.000	0.000	0.000	0.000
5	1.000	0.000	0.000	1.000	1.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000
	1.000	0.000	0.000	1.000	0.000	1.000
	1.000	0.000	0.000	0.000	0.000	0.000
	1.000	0.000	0.000	1.000	0.000	1.000
	0.000	1.000	0.000	0.000	0.000	0.000
	1.000	0.000	0.000	1.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000

Ld Case A : DEAD LOAD (TANK WT. + POST TENSIONING FORCES)
Ld Case B : SNOW LOAD (20 PSF)
Ld Case C : NOT USED
Ld Case D : CONTENTS LOAD
Ld Case E : EMBANKMENT W/3' COVER
Ld Case F : EXISTING EMBANKMENT
Ld Case G : TORNADO PRESSURE (401 PSF)
Ld Case H : TORNADO SUCTION (432 PSF)

BER OF LOAD CASES = 8

Comb 1 : DL
Comb 2 : DL + LL
Comb 3 : DL + LL + CONTENTS
Comb 4 : DL + LL + EXIST. EMBANK.
Comb 5 : DL + LL + CONTENTS + EXIST. EMBANK.
Comb 6 : DL + CONTENTS + EMBANK. W/3' COVER
Comb 7 : DL + CONTENTS + EXISTING EMBANK + TORNADO PRESSURE
Comb 8 : DL + CONTENTS + EXIST. EMBANK + TORNADO SUCTION
Comb 9 : DL + CONTENTS

:AL SPECIFICATIONS *

YOUNG'S MODULUS (LONG)	POISSON'S RATIO (LONG)	SHEAR MODULUS (LONG)	YOUNGS MODULUS (TRANS)	POISSON'S RATIO (TRANS)	SHEAR MODULUS (TRANS)	THERMAL COEFFICIENT
2.85E+06	2.00E-01	1.18E+06	2.85E+06	2.00E-01	1.18E-05	0.00E+00
3.12E+06	2.00E-01	1.30E+06	3.12E+06	2.00E-01	1.30E+06	0.00E+00
3.37E+06	2.00E-01	1.40E+06	3.37E+06	2.00E-01	1.40E+06	0.00E+00
3.60E+06	2.00E-01	1.50E+06	3.60E+06	2.00E-01	1.50E+06	0.00E+00
3.82E+06	2.00E-01	1.59E+06	3.82E+06	2.00E-01	1.59E+06	0.00E+00

COORDINATES *

X COORD	Y COORD	COMMENT
0.0000	0.6667	S/X
0.0000	0.8333	
0.0000	1.0000	
0.8333	0.6667	S/X
0.8333	0.8333	
0.8333	1.0000	
1.5000	0.6667	S/X
1.5000	0.8333	
1.5000	1.0000	
2.1667	0.6667	S/X
2.1667	0.8333	
2.1667	1.0000	
2.8334	0.6667	S/X
2.8334	0.8333	
2.8334	1.0000	
3.5001	0.6667	S/X
3.5001	0.8333	
3.5001	1.0000	
4.1668	0.6667	S/X
4.1668	0.8333	
4.1668	1.0000	
4.8335	0.6667	S/X
4.8335	0.8333	
4.8335	1.0000	
5.5002	0.6667	S/X

AL COORDINATES *

X COORD	Y COORD	COMMENT
5.5002	0.8333	
5.5002	1.0000	
6.1669	0.6667	S/X
6.1669	0.8333	
6.1669	1.0000	
6.8336	0.6667	S/X
6.8336	0.8333	
6.8336	1.0000	
7.5003	0.6667	S/X
7.5003	0.8333	
7.5003	1.0000	
8.1670	0.6667	S/X
8.1670	0.8333	
8.1670	1.0000	
8.8337	0.6667	S/X
8.8337	0.8333	
8.8337	1.0000	
9.5004	0.6667	S/X
9.5004	0.8333	
9.5004	1.0000	
10.1670	0.6667	S/X
10.1670	0.8333	
10.1670	1.0000	
10.8330	0.6667	S/X
10.8330	0.8333	
10.8330	1.0000	
11.5000	0.6667	S/X
11.5000	0.8333	
11.5000	1.0000	
12.1670	0.6667	S/X
12.1670	0.8333	
12.1670	1.0000	
12.8330	0.6667	S/X
12.8330	0.8333	
12.8330	1.0000	
13.5000	0.6667	S/X
13.5000	0.8333	
13.5000	1.0000	
14.1670	0.6667	S/X
14.1670	0.8333	
14.1670	1.0000	

COORDINATES *

X COORD	Y COORD	COMMENT
14.8330	0.6667	S/X
14.8330	0.8333	
14.8330	1.0000	
15.5000	0.6667	S/X
15.5000	0.8333	
15.5000	1.0000	
16.1670	0.6667	S/X
16.1670	0.8333	
16.1670	1.0000	
16.8330	0.6667	S/X
16.8330	0.8333	
16.8330	1.0000	
17.5000	0.6667	S/X
17.5000	0.8333	
17.5000	1.0000	
18.1670	0.6667	S/X
18.1670	0.8333	
18.1670	1.0000	
18.8330	0.6667	S/X
18.8330	0.8333	
18.8330	1.0000	
19.5000	0.6667	S/X
19.5000	0.8333	
19.5000	1.0000	
20.1670	0.6667	S/X
20.1670	0.8333	
20.1670	1.0000	
20.8330	0.6667	S/X
20.8330	0.8333	
20.8330	1.0000	
21.5000	0.6667	S/X
21.5000	0.8333	
21.5000	1.0000	
22.1670	0.6667	S/X
22.1670	0.8333	
22.1670	1.0000	
22.8330	0.6667	S/X
22.8330	0.8333	
22.8330	1.0000	
23.5000	0.6667	S/X
23.5000	0.8333	

COORDINATES *

X COORD	Y COORD	COMMENT
23.5000	1.0000	
24.1670	0.6667	S/X
24.1670	0.8333	
24.1670	1.0000	
24.8330	0.6667	S/X
24.8330	0.8333	
24.8330	1.0000	
25.5000	0.6667	S/X
25.5000	0.8333	
25.5000	1.0000	
26.1670	0.6667	S/X
26.1670	0.8333	
26.1670	1.0000	
26.8330	0.6667	S/X
26.8330	0.8333	
26.8330	1.0000	
27.5000	0.6667	S/X
27.5000	0.8333	
27.5000	1.0000	
28.1670	0.6667	S/X
28.1670	0.8333	
28.1670	1.0000	
28.8330	0.6667	S/X
28.8330	0.8333	
28.8330	1.0000	
29.5000	0.6667	S/X
29.5000	0.8333	
29.5000	1.0000	
30.1670	0.6667	S/X
30.1670	0.8333	
30.1670	1.0000	
30.8330	0.6667	S/X
30.8330	0.8333	
30.8330	1.0000	
31.5000	0.6667	S/X
31.5000	0.8333	
31.5000	1.0000	
32.1670	0.6667	S/X
32.1670	0.8333	
32.1670	1.0000	
32.8330	0.6667	S/X

. COORDINATES *

X COORD	Y COORD	COMMENT
32.8330	0.8333	
32.8330	1.0000	
33.5000	0.6667	S/X
33.5000	0.8333	
33.5000	1.0000	
34.1670	0.6667	S/X
34.1670	0.8333	
34.1670	1.0000	
34.8330	0.6667	S/X
34.8330	0.8333	
34.8330	1.0000	
35.5000	0.6667	S/X
35.5000	0.8333	
35.5000	1.0000	
36.1670	0.6667	S/X
36.1670	0.8333	
36.1670	1.0000	
36.6660	0.5000	S/X
36.6660	0.6667	
36.6660	0.8333	
36.6660	1.0000	
37.1660	0.3333	S/X
37.1660	0.5000	
37.1660	0.6667	
37.1660	0.8333	
37.1660	1.0000	
37.6660	0.1667	S/X
37.6660	0.3333	
37.6660	0.5000	
37.6660	0.6667	
37.6660	0.8333	
37.6660	1.0000	
38.1660	0.0000	S/X
38.1660	0.1667	
38.1660	0.3333	
38.1660	0.5000	
38.1660	0.6667	
38.1660	0.8333	
38.1660	1.0000	
38.6660	0.0000	S/X
38.6660	0.1667	

AL COORDINATES *

	X COORD	Y COORD	COMMENT
	38.6660	0.3333	
	38.6660	0.5000	
	38.6660	0.6667	
	38.6660	0.8333	
	38.6660	1.0000	
	39.1660	0.0000	S/X
	39.1660	0.1667	
	39.1660	0.3333	
	39.1660	0.5000	
	39.1660	0.6667	
	39.1660	0.8333	
	39.1660	1.0000	
	39.5820	0.0000	S/X
	39.5820	0.1667	
	39.5820	0.3333	
	39.5820	0.5000	
	39.5820	0.6667	
	39.5820	0.8333	
	39.5820	1.0000	
	40.0000	0.0000	S/X
	40.0000	0.1667	
	40.0000	0.3333	
	40.0000	0.5000	
	40.0000	0.6667	
	40.0000	0.8333	
	40.0000	1.0000	
	40.1870	0.0000	S/X
	40.1870	0.1667	
	40.1870	0.3333	
	40.1870	0.5000	
	40.1870	0.6667	
	40.1870	0.8333	
	40.1870	1.0000	
	40.3750	0.0000	S/X
	40.3750	0.1667	
	40.3750	0.3333	
	40.3750	0.5000	
	40.3750	0.6667	
	40.3750	0.8333	
	40.3750	1.0000	
	40.5200	0.0000	S/X

COORDINATES *

X COORD	Y COORD	COMMENT
40.5200	0.1667	
40.5200	0.3333	
40.5200	0.5000	
40.5200	0.6667	
40.5200	0.8333	
40.5200	1.0000	
40.6660	0.0000	S/X
40.6660	0.1667	
40.6660	0.3333	
40.6660	0.5000	
40.6660	0.6667	
40.6660	0.8333	
40.6660	1.0000	
41.1660	0.0000	S/X
41.1660	0.1667	
41.1660	0.3333	
41.1660	0.5000	
41.1660	0.6667	
41.1660	0.8333	
41.1660	1.0000	
41.6660	0.0000	S/X
41.6660	0.1667	
41.6660	0.3333	
41.6660	0.5000	
41.6660	0.6667	
41.6660	0.8333	
41.6660	1.0000	
40.0830	1.0001	
40.2290	1.0001	
40.5200	1.0001	
40.6660	1.0001	
40.0830	1.6667	
40.2290	1.6667	
40.3750	1.6667	
40.5200	1.6667	
40.6660	1.6667	
40.0830	2.3334	
40.2290	2.3334	
40.3750	2.3334	
40.5200	2.3334	
40.6660	2.3334	

DAL COORDINATES *

	X COORD	Y COORD	COMMENT
2	40.0830	3.0001	
3	40.2290	3.0001	
4	40.3750	3.0001	
5	40.5200	3.0001	
6	40.6660	3.0001	
7	40.0410	3.6668	
8	40.1970	3.6668	
9	40.3530	3.6668	
0	40.5100	3.6668	
.	40.6660	3.6668	
2	40.0410	4.3335	
3	40.1970	4.3335	
4	40.3530	4.3335	
5	40.5100	4.3335	
6	40.6660	4.3335	
7	40.0410	5.0002	
8	40.1970	5.0002	
9	40.3530	5.0002	
0	40.5100	5.0002	
	40.6660	5.0002	
	40.0410	5.6669	
	40.1970	5.6669	
	40.3530	5.6669	
	40.5100	5.6669	
	40.6660	5.6669	
	40.0410	6.3336	
	40.1970	6.3336	
9	40.3530	6.3336	
0	40.5100	6.3336	
1	40.6660	6.3336	
2	40.0410	7.0003	
3	40.1970	7.0003	
	40.3530	7.0003	
	40.5100	7.0003	
	40.6660	7.0003	
	40.0410	7.6670	
	40.1970	7.6670	
	40.3530	7.6670	
	40.5100	7.6670	
	40.6660	7.6670	
	40.0410	8.3337	

COORDINATES *

X COORD	Y COORD	COMMENT
40.1970	8.3337	
40.3530	8.3337	
40.5100	8.3337	
40.6660	8.3337	
40.0410	9.0004	
40.1970	9.0004	
40.3530	9.0004	
40.5100	9.0004	
40.6660	9.0004	
40.0410	9.6671	
40.1970	9.6671	
40.3530	9.6671	
40.5100	9.6671	
40.6660	9.6671	
40.0410	10.3330	
40.1970	10.3330	
40.3530	10.3330	
40.5100	10.3330	
40.6660	10.3330	
40.0410	11.0000	
40.1970	11.0000	
40.3530	11.0000	
40.5100	11.0000	
40.6660	11.0000	
40.0410	11.6670	
40.1970	11.6670	
40.3530	11.6670	
40.5100	11.6670	
40.6660	11.6670	
40.0410	12.3330	
40.1970	12.3330	
40.3530	12.3330	
40.5100	12.3330	
40.6660	12.3330	
40.0410	13.0000	
40.1970	13.0000	
40.3530	13.0000	
40.5100	13.0000	
40.6660	13.0000	
40.0410	13.6670	
40.1970	13.6670	

COORDINATES *

X COORD	Y COORD	COMMENT
40.3530	13.6670	
40.5100	13.6670	
40.6660	13.6670	
40.0410	14.3340	
40.1970	14.3340	
40.3530	14.3340	
40.5100	14.3340	
40.6660	14.3340	
40.0410	15.0000	
40.1970	15.0000	
40.3530	15.0000	
40.5100	15.0000	
40.6660	15.0000	
40.0410	15.6670	
40.1970	15.6670	
40.3530	15.6670	
40.5100	15.6670	
40.6660	15.6670	
40.0410	16.3340	
40.1970	16.3340	
40.3530	16.3340	
40.5100	16.3340	
40.6660	16.3340	
40.0410	17.0000	
40.1970	17.0000	
40.3530	17.0000	
40.5100	17.0000	
40.6660	17.0000	
40.0410	17.6670	
40.1970	17.6670	
40.3530	17.6670	
40.5100	17.6670	
40.6660	17.6670	
40.0410	18.3340	
40.1970	18.3340	
40.3530	18.3340	
40.5100	18.3340	
40.6660	18.3340	
40.0410	19.0000	
40.1970	19.0000	
40.3530	19.0000	

COORDINATES *

X COORD	Y COORD	COMMENT
40.5100	19.0000	
40.6660	19.0000	
40.0410	19.6670	
40.1970	19.6670	
40.3530	19.6670	
40.5100	19.6670	
40.6660	19.6670	
40.0410	20.3340	
40.1970	20.3340	
40.3530	20.3340	
40.5100	20.3340	
40.6660	20.3340	
40.0410	21.0000	
40.1970	21.0000	
40.3530	21.0000	
40.5100	21.0000	
40.6660	21.0000	
40.0410	21.6670	
40.1970	21.6670	
40.3530	21.6670	
40.5100	21.6670	
40.6660	21.6670	
40.0410	22.3340	
40.1970	22.3340	
40.3530	22.3340	
40.5100	22.3340	
40.6660	22.3340	
40.0000	23.0000	
40.1660	23.0000	
40.3330	23.0000	
40.5000	23.0000	
40.6660	23.0000	
40.0000	23.6670	
40.1660	23.6670	
40.3330	23.6670	
40.5000	23.6670	
40.6660	23.6670	
40.0000	24.3340	
40.1660	24.3340	
40.3330	24.3340	
40.5000	24.3340	

COORDINATES *

X COORD	Y COORD	COMMENT
40.6660	24.3340	
40.0000	25.0000	
40.1660	25.0000	
40.3330	25.0000	
40.5000	25.0000	
40.6660	25.0000	
40.0000	25.6660	
40.1660	25.6660	
40.3330	25.6660	
40.5000	25.6660	
40.6660	25.6660	
40.0000	26.3320	
40.1660	26.3320	
40.3330	26.3320	
40.5000	26.3320	
40.6660	26.3320	
40.0000	27.0000	
40.1660	27.0000	
40.3330	27.0000	
40.5000	27.0000	
40.6660	27.0000	
40.0000	27.3330	
40.1660	27.3330	
40.3330	27.3330	
40.5000	27.3330	
40.6660	27.3330	
40.0000	27.6660	
40.1660	27.6660	
40.3330	27.6660	
40.5000	27.6660	
40.6660	27.6660	
39.5000	27.2640	
39.5000	27.5550	
39.5000	27.8470	
39.0000	27.5240	
39.0000	27.7740	
39.0000	28.0240	
38.5000	27.7800	
38.5000	28.0090	
38.5000	28.2380	
38.0000	28.0310	

COORDINATES *

X COORD	Y COORD	COMMENT
38.0000	28.2390	
38.0000	28.4480	
37.5000	28.2380	
37.5000	28.4460	
37.5000	28.6550	
37.0000	28.4400	
37.0000	28.6480	
37.0000	28.8570	
36.5000	28.6800	
36.5000	28.8880	
36.5000	29.0970	
36.0000	28.9160	
36.0000	29.1240	
36.0000	29.3330	
35.3330	29.2240	
35.3330	29.4320	
35.3330	29.6410	
34.6660	29.5250	
34.6660	29.7330	
34.6660	29.9420	
34.0000	29.8190	
34.0000	30.0270	
34.0000	30.2360	
33.3330	30.1070	
33.3330	30.3150	
33.3330	30.5240	
32.6660	30.3880	
32.6660	30.5960	
32.6660	30.8050	
32.0000	30.6620	
32.0000	30.8700	
32.0000	31.0790	
31.3330	30.9720	
31.3330	31.1590	
31.3330	31.3470	
30.6660	31.2330	
30.6660	31.4200	
30.6660	31.6080	
30.0000	31.4870	
30.0000	31.6740	
30.0000	31.8620	

COORDINATES *

X COORD	Y COORD	COMMENT
29.3330	31.7360	
29.3330	31.9230	
29.3330	32.1110	
28.6660	31.9780	
28.6660	32.1550	
28.6660	32.3530	
28.0000	32.2550	
28.0000	32.4220	
28.0000	32.5880	
27.3330	32.5260	
27.3330	32.6720	
27.3330	32.8180	
26.6660	32.7490	
26.6660	32.8950	
26.6660	33.0410	
26.0000	32.9660	
26.0000	33.1120	
26.0000	33.2580	
25.3330	33.1780	
25.3330	33.3240	
25.3330	33.4700	
24.6660	33.3830	
24.6660	33.5290	
24.6660	33.6750	
24.0000	33.5820	
24.0000	33.7280	
24.0000	33.8740	
23.3330	33.7750	
23.3330	33.9210	
23.3330	34.0670	
22.6660	33.9630	
22.6660	34.1090	
22.6660	34.2550	
22.0000	34.1440	
22.0000	34.2900	
22.0000	34.4360	
21.3330	34.3200	
21.3330	34.4660	
21.3330	34.6120	
20.6660	34.4900	
20.6660	34.6360	

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L COORDINATES *

X COORD	Y COORD	COMMENT
20.6660	34.7820	
20.0840	34.6340	
20.0840	34.7800	
20.0840	34.9260	
19.5000	34.8000	
19.5000	34.9540	
19.5000	35.1000	
18.9170	34.9430	
18.9170	35.0890	
18.9170	35.2340	
18.3340	35.0730	
18.3340	35.2180	
18.3340	35.3640	
17.7500	35.1980	
17.7500	35.3440	
17.7500	35.4900	
17.1670	35.3200	
17.1670	35.4650	
17.1670	35.6110	
16.5840	35.4370	
16.5840	35.5830	
16.5840	35.7280	
16.0840	35.5470	
16.0840	35.6720	
16.0840	35.7970	
15.5840	35.6650	
15.5840	35.7900	
15.5840	35.9150	
15.0840	35.7550	
15.0840	35.8810	
15.0840	36.0060	
14.5840	35.8440	
14.5840	35.9690	
14.5840	**36.0940**	
14.0840	**35.9290**	
14.0840	**36.0540**	
14.0840	**36.1790**	
13.5840	36.0110	
13.5840	36.1360	
13.5840	36.2610	
13.0840	36.0890	

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COORDINATES *

X COORD	Y COORD	COMMENT
13.0840	36.2140	
13.0840	36.3390	
12.5840	36.1650	
12.5840	36.2900	
12.5840	36.4150	
12.0840	36.2370	
12.0840	36.3630	
12.0840	36.4870	
11.5840	36.3070	
11.5840	36.4320	
11.5840	36.5570	
11.0840	36.3740	
11.0840	36.4990	
11.0840	36.6240	
10.5840	36.4370	
10.5840	36.5620	
10.5840	36.6780	
10.0840	36.4980	
10.0840	36.6230	
10.0840	36.7480	
9.5840	36.5550	
9.5840	36.6800	
9.5840	36.8050	
9.0840	36.6100	
9.0840	36.7350	
9.0840	36.8600	
8.6670	36.6400	
8.6670	36.7650	
8.6670	36.8900	
8.2510	36.6940	
8.2510	36.8190	
8.2510	36.9440	
7.8340	36.7330	
7.8340	**36.8580**	
7.8340	**36.9830**	
7.4170	**36.7700**	
7.4170	**36.8950**	
7.4170	37.0200	
7.0000	36.8050	
7.0000	36.9300	
7.0000	37.0550	

COORDINATES *

X COORD	Y COORD	COMMENT
6.5840	36.8370	
6.5840	36.9620	
6.5840	37.0870	
6.1670	36.8610	
6.1670	36.9860	
6.1670	37.1110	
5.7510	36.9390	
5.7510	37.0430	
5.7510	37.1470	
5.3340	36.9650	
5.3340	37.0690	
5.3340	37.1730	
4.9170	36.9900	
4.9170	37.0940	
4.9170	37.1980	
4.5000	37.0120	
4.5000	37.1160	
4.5000	37.2200	
4.0840	37.0330	
4.0840	37.1370	
4.0840	37.2410	
3.6670	37.0510	
3.6670	37.1550	
3.6670	37.2590	
3.2510	37.0670	
3.2510	37.1710	
3.2510	37.2750	
2.8340	37.0820	
2.8340	37.1860	
2.8340	37.2900	
2.4170	37.0940	
2.4170	37.1980	
2.4170	37.3020	
2.0000	37.1040	
2.0000	37.2080	
2.0000	37.3120	
1.6670	37.1090	
1.6670	37.2130	
1.6670	37.3170	
1.3330	37.1140	
1.3330	37.2180	

COORDINATES *

X COORD	Y COORD	COMMENT
1.3330	37.3220	
1.0000	37.1200	
1.0000	37.2240	
1.0000	37.3280	
0.6670	37.1230	
0.6670	37.2270	
0.6670	37.3310	
0.3330	37.1250	
0.3330	37.2290	
0.3330	37.3330	
0.0000	37.1250	
0.0000	37.2290	
0.0000	37.3330	

NT INPUTS *

	NODES		MATL	AREA	REF. ANGLE
1/	4/	5	2	0.069413	0.000
1/	5/	2	2	0.069413	0.000
2/	5/	3	2	0.069455	0.000
3/	5/	6	2	0.069455	0.000
4/	7/	5	2	0.055536	0.000
7/	8/	5	2	0.055536	0.000
5/	8/	9	2	0.055569	0.000
5/	9/	6	2	0.055569	0.000
7/	10/	11	2	0.055536	0.000
7/	11/	8	2	0.055536	0.000
8/	11/	9	2	0.055569	0.000
9/	11/	12	2	0.055569	0.000
10/	13/	11	2	0.055536	0.000
13/	14/	11	2	0.055536	0.000
11/	14/	15	2	0.055569	0.000
11/	15/	12	2	0.055569	0.000
13/	16/	17	2	0.055536	0.000
13/	17/	14	2	0.055536	0.000
14/	17/	15	2	0.055569	0.000
15/	17/	18	2	0.055569	0.000
16/	19/	17	2	0.055536	0.000
19/	20/	17	2	0.055536	0.000
17/	20/	21	2	0.055569	0.000
17/	21/	18	2	0.055569	0.000
19/	22/	23	2	0.055536	0.000
19/	23/	20	2	0.055536	0.000
20/	23/	21	2	0.055569	0.000
21/	23/	24	2	0.055569	0.000
22/	25/	23	2	0.055536	0.000
25/	26/	23	2	0.055536	0.000
23/	26/	27	2	0.055569	0.000
23/	27/	24	2	0.055569	0.000
25/	28/	29	2	0.055536	0.000
25/	29/	26	2	0.055536	0.000
26/	29/	27	2	0.055569	0.000
27/	29/	30	2	0.055569	0.000
28/	31/	29	2	0.055536	0.000
31/	32/	29	2	0.055536	0.000
29/	32/	33	2	0.055569	0.000
29/	33/	30	2	0.055569	0.000
31/	34/	35	2	0.055536	0.000

ENT INPUTS *

T	NODES	MATL	AREA	REF. ANGLE
2	31/ 35/ 32	2	0.055536	0.000
3	32/ 35/ 33	2	0.055569	0.000
4	33/ 35/ 36	2	0.055569	0.000
5	34/ 37/ 35	2	0.055536	0.000
6	37/ 38/ 35	2	0.055536	0.000
7	35/ 38/ 39	2	0.055569	0.000
8	35/ 39/ 36	2	0.055569	0.000
9	37/ 40/ 41	2	0.055536	0.000
0	37/ 41/ 38	2	0.055536	0.000
1	38/ 41/ 39	2	0.055569	0.000
2	39/ 41/ 42	2	0.055569	0.000
3	40/ 43/ 41	2	0.055536	0.000
4	43/ 44/ 41	2	0.055536	0.000
5	41/ 44/ 45	2	0.055569	0.000
6	41/ 45/ 42	2	0.055569	0.000
7	43/ 46/ 47	2	0.055527	0.000
8	43/ 47/ 44	2	0.055527	0.000
9	44/ 47/ 45	2	0.055561	0.000
0	45/ 47/ 48	2	0.055561	0.000
[illegible]	46/ 49/ 47	2	0.055477	0.000
[illegible]	9/ 50/ 47	2	0.055477	0.000
[illegible]	47/ 50/ 51	2	0.055511	0.000
54	47/ 51/ 48	2	0.055511	0.000
55	49/ 52/ 53	2	0.055561	0.000
56	49/ 53/ 50	2	0.055561	0.000
57	50/ 53/ 51	2	0.055594	0.000
58	51/ 53/ 54	2	0.055594	0.000
59	52/ 55/ 53	2	0.055561	0.000
70	55/ 56/ 53	2	0.055561	0.000
71	53/ 56/ 57	2	0.055594	0.000
72	53/ 57/ 54	2	0.055594	0.000
73	55/ 58/ 59	2	0.055477	0.000
74	55/ 59/ 56	2	0.055477	0.000
75	56/ 59/ 57	2	0.055511	0.000
76	57/ 59/ 60	2	0.055511	0.000
77	58/ 61/ 59	2	0.055561	0.000
78	61/ 62/ 59	2	0.055561	0.000
79	59/ 62/ 63	2	0.055594	0.000
80	59/ 63/ 60	2	0.055594	0.000
81	61/ 64/ 65	2	0.055561	0.000
82	61/ 65/ 62	2	0.055561	0.000

NT INPUTS *

NODES	MATL	AREA	REF. ANGLE
62/ 65/ 63	2	0.055594	0.000
63/ 65/ 66	2	0.055594	0.000
64/ 67/ 65	2	0.055477	0.000
67/ 68/ 65	2	0.055477	0.000
65/ 68/ 69	2	0.055511	0.000
65/ 69/ 66	2	0.055511	0.000
67/ 70/ 71	2	0.055561	0.000
67/ 71/ 68	2	0.055561	0.000
68/ 71/ 69	2	0.055594	0.000
69/ 71/ 72	2	0.055594	0.000
70/ 73/ 71	2	0.055561	0.000
73/ 74/ 71	2	0.055561	0.000
71/ 74/ 75	2	0.055594	0.000
71/ 75/ 72	2	0.055594	0.000
73/ 76/ 77	2	0.055477	0.000
73/ 77/ 74	2	0.055477	0.000
74/ 77/ 75	2	0.055511	0.000
75/ 77/ 78	2	0.055511	0.000
76/ 79/ 77	2	0.055561	0.000
79/ 80/ 77	2	0.055561	0.000
77/ 80/ 81	2	0.055594	0.000
77/ 81/ 78	2	0.055594	0.000
79/ 82/ 83	2	0.055561	0.000
79/ 83/ 80	2	0.055561	0.000
80/ 83/ 81	2	0.055594	0.000
81/ 83/ 84	2	0.055594	0.000
82/ 85/ 83	2	0.055477	0.000
85/ 86/ 83	2	0.055477	0.000
83/ 86/ 87	2	0.055511	0.000
83/ 87/ 84	2	0.055511	0.000
85/ 88/ 89	2	0.055561	0.000
85/ 89/ 86	2	0.055561	0.000
86/ 89/ 87	2	0.055594	0.000
87/ 89/ 90	2	0.055594	0.000
88/ 91/ 89	2	0.055561	0.000
91/ 92/ 89	2	0.055561	0.000
89/ 92/ 93	2	0.055594	0.000
89/ 93/ 90	2	0.055594	0.000
91/ 94/ 95	2	0.055477	0.000
91/ 95/ 92	2	0.055477	0.000
92/ 95/ 93	2	0.055511	0.000

MENT INPUTS *

NT	NODES	MATL	AREA	REF. ANGLE
24	93/ 95/ 96	2	0.055511	0.000
25	94/ 97/ 95	2	0.055561	0.000
26	97/ 98/ 95	2	0.055561	0.000
27	95/ 98/ 99	2	0.055594	0.000
28	95/ 99/ 96	2	0.055594	0.000
29	97/ 100/ 101	2	0.055561	0.000
30	97/ 101/ 98	2	0.055561	0.000
31	98/ 101/ 99	2	0.055594	0.000
32	99/ 101/ 102	2	0.055594	0.000
33	100/ 103/ 101	2	0.055477	0.000
34	103/ 104/ 101	2	0.055477	0.000
35	101/ 104/ 105	2	0.055511	0.000
36	101/ 105/ 102	2	0.055511	0.000
37	103/ 106/ 107	2	0.055561	0.000
38	103/ 107/ 104	2	0.055561	0.000
39	104/ 107/ 105	2	0.055594	0.000
40	105/ 107/ 108	2	0.055594	0.000
41	106/ 109/ 107	2	0.055561	0.000
42	109/ 110/ 107	2	0.055561	0.000
43	107/ 110/ 111	2	0.055594	0.000
[illegible]	107/ 111/ 108	2	0.055594	0.000
[illegible]	109/ 112/ 113	2	0.055477	0.000
46	109/ 113/ 110	2	0.055477	0.000
47	110/ 113/ 111	2	0.055511	0.000
48	111/ 113/ 114	2	0.055511	0.000
49	112/ 115/ 113	2	0.055561	0.000
50	115/ 116/ 113	2	0.055561	0.000
51	113/ 116/ 117	2	0.055594	0.000
52	113/ 117/ 114	2	0.055594	0.000
53	115/ 118/ 119	2	0.055561	0.000
54	115/ 119/ 116	2	0.055561	0.000
55	116/ 119/ 117	2	0.055594	0.000
56	117/ 119/ 120	2	0.055594	0.000
57	118/ 121/ 119	2	0.055477	0.000
58	121/ 122/ 119	2	0.055477	0.000
59	119/ 122/ 123	2	0.055511	0.000
60	119/ 123/ 120	2	0.055511	0.000
61	121/ 124/ 125	2	0.055561	0.000
62	121/ 125/ 122	2	0.055561	0.000
63	122/ 125/ 123	2	0.055594	0.000
64	123/ 125/ 126	2	0.055594	0.000

MENT INPUTS *

IT	NODES	MATL	AREA	REF. ANGLE
65	124/ 127/ 125	2	0.055561	0.000
66	127/ 128/ 125	2	0.055561	0.000
67	125/ 128/ 129	2	0.055594	0.000
68	125/ 129/ 126	2	0.055594	0.000
69	127/ 130/ 131	2	0.055477	0.000
70	127/ 131/ 128	2	0.055477	0.000
71	128/ 131/ 129	2	0.055511	0.000
72	129/ 131/ 132	2	0.055511	0.000
73	130/ 133/ 131	2	0.055561	0.000
74	133/ 134/ 131	2	0.055561	0.000
75	131/ 134/ 135	2	0.055594	0.000
76	131/ 135/ 132	2	0.055594	0.000
77	133/ 136/ 137	2	0.055561	0.000
78	133/ 137/ 134	2	0.055561	0.000
79	134/ 137/ 135	2	0.055594	0.000
80	135/ 137/ 138	2	0.055594	0.000
81	136/ 139/ 137	2	0.055477	0.000
82	139/ 140/ 137	2	0.055477	0.000
83	137/ 140/ 141	2	0.055511	0.000
84	137/ 141/ 138	2	0.055511	0.000
85	139/ 142/ 143	2	0.055561	0.000
86	139/ 143/ 140	2	0.055561	0.000
87	140/ 143/ 141	2	0.055594	0.000
88	141/ 143/ 144	2	0.055594	0.000
89	142/ 145/ 143	2	0.055561	0.000
90	145/ 146/ 143	2	0.055561	0.000
91	143/ 146/ 147	2	0.055594	0.000
92	143/ 147/ 144	2	0.055594	0.000
93	145/ 148/ 149	2	0.055477	0.000
94	145/ 149/ 146	2	0.055477	0.000
95	146/ 149/ 147	2	0.055511	0.000
96	147/ 149/ 150	2	0.055511	0.000
97	148/ 151/ 149	2	0.055561	0.000
	151/ 152/ 149	2	0.055561	0.000
	149/ 152/ 153	2	0.055594	0.000
	149/ 153/ 150	2	0.055594	0.000
	151/ 154/ 155	2	0.055561	0.000
	151/ 155/ 152	2	0.055561	0.000
	152/ 155/ 153	2	0.055594	0.000
	153/ 155/ 156	2	0.055594	0.000
	154/ 157/ 155	2	0.055477	0.000

MENT INPUTS *

NT	NODES	MATL	AREA	REF. ANGLE
06	157/ 158/ 155	2	0.055477	0.000
07	155/ 158/ 159	2	0.055511	0.000
08	155/ 159/ 156	2	0.055511	0.000
09	157/ 160/ 161	2	0.055561	0.000
0	157/ 161/ 158	2	0.055561	0.000
1	158/ 161/ 159	2	0.055594	0.000
2	159/ 161/ 162	2	0.055594	0.000
3	160/ 163/ 161	2	0.055561	0.000
4	163/ 164/ 161	2	0.055561	0.000
5	161/ 164/ 165	2	0.055594	0.000
6	161/ 165/ 162	2	0.055594	0.000
7	163/ 166/ 167	2	0.041591	0.000
8	163/ 167/ 168	2	0.041566	0.000
9	163/ 168/ 164	2	0.041566	0.000
0	164/ 168/ 165	2	0.041591	0.000
1	165/ 168/ 169	2	0.041591	0.000
2	166/ 170/ 171	2	0.041675	0.000
3	166/ 171/ 172	2	0.041675	0.000
4	166/ 172/ 167	2	0.041675	0.000
[illegible]	167/ 172/ 168	2	0.041650	0.000
[illegible]	[illegible]/ 172/ 173	2	0.041650	0.000
[illegible]	168/ 173/ 174	2	0.041675	0.000
3	168/ 174/ 169	2	0.041675	0.000
9	170/ 175/ 176	2	0.041650	0.000
0	170/ 176/ 177	2	0.041675	0.000
1	170/ 177/ 171	2	0.041675	0.000
2	171/ 177/ 172	2	0.041675	0.000
3	172/ 177/ 178	2	0.041675	0.000
4	172/ 178/ 179	2	0.041550	0.000
5	172/ 179/ 173	2	0.041550	0.000
6	173/ 179/ 174	2	0.041675	0.000
7	174/ 179/ 180	2	0.041675	0.000
8	175/ 181/ 182	2	0.041675	0.000
[illegible]	175/ 182/ 183	2	0.041650	0.000
[illegible]	175/ 183/ 176	2	0.041650	0.000
[illegible]	176/ 183/ 177	2	0.041675	0.000
[illegible]	177/ 183/ 184	2	0.041675	0.000
[illegible]	177/ 184/ 185	2	0.041675	0.000
[illegible]	177/ 185/ 178	2	0.041675	0.000
[illegible]	178/ 185/ 179	2	0.041650	0.000
[illegible]	179/ 185/ 186	2	0.041650	0.000

' INPUTS *

NODES	MATL	AREA	REF. ANGLE
179/ 186/ 187	2	0.041675	0.000
179/ 187/ 180	2	0.041675	0.000
181/ 188/ 189	2	0.041675	0.000
181/ 189/ 182	2	0.041675	0.000
182/ 189/ 183	2	0.041650	0.000
183/ 189/ 190	2	0.041650	0.000
183/ 190/ 191	2	0.041675	0.000
184/ 183/ 191	2	0.041675	0.000
184/ 191/ 185	2	0.041675	0.000
185/ 191/ 192	2	0.041675	0.000
185/ 192/ 193	2	0.041650	0.000
185/ 193/ 186	2	0.041650	0.000
186/ 193/ 187	2	0.041675	0.000
187/ 193/ 194	2	0.041675	0.000
188/ 195/ 189	2	0.041675	0.000
189/ 195/ 196	2	0.041675	0.000
189/ 196/ 197	2	0.041650	0.000
189/ 197/ 190	2	0.041650	0.000
190/ 197/ 191	2	0.041675	0.000
191/ 197/ 198	2	0.041675	0.000
191/ 198/ 199	2	0.041675	0.000
191/ 199/ 192	2	0.041675	0.000
192/ 199/ 193	2	0.041650	0.000
193/ 199/ 200	2	0.041650	0.000
193/ 200/ 201	2	0.041675	0.000
193/ 201/ 194	2	0.041675	0.000
195/ 202/ 203	2	0.034673	0.000
195/ 203/ 196	2	0.034673	0.000
196/ 203/ 197	2	0.034652	0.000
197/ 203/ 204	2	0.034652	0.000
197/ 204/ 205	2	0.034673	0.000
198/ 197/ 205	2	0.034673	0.000
198/ 205/ 199	2	0.034673	0.000
199/ 205/ 206	2	0.034673	0.000
199/ 206/ 207	2	0.034652	0.000
199/ 207/ 200	2	0.034652	0.000
200/ 207/ 201	2	0.034673	0.000
201/ 207/ 208	2	0.034673	0.000
202/ 209/ 203	2	0.034840	0.000
203/ 209/ 210	2	0.034840	0.000
203/ 210/ 211	2	0.034819	0.000

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INPUTS *

IT	NODES	MATL	AREA	REF. ANGLE
38	203/ 211/ 204	2	0.034819	0.000
39	204/ 211/ 205	2	0.034840	0.000
40	205/ 211/ 212	2	0.034840	0.000
41	205/ 212/ 213	2	0.034840	0.000
42	205/ 213/ 206	2	0.034840	0.000
43	206/ 213/ 207	2	0.034819	0.000
44	207/ 213/ 214	2	0.034819	0.000
45	207/ 214/ 215	2	0.034840	0.000
46	207/ 215/ 208	2	0.034840	0.000
47	209/ 216/ 217	2	0.015586	0.000
48	209/ 217/ 210	2	0.015586	0.000
49	210/ 217/ 211	2	0.015577	0.000
50	211/ 217/ 218	2	0.015577	0.000
51	211/ 218/ 219	2	0.015586	0.000
52	212/ 211/ 219	2	0.015586	0.000
53	212/ 219/ 213	2	0.015586	0.000
54	213/ 219/ 220	2	0.015586	0.000
55	213/ 220/ 221	2	0.015577	0.000
56	213/ 221/ 214	2	0.015577	0.000
57	214/ 221/ 215	2	0.015586	0.000
[illegible]	[illegible]/ 221/ 222	2	0.015586	0.000
[illegible]	[illegible]/ 223/ 217	2	0.015669	0.000
60	217/ 223/ 224	2	0.015669	0.000
61	217/ 224/ 225	2	0.015660	0.000
62	217/ 225/ 218	2	0.015660	0.000
63	218/ 225/ 219	2	0.015669	0.000
64	219/ 225/ 226	2	0.015669	0.000
65	219/ 226/ 227	2	0.015669	0.000
66	219/ 227/ 220	2	0.015669	0.000
67	220/ 227/ 221	2	0.015660	0.000
68	221/ 227/ 228	2	0.015669	0.000
69	221/ 228/ 229	2	0.015669	0.000
70	221/ 229/ 222	2	0.015669	0.000
[illegible]	223/ 230/ 231	2	0.012085	0.000
[illegible]	223/ 231/ 224	2	0.012085	0.000
[illegible]	224/ 231/ 225	2	0.012078	0.000
[illegible]	225/ 231/ 232	2	0.012078	0.000
[illegible]	225/ 232/ 233	2	0.012085	0.000
[illegible]	225/ 225/ 233	2	0.012085	0.000
[illegible]	226/ 233/ 227	2	0.012085	0.000
[illegible]	227/ 233/ 234	2	0.012085	0.000

NT INPUTS *

NODES	MATL	AREA	REF. ANGLE
227/ 234/ 235	2	0.012078	0.000
227/ 235/ 228	2	0.012078	0.000
228/ 235/ 229	2	0.012085	0.000
229/ 235/ 236	2	0.012085	0.000
230/ 237/ 231	2	0.012169	0.000
231/ 237/ 238	2	0.012169	0.000
231/ 238/ 239	2	0.012161	0.000
231/ 239/ 232	2	0.012161	0.000
232/ 239/ 233	2	0.012169	0.000
233/ 239/ 240	2	0.012169	0.000
233/ 240/ 241	2	0.012169	0.000
233/ 241/ 234	2	0.012169	0.000
234/ 241/ 235	2	0.012161	0.000
235/ 241/ 242	2	0.012161	0.000
235/ 242/ 243	2	0.012169	0.000
235/ 243/ 236	2	0.012169	0.000
237/ 244/ 245	2	0.041675	0.000
237/ 245/ 238	2	0.041675	0.000
238/ 245/ 239	2	0.041650	0.000
239/ 245/ 246	2	0.041650	0.000
239/ 246/ 247	2	0.041675	0.000
240/ 239/ 247	2	0.041675	0.000
240/ 247/ 241	2	0.041675	0.000
241/ 247/ 248	2	0.041675	0.000
241/ 248/ 249	2	0.041650	0.000
241/ 249/ 242	2	0.041650	0.000
242/ 249/ 243	2	0.041675	0.000
243/ 249/ 250	2	0.041675	0.000
244/ 251/ 245	2	0.041675	0.000
245/ 251/ 252	2	0.041675	0.000
245/ 252/ 253	2	0.041650	0.000
245/ 253/ 246	2	0.041650	0.000
246/ 253/ 247	2	0.041675	0.000
247/ 253/ 254	2	0.041675	0.000
247/ 254/ 255	2	0.041675	0.000
247/ 255/ 248	2	0.041675	0.000
248/ 255/ 249	2	0.041650	0.000
249/ 255/ 256	2	0.041650	0.000
249/ 256/ 257	2	0.041675	0.000
249/ 257/ 250	2	0.041675	0.000
258/ 263/ 252	2	0.048661	0.000

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ENT INPUTS *

T	NODES	MATL	AREA	REF. ANGLE
0	258/ 259/ 263	2	0.048661	0.000
1	259/ 229/ 263	2	0.048661	0.000
2	229/ 264/ 263	2	0.048669	0.000
3	229/ 265/ 264	2	0.048335	0.000
4	229/ 260/ 265	2	0.048328	0.000
5	260/ 261/ 265	2	0.048661	0.000
6	261/ 266/ 265	2	0.048661	0.000
7	262/ 263/ 267	2	0.048669	0.000
8	263/ 268/ 267	2	0.048669	0.000
9	263/ 269/ 268	2	0.048669	0.000
0	263/ 264/ 269	2	0.048669	0.000
1	264/ 265/ 269	2	0.048335	0.000
2	265/ 270/ 269	2	0.048335	0.000
3	265/ 271/ 270	2	0.048669	0.000
4	265/ 266/ 271	2	0.048669	0.000
5	267/ 273/ 272	2	0.048669	0.000
6	267/ 268/ 273	2	0.048669	0.000
7	268/ 269/ 273	2	0.048669	0.000
8	269/ 274/ 273	2	0.048669	0.000
9	[illegible]/ 275/ 274	2	0.048335	0.000
[illegible]	[illegible] 270/ 275	2	0.048335	0.000
[illegible]	270/ 271/ 275	2	0.048669	0.000
2	271/ 276/ 275	2	0.048669	0.000
3	272/ 273/ 277	3	0.048669	0.000
4	273/ 278/ 277	3	0.052002	0.000
5	273/ 279/ 278	3	0.052002	0.000
6	273/ 274/ 279	3	0.048669	0.000
7	274/ 275/ 279	3	0.048335	0.000
8	275/ 280/ 279	3	0.052335	0.000
9	275/ 281/ 280	3	0.052002	0.000
[illegible]	275/ 276/ 281	3	0.048669	0.000
[illegible]	277/ 283/ 282	3	0.052002	0.000
[illegible]	277/ 278/ 283	3	0.052002	0.000
6	278/ 279/ 283	3	0.052002	0.000
[illegible]	279/ 284/ 283	3	0.052002	0.000
[illegible]	279/ 285/ 284	3	0.052335	0.000
[illegible]	279/ 280/ 285	3	0.052335	0.000
[illegible]	280/ 281/ 285	3	0.052002	0.000
8	281/ 286/ 285	3	0.052002	0.000
[illegible]	282/ 283/ 287	3	0.052002	0.000
[illegible]	283/ 288/ 287	3	0.052002	0.000

NT INPUTS *

NODES	MATL	AREA	REF. ANGLE
283/ 289/ 288	3	0.052002	0.000
283/ 284/ 289	3	0.052002	0.000
284/ 285/ 289	3	0.052335	0.000
285/ 290/ 289	3	0.052335	0.000
285/ 291/ 290	3	0.052002	0.000
285/ 286/ 291	3	0.052002	0.000
287/ 293/ 292	3	0.052002	0.000
287/ 288/ 293	3	0.052002	0.000
288/ 289/ 293	3	0.052002	0.000
289/ 294/ 293	3	0.052002	0.000
289/ 295/ 294	3	0.052335	0.000
289/ 290/ 295	3	0.052335	0.000
290/ 291/ 295	3	0.052002	0.000
291/ 296/ 295	3	0.052002	0.000
292/ 293/ 297	3	0.052002	0.000
293/ 298/ 297	3	0.052002	0.000
293/ 299/ 298	3	0.052002	0.000
293/ 294/ 299	3	0.052002	0.000
294/ 295/ 299	3	0.052335	0.000
295/ 300/ 299	3	0.052335	0.000
295/ 301/ 300	3	0.052002	0.000
295/ 296/ 301	3	0.052002	0.000
297/ 303/ 302	3	0.052002	0.000
297/ 298/ 303	3	0.052002	0.000
298/ 299/ 303	3	0.052002	0.000
299/ 304/ 303	3	0.052002	0.000
299/ 305/ 304	3	0.052335	0.000
299/ 300/ 305	3	0.052335	0.000
300/ 301/ 305	3	0.052002	0.000
301/ 306/ 305	3	0.052002	0.000
302/ 303/ 307	3	0.052002	0.000
303/ 308/ 307	3	0.052002	0.000
303/ 309/ 308	3	0.052002	0.000
303/ 304/ 309	3	0.052002	0.000
304/ 305/ 309	3	0.052335	0.000
305/ 310/ 309	3	0.052335	0.000
305/ 311/ 310	3	0.052002	0.000
305/ 306/ 311	3	0.052002	0.000
307/ 313/ 312	3	0.052002	0.000
307/ 308/ 313	3	0.052002	0.000
308/ 309/ 313	3	0.052002	0.000

ELEM INPUTS *

ENT	NODES	MATL	AREA	REF. ANGLE
452	309/ 314/ 313	3	0.052002	0.000
453	309/ 315/ 314	3	0.052335	0.000
454	309/ 310/ 315	3	0.052335	0.000
455	310/ 311/ 315	3	0.052002	0.000
456	311/ 316/ 315	3	0.052002	0.000
457	312/ 313/ 317	3	0.052002	0.000
458	313/ 318/ 317	3	0.052002	0.000
459	313/ 319/ 318	3	0.052002	0.000
460	313/ 314/ 319	3	0.052002	0.000
461	314/ 315/ 319	3	0.052335	0.000
462	315/ 320/ 319	3	0.052335	0.000
463	315/ 321/ 320	3	0.052002	0.000
464	315/ 316/ 321	3	0.052002	0.000
465	317/ 323/ 322	3	0.052002	0.000
466	317/ 318/ 323	3	0.052002	0.000
467	318/ 319/ 323	3	0.052002	0.000
468	319/ 324/ 323	3	0.052002	0.000
469	319/ 325/ 324	3	0.052335	0.000
470	319/ 320/ 325	3	0.052335	0.000
471	320/ 321/ 325	3	0.052002	0.000
[illegible]	321/ 326/ 325	3	0.052002	0.000
473	322/ 323/ 327	3	0.051940	0.000
474	323/ 328/ 327	3	0.051940	0.000
475	323/ 329/ 328	3	0.051940	0.000
476	323/ 324/ 329	3	0.051940	0.000
477	324/ 325/ 329	3	0.052273	0.000
478	325/ 330/ 329	3	0.052273	0.000
479	325/ 331/ 330	3	0.051940	0.000
480	325/ 326/ 331	3	0.051940	0.000
481	327/ 333/ 332	3	0.052026	0.000
482	327/ 328/ 333	3	0.052026	0.000
483	328/ 329/ 333	3	0.052026	0.000
484	329/ 334/ 333	3	0.052026	0.000
485	329/ 335/ 334	3	0.052359	0.000
486	329/ 330/ 335	3	0.052359	0.000
487	330/ 331/ 335	3	0.052026	0.000
488	331/ 336/ 335	3	0.052026	0.000
489	332/ 333/ 337	3	0.052026	0.000
490	333/ 338/ 337	3	0.052026	0.000
491	333/ 339/ 338	3	0.052026	0.000
492	333/ 334/ 339	3	0.052026	0.000

IT INPUTS *

NODES	MATL	AREA	REF. ANGLE
334/ 335/ 339	3	0.052359	0.000
335/ 340/ 339	3	0.052359	0.000
335/ 341/ 340	3	0.052026	0.000
335/ 336/ 341	3	0.052026	0.000
337/ 343/ 342	3	0.051948	0.000
337/ 338/ 343	3	0.051948	0.000
338/ 339/ 343	3	0.051948	0.000
339/ 344/ 343	3	0.051948	0.000
339/ 345/ 344	3	0.052281	0.000
339/ 340/ 345	3	0.052281	0.000
340/ 341/ 345	3	0.051948	0.000
341/ 346/ 345	3	0.051948	0.000
342/ 343/ 347	3	0.052026	0.000
343/ 348/ 347	3	0.052026	0.000
343/ 349/ 348	3	0.052026	0.000
343/ 344/ 349	3	0.052026	0.000
344/ 345/ 349	3	0.052359	0.000
345/ 350/ 349	3	0.052359	0.000
345/ 351/ 350	3	0.052026	0.000
345/ 346/ 351	3	0.052026	0.000
347/ 353/ 352	3	0.052026	0.000
347/ 348/ 353	3	0.052026	0.000
348/ 349/ 353	3	0.052026	0.000
349/ 354/ 353	3	0.052026	0.000
349/ 355/ 354	3	0.052359	0.000
349/ 350/ 355	3	0.052359	0.000
350/ 351/ 355	3	0.052026	0.000
351/ 356/ 355	3	0.052026	0.000
352/ 353/ 357	3	0.052026	0.000
353/ 358/ 357	3	0.052026	0.000
353/ 359/ 358	3	0.052026	0.000
353/ 354/ 359	3	0.052026	0.000
354/ 355/ 359	3	0.052359	0.000
355/ 360/ 359	3	0.052359	0.000
355/ 361/ 360	3	0.052026	0.000
355/ 356/ 361	3	0.052026	0.000
357/ 363/ 362	3	0.051948	0.000
357/ 358/ 363	3	0.051948	0.000
358/ 359/ 363	3	0.051948	0.000
359/ 364/ 363	3	0.051948	0.000
359/ 365/ 364	3	0.052281	0.000

MENT INPUTS *

NT	NODES	MATL	AREA	REF. ANGLE
34	359/ 360/ 365	3	0.052281	0.000
35	360/ 361/ 365	3	0.051948	0.000
36	361/ 366/ 365	3	0.051948	0.000
37	362/ 363/ 367	3	0.052026	0.000
38	363/ 368/ 367	3	0.052026	0.000
39	363/ 369/ 368	3	0.052026	0.000
40	363/ 364/ 369	3	0.052026	0.000
41	364/ 365/ 369	3	0.052359	0.000
42	365/ 370/ 369	3	0.052359	0.000
43	365/ 371/ 370	3	0.052026	0.000
44	365/ 366/ 371	3	0.052026	0.000
45	367/ 373/ 372	3	0.052026	0.000
46	367/ 368/ 373	3	0.052026	0.000
47	368/ 369/ 373	3	0.052026	0.000
48	369/ 374/ 373	3	0.052026	0.000
49	369/ 375/ 374	3	0.052359	0.000
50	369/ 370/ 375	3	0.052359	0.000
51	370/ 371/ 375	3	0.052026	0.000
52	371/ 376/ 375	3	0.052026	0.000
[illegible]	372/ 373/ 377	3	0.051948	0.000
[illegible]	373/ 378/ 377	3	0.051948	0.000
55	373/ 379/ 378	3	0.051948	0.000
56	373/ 374/ 379	3	0.051948	0.000
57	374/ 375/ 379	3	0.052281	0.000
58	375/ 380/ 379	3	0.052281	0.000
59	375/ 381/ 380	3	0.051948	0.000
60	375/ 376/ 381	3	0.051948	0.000
561	377/ 383/ 382	3	0.052026	0.000
562	377/ 378/ 383	3	0.052026	0.000
563	378/ 379/ 383	3	0.052026	0.000
564	379/ 384/ 383	3	0.052026	0.000
565	379/ 385/ 384	3	0.052359	0.000
66	379/ 380/ 385	3	0.052359	0.000
67	380/ 381/ 385	3	0.052026	0.000
68	381/ 386/ 385	3	0.052026	0.000
69	382/ 383/ 387	3	0.052026	0.000
70	383/ 388/ 387	3	0.052026	0.000
71	383/ 389/ 388	3	0.052026	0.000
72	383/ 384/ 389	3	0.052026	0.000
73	384/ 385/ 389	3	0.052359	0.000
74	385/ 390/ 389	3	0.052359	0.000

NT INPUTS *

	NODES	MATL	AREA	REF. ANGLE
	385/ 391/ 390	3	0.052025	0.000
	385/ 386/ 391	3	0.052026	0.000
	387/ 393/ 392	3	0.051948	0.000
3	387/ 388/ 393	3	0.051948	0.000
1	388/ 389/ 393	3	0.051948	0.000
1	389/ 394/ 393	3	0.051948	0.000
1	389/ 395/ 394	3	0.052281	0.000
2	389/ 390/ 395	3	0.052281	0.000
3	390/ 391/ 395	3	0.051943	0.000
4	391/ 396/ 395	3	0.051948	0.000
5	392/ 393/ 397	3	0.052026	0.000
6	393/ 398/ 397	3	0.052026	0.000
7	393/ 399/ 398	3	0.052026	0.000
8	393/ 394/ 399	3	0.052026	0.000
9	394/ 395/ 399	3	0.052359	0.000
0	395/ 400/ 399	3	0.052359	0.000
1	395/ 401/ 400	3	0.052026	0.000
2	395/ 396/ 401	3	0.052026	0.000
3	397/ 403/ 402	3	0.052026	0.000
4	397/ 398/ 403	3	0.052026	0.000
5	398/ 399/ 403	3	0.052026	0.000
6	399/ 404/ 403	3	0.052026	0.000
7	399/ 405/ 404	3	0.052359	0.000
8	399/ 400/ 405	3	0.052359	0.000
9	400/ 401/ 405	3	0.052026	0.000
0	401/ 406/ 405	3	0.052026	0.000
1	402/ 403/ 407	3	0.051948	0.000
2	403/ 408/ 407	3	0.051948	0.000
3	403/ 409/ 408	3	0.051948	0.000
4	403/ 404/ 409	3	0.051948	0.000
5	404/ 405/ 409	3	0.052281	0.000
6	405/ 410/ 409	3	0.052281	0.000
07	405/ 411/ 410	3	0.051948	0.000
08	405/ 406/ 411	3	0.051948	0.000
09	407/ 413/ 412	3	0.052026	0.000
10	407/ 408/ 413	3	0.052026	0.000
11	408/ 409/ 413	3	0.052026	0.000
12	409/ 414/ 413	3	0.052026	0.000
13	409/ 415/ 414	3	0.052359	0.000
14	409/ 410/ 415	3	0.052359	0.000
15	410/ 411/ 415	3	0.052026	0.000

EMENT INPUTS *

ENT	NODES	MATL	AREA	REF. ANGLE
516	411/ 416/ 415	3	0.052026	0.000
517	412/ 413/ 417	3	0.052026	0.000
518	413/ 418/ 417	3	0.052026	0.000
519	413/ 419/ 418	3	0.052026	0.000
520	413/ 414/ 419	3	0.052026	0.000
521	414/ 415/ 419	3	0.052359	0.000
522	415/ 420/ 419	3	0.052359	0.000
523	415/ 421/ 420	3	0.052026	0.000
624	415/ 416/ 421	3	0.052026	0.000
625	417/ 423/ 422	4	0.055278	0.000
626	417/ 418/ 423	4	0.051948	0.000
627	418/ 419/ 423	4	0.051948	0.000
628	419/ 424/ 423	4	0.055611	0.000
629	419/ 425/ 424	4	0.055611	0.000
630	419/ 420/ 425	4	0.052281	0.000
631	420/ 421/ 425	4	0.051948	0.000
632	421/ 426/ 425	4	0.055278	0.000
633	422/ 423/ 427	4	0.055361	0.000
634	423/ 428/ 427	4	0.055361	0.000
[illegible]	423/ 429/ 428	4	0.055694	0.000
[illegible]	423/ 424/ 429	4	0.055694	0.000
637	424/ 425/ 429	4	0.055694	0.000
638	425/ 430/ 429	4	0.055694	0.000
639	425/ 431/ 430	4	0.055361	0.000
640	425/ 426/ 431	4	0.055361	0.000
641	427/ 433/ 432	4	0.055361	0.000
642	427/ 428/ 433	4	0.055361	0.000
643	428/ 429/ 433	4	0.055694	0.000
644	429/ 434/ 433	4	0.055694	0.000
645	429/ 435/ 434	4	0.055694	0.000
646	429/ 430/ 435	4	0.055694	0.000
647	430/ 431/ 435	4	0.055361	0.000
648	431/ 436/ 435	4	0.055361	0.000
649	432/ 433/ 437	4	0.055278	0.000
650	433/ 438/ 437	4	0.055278	0.000
651	433/ 439/ 438	4	0.055611	0.000
652	433/ 434/ 439	4	0.055611	0.000
653	434/ 435/ 439	4	0.055611	0.000
654	435/ 440/ 439	4	0.055611	0.000
655	435/ 441/ 440	4	0.055278	0.000
656	435/ 436/ 441	4	0.055278	0.000

:NT INPUTS *

:	NODES	MATL	AREA	REF. ANGLE
7	437/ 443/ 442	4	0.055278	0.000
3	437/ 438/ 443	4	0.055278	0.000
9	438/ 439/ 443	4	0.055611	0.000
0	439/ 444/ 443	4	0.055611	0.000
1	439/ 445/ 444	4	0.055611	0.000
2	439/ 440/ 445	4	0.055611	0.000
3	440/ 441/ 445	4	0.055278	0.000
4	441/ 446/ 445	4	0.055278	0.000
5	442/ 443/ 447	4	0.055278	0.000
6	443/ 448/ 447	4	0.055278	0.000
7	443/ 449/ 448	4	0.055611	0.000
8	443/ 444/ 449	4	0.055611	0.000
9	444/ 445/ 449	4	0.055611	0.000
0	445/ 450/ 449	4	0.055611	0.000
1	445/ 451/ 450	4	0.055278	0.000
2	445/ 446/ 451	4	0.055278	0.000
3	447/ 453/ 452	4	0.055444	0.000
4	447/ 448/ 453	4	0.055444	0.000
5	448/ 449/ 453	4	0.055778	0.000
6	449/ 454/ 453	4	0.055778	0.000
7	449/ 455/ 454	4	0.055778	0.000
8	449/ 450/ 455	4	0.055778	0.000
9	450/ 451/ 455	4	0.055444	0.000
0	451/ 456/ 455	4	0.055444	0.000
1	452/ 453/ 457	4	0.027639	0.000
2	453/ 458/ 457	4	0.027639	0.000
3	453/ 459/ 458	4	0.027805	0.000
84	453/ 454/ 459	4	0.027805	0.000
85	454/ 455/ 459	4	0.027805	0.000
86	455/ 460/ 459	4	0.027805	0.000
87	455/ 461/ 460	4	0.027639	0.000
88	455/ 456/ 461	4	0.027639	0.000
89	457/ 463/ 462	4	0.027639	0.000
90	457/ 458/ 463	4	0.027639	0.000
91	458/ 459/ 463	4	0.027805	0.000
92	459/ 464/ 463	4	0.027805	0.000
93	459/ 465/ 464	4	0.027805	0.000
94	459/ 460/ 465	4	0.027805	0.000
95	460/ 461/ 465	4	0.027639	0.000
96	461/ 465/ 465	4	0.027639	0.000
97	467/ 452/ 457	4	0.083250	0.000

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MENT INPUTS *

NT	NODES	MATL	AREA	REF. ANGLE
98	467/ 457/ 468	4	0.072750	0.000
99	468/ 457/ 469	4	0.073000	0.000
00	469/ 457/ 462	4	0.083250	0.000
01	470/ 467/ 471	4	0.062500	0.000
02	471/ 467/ 468	4	0.072750	0.000
03	471/ 468/ 469	4	0.073000	0.000
04	471/ 469/ 472	4	0.062500	0.000
05	473/ 470/ 471	4	0.062500	0.000
06	473/ 471/ 474	4	0.057250	0.000
07	474/ 471/ 475	4	0.057250	0.000
08	475/ 471/ 472	4	0.062500	0.000
09	476/ 473/ 477	4	0.052000	0.000
0	477/ 473/ 474	4	0.057250	0.000
1	477/ 474/ 475	4	0.057250	0.000
2	477/ 475/ 478	4	0.052250	0.000
3	479/ 476/ 477	4	0.052000	0.000
4	479/ 477/ 480	4	0.052000	0.000
5	480/ 477/ 481	4	0.052250	0.000
6	481/ 477/ 478	4	0.052250	0.000
7	482/ 479/ 483	4	0.052000	0.000
[illegible]	[illegible]/ 479/ 480	4	0.052000	0.000
9	483/ 480/ 481	4	0.052250	0.000
0	483/ 481/ 484	4	0.052250	0.000
1	485/ 482/ 483	4	0.052000	0.000
2	485/ 483/ 486	4	0.052000	0.000
3	486/ 483/ 487	4	0.052250	0.000
4	487/ 483/ 484	4	0.052250	0.000
5	488/ 485/ 489	4	0.052000	0.000
6	489/ 485/ 486	4	0.052000	0.000
7	489/ 486/ 487	4	0.052250	0.000
8	489/ 487/ 490	4	0.052250	0.000
9	491/ 488/ 489	4	0.069368	0.000
0	491/ 489/ 492	4	0.069368	0.000
1	492/ 489/ 493	4	0.069701	0.000
2	493/ 489/ 490	4	0.069701	0.000
3	494/ 491/ 495	4	0.069368	0.000
4	495/ 491/ 492	4	0.069368	0.000
5	495/ 492/ 493	4	0.069701	0.000
6	495/ 493/ 496	4	0.069701	0.000
7	497/ 494/ 495	4	0.069264	0.000
8	497/ 495/ 498	4	0.069264	0.000

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MENT INPUTS *

NT	NODES	MATL	AREA	REF. ANGLE
39	498/ 495/ 499	4	0.069597	0.000
40	499/ 495/ 496	4	0.069597	0.000
41	500/ 497/ 501	4	0.069368	0.000
42	501/ 497/ 498	4	0.069368	0.000
43	501/ 498/ 499	4	0.069701	0.000
44	501/ 499/ 502	4	0.069701	0.000
45	503/ 500/ 501	4	0.069368	0.000
46	503/ 501/ 504	4	0.069368	0.000
47	504/ 501/ 505	4	0.069701	0.000
48	505/ 501/ 502	4	0.069701	0.000
49	506/ 503/ 507	4	0.069264	0.000
50	507/ 503/ 504	4	0.069264	0.000
51	507/ 504/ 505	4	0.069597	0.000
52	507/ 505/ 508	4	0.069597	0.000
53	509/ 506/ 507	4	0.069368	0.000
54	509/ 507/ 510	4	0.062364	0.000
55	510/ 507/ 511	4	0.062698	0.000
56	511/ 507/ 508	4	0.069701	0.000
57	512/ 509/ 513	4	0.062364	0.000
58	513/ 509/ 510	4	0.062364	0.000
59	513/ 510/ 511	4	0.062698	0.000
60	513/ 511/ 514	4	0.062698	0.000
61	515/ 512/ 513	4	0.062271	0.000
62	515/ 513/ 516	4	0.062271	0.000
63	516/ 513/ 517	4	0.062604	0.000
64	517/ 513/ 514	4	0.062604	0.000
65	518/ 515/ 519	4	0.062364	0.000
66	519/ 515/ 516	4	0.062364	0.000
67	519/ 516/ 517	4	0.062698	0.000
68	519/ 517/ 520	4	0.062698	0.000
69	521/ 518/ 519	4	0.062364	0.000
70	521/ 519/ 522	4	0.062364	0.000
71	522/ 519/ 523	4	0.062698	0.000
72	523/ 519/ 520	4	0.062698	0.000
73	524/ 521/ 525	4	0.055611	0.000
74	525/ 521/ 522	4	0.062271	0.000
75	525/ 522/ 523	4	0.062604	0.000
76	525/ 523/ 526	4	0.055278	0.000
77	527/ 524/ 525	3	0.055694	0.000
78	527/ 525/ 528	3	0.048691	0.000
79	528/ 525/ 529	3	0.048691	0.000

MENT INPUTS *

NT	NODES	MATL	AREA	REF. ANGLE
30	529/ 525/ 526	3	0.055361	0.000
31	530/ 527/ 531	3	0.048691	0.000
32	531/ 527/ 528	3	0.048691	0.000
33	531/ 528/ 529	3	0.048691	0.000
34	531/ 529/ 532	3	0.048691	0.000
35	533/ 530/ 531	3	0.048618	0.000
36	533/ 531/ 534	3	0.048618	0.000
37	534/ 531/ 535	3	0.048618	0.000
38	535/ 531/ 532	3	0.048618	0.000
39	536/ 533/ 537	3	0.048691	0.000
40	537/ 533/ 534	3	0.048691	0.000
41	537/ 534/ 535	3	0.048691	0.000
42	537/ 535/ 538	3	0.048691	0.000
43	539/ 536/ 537	3	0.048691	0.000
44	539/ 537/ 540	3	0.048691	0.000
45	540/ 537/ 541	3	0.048691	0.000
46	541/ 537/ 538	3	0.048691	0.000
47	542/ 539/ 543	3	0.048618	0.000
48	543/ 539/ 540	3	0.048618	0.000
[illegible]	543/ 540/ 541	3	0.048618	0.000
[illegible]	[illegible]/ 541/ 544	3	0.048618	0.000
51	545/ 542/ 543	3	0.048691	0.000
52	545/ 543/ 546	3	0.048691	0.000
53	546/ 543/ 547	3	0.048691	0.000
54	547/ 543/ 544	3	0.048691	0.000
55	548/ 545/ 549	3	0.048691	0.000
56	549/ 545/ 546	3	0.048691	0.000
57	549/ 546/ 547	3	0.048691	0.000
58	549/ 547/ 550	3	0.048691	0.000
59	551/ 548/ 549	3	0.048618	0.000
60	551/ 549/ 552	3	0.048618	0.000
61	552/ 549/ 553	3	0.048618	0.000
62	553/ 549/ 550	3	0.048618	0.000
63	554/ 551/ 555	3	0.048691	0.000
64	555/ 551/ 552	3	0.048691	0.000
65	555/ 552/ 553	3	0.048691	0.000
66	555/ 553/ 556	3	0.048691	0.000
67	557/ 554/ 555	3	0.048691	0.000
68	557/ 555/ 558	3	0.048691	0.000
69	558/ 555/ 559	3	0.048691	0.000
70	559/ 555/ 556	3	0.048691	0.000

ELEM. INPUTS *

IT	NODES	MATL	AREA	REF. ANGLE
1	560/ 557/ 561	3	0.042486	0.000
2	561/ 557/ 558	3	0.042486	0.000
3	561/ 558/ 559	3	0.042486	0.000
4	561/ 559/ 562	3	0.042486	0.000
5	563/ 560/ 561	3	0.042632	0.000
6	563/ 561/ 564	3	0.044968	0.000
7	564/ 561/ 565	3	0.042632	0.000
8	565/ 561/ 562	3	0.042632	0.000
9	566/ 563/ 567	3	0.042559	0.000
0	567/ 563/ 564	3	0.044891	0.000
1	567/ 564/ 565	3	0.042559	0.000
2	567/ 565/ 568	3	0.042267	0.000
3	569/ 566/ 567	3	0.042559	0.000
4	569/ 567/ 570	3	0.042267	0.000
5	570/ 567/ 571	3	0.042559	0.000
6	571/ 567/ 568	3	0.042267	0.000
7	572/ 569/ 573	3	0.042632	0.000
8	573/ 569/ 570	3	0.042340	0.000
	573/ 570/ 571	3	0.042632	0.000
	573/ 571/ 574	3	0.042632	0.000
	[illegible]/ 572/ 573	3	0.042559	0.000
	[illegible]/ 573/ 576	3	0.042267	0.000
	576/ 573/ 577	3	0.042559	0.000
	577/ 573/ 574	3	0.042559	0.000
	578/ 575/ 579	3	0.042559	0.000
	579/ 575/ 576	3	0.042267	0.000
	579/ 576/ 577	3	0.042559	0.000
	579/ 577/ 580	3	0.042267	0.000
9	581/ 578/ 579	2	0.036500	0.000
0	581/ 579/ 582	2	0.031250	0.000
1	582/ 579/ 583	2	0.031250	0.000
2	583/ 579/ 580	2	0.036250	0.000
	584/ 581/ 585	2	0.031250	0.000
	585/ 581/ 582	2	0.031250	0.000
	585/ 582/ 583	2	0.031250	0.000
	585/ 583/ 586	2	0.031250	0.000
	587/ 584/ 585	2	0.031250	0.000
	587/ 585/ 588	2	0.031250	0.000
	588/ 585/ 589	2	0.031250	0.000
	589/ 585/ 586	2	0.031250	0.000
	590/ 587/ 591	2	0.031250	0.000

T INPUTS *

NODES	MATL	AREA	REF. ANGLE
591/ 587/ 588	2	0.031250	0.000
591/ 588/ 589	2	0.031250	0.000
591/ 589/ 592	2	0.031250	0.000
593/ 590/ 591	2	0.031250	0.000
593/ 591/ 594	2	0.031250	0.000
594/ 591/ 595	2	0.031250	0.000
595/ 591/ 592	2	0.031250	0.000
596/ 593/ 597	2	0.031250	0.000
597/ 593/ 594	2	0.031250	0.000
597/ 594/ 595	2	0.031250	0.000
597/ 595/ 598	2	0.031250	0.000
599/ 596/ 597	2	0.031250	0.000
599/ 597/ 600	2	0.031250	0.000
600/ 597/ 601	2	0.031250	0.000
601/ 597/ 598	2	0.031250	0.000
602/ 599/ 603	2	0.031250	0.000
603/ 599/ 600	2	0.031250	0.000
603/ 600/ 601	2	0.031250	0.000
603/ 601/ 604	2	0.031250	0.000
605/ 602/ 603	2	0.031250	0.000
605/ 603/ 606	2	0.031500	0.000
606/ 603/ 607	2	0.031000	0.000
607/ 603/ 604	2	0.031250	0.000
608/ 605/ 609	2	0.031250	0.000
609/ 605/ 606	2	0.031500	0.000
609/ 606/ 607	2	0.031000	0.000
609/ 607/ 610	2	0.031250	0.000
611/ 608/ 609	2	0.031250	0.000
611/ 609/ 612	2	0.031250	0.000
612/ 609/ 613	2	0.031250	0.000
613/ 609/ 610	2	0.031250	0.000
614/ 611/ 615	2	0.031250	0.000
615/ 611/ 612	2	0.031250	0.000
615/ 612/ 613	2	0.031250	0.000
615/ 613/ 616	2	0.029000	0.000
617/ 614/ 615	2	0.031250	0.000
617/ 615/ 618	2	0.031250	0.000
618/ 615/ 619	2	0.031250	0.000
619/ 615/ 616	2	0.029000	0.000
620/ 617/ 621	2	0.031250	0.000
621/ 617/ 618	2	0.031250	0.000

MENT INPUTS *

NT	NODES	MATL	AREA	REF. ANGLE
33	621/ 618/ 619	2	0.031250	0.000
34	621/ 619/ 622	2	0.031250	0.000
35	623/ 620/ 621	2	0.031250	0.000
36	623/ 621/ 624	2	0.031250	0.000
37	624/ 621/ 625	2	0.031250	0.000
38	625/ 621/ 622	2	0.031250	0.000
39	626/ 623/ 627	2	0.026062	0.000
0	627/ 623/ 624	2	0.026062	0.000
1	627/ 624/ 625	2	0.026062	0.000
2	627/ 625/ 628	2	0.026062	0.000
3	629/ 626/ 627	2	0.026000	0.000
4	629/ 627/ 630	2	0.026000	0.000
5	630/ 627/ 631	2	0.026000	0.000
6	631/ 627/ 628	2	0.026000	0.000
7	632/ 629/ 633	2	0.026062	0.000
8	633/ 629/ 630	2	0.026062	0.000
9	633/ 630/ 631	2	0.026062	0.000
0	633/ 631/ 634	2	0.026062	0.000
1	635/ 632/ 633	2	0.026062	0.000
[illegible]	635/ 633/ 636	2	0.026062	0.000
[illegible]	[illegible]/ 633/ 637	2	0.026062	0.000
4	637/ 633/ 634	2	0.026062	0.000
5	638/ 635/ 639	2	0.026062	0.000
6	639/ 635/ 636	2	0.026062	0.000
7	639/ 636/ 637	2	0.026062	0.000
8	639/ 637/ 640	2	0.026062	0.000
9	641/ 638/ 639	2	0.026000	0.000
0	641/ 639/ 642	2	0.026000	0.000
1	642/ 639/ 643	2	0.026000	0.000
2	643/ 639/ 640	2	0.026000	0.000
3	644/ 641/ 645	2	0.026062	0.000
4	645/ 641/ 642	2	0.026062	0.000
5	645/ 642/ 643	2	0.026062	0.000
6	645/ 643/ 646	2	0.026062	0.000
7	647/ 644/ 645	2	0.026000	0.000
8	647/ 645/ 648	2	0.021632	0.000
9	648/ 645/ 649	2	0.021632	0.000
0	649/ 645/ 646	2	0.026000	0.000
1	650/ 647/ 651	2	0.021684	0.000
2	651/ 647/ 648	2	0.021684	0.000
3	651/ 648/ 649	2	0.021684	0.000

MENT INPUTS *

NT	NODES	MATL	AREA	REF. ANGLE
44	651/ 649/ 652	2	0.021684	0.000
45	653/ 650/ 651	2	0.021684	0.000
46	653/ 651/ 654	2	0.021684	0.000
47	654/ 651/ 655	2	0.021684	0.000
48	655/ 651/ 652	2	0.021684	0.000
49	656/ 653/ 657	2	0.021684	0.000
50	657/ 653/ 654	2	0.021684	0.000
51	657/ 654/ 655	2	0.021684	0.000
52	657/ 655/ 658	2	0.021684	0.000
53	659/ 656/ 657	2	0.021632	0.000
54	659/ 657/ 660	2	0.021632	0.000
55	660/ 657/ 661	2	0.021632	0.000
56	661/ 657/ 658	2	0.021632	0.000
57	662/ 659/ 663	2	0.021684	0.000
58	663/ 659/ 660	2	0.021684	0.000
59	663/ 660/ 661	2	0.021684	0.000
60	663/ 661/ 664	2	0.021684	0.000
61	665/ 662/ 663	2	0.021632	0.000
62	665/ 663/ 666	2	0.021632	0.000
63	666/ 663/ 667	2	0.021632	0.000
64	667/ 663/ 664	2	0.021632	0.000
65	668/ 665/ 669	2	0.021684	0.000
66	669/ 665/ 666	2	0.021684	0.000
67	669/ 666/ 667	2	0.021684	0.000
68	669/ 557/ 670	2	0.021684	0.000
69	671/ 668/ 669	2	0.021684	0.000
70	671/ 669/ 672	2	0.021684	0.000
71	672/ 669/ 673	2	0.021684	0.000
72	673/ 669/ 670	2	0.021684	0.000
73	674/ 671/ 675	2	0.021684	0.000
74	675/ 671/ 672	2	0.021684	0.000
75	675/ 672/ 673	2	0.021684	0.000
76	675/ 673/ 676	2	0.021684	0.000
77	677/ 674/ 675	1	0.017316	0.000
78	677/ 675/ 678	1	0.017316	0.000
79	678/ 675/ 679	1	0.017316	0.000
80	679/ 675/ 676	1	0.017316	0.000
81	680/ 677/ 681	1	0.017368	0.000
82	681/ 677/ 678	1	0.017368	0.000
83	681/ 678/ 679	1	0.017368	0.000
84	681/ 679/ 682	1	0.017368	0.000

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ENT INPUTS *

IT	NODES	MATL	AREA	REF. ANGLE
5	683/ 680/ 681	1	0.017316	0.000
6	683/ 681/ 684	1	0.017316	0.000
7	684/ 681/ 685	1	0.017316	0.000
8	685/ 681/ 682	1	0.017316	0.000
9	686/ 683/ 687	1	0.017316	0.000
0	687/ 683/ 684	1	0.017316	0.000
1	687/ 684/ 685	1	0.017316	0.000
2	687/ 685/ 688	1	0.017316	0.000
3	689/ 686/ 687	1	0.017368	0.000
4	689/ 687/ 690	1	0.017368	0.000
5	690/ 687/ 691	1	0.017368	0.000
6	691/ 687/ 688	1	0.017368	0.000
7	692/ 689/ 693	1	0.017316	0.000
8	693/ 689/ 690	1	0.017316	0.000
9	693/ 690/ 691	1	0.017316	0.000
0	693/ 691/ 694	1	0.017316	0.000

DISPLACEMENTS *

TYPE	ELMT/ NODE	DIRECTION	DISPLACEMENT

LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
B	1	1	Y	-0.0868000
B	2	1	Y	-0.0868000
B	3	1	Y	-0.0868000
B	4	1	Y	-0.0868000
B	5	1	Y	-0.0868000
B	6	1	Y	-0.0868000
B	7	1	Y	-0.0868000
B	8	1	Y	-0.0868000
B	9	1	Y	-0.0868000
B	10	1	Y	-0.0868000
B	11	1	Y	-0.0868000
B	12	1	Y	-0.0868000
B	13	1	Y	-0.0868000
B	14	1	Y	-0.0868000
B	15	1	Y	-0.0868000
B	16	1	Y	-0.0868000
B	17	1	Y	-0.0868000
B	18	1	Y	-0.0868000
B	19	1	Y	-0.0868000
B	20	1	Y	-0.0868000
B	21	1	Y	-0.0868000
B	22	1	Y	-0.0868000
B	23	1	Y	-0.0868000
B	24	1	Y	-0.0868000
B	25	1	Y	-0.0868000
B	26	1	Y	-0.0868000
B	27	1	Y	-0.0868000

DS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
3	B	28	1	Y	-0.0868000
3	B	29	1	Y	-0.0868000
3	B	30	1	Y	-0.0868000
	B	31	1	Y	-0.0868000
	B	32	1	Y	-0.0868000
	B	33	1	Y	-0.0868000
	B	34	1	Y	-0.0868000
	B	35	1	Y	-0.0868000
	B	36	1	Y	-0.0868000
	B	37	1	Y	-0.0868000
	B	38	1	Y	-0.0868000
	B	39	1	Y	-0.0868000
	B	40	1	Y	-0.0868000
	B	41	1	Y	-0.0868000
	B	42	1	Y	-0.0868000
	B	43	1	Y	-0.0868000
	B	44	1	Y	-0.0868000
	B	45	1	Y	-0.0868000
	B	46	1	Y	-0.0868000
		47	1	Y	-0.0868000
		48	1	Y	-0.0868000
	B	49	1	Y	-0.0868000
	B	50	1	Y	-0.0868000
	B	51	1	Y	-0.0868000
	B	52	1	Y	-0.0868000
	B	53	1	Y	-0.0868000
	B	54	1	Y	-0.0868000
	B	55	1	Y	-0.0868000
	B	56	1	Y	-0.0868000
	B	57	1	Y	-0.0868000
	B	58	1	Y	-0.0868000
	B	59	1	Y	-0.0868000
	B	60	1	Y	-0.0868000
	B	61	1	Y	-0.0868000
	B	52	1	Y	-0.0868000
	B	63	1	Y	-0.0868000
	B	64	1	Y	-0.0868000
	B	65	1	Y	-0.0868000
	B	66	1	Y	-0.0868000
	B	67	1	Y	-0.0868000

AL LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
B	68	1	Y	-0.0868000
B	69	1	Y	-0.0868000
B	70	1	Y	-0.0868000
B	71	1	Y	-0.0868000
B	72	1	Y	-0.0868000
B	73	1	Y	-0.0868000
B	74	1	Y	-0.0868000
B	75	1	Y	-0.0868000
B	76	1	Y	-0.0868000
B	77	1	Y	-0.0868000
B	78	1	Y	-0.0868000
B	79	1	Y	-0.0868000
B	80	1	Y	-0.0868000
B	81	1	Y	-0.0868000
B	82	1	Y	-0.0868000
B	83	1	Y	-0.0868000
B	84	1	Y	-0.0868000
B	85	1	Y	-0.0868000
B	86	1	Y	-0.0868000
B	87	1	Y	-0.0868000
B	88	1	Y	-0.0868000
B	89	1	Y	-0.0868000
B	90	1	Y	-0.0868000
B	91	1	Y	-0.0868000
B	92	1	Y	-0.0868000
B	93	1	Y	-0.0868000
B	94	1	Y	-0.0868000
B	95	1	Y	-0.0868000
B	96	1	Y	-0.0868000
B	97	1	Y	-0.0868000
B	98	1	Y	-0.0868000
B	99	1	Y	-0.0868000
B	100	1	Y	-0.0868000
B	101	1	Y	-0.0868000
B	102	1	Y	-0.0868000
B	103	1	Y	-0.0868000
B	104	1	Y	-0.0868000
B	105	1	Y	-0.0868000
B	106	1	Y	-0.0868000
B	107	1	Y	-0.0868000

DAL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
8	B	108	1	Y	-0.0868000
9	B	109	1	Y	-0.0868000
0	B	110	1	Y	-0.0868000
1	B	111	1	Y	-0.0868000
2	B	112	1	Y	-0.0868000
3	B	113	1	Y	-0.0868000
4	B	114	1	Y	-0.0868000
5	B	115	1	Y	-0.0868000
6	B	116	1	Y	-0.0868000
7	B	117	1	Y	-0.0868000
8	B	118	1	Y	-0.0868000
9	B	119	1	Y	-0.0868000
0	B	120	1	Y	-0.0868000
1	B	121	1	Y	-0.0868000
2	B	122	1	Y	-0.0868000
3	B	123	1	Y	-0.0868000
4	B	124	1	Y	-0.0868000
5	B	125	1	Y	-0.0868000
6	B	126	1	Y	-0.0868000
[illegible]	B	127	1	Y	-0.0868000
[illegible]	B	128	1	Y	-0.0868000
[illegible]	B	129	1	Y	-0.0868000
0	B	130	1	Y	-0.0868000
[illegible]	B	131	1	Y	-0.0868000
2	B	132	1	Y	-0.0868000
3	B	133	1	Y	-0.0868000
4	B	134	1	Y	-0.0868000
5	B	135	1	Y	-0.0868000
6	B	136	1	Y	-0.0868000
7	B	137	1	Y	-0.0868000
8	B	138	1	Y	-0.0868000
9	B	139	1	Y	-0.0868000
	B	140	1	Y	-0.0868000
	B	141	1	Y	-0.0868000
	B	142	1	Y	-0.0868000
	B	143	1	Y	-0.0868000
	B	144	1	Y	-0.0868000
5	B	145	1	Y	-0.0868000
6	B	146	1	Y	-0.0868000
7	B	147	1	Y	-0.0868000

L LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
B	148	1	Y	-0.0868000
B	149	1	Y	-0.0868000
B	150	1	Y	-0.0868000
B	151	1	Y	-0.0868000
B	152	1	Y	-0.0868000
B	153	1	Y	-0.0868000
B	154	1	Y	-0.0868000
B	155	1	Y	-0.0868000
B	156	1	Y	-0.0868000
B	157	1	Y	-0.0868000
B	158	1	Y	-0.0868000
B	159	1	Y	-0.0868000
B	160	1	Y	-0.0868000
B	161	1	Y	-0.0868000
B	162	1	Y	-0.0868000
B	163	1	Y	-0.0868000
B	164	1	Y	-0.0868000
B	165	1	Y	-0.0868000
B	166	1	Y	-0.0868000
B	167	1	Y	-0.0868000
B	168	1	Y	-0.0868000
B	169	1	Y	-0.0868000
B	170	1	Y	-0.0868000
B	171	1	Y	-0.0868000
B	172	1	Y	-0.0868000
B	173	1	Y	-0.0868000
B	174	1	Y	-0.0868000
B	175	1	Y	-0.0868000
B	176	1	Y	-0.0868000
B	177	1	Y	-0.0868000
B	178	1	Y	-0.0868000
B	179	1	Y	-0.0868000
B	180	1	Y	-0.0868000
B	181	1	Y	-0.0868000
B	182	1	Y	-0.0868000
B	183	1	Y	-0.0868000
B	184	1	Y	-0.0868000
B	185	1	Y	-0.0868000
B	186	1	Y	-0.0868000
B	187	1	Y	-0.0868000

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AL LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
B	188	1	Y	-0.0868000
B	189	1	Y	-0.0868000
B	190	1	Y	-0.0868000
B	191	1	Y	-0.0868000
B	192	1	Y	-0.0868000
B	193	1	Y	-0.0868000
B	194	1	Y	-0.0868000
B	195	1	Y	-0.0868000
B	196	1	Y	-0.0868000
B	197	1	Y	-0.0868000
B	198	1	Y	-0.0868000
B	199	1	Y	-0.0868000
B	200	1	Y	-0.0868000
B	201	1	Y	-0.0868000
B	202	1	Y	-0.0868000
B	203	1	Y	-0.0868000
B	204	1	Y	-0.0868000
B	205	1	Y	-0.0868000
B	206	1	Y	-0.0868000
B	207	1	Y	-0.0868000
B	208	1	Y	-0.0868000
B	209	1	Y	-0.0868000
B	210	1	Y	-0.0868000
B	211	1	Y	-0.0868000
B	212	1	Y	-0.0868000
B	213	1	Y	-0.0868000
B	214	1	Y	-0.0868000
B	215	1	Y	-0.0868000
B	216	1	Y	-0.0868000
B	217	1	Y	-0.0868000
B	218	1	Y	-0.0868000
B	219	1	Y	-0.0868000
B	220	1	Y	-0.0868000
B	221	1	Y	-0.0868000
B	222	1	Y	-0.0868000
B	223	1	Y	-0.0868000
B	224	1	Y	-0.0868000
B	225	1	Y	-0.0868000
B	226	1	Y	-0.0868000
B	227	1	Y	-0.0868000

LOADS :

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
B	228	1	Y	-0.0868000
B	229	1	Y	-0.0868000
B	230	1	Y	-0.0868000
B	231	1	Y	-0.0868000
B	232	1	Y	-0.0868000
B	233	1	Y	-0.0868000
B	234	1	Y	-0.0868000
B	235	1	Y	-0.0868000
B	236	1	Y	-0.0868000
B	237	1	Y	-0.0868000
B	238	1	Y	-0.0868000
B	239	1	Y	-0.0868000
B	240	1	Y	-0.0868000
B	241	1	Y	-0.0868000
B	242	1	Y	-0.0868000
B	243	1	Y	-0.0868000
B	244	1	Y	-0.0868000
B	245	1	Y	-0.0868000
B	246	1	Y	-0.0868000
B	247	1	Y	-0.0868000
B	248	1	Y	-0.0868000
B	249	1	Y	-0.0868000
B	250	1	Y	-0.0868000
B	251	1	Y	-0.0868000
B	252	1	Y	-0.0868000
B	253	1	Y	-0.0868000
B	254	1	Y	-0.0868000
B	255	1	Y	-0.0868000
B	256	1	Y	-0.0868000
B	257	1	Y	-0.0868000
B	258	1	Y	-0.0868000
B	259	1	Y	-0.0868000
B	260	1	Y	-0.0868000
B	261	1	Y	-0.0868000
B	262	1	Y	-0.0868000
B	263	1	Y	-0.0868000
B	264	1	Y	-0.0868000
B	265	1	Y	-0.0868000
B	266	1	Y	-0.0868000
B	267	1	Y	-0.0868000

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AL LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
B	268	1	Y	-0.0868000
B	269	1	Y	-0.0868000
B	270	1	Y	-0.0868000
B	271	1	Y	-0.0868000
B	272	1	Y	-0.0868000
B	273	1	Y	-0.0868000
B	274	1	Y	-0.0868000
B	275	1	Y	-0.0868000
B	276	1	Y	-0.0868000
B	277	1	Y	-0.0868000
B	278	1	Y	-0.0868000
B	279	1	Y	-0.0868000
B	280	1	Y	-0.0868000
B	281	1	Y	-0.0868000
B	282	1	Y	-0.0868000
B	283	1	Y	-0.0868000
B	284	1	Y	-0.0868000
B	285	1	Y	-0.0868000
B	286	1	Y	-0.0868000
B	287	1	Y	-0.0868000
B	288	1	Y	-0.0868000
B	289	1	Y	-0.0868000
B	290	1	Y	-0.0868000
B	291	1	Y	-0.0868000
B	292	1	Y	-0.0868000
B	293	1	Y	-0.0868000
B	294	1	Y	-0.0868000
B	295	1	Y	-0.0868000
B	296	1	Y	-0.0868000
B	297	1	Y	-0.0868000
B	298	1	Y	-0.0868000
B	299	1	Y	-0.0868000
B	300	1	Y	-0.0868000
B	301	1	Y	-0.0868000
B	302	1	Y	-0.0868000
B	303	1	Y	-0.0868000
B	304	1	Y	-0.0868000
B	305	1	Y	-0.0868000
B	306	1	Y	-0.0868000
B	307	1	Y	-0.0868000

LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
B	308	1	Y	-0.0868000
B	309	1	Y	-0.0868000
B	310	1	Y	-0.0868000
B	311	1	Y	-0.0868000
B	312	1	Y	-0.0868000
B	313	1	Y	-0.0868000
B	314	1	Y	-0.0868000
B	315	1	Y	-0.0868000
B	316	1	Y	-0.0868000
B	317	1	Y	-0.0868000
B	318	1	Y	-0.0868000
B	319	1	Y	-0.0868000
B	320	1	Y	-0.0868000
B	321	1	Y	-0.0868000
B	322	1	Y	-0.0868000
B	323	1	Y	-0.0868000
B	324	1	Y	-0.0868000
B	325	1	Y	-0.0868000
B	326	1	Y	-0.0868000
B	327	1	Y	-0.0858000
B	328	1	Y	-0.0868000
B	329	1	Y	-0.0868000
B	330	1	Y	-0.0868000
B	331	1	Y	-0.0868000
B	332	1	Y	-0.0868000
B	333	1	Y	-0.0868000
B	334	1	Y	-0.0868000
B	335	1	Y	-0.0868000
B	336	1	Y	-0.0868000
B	337	1	Y	-0.0869000
B	338	1	Y	-0.0868000
B	339	1	Y	-0.0868000
B	340	1	Y	-0.0868000
B	341	1	Y	-0.0868000
B	342	1	Y	-0.0868000
B	343	1	Y	-0.0868000
B	344	1	Y	-0.0868000
B	345	1	Y	-0.0868000
B	346	1	Y	-0.0868000
B	347	1	Y	-0.0868000

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DAL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
3	B	348	1	Y	-0.0868000
9	B	349	1	Y	-0.0868000
0	B	350	1	Y	-0.0868000
1	B	351	1	Y	-0.0868000
2	B	352	1	Y	-0.0868000
3	B	353	1	Y	-0.0868000
4	B	354	1	Y	-0.0868000
5	B	355	1	Y	-0.0868000
6	B	356	1	Y	-0.0868000
7	B	357	1	Y	-0.0868000
8	B	358	1	Y	-0.0868000
9	B	359	1	Y	-0.0868000
0	B	360	1	Y	-0.0868000
1	B	361	1	Y	-0.0868000
2	B	362	1	Y	-0.0868000
3	B	363	1	Y	-0.0868000
4	B	364	1	Y	-0.0868000
5	B	365	1	Y	-0.0868000
6	B	366	1	Y	-0.0868000
		367	1	Y	-0.0868000
8	B	368	1	Y	-0.0868000
9	B	369	1	Y	-0.0868000
0	B	370	1	Y	-0.0868000
	B	371	1	Y	-0.0868000
2	B	372	1	Y	-0.0868000
3	B	373	1	Y	-0.0868000
4	B	374	1	Y	-0.0868000
5	B	375	1	Y	-0.0868000
6	B	376	1	Y	-0.0868000
7	B	377	1	Y	-0.0868000
8	B	378	1	Y	-0.0868000
9	B	379	1	Y	-0.0868000
	B	380	1	Y	-0.0868000
	B	381	1	Y	-0.0868000
	B	382	1	Y	-0.0868000
	B	383	1	Y	-0.0868000
	B	384	1	Y	-0.0868000
	B	385	1	Y	-0.0868000
	B	386	1	Y	-0.0868000
	B	387	1	Y	-0.0868000

AL LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
B	388	1	Y	-0.0868000
B	389	1	Y	-0.0868000
B	390	1	Y	-0.0868000
B	391	1	Y	-0.0868000
B	392	1	Y	-0.0868000
B	393	1	Y	-0.0868000
B	394	1	Y	-0.0868000
B	395	1	Y	-0.0868000
B	396	1	Y	-0.0868000
B	397	1	Y	-0.0868000
B	398	1	Y	-0.0868000
B	399	1	Y	-0.0868000
B	400	1	Y	-0.0868000
B	401	1	Y	-0.0868000
B	402	1	Y	-0.0868000
B	403	1	Y	-0.0868000
B	404	1	Y	-0.0868000
B	405	1	Y	-0.0868000
B	406	1	Y	-0.0868000
B	407	1	Y	-0.0868000
B	408	1	Y	-0.0868000
B	409	1	Y	-0.0868000
B	410	1	Y	-0.0868000
B	411	1	Y	-0.0868000
B	412	1	Y	-0.0868000
B	413	1	Y	-0.0868000
B	414	1	Y	-0.0868000
B	415	1	Y	-0.0868000
B	416	1	Y	-0.0868000
B	417	1	Y	-0.0868000
B	418	1	Y	-0.0868000
B	419	1	Y	-0.0868000
B	420	1	Y	-0.0868000
B	421	1	Y	-0.0868000
B	422	1	Y	-0.0868000
B	423	1	Y	-0.0868000
B	424	1	Y	-0.0868000
B	425	1	Y	-0.0868000
B	426	1	Y	-0.0868000
B	427	1	Y	-0.0868000

NODAL LOADS *

Q #	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
428	B	428	1	Y	-0.0868000
429	B	429	1	Y	-0.0868000
430	B	430	1	Y	-0.0868000
431	B	431	1	Y	-0.0868000
432	B	432	1	Y	-0.0868000
433	B	433	1	Y	-0.0868000
434	B	434	1	Y	-0.0868000
435	B	435	1	Y	-0.0868000
436	B	436	1	Y	-0.0868000
437	B	437	1	Y	-0.0868000
438	B	438	1	Y	-0.0868000
439	B	439	1	Y	-0.0868000
440	B	440	1	Y	-0.0868000
441	B	441	1	Y	-0.0868000
442	B	442	1	Y	-0.0868000
443	B	443	1	Y	-0.0868000
444	B	444	1	Y	-0.0868000
445	B	445	1	Y	-0.0868000
446	B	446	1	Y	-0.0868000
[illegible]	B	447	1	Y	-0.0868000
448	B	448	1	Y	-0.0868000
449	B	449	1	Y	-0.0868000
450	B	450	1	Y	-0.0868000
451	B	451	1	Y	-0.0868000
452	B	452	1	Y	-0.0868000
453	B	453	1	Y	-0.0868000
454	B	454	1	Y	-0.0868000
455	B	455	1	Y	-0.0868000
456	B	456	1	Y	-0.0868000
457	B	457	1	Y	-0.0868000
458	B	458	1	Y	-0.0868000
459	B	459	1	Y	-0.0868000
460	B	460	1	Y	-0.0868000
461	B	461	1	Y	-0.0868000
462	B	462	1	Y	-0.0868000
463	B	463	1	Y	-0.0868000
464	B	464	1	Y	-0.0868000
465	B	465	1	Y	-0.0868000
466	B	466	1	Y	-0.0868000
467	B	467	1	Y	-0.0868000

S LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
B	468	1	Y	-0.0868000
B	469	1	Y	-0.0868000
B	470	1	Y	-0.0868000
B	471	1	Y	-0.0868000
B	472	1	Y	-0.0868000
B	473	1	Y	-0.0868000
B	474	1	Y	-0.0868000
B	475	1	Y	-0.0868000
B	476	1	Y	-0.0868000
B	477	1	Y	-0.0868000
B	478	1	Y	-0.0868000
B	479	1	Y	-0.0868000
B	480	1	Y	-0.0868000
B	481	1	Y	-0.0868000
B	482	1	Y	-0.0868000
B	483	1	Y	-0.0868000
B	484	1	Y	-0.0868000
B	485	1	Y	-0.0868000
B	486	1	Y	-0.0868000
B	487	1	Y	-0.0868000
B	488	1	Y	-0.0868000
B	489	1	Y	-0.0868000
B	490	1	Y	-0.0868000
B	491	1	Y	-0.0868000
B	492	1	Y	-0.0868000
B	493	1	Y	-0.0868000
B	494	1	Y	-0.0868000
B	495	1	Y	-0.0868000
B	496	1	Y	-0.0868000
B	497	1	Y	-0.0868000
B	498	1	Y	-0.0868000
B	499	1	Y	-0.0868000
B	500	1	Y	-0.0868000
B	501	1	Y	-0.0868000
B	502	1	Y	-0.0868000
B	503	1	Y	-0.0868000
B	504	1	Y	-0.0868000
B	505	1	Y	-0.0868000
B	506	1	Y	-0.0868000
B	507	1	Y	-0.0868000

NODAL LOADS *

EQ #	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
508	B	508	1	Y	-0.0868000
509	B	509	1	Y	-0.0868000
510	B	510	1	Y	-0.0868000
511	B	511	1	Y	-0.0868000
512	B	512	1	Y	-0.0868000
513	B	513	1	Y	-0.0868000
514	B	514	1	Y	-0.0868000
515	B	515	1	Y	-0.0868000
516	B	516	1	Y	-0.0868000
517	B	517	1	Y	-0.0868000
518	B	518	1	Y	-0.0868000
519	B	519	1	Y	-0.0868000
520	B	520	1	Y	-0.0868000
521	B	521	1	Y	-0.0868000
522	B	522	1	Y	-0.0868000
523	B	523	1	Y	-0.0868000
524	B	524	1	Y	-0.0868000
525	B	525	1	Y	-0.0868000
[illegible]	B	526	1	Y	-0.0868000
[illegible]	B	527	1	Y	-0.0868000
528	B	528	1	Y	-0.0868000
529	B	529	1	Y	-0.0868000
530	B	530	1	Y	-0.0868000
531	B	531	1	Y	-0.0868000
532	B	532	1	Y	-0.0868000
533	B	533	1	Y	-0.0868000
534	B	534	1	Y	-0.0868000
535	B	535	1	Y	-0.0868000
536	B	536	1	Y	-0.0868000
537	B	537	1	Y	-0.0868000
538	B	538	1	Y	-0.0868000
539	B	539	1	Y	-0.0868000
540	B	540	1	Y	-0.0868000
541	B	541	1	Y	-0.0868000
542	B	542	1	Y	-0.0868000
543	B	543	1	Y	-0.0868000
544	B	544	1	Y	-0.0868000
545	B	545	1	Y	-0.0868000
546	B	546	1	Y	-0.0868000
547	B	547	1	Y	-0.0868000

E LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
B	548	1	Y	-0.0868000
B	549	1	Y	-0.0868000
B	550	1	Y	-0.0868000
B	551	1	Y	-0.0868000
B	552	1	Y	-0.0868000
B	553	1	Y	-0.0868000
B	554	1	Y	-0.0868000
B	555	1	Y	-0.0868000
B	556	1	Y	-0.0868000
B	557	1	Y	-0.0868000
B	558	1	Y	-0.0868000
B	559	1	Y	-0.0868000
B	560	1	Y	-0.0868000
B	561	1	Y	-0.0868000
B	562	1	Y	-0.0868000
B	563	1	Y	-0.0868000
B	564	1	Y	-0.0868000
B	565	1	Y	-0.0868000
B	566	1	Y	-0.0868000
B	567	1	Y	-0.0868000
B	568	1	Y	-0.0868000
B	569	1	Y	-0.0868000
B	570	1	Y	-0.0868000
B	571	1	Y	-0.0868000
B	572	1	Y	-0.0868000
B	573	1	Y	-0.0868000
B	574	1	Y	-0.0868000
B	575	1	Y	-0.0868000
B	576	1	Y	-0.0868000
B	577	1	Y	-0.0868000
B	578	1	Y	-0.0868000
B	579	1	Y	-0.0868000
B	580	1	Y	-0.0868000
B	581	1	Y	-0.0868000
B	582	1	Y	-0.0868000
B	583	1	Y	-0.0868000
B	584	1	Y	-0.0868000
B	585	1	Y	-0.0868000
B	586	1	Y	-0.0868000
B	587	1	Y	-0.0868000

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NODAL LOADS *

Q #	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
588	B	588	1	Y	-0.0868000
589	B	589	1	Y	-0.0868000
590	B	590	1	Y	-0.0868000
591	B	591	1	Y	-0.0868000
592	B	592	1	Y	-0.0868000
593	B	593	1	Y	-0.0868000
594	B	594	1	Y	-0.0868000
595	B	595	1	Y	-0.0868000
596	B	596	1	Y	-0.0868000
597	B	597	1	Y	-0.0868000
598	B	598	1	Y	-0.0868000
599	B	599	1	Y	-0.0868000
600	B	600	1	Y	-0.0868000
601	B	601	1	Y	-0.0868000
602	B	602	1	Y	-0.0868000
603	B	603	1	Y	-0.0868000
604	B	604	1	Y	-0.0868000
605	B	605	1	Y	-0.0868000
[illegible]	B	606	1	Y	-0.0868000
[illegible]	B	607	1	Y	-0.0868000
[illegible]	B	608	1	Y	-0.0868000
609	B	609	1	Y	-0.0868000
610	B	610	1	Y	-0.0868000
611	B	611	1	Y	-0.0868000
612	B	612	1	Y	-0.0868000
613	B	613	1	Y	-0.0868000
[illegible]	B	614	1	Y	-0.0868000
[illegible]	B	615	1	Y	-0.0868000
[illegible]	B	616	1	Y	-0.0868000
[illegible]	B	617	1	Y	-0.0868000
[illegible]	B	618	1	Y	-0.086[illegible]
[illegible]	B	619	1	Y	-0.0868000
620	B	620	1	Y	-0.0868000
621	B	621	1	Y	-0.0868000
622	B	622	1	Y	-0.0868000
623	B	623	1	Y	-0.0868000
624	B	524	1	Y	-0.0868000
625	B	525	1	Y	-0.0868000
626	B	526	1	Y	-0.0868000
627	B	627	1	Y	-0.0868000

LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
B	628	1	Y	-0.0868000
B	629	1	Y	-0.0868000
B	630	1	Y	-0.0868000
B	631	1	Y	-0.0868000
B	632	1	Y	-0.0868000
B	633	1	Y	-0.0868000
B	634	1	Y	-0.0868000
B	635	1	Y	-0.0868000
B	636	1	Y	-0.0868000
B	637	1	Y	-0.0868000
B	638	1	Y	-0.0868000
B	639	1	Y	-0.0868000
B	640	1	Y	-0.0868000
B	641	1	Y	-0.0868000
B	642	1	Y	-0.0868000
B	643	1	Y	-0.0868000
B	644	1	Y	-0.0868000
B	645	1	Y	-0.0868000
B	646	1	Y	-0.0868000
B	647	1	Y	-0.0868000
B	648	1	Y	-0.0868000
B	649	1	Y	-0.0868000
B	650	1	Y	-0.0868000
B	651	1	Y	-0.0868000
B	652	1	Y	-0.0868000
B	653	1	Y	-0.0868000
B	654	1	Y	-0.0868000
B	655	1	Y	-0.0868000
B	656	1	Y	-0.0868000
B	657	1	Y	-0.0868000
B	658	1	Y	-0.0868000
B	659	1	Y	-0.0868000
B	660	1	Y	-0.0868000
B	661	1	Y	-0.0868000
B	662	1	Y	-0.0868000
B	663	1	Y	-0.0868000
B	664	1	Y	-0.0868000
B	665	1	Y	-0.0868000
B	666	1	Y	-0.0868000
B	667	1	Y	-0.0868000

ODAL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
68	B	668	1	Y	-0.0868000
69	B	669	1	Y	-0.0868000
70	B	670	1	Y	-0.0868000
71	B	671	1	Y	-0.0868000
72	B	672	1	Y	-0.0868000
3	B	673	1	Y	-0.0868000
4	B	674	1	Y	-0.0868000
5	B	675	1	Y	-0.0868000
6	B	676	1	Y	-0.0868000
7	B	677	1	Y	-0.0868000
8	B	678	1	Y	-0.0868000
9	B	679	1	Y	-0.0868000
0	B	680	1	Y	-0.0868000
1	B	681	1	Y	-0.0868000
2	B	682	1	Y	-0.0868000
3	B	683	1	Y	-0.0868000
4	B	684	1	Y	-0.0868000
5	B	685	1	Y	-0.0868000
6	B	686	1	Y	-0.0868000
	B	687	1	Y	-0.0868000
	B	688	1	Y	-0.0868000
	B	689	1	Y	-0.0868000
	B	690	1	Y	-0.0868000
	B	691	1	Y	-0.0868000
	B	692	1	Y	-0.0868000
	B	693	1	Y	-0.0868000
	B	694	1	Y	-0.0868000
	B	695	1	Y	-0.0868000
	B	696	1	Y	-0.0868000
	B	697	1	Y	-0.0868000
	B	698	1	Y	-0.0868000
	B	699	1	Y	-0.0868000
	B	700	1	Y	-0.0868000
	B	701	1	Y	-0.0868000
	B	702	1	Y	-0.0868000
	B	703	1	Y	-0.0868000
	B	704	1	Y	-0.0868000
	B	705	1	Y	-0.0868000
	B	706	1	Y	-0.0868000
	B	707	1	Y	-0.0868000

RDS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
B	708	1	Y	-0.0868000
B	709	1	Y	-0.0868000
B	710	1	Y	-0.0868000
B	711	1	Y	-0.0868000
B	712	1	Y	-0.0868000
B	713	1	Y	-0.0868000
B	714	1	Y	-0.0868000
B	715	1	Y	-0.0868000
B	716	1	Y	-0.0868000
B	717	1	Y	-0.0868000
B	718	1	Y	-0.0868000
B	719	1	Y	-0.0868000
B	720	1	Y	-0.0868000
B	721	1	Y	-0.0868000
B	722	1	Y	-0.0868000
B	723	1	Y	-0.0868000
B	724	1	Y	-0.0868000
B	725	1	Y	-0.0868000
B	726	1	Y	-0.0868000
B	727	1	Y	-0.0868000
B	728	1	Y	-0.0868000
B	729	1	Y	-0.0868000
B	730	1	Y	-0.0868000
B	731	1	Y	-0.0868000
B	732	1	Y	-0.0868000
B	733	1	Y	-0.0868000
B	734	1	Y	-0.0868000
B	735	1	Y	-0.0868000
B	736	1	Y	-0.0868000
B	737	1	Y	-0.0868000
B	738	1	Y	-0.0868000
B	739	1	Y	-0.0868000
B	740	1	Y	-0.0868000
B	741	1	Y	-0.0868000
B	742	1	Y	-0.0868000
B	743	1	Y	-0.0868000
B	744	1	Y	-0.0868000
B	745	1	Y	-0.0868000
B	746	1	Y	-0.0868000
B	747	1	Y	-0.0868000

NE LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
B	748	1	Y	-0.0868000
B	749	1	Y	-0.0868000
B	750	1	Y	-0.0868000
B	751	1	Y	-0.0868000
B	752	1	Y	-0.0868000
B	753	1	Y	-0.0868000
B	754	1	Y	-0.0868000
B	755	1	Y	-0.0868000
B	756	1	Y	-0.0868000
B	757	1	Y	-0.0868000
B	758	1	Y	-0.0868000
B	759	1	Y	-0.0868000
B	760	1	Y	-0.0868000
B	761	1	Y	-0.0868000
B	762	1	Y	-0.0868000
B	763	1	Y	-0.0868000
B	764	1	Y	-0.0868000
B	765	1	Y	-0.0868000
B	766	1	Y	-0.0868000
B	757	1	Y	-0.0868000
B	768	1	Y	-0.0868000
B	769	1	Y	-0.0868000
B	770	1	Y	-0.0868000
B	771	1	Y	-0.0868000
B	772	1	Y	-0.0868000
B	773	1	Y	-0.0868000
B	774	1	Y	-0.0868000
B	775	1	Y	-0.0868000
B	776	1	Y	-0.0868000
B	777	1	Y	-0.0868000
B	778	1	Y	-0.0868000
B	779	1	Y	-0.0868000
B	780	1	Y	-0.0868000
B	781	1	Y	-0.0868000
B	782	1	Y	-0.0868000
B	783	1	Y	-0.0868000
B	784	1	Y	-0.0868000
B	785	1	Y	-0.0868000
B	786	1	Y	-0.0868000
B	787	1	Y	-0.0868000

DAL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
8	B	788	1	Y	-0.0868000
9	B	789	1	Y	-0.0868000
0	B	790	1	Y	-0.0868000
1	B	791	1	Y	-0.0868000
2	B	792	1	Y	-0.0868000
3	B	793	1	Y	-0.0868000
4	B	794	1	Y	-0.0868000
5	B	795	1	Y	-0.0868000
6	B	796	1	Y	-0.0868000
7	B	797	1	Y	-0.0868000
8	B	798	1	Y	-0.0868000
9	B	799	1	Y	-0.0868000
0	B	800	1	Y	-0.0868000
1	B	801	1	Y	-0.0868000
2	B	802	1	Y	-0.0868000
3	B	803	1	Y	-0.0868000
4	B	804	1	Y	-0.0868000
5	B	805	1	Y	-0.0868000
[illegible]	B	806	1	Y	-0.0868000
[illegible]	B	807	1	Y	-0.0868000
8	B	808	1	Y	-0.0868000
9	B	809	1	Y	-0.0868000
0	B	810	1	Y	-0.0868000
1	B	811	1	Y	-0.0868000
2	B	812	1	Y	-0.0868000
3	B	813	1	Y	-0.0868000
4	B	814	1	Y	-0.0868000
5	B	815	1	Y	-0.0868000
6	B	816	1	Y	-0.0868000
7	B	817	1	Y	-0.0868000
8	B	818	1	Y	-0.0868000
9	B	819	1	Y	-0.0868000
0	B	820	1	Y	-0.0868000
1	B	821	1	Y	-0.0868000
2	B	822	1	Y	-0.0868000
3	B	823	1	Y	-0.0868000
4	B	824	1	Y	-0.0868000
5	B	825	1	Y	-0.0868000
6	B	826	1	Y	-0.0868000
7	B	827	1	Y	-0.0868000

AL LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
B	828	1	Y	-0.0868000
B	829	1	Y	-0.0868000
B	830	1	Y	-0.0868000
B	831	1	Y	-0.0868000
B	832	1	Y	-0.0868000
B	833	1	Y	-0.0868000
B	834	1	Y	-0.0868000
B	835	1	Y	-0.0868000
B	836	1	Y	-0.0868000
B	837	1	Y	-0.0868000
B	838	1	Y	-0.0868000
B	839	1	Y	-0.0868000
B	840	1	Y	-0.0868000
B	841	1	Y	-0.0868000
B	842	1	Y	-0.0868000
B	843	1	Y	-0.0868000
B	844	1	Y	-0.0868000
B	845	1	Y	-0.0868000
B	846	1	Y	-0.0868000
B	847	1	Y	-0.0868000
B	848	1	Y	-0.0868000
B	849	1	Y	-0.0868000
B	850	1	Y	-0.0868000
B	851	1	Y	-0.0868000
B	852	1	Y	-0.0868000
B	853	1	Y	-0.0868000
B	854	1	Y	-0.0868000
B	855	1	Y	-0.0868000
B	856	1	Y	-0.0868000
B	857	1	Y	-0.0868000
B	858	1	Y	-0.0868000
B	859	1	Y	-0.0868000
B	860	1	Y	-0.0868000
B	861	1	Y	-0.0868000
B	862	1	Y	-0.0868000
B	863	1	Y	-0.0868000
B	864	1	Y	-0.0868000
B	865	1	Y	-0.0868000
B	866	1	Y	-0.0868000
B	867	1	Y	-0.0868000

8

LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
B	868	1	Y	-0.0868000
B	869	1	Y	-0.0868000
B	870	1	Y	-0.0868000
B	871	1	Y	-0.0868000
B	872	1	Y	-0.0868000
B	873	1	Y	-0.0868000
B	874	1	Y	-0.0868000
B	875	1	Y	-0.0868000
B	876	1	Y	-0.0868000
B	877	1	Y	-0.0868000
B	878	1	Y	-0.0868000
B	879	1	Y	-0.0868000
B	880	1	Y	-0.0868000
B	881	1	Y	-0.0868000
B	882	1	Y	-0.0868000
B	883	1	Y	-0.0868000
B	884	1	Y	-0.0868000
B	885	1	Y	-0.0868000
B	886	1	Y	-0.0868000
B	887	1	Y	-0.0868000
B	888	1	Y	-0.0868000
B	889	1	Y	-0.0868000
B	890	1	Y	-0.0868000
B	891	1	Y	-0.0868000
B	892	1	Y	-0.0868000
B	893	1	Y	-0.0868000
B	894	1	Y	-0.0868000
B	895	1	Y	-0.0868000
B	896	1	Y	-0.0868000
B	897	1	Y	-0.0868000
B	898	1	Y	-0.0868000
B	899	1	Y	-0.0868000
B	900	1	Y	-0.0868000
B	901	1	Y	-0.0868000
B	902	1	Y	-0.0868000
B	903	1	Y	-0.0868000
B	904	1	Y	-0.0868000
B	905	1	Y	-0.0868000
B	906	1	Y	-0.0868000
B	907	1	Y	-0.0868000

* LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
B	908	1	Y	-0.0868000
B	909	1	Y	-0.0868000
B	910	1	Y	-0.0868000
B	911	1	Y	-0.0868000
B	912	1	Y	-0.0868000
B	913	1	Y	-0.0868000
B	914	1	Y	-0.0868000
B	915	1	Y	-0.0868000
B	916	1	Y	-0.0868000
B	917	1	Y	-0.0868000
B	918	1	Y	-0.0868000
B	919	1	Y	-0.0868000
B	920	1	Y	-0.0868000
B	921	1	Y	-0.0868000
B	922	1	Y	-0.0868000
B	923	1	Y	-0.0868000
B	924	1	Y	-0.0868000
B	925	1	Y	-0.0868000
B	926	1	Y	-0.0868000
B	927	1	Y	-0.0868000
B	928	1	Y	-0.0868000
B	929	1	Y	-0.0868000
B	930	1	Y	-0.0868000
B	931	1	Y	-0.0868000
B	932	1	Y	-0.0868000
B	933	1	Y	-0.0868000
B	934	1	Y	-0.0868000
B	935	1	Y	-0.0868000
B	936	1	Y	-0.0868000
B	937	1	Y	-0.0868000
B	938	1	Y	-0.0868000
B	939	1	Y	-0.0868000
B	940	1	Y	-0.0868000
B	941	1	Y	-0.0868000
B	942	1	Y	-0.0868000
B	943	1	Y	-0.0868000
B	944	1	Y	-0.0868000
B	945	1	Y	-0.0868000
B	946	1	Y	-0.0868000
B	947	1	Y	-0.0868000

NODAL LOADS *

D #	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
948	B	948	1	Y	-0.0868000
949	B	949	1	Y	-0.0868000
950	B	950	1	Y	-0.0868000
951	B	951	1	Y	-0.0868000
952	B	952	1	Y	-0.0868000
953	B	953	1	Y	-0.0868000
954	B	954	1	Y	-0.0868000
955	B	955	1	Y	-0.0868000
956	B	956	1	Y	-0.0868000
957	B	957	1	Y	-0.0868000
958	B	958	1	Y	-0.0868000
959	B	959	1	Y	-0.0868000
960	B	960	1	Y	-0.0868000
961	B	961	1	Y	-0.0868000
962	B	962	1	Y	-0.0868000
963	B	963	1	Y	-0.0868000
964	B	964	1	Y	-0.0868000
965	B	965	1	Y	-0.0868000
[illegible]	B	966	1	Y	-0.0868000
[illegible]	B	967	1	Y	-0.0868000
968	B	968	1	Y	-0.0868000
969	B	969	1	Y	-0.0868000
970	B	970	1	Y	-0.0868000
971	B	971	1	Y	-0.0868000
972	B	972	1	Y	-0.0868000
973	B	973	1	Y	-0.0868000
974	B	974	1	Y	-0.0868000
975	B	975	1	Y	-0.0868000
976	B	976	1	Y	-0.0868000
977	B	977	1	Y	-0.0868000
978	B	978	1	Y	-0.0868000
979	B	979	1	Y	-0.0868000
980	B	980	1	Y	-0.0868000
981	B	981	1	Y	-0.0868000
982	B	982	1	Y	-0.0868000
983	B	983	1	Y	-0.0868000
984	B	984	1	Y	-0.0868000
985	B	985	1	Y	-0.0868000
986	B	986	1	Y	-0.0868000
987	B	987	1	Y	-0.0868000

AL LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
B	988	1	Y	-0.0868000
B	989	1	Y	-0.0868000
B	990	1	Y	-0.0868000
B	991	1	Y	-0.0868000
B	992	1	Y	-0.0868000
B	993	1	Y	-0.0868000
B	994	1	Y	-0.0868000
B	995	1	Y	-0.0868000
B	996	1	Y	-0.0868000
B	997	1	Y	-0.0868000
B	998	1	Y	-0.0868000
B	999	1	Y	-0.0868000
B	1000	1	Y	-0.0868000
N	261	1	X	-153,210.0000000
N	266	1	X	-304,500.0000000
N	271	1	X	-300,670.0000000
N	276	1	X	-291,100.0000000
N	281	1	X	-281,520.0000000
N	286	1	X	-277,690.0000000
N	291	1	X	-268,120.0000000
N	296	1	X	-268,290.0000000
N	301	1	X	-260,280.0000000
N	306	1	X	-252,280.0000000
N	311	1	X	-244,260.0000000
N	316	1	X	-236,250.0000000
N	321	1	X	-224,250.0000000
N	326	1	X	-214,230.0000000
N	331	1	X	-210,220.0000000
N	336	1	X	-200,200.0000000
N	341	1	X	-190,200.0000000
N	346	1	X	-186,210.0000000
N	351	1	X	-176,200.0000000
N	356	1	X	-164,170.0000000
N	361	1	X	-156,160.0000000
N	366	1	X	-148,150.0000000
N	371	1	X	-140,150.0000000
N	376	1	X	-132,130.0000000
N	381	1	X	-124,120.0000000
N	386	1	X	-116,120.0000000
N	391	1	X	-108,110.0000000

DAD LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
3	N	396	1	X	-96,106.0000000
9	N	401	1	X	-86,095.0000000
0	N	406	1	X	-82,089.0000000
1	N	411	1	X	-72,081.0000000
2	N	416	1	X	-64,075.0000000
3	N	421	1	X	-69,648.0000000
4	N	426	1	X	-69,648.0000000
5	N	431	1	X	-69,648.0000000
6	N	436	1	X	-69,648.0000000
7	N	441	1	X	-69,648.0000000
8	N	446	1	X	-69,648.0000000
	N	451	1	X	-338,410.0000000
	N	456	1	X	-455,380.0000000
	N	461	1	X	-303,580.0000000
	N	466	1	X	-151,800.0000000
	N	259	1	Y	1,456,000.0000000
	N	229	1	Y	1,456,000.0000000
	N	260	1	Y	1,456,000.0000000
	N	463	1	Y	-1,456,000.0000000
	N	464	1	Y	-1,456,000.0000000
	N	465	1	Y	-1,456,000.0000000
	N	466	2	Y	-409.0000000
	N	465	2	Y	-849.0000000
	N	464	2	Y	-845.0000000
	N	463	2	Y	-841.0000000
	N	462	2	Y	-1,676.0000000
	N	459	2	Y	-2,482.0000000
	N	472	2	Y	-2,450.0000000
	N	475	2	Y	-2,419.0000000
	N	478	2	Y	-2,388.0000000
	N	481	2	Y	-2,356.0000000
	N	484	2	Y	-2,325.0000000
	N	487	2	Y	-2,293.0000000
	N	490	2	Y	-3,016.0000000
	N	493	2	Y	-2,960.0000000
	N	496	2	Y	-2,904.0000000
	N	499	2	Y	-2,848.0000000
	N	502	2	Y	-2,793.0000000
	N	505	2	Y	-2,737.0000000

LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
N	508	2	Y	-2,681.0000000
N	511	2	Y	-2,625.0000000
N	514	2	Y	-2,569.0000000
N	517	2	Y	-2,513.0000000
N	520	2	Y	-2,457.0000000
N	523	2	Y	-2,402.0000000
N	526	2	Y	-2,346.0000000
N	529	2	Y	-2,290.0000000
N	532	2	Y	-2,234.0000000
N	535	2	Y	-2,178.0000000
N	538	2	Y	-2,122.0000000
N	541	2	Y	-2,066.0000000
N	544	2	Y	-2,011.0000000
N	547	2	Y	-1,955.0000000
N	550	2	Y	-1,899.0000000
N	553	2	Y	-1,843.0000000
N	556	2	Y	-1,787.0000000
N	559	2	Y	-1,514.0000000
N	562	2	Y	-1,464.0000000
N	565	2	Y	-1,421.0000000
N	568	2	Y	-1,379.0000000
N	571	2	Y	-1,335.0000000
N	574	2	Y	-1,294.0000000
N	577	2	Y	-1,251.0000000
N	580	2	Y	-1,058.0000000
N	583	2	Y	-1,011.0000000
N	586	2	Y	-979.0000000
N	589	2	Y	-948.0000000
N	592	2	Y	-916.0000000
N	595	2	Y	-885.0000000
N	598	2	Y	-854.0000000
N	601	2	Y	-822.0000000
N	604	2	Y	-791.0000000
N	607	2	Y	-759.0000000
N	610	2	Y	-728.0000000
N	613	2	Y	-696.0000000
N	616	2	Y	-665.0000000
N	619	2	Y	-634.0000000
N	622	2	Y	-602.0000000
N	625	2	Y	-523.0000000

AD LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
N	628	2	Y	-454.0000000
N	631	2	Y	-432.0000000
N	634	2	Y	-410.0000000
N	637	2	Y	-388.0000000
N	640	2	Y	-367.0000000
N	643	2	Y	-345.0000000
N	646	2	Y	-323.0000000
N	649	2	Y	-301.0000000
N	652	2	Y	-279.0000000
N	655	2	Y	-257.0000000
N	658	2	Y	-236.0000000
N	661	2	Y	-214.0000000
N	664	2	Y	-192.0000000
N	667	2	Y	-170.0000000
N	670	2	Y	-148.0000000
N	673	2	Y	-127.0000000
N	676	2	Y	-94.0000000
N	679	2	Y	-70.0000000
N	682	2	Y	-56.0000000
N	685	2	Y	-42.0000000
N	688	2	Y	-28.0000000
N	691	2	Y	-14.0000000
N	694	2	Y	-2.0000000
N	3	4	Y	-1,081.0000000
N	6	4	Y	-6,953.0000000
N	9	4	Y	-12,570.0000000
N	12	4	Y	-18,150.0000000
N	15	4	Y	-23,740.0000000
N	18	4	Y	-29,320.0000000
N	21	4	Y	-34,910.0000000
N	24	4	Y	-40,490.0000000
N	27	4	Y	-46,070.0000000
N	30	4	Y	-51,660.0000000
N	33	4	Y	-57,240.0000000
N	36	4	Y	-62,830.0000000
N	39	4	Y	-68,420.0000000
N	42	4	Y	-74,000.0000000
N	45	4	Y	-79,590.0000000
N	48	4	Y	-85,200.0000000

LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
N	51	4	Y	-90,730.0000000
N	54	4	Y	-96,340.0000000
N	57	4	Y	-101,950.0000000
N	60	4	Y	-107,470.0000000
N	63	4	Y	-113,080.0000000
N	66	4	Y	-118,690.0000000
N	69	4	Y	-124,300.0000000
N	72	4	Y	-129,830.0000000
N	75	4	Y	-135,430.0000000
N	78	4	Y	-141,040.0000000
N	81	4	Y	-146,570.0000000
N	84	4	Y	-152,180.0000000
N	87	4	Y	-157,790.0000000
N	90	4	Y	-163,310.0000000
N	93	4	Y	-168,920.0000000
N	96	4	Y	-174,530.0000000
N	99	4	Y	-180,110.0000000
N	102	4	Y	-185,670.0000000
N	105	4	Y	-191,270.0000000
N	108	4	Y	-196,880.0000000
N	111	4	Y	-202,490.0000000
N	114	4	Y	-208,100.0000000
N	117	4	Y	-213,630.0000000
N	120	4	Y	-219,240.0000000
N	123	4	Y	-224,790.0000000
N	126	4	Y	-230,370.0000000
N	129	4	Y	-235,980.0000000
N	132	4	Y	-241,590.0000000
N	135	4	Y	-247,110.0000000
N	138	4	Y	-252,720.0000000
N	141	4	Y	-258,330.0000000
N	144	4	Y	-263,860.0000000
N	147	4	Y	-269,470.0000000
N	150	4	Y	-275,070.0000000
N	153	4	Y	-280,600.0000000
N	156	4	Y	-286,210.0000000
N	159	4	Y	-291,820.0000000
N	162	4	Y	-297,430.0000000
N	165	4	Y	-265,090.0000000
N	169	4	Y	-230,370.0000000

ODAL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
57	N	174	4	Y	-233,500.0000000
58	N	180	4	Y	-236,640.0000000
59	N	187	4	Y	-239,770.0000000
60	N	194	4	Y	-242,910.0000000
61	N	201	4	Y	-225,590.0000000
62	N	208	4	Y	-208,920.0000000
63	N	215	4	Y	-52,230.0000000
64	N	258	4	X	166,130.0000000
65	N	262	4	X	323,930.0000000
66	N	267	4	X	312,760.0000000
67	N	272	4	X	301,590.0000000
68	N	277	4	X	290,420.0000000
69	N	282	4	X	279,250.0000000
70	N	287	4	X	268,080.0000000
71	N	292	4	X	256,910.0000000
72	N	297	4	X	245,740.0000000
73	N	302	4	X	234,570.0000000
74	N	307	4	X	223,400.0000000
75	N	312	4	X	212,230.0000000
[illegible]	N	317	4	X	201,060.0000000
77	N	322	4	X	189,890.0000000
78	N	327	4	X	178,730.0000000
79	N	332	4	X	167,550.0000000
80	N	337	4	X	156,390.0000000
81	N	342	4	X	145,220.0000000
82	N	347	4	X	134,040.0000000
83	N	352	4	X	122,880.0000000
84	N	357	4	X	111,710.0000000
85	N	362	4	X	100,530.0000000
86	N	367	4	X	89,370.0000000
87	N	372	4	X	78,200.0000000
88	N	377	4	X	67,020.0000000
89	N	382	4	X	55,860.0000000
90	N	387	4	X	44,690.0000000
91	N	392	4	X	33,510.0000000
92	N	397	4	X	22,350.0000000
93	N	402	4	X	11,180.0000000
94	N	407	4	X	1,396.0000000
1	N	261	5	X	-14,240.0000000

, LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
N	266	5	X	-321,100.0000000
N	271	5	X	-313,720.0000000
N	276	5	X	-306,340.0000000
N	281	5	X	-298,950.0000000
N	286	5	X	-291,570.0000000
N	291	5	X	-284,190.0000000
N	296	5	X	-276,810.0000000
N	301	5	X	-269,430.0000000
N	306	5	X	-262,050.0000000
N	311	5	X	-254,660.0000000
N	316	5	X	-247,280.0000000
N	321	5	X	-239,900.0000000
N	326	5	X	-232,520.0000000
N	331	5	X	-225,140.0000000
N	336	5	X	-217,760.0000000
N	341	5	X	-210,380.0000000
N	346	5	X	-202,990.0000000
N	351	5	X	-195,610.0000000
N	356	5	X	-188,230.0000000
N	361	5	X	-180,850.0000000
N	366	5	X	-173,470.0000000
N	371	5	X	-166,090.0000000
N	376	5	X	-158,700.0000000
N	381	5	X	-151,320.0000000
N	386	5	X	-143,940.0000000
N	391	5	X	-136,560.0000000
N	396	5	X	-129,180.0000000
N	401	5	X	-121,800.0000000
N	406	5	X	-114,410.0000000
N	411	5	X	-107,030.0000000
N	416	5	X	-99,651.0000000
N	421	5	X	-92,270.0000000
N	426	5	X	-84,888.0000000
N	431	5	X	-77,507.0000000
N	436	5	X	-70,125.0000000
N	441	5	X	-62,743.0000000
N	446	5	X	-55,362.0000000
N	451	5	X	-47,980.0000000
N	456	5	X	-30,449.0000000
N	461	5	X	-18,454.0000000

ODAL LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
42	N	466	5	X	-8,304.0000000
43	N	466	5	Y	-7,576.0000000
44	N	465	5	Y	-16,556.0000000
45	N	464	5	Y	-16,478.0000000
46	N	463	5	Y	-16,400.0000000
47	N	462	5	Y	-32,682.0000000
48	N	469	5	Y	-48,399.0000000
49	N	472	5	Y	-47,775.0000000
50	N	475	5	Y	-47,171.0000000
51	N	478	5	Y	-46,566.0000000
52	N	481	5	Y	-45,942.0000000
53	N	484	5	Y	-45,338.0000000
54	N	487	5	Y	-44,714.0000000
55	N	490	5	Y	-58,812.0000000
56	N	493	5	Y	-57,720.0000000
57	N	496	5	Y	-56,628.0000000
58	N	499	5	Y	-55,536.0000000
59	N	502	5	Y	-54,464.0000000
60	N	505	5	Y	-53,372.0000000
[illegible]	N	508	5	Y	-52,280.0000000
2	N	511	5	Y	-51,188.0000000
3	N	514	5	Y	-50,096.0000000
4	N	517	5	Y	-49,004.0000000
65	N	520	5	Y	-47,912.0000000
66	N	523	5	Y	-46,839.0000000
67	N	526	5	Y	-45,747.0000000
68	N	529	5	Y	-44,655.0000000
69	N	532	5	Y	-43,563.0000000
70	N	535	5	Y	-42,374.0000000
71	N	538	5	Y	-41,379.0000000
72	N	541	5	Y	-40,287.0000000
73	N	544	5	Y	-39,215.0000000
4	N	547	5	Y	-38,123.0000000
5	N	550	5	Y	-37,031.0000000
6	N	553	5	Y	-35,939.0000000
7	N	556	5	Y	-34,847.0000000
8	N	559	5	Y	-31,473.0000000
9	N	562	5	Y	-28,548.0000000
0	N	565	5	Y	-27,710.0000000
1	N	568	5	Y	-26,891.0000000

: LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
N	571	5	Y	-26,052.0000000
N	574	5	Y	-25,233.0000000
N	577	5	Y	-24,395.0000000
N	580	5	Y	-20,631.0000000
N	583	5	Y	-19,715.0000000
N	586	5	Y	-19,091.0000000
N	589	5	Y	-18,486.0000000
N	592	5	Y	-17,862.0000000
N	595	5	Y	-17,258.0000000
N	598	5	Y	-16,653.0000000
N	601	5	Y	-16,029.0000000
N	604	5	Y	-15,425.0000000
N	607	5	Y	-14,801.0000000
N	610	5	Y	-14,196.0000000
N	613	5	Y	-13,572.0000000
N	616	5	Y	-12,968.0000000
N	619	5	Y	-12,363.0000000
N	622	5	Y	-11,739.0000000
N	625	5	Y	-10,199.0000000
N	628	5	Y	-8,853.0000000
N	631	5	Y	-8,428.0000000
N	634	5	Y	-7,995.0000000
N	637	5	Y	-7,566.0000000
N	640	5	Y	-7,157.0000000
N	643	5	Y	-6,728.0000000
N	646	5	Y	-6,299.0000000
N	649	5	Y	-5,870.0000000
N	652	5	Y	-5,441.0000000
N	655	5	Y	-5,012.0000000
N	658	5	Y	-4,602.0000000
N	661	5	Y	-4,173.0000000
N	664	5	Y	-3,744.0000000
N	667	5	Y	-3,315.0000000
N	670	5	Y	-2,886.0000000
N	673	5	Y	-2,477.0000000
N	676	5	Y	-1,833.0000000
N	679	5	Y	-1,365.0000000
N	682	5	Y	-1,092.0000000
N	685	5	Y	-819.0000000
N	688	5	Y	-546.0000000

NODAL LOADS *

) #	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
.22	N	691	5	Y	-273.0000000
.23	N	694	5	Y	-39.0000000
1	N	461	6	X	-1,846.0000000
2	N	456	6	X	-5,537.0000000
3	N	451	6	X	-14,764.0000000
4	N	446	6	X	-22,146.0000000
5	N	441	6	X	-29,527.0000000
6	N	436	6	X	-36,909.0000000
7	N	431	6	X	-44,291.0000000
8	N	426	6	X	-51,672.0000000
9	N	421	6	X	-59,054.0000000
10	N	416	6	X	-66,435.0000000
11	N	411	6	X	-73,814.0000000
12	N	406	6	X	-81,191.0000000
13	N	401	6	X	-88,584.0000000
14	N	396	6	X	-95,964.0000000
15	N	391	6	X	-103,340.0000000
[illegible]	N	386	6	X	-110,720.0000000
[illegible]	N	381	6	X	-118,100.0000000
18	N	376	6	X	-125.480.0000000
19	N	371	6	X	-132,870.0000000
20	N	366	6	X	-140,250.0000000
21	N	361	6	X	-147,630.0000000
22	N	356	6	X	-155,010.0000000
23	N	351	6	X	-162,390.0000000
24	N	346	6	X	-169,770.0000000
25	N	341	6	X	-177,150.0000000
26	N	336	6	X	-184,540.0000000
27	N	331	6	X	-191,920.0000000
28	N	326	6	X	-199,300.0000000
29	N	321	6	X	-206,680.0000000
30	N	316	6	X	-214,060.0000000
31	N	311	6	X	-221,440.0000000
32	N	306	6	X	-228,830.0000000
33	N	301	6	X	-236,210.0000000
34	N	296	6	X	-243,590.0000000
35	N	291	6	X	-250,970.0000000
36	N	286	6	X	-258,350.0000000
37	N	281	6	X	-265,730.0000000

LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
N	276	6	X	-273,120.0000000
N	271	6	X	-280,500.0000000
N	266	6	X	-287,880.0000000
N	261	6	X	-147,630.0000000
N	466	7	Y	-8,201.0000000
N	465	7	Y	-17,022.0000000
N	464	7	Y	-16,942.0000000
N	463	7	Y	-16,862.0000000
N	462	7	Y	-33,604.0000000
N	469	7	Y	-49,764.0000000
N	472	7	Y	-49,123.0000000
N	475	7	Y	-48,501.0000000
N	478	7	Y	-47,879.0000000
N	481	7	Y	-47,238.0000000
N	484	7	Y	-46,616.0000000
N	487	7	Y	-45,975.0000000
N	490	7	Y	-60,471.0000000
N	493	7	Y	-59,348.0000000
N	496	7	Y	-58,225.0000000
N	499	7	Y	-57,102.0000000
N	502	7	Y	-56,000.0000000
N	505	7	Y	-54,877.0000000
N	508	7	Y	-53,754.0000000
N	511	7	Y	-52,631.0000000
N	514	7	Y	-51,508.0000000
N	517	7	Y	-50,386.0000000
N	520	7	Y	-49,263.0000000
N	523	7	Y	-48,160.0000000
N	526	7	Y	-47,037.0000000
N	529	7	Y	-45,915.0000000
N	532	7	Y	-44,792.0000000
N	535	7	Y	-43,669.0000000
N	538	7	Y	-52,546.0000000
N	541	7	Y	-41,423.0000000
N	544	7	Y	-40,321.0000000
N	547	7	Y	-39,198.0000000
N	550	7	Y	-38,075.0000000
N	553	7	Y	-36,952.0000000
N	556	7	Y	-35,829.0000000

OAD LOADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
36	N	559	7	Y	-32,360.0000000
37	N	562	7	Y	-29,353.0000000
38	N	565	7	Y	-28,491.0000000
39	N	568	7	Y	-27,649.0000000
40	N	571	7	Y	-26,787.0000000
41	N	574	7	Y	-25,945.0000000
42	N	577	7	Y	-25,083.0000000
43	N	580	7	Y	-21,213.0000000
44	N	583	7	Y	-20,271.0000000
45	N	586	7	Y	-19,629.0000000
46	N	589	7	Y	-19,007.0000000
47	N	592	7	Y	-18,366.0000000
48	N	595	7	Y	-17,744.0000000
49	N	598	7	Y	-17,123.0000000
50	N	601	7	Y	-16,481.0000000
51	N	604	7	Y	-15,860.0000000
52	N	607	7	Y	-15,218.0000000
53	N	610	7	Y	-14,596.0000000
[illegible]	N	613	7	Y	-13,955.0000000
[illegible]	N	616	7	Y	-13,333.0000000
56	N	619	7	Y	-12,712.0000000
57	N	622	7	Y	-12,070.0000000
58	N	625	7	Y	-10,486.0000000
59	N	628	7	Y	-9,102.0000000
60	N	631	7	Y	-8,662.0000000
61	N	634	7	Y	-8,221.0000000
62	N	637	7	Y	-7,780.0000000
63	N	640	7	Y	-7,358.0000000
64	N	643	7	Y	-6,917.0000000
65	N	645	7	Y	-6,476.0000000
66	N	649	7	Y	-6,035.0000000
67	N	652	7	Y	-5,594.0000000
68	N	655	7	Y	-5,153.0000000
69	N	658	7	Y	-4,732.0000000
70	N	661	7	Y	-4,291.0000000
71	N	664	7	Y	-3,850.0000000
72	N	667	7	Y	-3,409.0000000
73	N	670	7	Y	-2,967.0000000
74	N	673	7	Y	-2,546.0000000
75	N	675	7	Y	-1,885.0000000

E LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
N	679	7	Y	-1,404.0000000
N	682	7	Y	-1,123.0000000
N	685	7	Y	-842.0000000
N	688	7	Y	-561.0000000
N	691	7	Y	-281.0000000
N	694	7	Y	-40.0000000
N	466	8	Y	8,834.0000000
N	465	8	Y	18,338.0000000
N	464	8	Y	18,252.0000000
N	463	8	Y	18,166.0000000
N	462	8	Y	36,202.0000000
N	469	8	Y	53,611.0000000
N	472	8	Y	52,920.0000000
N	475	8	Y	52,250.0000000
N	478	8	Y	51,581.0000000
N	481	8	Y	50,890.0000000
N	484	8	Y	50,220.0000000
N	487	8	Y	49,529.0000000
N	490	8	Y	65,146.0000000
N	493	8	Y	63,936.0000000
N	496	8	Y	62,726.0000000
N	499	8	Y	61,517.0000000
N	502	8	Y	60,329.0000000
N	505	8	Y	59,119.0000000
N	508	8	Y	57,910.0000000
N	511	8	Y	56,700.0000000
N	514	8	Y	55,490.0000000
N	517	8	Y	54,281.0000000
N	520	8	Y	53,071.0000000
N	523	8	Y	51,883.0000000
N	526	8	Y	50,674.0000000
N	529	8	Y	49,464.0000000
N	532	8	Y	48,254.0000000
N	535	8	Y	47,045.0000000
N	538	8	Y	45,835.0000000
N	541	8	Y	44,626.0000000
N	544	8	Y	43,438.0000000
N	547	8	Y	42,228.0000000
N	550	8	Y	41,018.0000000

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ADS *

#	TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
4	N	553	8	Y	39,809.0000000
5	N	556	8	Y	38,599.0000000
6	N	559	8	Y	34,862.0000000
7	N	562	8	Y	31,622.0000000
8	N	565	8	Y	30,694.0000000
9	N	568	8	Y	29,786.0000000
0	N	571	8	Y	28,858.0000000
	N	574	8	Y	27,950.0000000
	N	577	8	Y	27,021.0000000
	N	580	8	Y	22,853.0000000
	N	583	8	Y	21,838.0000000
	N	586	8	Y	21,146.0000000
	N	589	8	Y	20,477.0000000
	N	592	8	Y	19,786.0000000
	N	595	8	Y	19,116.0000000
	N	598	8	Y	18,446.0000000
	N	601	8	Y	17,755.0000000
	N	604	8	Y	17,086.0000000
	N	607	8	Y	16,394.0000000
	N	610	8	Y	15,725.0000000
		613	8	Y	15,034.0000000
	N	616	8	Y	14,364.0000000
	N	619	8	Y	13,694.0000000
	N	622	8	Y	13,003.0000000
	N	625	8	Y	11,297.0000000
	N	628	8	Y	9,806.0000000
	N	631	8	Y	9,331.0000000
	N	634	8	Y	8,856.0000000
	N	637	8	Y	8,381.0000000
	N	640	8	Y	7,927.0000000
	N	643	8	Y	7,452.0000000
	N	646	8	Y	6,977.0000000
	N	649	8	Y	6,502.0000000
	N	652	8	Y	6,026.0000000
	N	655	8	Y	5,551.0000000
	N	658	8	Y	5,098.0000000
	N	661	8	Y	4,622.0000000
	N	664	8	Y	4,147.0000000
	N	667	8	Y	3,672.0000000
	N	670	8	Y	3,197.0000000

LOADS *

TYPE	ELMT/ NODE	LOAD CASE	DIRECTION	LOAD
N	673	8	Y	2,743.0000000
N	676	8	Y	2,030.0000000
N	679	8	Y	1,512.0000000
N	682	8	Y	1,210.0000000
N	685	8	Y	907.0000000
N	688	8	Y	605.0000000
N	691	8	Y	302.0000000
N	694	8	Y	44.0000000

G RESTRAINTS *

TYPE	ELMT/ NODE	DIRECTION	STIFFNESS

OOKS TO GROUND *

MODE	ELMT/ NODE	DIRECTION	STIFFNESS	INITIAL OPENING	TYPE

S *

TYPE	ELMT/ NODE	DIRECTION(S)	MASS

NITIAL STRESS/STRAIN & TEMP *

	RADIAL	AXIAL	HOOP	SHEAR	TEMP

****
OAD CASE 1 *
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OAD CASE 2 *
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OAD CASE 3 *
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OAD CASE 4 *
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OAD CASE 5 *
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OAD CASE 6 *
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ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
153	4	-137.236	-0.287	-137.234	0.000	-0.287	-137.236	90.000
153	5	-59.007	-14.180	-59.011	-0.000	-14.180	-59.007	90.000
153	6	-54.207	-14.180	-54.211	-0.000	-14.180	-54.207	90.000
[illegible]	7	-56.013	-14.180	-56.018	-0.000	-14.180	-56.013	90.000
[illegible]	8	-62.539	-14.180	-62.543	-0.000	-14.180	-62.539	90.000
153	9	9.943	-14.180	9.938	-0.000	9.943	-14.180	180.000
154	1	-68.272	-0.233	-68.270	-0.004	-0.233	-68.272	90.004
154	2	-68.115	-0.233	-68.113	-0.004	-0.233	-68.115	90.004
154	3	10.113	-14.116	10.115	-0.006	10.113	-14.116	180.000
154	4	-137.223	-0.233	-137.219	-0.004	-0.233	-137.223	90.002
154	5	-58.994	-14.116	-58.990	-0.006	-14.116	-58.994	90.007
154	6	-54.193	-14.116	-54.190	-0.006	-14.116	-54.193	90.008
154	7	-56.000	-14.116	-55.996	-0.006	-14.116	-56.000	90.008
154	8	-62.526	-14.116	-62.521	-0.006	-14.116	-62.526	90.007
154	9	9.956	-14.116	9.959	-0.006	9.956	-14.116	180.000
155	1	-68.243	-0.115	-68.240	-0.004	-0.115	-68.243	90.004
155	2	-68.086	-0.115	-68.084	-0.004	-0.115	-68.086	90.004
155	3	10.142	-13.997	10.144	-0.005	10.142	-13.997	180.000
155	4	-137.195	-0.115	-137.190	-0.004	-0.115	-137.195	90.002
155	5	-58.965	-13.997	-58.961	-0.005	-13.997	-58.965	90.007
155	6	-54.165	-13.997	-54.161	-0.005	-13.997	-54.165	90.008
155	7	-55.972	-13.997	-55.968	-0.005	-13.997	-55.972	90.008
155	8	-62.497	-13.997	-62.493	-0.005	-13.997	-62.497	90.007
155	9	9.986	-13.997	9.988	-0.005	9.986	-13.997	180.000
156	1	-68.228	-0.058	-68.227	0.000	-0.058	-68.228	89.999
[illegible]	2	-68.072	-0.058	-68.070	0.000	-0.058	-68.072	89.999
[illegible]	3	10.156	-13.951	10.151	-0.000	10.156	-13.951	180.000
156	4	-137.180	-0.058	-137.177	0.000	-0.058	-137.180	89.999
156	5	-58.951	-13.951	-58.954	-0.000	-13.951	-58.951	90.001
156	6	-54.150	-13.951	-54.154	-0.000	-13.951	-54.150	90.001
156	7	-55.957	-13.951	-55.961	-0.000	-13.951	-55.957	90.001
156	8	-62.483	-13.951	-62.486	-0.000	-13.951	-62.483	90.001
156	9	10.000	-13.951	9.995	-0.000	10.000	-13.951	180.000
157	1	-68.285	-0.286	-68.284	0.000	-0.286	-68.286	90.000
157	2	-68.129	-0.286	-68.128	0.000	-0.286	-68.129	90.000
157	3	10.099	-14.179	10.093	-0.000	10.099	-14.179	180.000
157	4	-137.238	-0.286	-137.235	0.000	-0.286	-137.238	90.000
157	5	-59.009	-14.179	-59.013	-0.000	-14.179	-59.009	90.000
157	6	-54.208	-14.179	-54.212	-0.000	-14.179	-54.208	90.000
157	7	-56.015	-14.179	-56.019	-0.000	-14.179	-56.015	90.000
157	8	-62.540	-14.179	-62.544	-0.000	-14.179	-62.540	90.000
157	9	9.943	-14.179	9.937	-0.000	9.943	-14.179	180.000
158	1	-68.272	-0.233	-68.271	0.004	-0.233	-68.272	89.996
158	2	-68.116	-0.233	-68.115	0.004	-0.233	-68.116	89.996
158	3	10.112	-14.124	10.106	0.004	10.112	-14.124	0.000
158	4	-137.224	-0.233	-137.222	0.004	-0.233	-137.224	89.998
158	5	-58.995	-14.124	-58.999	0.004	-14.124	-58.995	89.994
158	6	-54.195	-14.124	-54.199	0.004	-14.124	-54.195	89.993
[illegible]	7	-56.001	-14.124	-56.006	0.004	-14.124	-56.001	89.994
[illegible]	8	-62.527	-14.124	-62.531	0.004	-14.124	-62.527	89.994

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NT	LOAD COMB	R-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
68	9	9.956	-14.124	9.950	0.004	9.956	-14.124	0.000
9	1	-68.242	-0.115	-68.240	0.004	-0.115	-68.242	89.996
9	2	-68.086	-0.115	-68.084	0.004	-0.115	-68.086	89.995
9	3	10.143	-14.006	10.137	0.004	10.143	-14.006	0.000
9	4	-137.193	-0.115	-137.190	0.004	-0.115	-137.193	89.999
9	5	-58.964	-14.006	-58.968	0.004	-14.006	-58.964	89.993
9	6	-54.163	-14.006	-54.168	0.004	-14.006	-54.163	89.993
9	7	-55.970	-14.006	-55.974	0.004	-14.006	-55.970	89.993
9	8	-62.496	-14.006	-62.499	0.004	-14.006	-62.496	89.994
9	9	9.986	-14.006	9.981	0.004	9.986	-14.006	0.000
0	1	-68.227	-0.057	-68.226	-0.000	-0.057	-68.227	90.000
0	2	-68.071	-0.057	-68.070	-0.000	-0.057	-68.071	90.000
0	3	10.157	-13.951	10.152	0.000	10.157	-13.951	0.000
0	4	-137.179	-0.057	-137.175	-0.000	-0.057	-137.179	90.000
0	5	-58.949	-13.951	-58.953	0.000	-13.951	-58.949	89.999
0	6	-54.149	-13.951	-54.153	0.000	-13.951	-54.149	89.998
0	7	-55.956	-13.951	-55.959	0.000	-13.951	-55.956	89.999
0	8	-62.481	-13.951	-62.485	0.000	-13.951	-62.481	89.999
0	9	10.001	-13.951	9.995	0.000	10.001	-13.951	0.000
	1	-68.285	-0.286	-68.284	0.000	-0.286	-68.285	90.000
	2	-68.129	-0.286	-68.127	0.000	-0.286	-68.129	90.000
	3	10.100	-14.168	10.101	-0.000	10.100	-14.168	180.000
	4	-137.236	-0.286	-137.234	0.000	-0.286	-137.236	90.000
	5	-59.007	-14.168	-59.004	-0.000	-14.168	-59.007	90.000
	6	-54.206	-14.168	-54.204	-0.000	-14.168	-54.206	90.000
	7	-56.013	-14.168	-56.011	-0.000	-14.168	-56.013	90.000
	8	-62.539	-14.168	-62.536	-0.000	-14.168	-62.539	90.000
	9	9.943	-14.168	9.945	-0.000	9.943	-14.168	180.000
	1	-68.272	-0.233	-68.270	-0.004	-0.233	-68.272	90.004
	2	-68.115	-0.233	-68.114	-0.004	-0.233	-68.115	90.004
	3	10.113	-14.124	10.107	-0.004	10.113	-14.124	180.000
	4	-137.223	-0.233	-137.220	-0.005	-0.233	-137.223	90.002
	5	-58.994	-14.124	-58.998	-0.004	-14.124	-58.994	90.006
	6	-54.193	-14.124	-54.197	-0.004	-14.124	-54.193	90.006
	7	-56.000	-14.124	-56.004	-0.004	-14.124	-56.000	90.006
	8	-62.526	-14.124	-62.530	-0.004	-14.124	-62.526	90.005
	9	9.955	-14.124	9.951	-0.004	9.956	-14.124	180.000
	1	-68.243	-0.115	-68.241	-0.004	-0.115	-68.243	90.004
	2	-68.086	-0.115	-68.085	-0.004	-0.115	-68.086	90.004
	3	10.142	-14.007	10.136	-0.004	10.142	-14.007	180.000
	4	-137.195	-0.115	-137.191	-0.005	-0.115	-137.195	90.002
	5	-58.965	-14.007	-58.969	-0.004	-14.007	-58.965	90.005
	6	-54.165	-14.007	-54.169	-0.004	-14.007	-54.165	90.006
	7	-55.972	-14.007	-55.975	-0.004	-14.007	-55.972	90.006
	8	-62.497	-14.007	-62.501	-0.004	-14.007	-62.497	90.005
	9	9.986	-14.007	9.980	-0.004	9.986	-14.007	180.000
	1	-68.228	-0.057	-68.227	0.000	-0.057	-68.228	89.999
	2	-68.072	-0.057	-68.070	0.000	-0.057	-68.072	89.999
	3	10.156	-13.939	10.158	0.002	10.156	-13.939	0.000

E 566

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
142	4	-137.223	-0.233	-137.219	0.005	-0.233	-137.223	89.998
142	5	-58.994	-14.127	-58.997	0.004	-14.127	-58.994	89.994
142	6	-54.194	-14.127	-54.197	0.004	-14.127	-54.194	89.993
	7	-56.000	-14.127	-56.003	0.004	-14.127	-56.000	89.993
	8	-62.526	-14.127	-62.528	0.004	-14.127	-62.526	89.994
142	9	9.956	-14.127	9.952	0.004	9.956	-14.127	0.000
143	1	-68.243	-0.115	-68.240	0.005	-0.115	-68.243	89.995
143	2	-68.086	-0.115	-68.084	0.005	-0.115	-68.086	89.995
143	3	10.142	-14.010	10.137	0.004	10.142	-14.010	0.000
143	4	-137.195	-0.115	-137.190	0.005	-0.115	-137.195	89.998
143	5	-58.965	-14.010	-58.968	0.004	-14.010	-58.965	89.994
143	6	-54.165	-14.010	-54.168	0.004	-14.010	-54.165	89.994
143	7	-55.972	-14.010	-55.974	0.004	-14.010	-55.972	89.994
143	8	-62.497	-14.010	-62.500	0.004	-14.010	-62.497	89.995
143	9	9.986	-14.010	9.981	0.004	9.986	-14.010	0.000
144	1	-68.229	-0.057	-68.226	-0.000	-0.057	-68.229	90.000
144	2	-68.072	-0.057	-68.070	-0.000	-0.057	-68.072	90.000
144	3	10.156	-13.940	10.159	-0.002	10.156	-13.940	180.000
144	4	-137.181	-0.057	-137.176	-0.000	-0.057	-137.181	90.000
144	5	-58.952	-13.940	-58.947	-0.002	-13.940	-58.952	90.003
144	6	-54.151	-13.940	-54.146	-0.002	-13.940	-54.151	90.003
144	7	-55.958	-13.940	-55.953	-0.002	-13.940	-55.958	90.003
144	8	-62.483	-13.940	-62.478	-0.002	-13.940	-62.483	90.002
144	9	9.999	-13.940	10.002	-0.002	10.000	-13.940	180.000
145	1	-68.286	-0.286	-68.284	-0.000	-0.286	-68.286	90.000
	2	-68.129	-0.286	-68.128	-0.000	-0.286	-68.129	90.000
	3	10.099	-14.182	10.093	0.000	10.099	-14.182	0.000
145	4	-137.238	-0.286	-137.235	-0.000	-0.286	-137.238	90.000
145	5	-59.009	-14.182	-59.013	0.000	-14.182	-59.009	89.999
145	6	-54.208	-14.182	-54.212	0.000	-14.182	-54.208	89.999
145	7	-56.015	-14.182	-56.019	0.000	-14.182	-56.015	89.999
145	8	-62.540	-14.182	-62.544	0.000	-14.182	-62.540	89.999
145	9	9.943	-14.182	9.937	0.000	9.943	-14.182	0.000
146	1	-68.272	-0.233	-68.270	-0.004	-0.233	-68.272	90.004
146	2	-68.116	-0.233	-68.114	-0.004	-0.233	-68.116	90.004
146	3	10.112	-14.127	10.107	-0.004	10.112	-14.127	180.000
146	4	-137.224	-0.233	-137.221	-0.004	-0.233	-137.224	90.002
146	5	-58.995	-14.127	-58.999	-0.004	-14.127	-58.995	90.005
146	6	-54.195	-14.127	-54.198	-0.004	-14.127	-54.195	90.006
146	7	-56.001	-14.127	-56.005	-0.004	-14.127	-56.001	90.005
146	8	-62.527	-14.127	-62.530	-0.004	-14.127	-62.527	90.005
146	9	9.956	-14.127	9.951	-0.004	9.956	-14.127	180.000
147	1	-68.242	-0.115	-68.240	-0.004	-0.115	-68.242	90.004
147	2	-68.086	-0.115	-68.084	-0.004	-0.115	-68.086	90.004
147	3	10.143	-14.009	10.137	-0.004	10.143	-14.009	180.000
147	4	-137.193	-0.115	-137.190	-0.004	-0.115	-137.193	90.002
147	5	-58.964	-14.009	-58.968	-0.004	-14.009	-58.964	90.006
147	6	-54.163	-14.009	-54.168	-0.004	-14.009	-54.163	90.006
147	7	-55.970	-14.009	-55.974	-0.004	-14.009	-55.970	90.006
	8	-62.496	-14.009	-62.499	-0.004	-14.009	-62.496	90.005

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740

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	Z-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
147	9	9.986	-14.009	9.981	-0.004	9.986	-14.009	180.000
148	1	-68.228	-0.057	-68.225	0.000	-0.057	-68.228	89.999
148	2	-68.072	-0.057	-68.070	0.000	-0.057	-68.072	89.999
148	3	10.156	-13.953	10.152	-0.000	10.156	-13.953	180.000
148	4	-137.179	-0.057	-137.175	0.000	-0.057	-137.179	90.000
148	5	-58.950	-13.953	-58.953	-0.001	-13.953	-58.950	90.001
148	6	-54.149	-13.953	-54.153	-0.001	-13.953	-54.149	90.001
148	7	-55.956	-13.953	-55.959	-0.001	-13.953	-55.956	90.001
148	8	-62.482	-13.953	-62.485	-0.001	-13.953	-62.482	90.001
148	9	10.000	-13.953	9.995	-0.000	10.000	-13.953	180.000
149	1	-68.285	-0.286	-68.284	-0.000	-0.286	-68.285	90.000
149	2	-68.129	-0.286	-68.127	-0.000	-0.286	-68.129	90.000
149	3	10.100	-14.182	10.094	0.000	10.100	-14.182	0.000
149	4	-137.236	-0.287	-137.233	-0.000	-0.287	-137.236	90.000
149	5	-59.007	-14.182	-59.011	0.000	-14.182	-59.007	89.999
149	6	-54.207	-14.182	-54.211	0.000	-14.182	-54.207	89.999
149	7	-56.013	-14.182	-56.017	0.000	-14.182	-56.013	89.999
149	8	-62.539	-14.182	-62.542	0.000	-14.182	-62.539	89.999
149	9	9.943	-14.182	9.938	0.000	9.943	-14.182	0.000
150	1	-68.272	-0.233	-68.270	0.005	-0.233	-68.272	89.995
150	2	-68.115	-0.233	-68.113	0.005	-0.233	-68.115	89.995
150	3	10.113	-14.116	10.115	0.006	10.113	-14.116	0.000
150	4	-137.223	-0.233	-137.219	0.005	-0.233	-137.223	89.998
150	5	-58.994	-14.116	-58.990	0.006	-14.116	-58.994	89.992
150	6	-54.194	-14.116	-54.190	0.006	-14.116	-54.194	89.991
150	7	-56.000	-14.116	-55.996	0.006	-14.116	-56.000	89.991
150	8	-62.526	-14.116	-62.521	0.006	-14.116	-62.526	89.992
150	9	9.956	-14.116	9.959	0.006	9.956	-14.116	0.000
151	1	-68.243	-0.115	-68.240	0.005	-0.115	-68.243	89.995
151	2	-68.086	-0.115	-68.084	0.005	-0.115	-68.086	89.995
151	3	10.142	-13.997	10.144	0.006	10.142	-13.997	0.000
151	4	-137.195	-0.115	-137.190	0.005	-0.115	-137.195	89.998
151	5	-58.965	-13.997	-58.961	0.006	-13.997	-58.965	89.992
151	6	-54.165	-13.997	-54.161	0.006	-13.997	-54.165	89.991
151	7	-55.972	-13.997	-55.968	0.006	-13.997	-55.972	89.991
151	8	-62.497	-13.997	-62.493	0.006	-13.997	-62.497	89.992
151	9	9.986	-13.997	9.988	0.006	9.986	-13.997	0.000
152	1	-68.228	-0.057	-68.227	-0.000	-0.057	-68.228	90.000
152	2	-68.072	-0.057	-68.070	-0.000	-0.057	-68.072	90.000
152	3	10.156	-13.953	10.151	0.000	10.156	-13.953	0.000
152	4	-137.180	-0.057	-137.177	-0.000	-0.057	-137.180	90.000
152	5	-58.951	-13.953	-58.954	0.000	-13.953	-58.951	89.999
152	6	-54.150	-13.953	-54.154	0.000	-13.953	-54.150	89.998
152	7	-55.957	-13.953	-55.961	0.000	-13.953	-55.957	89.999
152	8	-62.483	-13.953	-62.486	0.000	-13.953	-62.483	89.999
152	9	10.000	-13.953	9.995	0.000	10.000	-13.953	0.000
153	1	-68.285	-0.286	-68.284	0.000	-0.286	-68.285	90.000
153	2	-68.129	-0.286	-68.127	0.000	-0.286	-68.129	90.000
153	3	10.100	-14.180	10.094	-0.000	10.100	-14.180	180.000

E564

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
131	4	-137.195	-0.115	-137.190	-0.004	-0.115	-137.195	90.002
131	5	-58.966	-13.996	-58.961	-0.005	-13.996	-58.966	90.007
131	6	-54.166	-13.996	-54.161	-0.005	-13.996	-54.166	90.008
[illegible]	7	-55.972	-13.996	-55.968	-0.005	-13.996	-55.972	90.007
[illegible]	8	-62.498	-13.996	-62.493	-0.005	-13.996	-62.498	90.006
131	9	9.985	-13.996	9.988	-0.005	9.985	-13.996	180.000
132	1	-68.229	-0.058	-68.226	0.000	-0.058	-68.229	89.999
132	2	-68.072	-0.058	-68.070	0.000	-0.058	-68.072	89.999
132	3	10.156	-13.947	10.152	-0.000	10.156	-13.947	180.000
132	4	-137.181	-0.058	-137.176	0.000	-0.058	-137.181	89.999
132	5	-58.952	-13.947	-58.954	-0.000	-13.947	-58.952	90.000
132	6	-54.152	-13.947	-54.153	-0.000	-13.947	-54.152	90.000
132	7	-55.958	-13.947	-55.960	-0.000	-13.947	-55.958	90.000
132	8	-62.483	-13.947	-62.485	-0.000	-13.947	-62.483	90.000
132	9	9.999	-13.947	9.995	-0.000	9.999	-13.947	180.000
133	1	-68.286	-0.286	-68.284	0.000	-0.286	-68.286	90.000
133	2	-68.129	-0.286	-68.127	0.000	-0.286	-68.129	90.000
133	3	10.099	-14.175	10.094	-0.000	10.099	-14.175	180.000
133	4	-137.238	-0.286	-137.234	0.000	-0.286	-137.238	90.000
133	5	-59.009	-14.175	-59.011	-0.000	-14.175	-59.009	90.000
133	6	-54.209	-14.175	-54.211	-0.000	-14.175	-54.209	90.000
133	7	-56.015	-14.175	-56.018	-0.000	-14.175	-56.015	90.000
133	8	-62.540	-14.175	-62.543	-0.000	-14.175	-62.540	90.000
133	9	9.943	-14.175	9.938	-0.000	9.943	-14.175	180.000
134	1	-68.272	-0.233	-68.270	0.004	-0.233	-68.272	89.996
[illegible]	2	-68.116	-0.233	-68.114	0.004	-0.233	-68.116	89.996
[illegible]	3	10.112	-14.124	10.107	0.004	10.112	-14.124	0.000
134	4	-137.225	-0.233	-137.220	0.004	-0.233	-137.225	89.998
134	5	-58.996	-14.124	-58.998	0.004	-14.124	-58.996	89.994
134	6	-54.195	-14.124	-54.198	0.004	-14.124	-54.195	89.993
134	7	-56.002	-14.124	-56.004	0.004	-14.124	-56.002	89.993
134	8	-62.528	-14.124	-62.530	0.004	-14.124	-62.528	89.994
134	9	9.956	-14.124	9.951	0.004	9.956	-14.124	0.000
135	1	-68.243	-0.115	-68.240	0.004	-0.115	-68.243	89.996
135	2	-68.086	-0.115	-68.084	0.004	-0.115	-68.086	89.996
135	3	10.142	-14.005	10.138	0.004	10.142	-14.005	0.000
135	4	-137.194	-0.115	-137.189	0.004	-0.115	-137.194	89.998
135	5	-58.965	-14.005	-58.967	0.004	-14.005	-58.965	89.994
135	6	-54.165	-14.005	-54.167	0.004	-14.005	-54.165	89.993
135	7	-55.971	-14.005	-55.973	0.004	-14.005	-55.971	89.993
135	8	-62.497	-14.005	-62.498	0.004	-14.005	-62.497	89.994
135	9	9.986	-14.005	9.981	0.004	9.986	-14.005	0.000
136	1	-68.228	-0.057	-68.226	-0.000	-0.057	-68.228	90.000
136	2	-68.072	-0.057	-68.070	-0.000	-0.057	-68.072	90.000
136	3	10.156	-13.947	10.152	0.000	10.156	-13.947	0.000
136	4	-137.179	-0.057	-137.175	-0.000	-0.057	-137.179	90.000
136	5	-58.950	-13.947	-58.953	0.000	-13.947	-58.950	89.999
136	6	-54.150	-13.947	-54.153	0.000	-13.947	-54.150	89.999
[illegible]	7	-55.956	-13.947	-55.959	0.000	-13.947	-55.956	89.999
[illegible]	8	-62.482	-13.947	-62.485	0.000	-13.947	-62.482	89.999

NT	LOAD COMB	[illegible] (RADIAL)	[illegible] (AXIAL)	[illegible]-STRESS (HOOP)	[illegible]-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
66	9	10.000	-13.947	9.995	0.000	10.000	-13.947	0.000
67	1	-68.286	-0.286	-68.283	0.000	-0.286	-68.286	90.000
67	2	-68.129	-0.286	-68.127	0.000	-0.286	-68.129	90.000
7	3	10.099	-14.169	10.095	-0.000	10.099	-14.169	180.000
7	4	-137.238	-0.286	-137.232	0.000	-0.286	-137.238	90.000
7	5	-59.009	-14.169	-59.010	-0.000	-14.169	-59.009	90.000
7	6	-54.208	-14.169	-54.210	-0.000	-14.169	-54.208	90.000
7	7	-56.015	-14.169	-56.016	-0.000	-14.169	-56.015	90.000
7	8	-62.540	-14.169	-62.542	-0.000	-14.169	-62.540	90.000
7	9	9.943	-14.169	9.938	-0.000	9.943	-14.169	180.000
3	1	-68.272	-0.233	-68.270	-0.004	-0.233	-68.272	90.004
3	2	-68.115	-0.233	-68.113	-0.004	-0.233	-68.115	90.004
3	3	10.113	-14.124	10.108	-0.004	10.113	-14.124	180.000
3	4	-137.224	-0.233	-137.219	-0.005	-0.233	-137.224	90.002
3	5	-58.995	-14.124	-58.997	-0.004	-14.124	-58.995	90.006
3	6	-54.194	-14.124	-54.197	-0.004	-14.124	-54.194	90.006
3	7	-56.001	-14.124	-56.003	-0.004	-14.124	-56.001	90.006
3	8	-62.526	-14.124	-62.528	-0.004	-14.124	-62.526	90.005
3	9	9.956	-14.124	9.952	-0.004	9.956	-14.124	180.000
[illegible]	1	-68.243	-0.115	-68.240	-0.004	-0.115	-68.243	90.004
[illegible]	2	-68.086	-0.115	-68.084	-0.004	-0.115	-68.086	90.004
	3	10.142	-14.006	10.137	-0.004	10.142	-14.006	180.000
	4	-137.195	-0.115	-137.190	-0.005	-0.115	-137.195	90.002
	5	-58.965	-14.006	-58.968	-0.004	-14.006	-58.965	90.005
	6	-54.165	-14.006	-54.168	-0.004	-14.006	-54.165	90.006
	7	-55.972	-14.006	-55.974	-0.004	-14.006	-55.972	90.006
	8	-62.497	-14.006	-62.500	-0.004	-14.006	-62.497	90.005
	9	9.986	-14.006	9.981	-0.004	9.986	-14.006	180.000
	1	-68.229	-0.058	-68.226	0.000	-0.058	-68.229	89.999
	2	-68.072	-0.058	-68.070	0.000	-0.058	-68.072	89.999
	3	10.156	-13.940	10.159	0.002	10.156	-13.940	0.000
	4	-137.181	-0.058	-137.176	0.000	-0.058	-137.181	90.000
	5	-58.952	-13.940	-58.947	0.002	-13.940	-58.952	89.997
	6	-54.151	-13.940	-54.146	0.002	-13.940	-54.151	89.996
	7	-55.958	-13.940	-55.953	0.002	-13.940	-55.958	89.997
	8	-62.483	-13.940	-62.478	0.002	-13.940	-62.483	89.997
	9	9.999	-13.940	10.002	0.002	10.000	-13.940	0.000
	1	-68.286	-0.286	-68.283	0.000	-0.286	-68.286	90.000
	2	-68.129	-0.286	-68.127	0.000	-0.286	-68.129	90.000
	3	10.099	-14.169	10.095	-0.000	10.099	-14.169	180.000
	4	-137.237	-0.286	-137.232	0.000	-0.286	-137.237	90.000
	5	-59.008	-14.169	-59.010	-0.000	-14.169	-59.008	90.000
	6	-54.208	-14.169	-54.210	-0.000	-14.169	-54.208	90.000
	7	-56.014	-14.169	-56.015	-0.000	-14.169	-56.014	90.000
	8	-62.540	-14.169	-62.542	-0.000	-14.169	-62.540	90.000
	9	9.943	-14.169	9.938	-0.000	9.943	-14.169	180.000
	1	-68.272	-0.233	-68.270	0.005	-0.233	-68.272	89.995
	2	-68.115	-0.233	-68.113	0.005	-0.233	-68.115	89.995
	3	10.113	-14.127	10.108	0.004	10.113	-14.127	0.000

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MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
120	4	-137.181	-0.057	-137.175	-0.000	-0.057	-137.181	90.000
120	5	-58.952	-13.935	-58.946	-0.002	-13.935	-58.952	90.003
120	6	-54.152	-13.935	-54.146	-0.002	-13.935	-54.152	90.004
[illegible]	7	-55.958	-13.935	-55.952	-0.002	-13.935	-55.958	90.004
[illegible]	9	-62.484	-13.935	-62.478	-0.002	-13.935	-62.484	90.003
120	9	9.999	-13.935	10.002	-0.002	10.000	-13.935	180.000
121	1	-68.286	-0.286	-68.284	-0.000	-0.286	-68.286	90.000
121	2	-68.130	-0.286	-68.127	-0.000	-0.286	-68.130	90.000
121	3	10.098	-14.177	10.094	0.000	10.098	-14.177	0.000
121	4	-137.239	-0.286	-137.234	-0.000	-0.286	-137.239	90.000
121	5	-59.010	-14.177	-59.011	0.000	-14.177	-59.010	90.000
121	6	-54.209	-14.177	-54.211	0.000	-14.177	-54.209	90.000
121	7	-56.016	-14.177	-56.018	0.000	-14.177	-56.016	90.000
121	8	-62.542	-14.177	-62.543	0.000	-14.177	-62.542	90.000
121	9	9.942	-14.177	9.938	0.000	9.942	-14.177	0.000
122	1	-68.273	-0.233	-68.270	-0.004	-0.233	-68.273	90.004
122	2	-68.117	-0.233	-68.114	-0.004	-0.233	-68.117	90.004
122	3	10.111	-14.123	10.107	-0.004	10.111	-14.123	180.000
122	4	-137.226	-0.233	-137.220	-0.004	-0.233	-137.226	90.002
122	5	-58.997	-14.123	-58.998	-0.004	-14.123	-58.997	90.005
122	6	-54.196	-14.123	-54.197	-0.004	-14.123	-54.196	90.006
122	7	-56.003	-14.123	-56.004	-0.004	-14.123	-56.003	90.006
122	8	-62.529	-14.123	-62.530	-0.004	-14.123	-62.529	90.005
122	9	9.955	-14.123	9.951	-0.004	9.955	-14.123	180.000
123	1	-68.243	-0.115	-68.240	-0.004	-0.115	-68.243	90.004
[illegible]	2	-68.086	-0.115	-68.084	-0.004	-0.115	-68.086	90.004
[illegible]	3	10.142	-14.005	10.138	-0.004	10.142	-14.005	180.000
123	4	-137.195	-0.115	-137.189	-0.004	-0.115	-137.195	90.002
123	5	-58.965	-14.005	-58.967	-0.004	-14.005	-58.965	90.006
123	6	-54.165	-14.005	-54.166	-0.004	-14.005	-54.165	90.007
123	7	-55.972	-14.005	-55.973	-0.004	-14.005	-55.972	90.006
123	8	-62.497	-14.005	-62.498	-0.004	-14.005	-62.497	90.005
123	9	9.986	-14.005	9.981	-0.004	9.986	-14.005	180.000
124	1	-68.228	-0.057	-68.225	0.000	-0.057	-68.228	89.999
124	2	-68.072	-0.057	-68.069	0.000	-0.057	-68.072	89.999
124	3	10.156	-13.949	10.152	-0.000	10.156	-13.949	180.000
124	4	-137.180	-0.057	-137.174	0.000	-0.057	-137.180	90.000
124	5	-58.951	-13.949	-58.952	-0.000	-13.949	-58.951	90.001
124	6	-54.150	-13.949	-54.152	-0.000	-13.949	-54.150	90.001
124	7	-55.957	-13.949	-55.959	-0.000	-13.949	-55.957	90.001
124	8	-62.483	-13.949	-62.484	-0.000	-13.949	-62.483	90.001
124	9	10.000	-13.949	9.996	-0.000	10.000	-13.949	180.000
125	1	-68.286	-0.286	-68.283	-0.000	-0.286	-68.286	90.000
125	2	-68.129	-0.286	-68.127	-0.000	-0.286	-68.129	90.000
125	3	10.099	-14.178	10.095	0.000	10.099	-14.178	0.000
125	4	-137.238	-0.287	-137.232	-0.000	-0.287	-137.238	90.000
125	5	-59.009	-14.178	-59.010	0.000	-14.178	-59.009	90.000
125	6	-54.208	-14.178	-54.209	0.000	-14.178	-54.208	90.000
[illegible]	7	-56.015	-14.178	-56.016	0.000	-14.178	-56.015	90.000
[illegible]	8	-62.540	-14.178	-62.542	0.000	-14.178	-62.540	90.000

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INT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
.25	9	9.943	-14.178	9.938	0.000	9.943	-14.178	0.000
.25	1	-68.272	-0.233	-68.270	0.005	-0.233	-68.272	89.995
.25	2	-68.116	-0.233	-68.113	0.005	-0.233	-68.116	89.995
.25	3	10.112	-14.115	10.108	0.005	10.112	-14.115	0.000
.26	4	-137.224	-0.233	-137.219	0.005	-0.233	-137.224	89.998
.26	5	-58.995	-14.115	-58.997	0.005	-14.115	-58.995	89.992
.26	6	-54.195	-14.115	-54.196	0.005	-14.115	-54.195	89.991
.26	7	-56.001	-14.115	-56.003	0.005	-14.115	-56.001	89.992
.26	8	-62.527	-14.115	-62.528	0.005	-14.115	-62.527	89.993
.26	9	9.956	-14.115	9.952	0.005	9.956	-14.115	0.000
.27	1	-68.243	-0.115	-68.240	0.005	-0.115	-68.243	89.995
.27	2	-68.087	-0.115	-68.084	0.005	-0.115	-68.087	89.995
.27	3	10.141	-13.996	10.144	0.005	10.141	-13.996	0.000
.27	4	-137.195	-0.115	-137.190	0.005	-0.115	-137.195	89.998
.27	5	-58.966	-13.996	-58.961	0.005	-13.996	-58.966	89.992
.27	6	-54.166	-13.996	-54.161	0.005	-13.996	-54.166	89.991
.27	7	-55.972	-13.996	-55.967	0.005	-13.996	-55.972	89.992
.27	8	-62.498	-13.996	-62.492	0.005	-13.996	-62.498	89.993
.27	9	9.985	-13.996	9.988	0.005	9.985	-13.996	0.000
.28	1	-68.229	-0.057	-68.226	-0.000	-0.057	-68.229	90.000
.28	2	-68.072	-0.057	-68.070	-0.000	-0.057	-68.072	90.000
.28	3	10.156	-13.949	10.152	0.000	10.156	-13.949	0.000
.28	4	-137.181	-0.057	-137.175	-0.000	-0.057	-137.181	90.000
.28	5	-58.952	-13.949	-58.953	0.000	-13.949	-58.952	89.999
.28	6	-54.152	-13.949	-54.153	0.000	-13.949	-54.152	89.999
.28	7	-55.958	-13.949	-55.959	0.000	-13.949	-55.958	89.999
.28	8	-62.483	-13.949	-62.485	0.000	-13.949	-62.483	89.999
.28	9	9.999	-13.949	9.995	0.000	10.000	-13.949	0.000
.29	1	-68.286	-0.295	-68.283	0.000	-0.286	-68.286	90.000
.29	2	-68.129	-0.286	-68.127	0.000	-0.286	-68.129	90.000
.29	3	10.099	-14.176	10.095	-0.000	10.099	-14.176	180.000
.29	4	-137.238	-0.287	-137.232	0.000	-0.287	-137.238	90.000
.29	5	-59.009	-14.176	-59.010	-0.000	-14.176	-59.009	90.000
.29	6	-54.209	-14.176	-54.210	-0.000	-14.176	-54.208	90.000
.29	7	-56.015	-14.175	-56.016	-0.000	-14.176	-56.015	90.000
.29	8	-62.540	-14.176	-62.542	-0.000	-14.176	-62.540	90.000
.29	9	9.943	-14.176	9.938	-0.000	9.943	-14.176	180.000
.30	1	-68.272	-0.233	-68.270	-0.004	-0.233	-68.272	90.004
.30	2	-68.116	-0.233	-68.113	-0.004	-0.233	-68.116	90.004
.30	3	10.112	-14.115	10.109	-0.005	10.112	-14.115	180.000
.30	4	-137.224	-0.233	-137.219	-0.004	-0.233	-137.224	90.002
.30	5	-58.995	-14.115	-58.997	-0.005	-14.115	-58.995	90.007
.30	6	-54.195	-14.115	-54.196	-0.005	-14.115	-54.195	90.008
.30	7	-56.002	-14.115	-56.003	-0.005	-14.115	-56.002	90.008
.30	8	-62.527	-14.115	-62.528	-0.005	-14.115	-62.527	90.006
.30	9	9.956	-14.115	9.952	-0.005	9.956	-14.115	180.000
.31	1	-68.243	-0.115	-68.240	-0.004	-0.115	-68.243	90.004
.31	2	-68.087	-0.115	-68.084	-0.004	-0.115	-68.087	90.004
.31	3	10.141	-13.996	10.144	-0.005	10.141	-13.996	180.000

E 560

ZMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
109	4	-137.239	-0.286	-137.232	0.000	-0.286	-137.239	90.000
109	5	-59.010	-14.177	-59.010	-0.000	-14.177	-59.010	90.000
109	6	-54.209	-14.177	-54.210	-0.000	-14.177	-54.209	90.000
[illegible]	7	-56.016	-14.177	-56.016	-0.000	-14.177	-56.016	90.000
[illegible]	8	-62.542	-14.177	-62.542	-0.000	-14.177	-62.542	90.000
109	9	9.942	-14.177	9.938	-0.000	9.942	-14.177	180.000
110	1	-68.273	-0.233	-68.270	0.005	-0.233	-68.273	89.995
110	2	-68.117	-0.233	-68.113	0.005	-0.233	-68.117	89.995
110	3	10.111	-14.126	10.108	0.004	10.111	-14.126	0.000
110	4	-137.226	-0.233	-137.219	0.004	-0.233	-137.226	89.998
110	5	-58.997	-14.126	-58.997	0.004	-14.126	-58.997	89.994
110	6	-54.197	-14.126	-54.197	0.004	-14.126	-54.197	89.994
110	7	-56.003	-14.126	-56.003	0.004	-14.126	-56.003	89.994
110	8	-62.529	-14.126	-62.528	0.004	-14.126	-62.529	89.995
110	9	9.955	-14.126	9.952	0.004	9.955	-14.126	0.000
111	1	-68.243	-0.115	-68.240	0.004	-0.115	-68.243	89.996
111	2	-68.086	-0.115	-68.084	0.004	-0.115	-68.086	89.995
111	3	10.142	-14.007	10.138	0.004	10.142	-14.007	0.000
111	4	-137.195	-0.115	-137.188	0.004	-0.115	-137.195	89.998
111	5	-58.965	-14.007	-58.966	0.004	-14.007	-58.965	89.994
111	6	-54.165	-14.007	-54.166	0.004	-14.007	-54.165	89.993
111	7	-55.972	-14.007	-55.972	0.004	-14.007	-55.972	89.993
111	8	-62.497	-14.007	-62.498	0.004	-14.007	-62.497	89.994
111	9	9.986	-14.007	9.981	0.004	9.986	-14.007	0.000
112	1	-68.229	-0.057	-68.225	-0.000	-0.057	-68.229	90.000
[illegible]	2	-68.072	-0.057	-68.069	-0.000	-0.057	-68.072	90.000
[illegible]	3	10.156	-13.948	10.152	0.000	10.156	-13.948	0.000
112	4	-137.181	-0.057	-137.174	-0.000	-0.057	-137.181	90.000
112	5	-58.952	-13.948	-58.952	0.000	-13.948	-58.952	89.999
112	6	-54.151	-13.948	-54.152	0.000	-13.948	-54.151	89.999
112	7	-55.958	-13.948	-55.958	0.000	-13.948	-55.958	89.999
112	8	-62.483	-13.948	-62.483	0.000	-13.948	-62.483	89.999
112	9	9.999	-13.948	9.996	0.000	10.000	-13.948	0.000
113	1	-68.286	-0.286	-68.283	0.000	-0.286	-68.286	90.000
113	2	-68.129	-0.286	-68.127	0.000	-0.286	-68.129	90.000
113	3	10.099	-14.164	10.102	0.000	10.099	-14.164	0.000
113	4	-137.238	-0.286	-137.231	0.000	-0.286	-137.238	90.000
113	5	-59.009	-14.164	-59.002	0.000	-14.164	-59.009	90.000
113	6	-54.209	-14.164	-54.202	0.000	-14.164	-54.209	90.000
113	7	-56.015	-14.164	-56.009	0.000	-14.164	-56.015	90.000
113	8	-62.540	-14.164	-62.534	0.000	-14.164	-62.540	90.000
113	9	9.943	-14.164	9.945	0.000	9.943	-14.164	0.000
114	1	-68.272	-0.233	-68.269	-0.004	-0.233	-68.272	90.004
114	2	-68.116	-0.233	-68.113	-0.004	-0.233	-68.116	90.004
114	3	10.112	-14.126	10.109	-0.004	10.112	-14.126	180.000
114	4	-137.224	-0.233	-137.218	-0.005	-0.233	-137.224	90.002
114	5	-58.995	-14.126	-58.995	-0.004	-14.125	-58.995	90.005
114	6	-54.195	-14.126	-54.195	-0.004	-14.126	-54.195	90.006
[illegible]	7	-56.001	-14.126	-56.002	-0.004	-14.126	-56.001	90.006
[illegible]	8	-62.527	-14.126	-62.527	-0.004	-14.125	-62.527	90.005

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ESS7

NT	LOAD COMB	Y-STRESS (RADIAL)	X-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
.4	9	9.956	-14.126	9.952	-0.004	9.956	-14.126	180.000
5	1	-68.243	-0.115	-68.240	-0.004	-0.115	-68.243	90.004
.5	2	-68.087	-0.115	-68.084	-0.004	-0.115	-68.087	90.004
5	3	10.141	-14.008	10.138	-0.003	10.141	-14.008	180.000
5	4	-137.196	-0.115	-137.189	-0.005	-0.115	-137.196	90.002
5	5	-58.967	-14.008	-58.967	-0.003	-14.008	-58.967	90.005
5	6	-54.166	-14.008	-54.167	-0.003	-14.008	-54.166	90.005
5	7	-55.973	-14.008	-55.973	-0.003	-14.008	-55.973	90.005
5	8	-62.499	-14.008	-62.498	-0.003	-14.008	-62.499	90.004
5	9	9.985	-14.008	9.981	-0.003	9.985	-14.008	180.000
6	1	-68.229	-0.058	-68.226	0.000	-0.058	-68.229	89.999
6	2	-68.072	-0.058	-68.070	0.000	-0.058	-68.072	89.999
6	3	10.156	-13.935	10.159	0.002	10.156	-13.935	0.000
6	4	-137.181	-0.058	-137.175	0.000	-0.058	-137.181	90.000
6	5	-58.952	-13.935	-58.946	0.002	-13.935	-58.952	89.996
6	6	-54.152	-13.935	-54.146	0.002	-13.935	-54.152	89.995
6	7	-55.958	-13.935	-55.952	0.002	-13.935	-55.958	89.996
6	8	-62.484	-13.935	-62.478	0.002	-13.935	-62.484	89.996
6	9	9.999	-13.935	10.002	0.002	10.000	-13.935	0.000
7	1	-68.286	-0.286	-68.283	0.000	-0.286	-68.286	90.000
7	2	-68.129	-0.286	-68.127	0.000	-0.286	-68.129	90.000
7	3	10.099	-14.165	10.102	0.000	10.099	-14.165	0.000
7	4	-137.238	-0.286	-137.232	0.000	-0.286	-137.238	90.000
7	5	-59.009	-14.165	-59.003	0.000	-14.165	-59.009	90.000
7	6	-54.208	-14.165	-54.202	0.000	-14.165	-54.208	90.000
7	7	-56.015	-14.165	-56.009	0.000	-14.165	-56.015	90.000
7	8	-62.540	-14.165	-62.535	0.000	-14.165	-62.540	90.000
7	9	9.943	-14.165	9.945	0.000	9.943	-14.165	0.000
8	1	-68.272	-0.233	-68.270	0.005	-0.233	-68.272	89.995
8	2	-68.116	-0.233	-68.113	0.005	-0.233	-68.116	89.995
8	3	10.112	-14.123	10.108	0.004	10.112	-14.123	0.000
8	4	-137.224	-0.233	-137.219	0.005	-0.233	-137.224	89.998
8	5	-58.995	-14.123	-58.997	0.004	-14.123	-58.995	89.994
8	6	-54.195	-14.123	-54.196	0.004	-14.123	-54.195	89.993
8	7	-56.001	-14.123	-56.003	0.004	-14.123	-56.001	89.993
8	8	-62.527	-14.123	-62.528	0.004	-14.123	-62.527	89.994
8	9	9.956	-14.123	9.952	0.004	9.956	-14.123	0.000
9	1	-68.243	-0.115	-68.240	0.005	-0.115	-68.243	89.995
9	2	-68.087	-0.115	-68.084	0.005	-0.115	-68.087	89.995
9	3	10.141	-14.005	10.137	0.004	10.141	-14.005	0.000
9	4	-137.196	-0.115	-137.190	0.005	-0.115	-137.196	89.998
9	5	-58.967	-14.005	-58.968	0.004	-14.005	-58.967	89.994
9	6	-54.166	-14.005	-54.168	0.004	-14.005	-54.166	89.994
9	7	-55.973	-14.005	-55.974	0.004	-14.005	-55.973	89.994
9	8	-62.499	-14.005	-62.499	0.004	-14.005	-62.499	89.995
9	9	9.985	-14.005	9.981	0.004	9.985	-14.005	0.000
1	1	-68.229	-0.057	-68.225	-0.000	-0.057	-68.229	90.000
1	2	-68.072	-0.057	-68.070	-0.000	-0.057	-68.072	90.000
	3	10.156	-13.935	10.159	-0.002	10.156	-13.935	180.000

E558

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
98	4	-137.227	-0.233	-137.219	-0.004	-0.233	-137.227	90.002
98	5	-58.998	-14.124	-58.997	-0.004	-14.124	-58.998	90.005
99	6	-54.197	-14.124	-54.196	-0.004	-14.124	-54.197	90.006
[illegible]	7	-56.004	-14.124	-56.003	-0.004	-14.124	-56.004	90.006
[illegible]	8	-62.530	-14.124	-62.528	-0.004	-14.124	-62.530	90.005
98	9	9.954	-14.124	9.952	-0.004	9.954	-14.124	180.000
99	1	-68.243	-0.115	-68.239	-0.004	-0.115	-68.243	90.004
99	2	-68.087	-0.115	-68.083	-0.004	-0.115	-68.087	90.004
99	3	10.141	-14.006	10.138	-0.004	10.141	-14.006	180.000
99	4	-137.196	-0.115	-137.187	-0.004	-0.115	-137.196	90.002
99	5	-58.967	-14.006	-58.965	-0.004	-14.006	-58.967	90.006
99	6	-54.166	-14.006	-54.165	-0.004	-14.006	-54.166	90.007
99	7	-55.973	-14.006	-55.971	-0.004	-14.006	-55.973	90.006
99	8	-62.499	-14.006	-62.496	-0.004	-14.006	-62.499	90.005
99	9	9.985	-14.006	9.982	-0.004	9.985	-14.006	180.000
100	1	-68.229	-0.057	-68.224	0.000	-0.057	-68.229	89.999
100	2	-68.073	-0.057	-68.068	0.000	-0.057	-68.073	89.999
100	3	10.155	-13.951	10.153	-0.001	10.155	-13.951	180.000
100	4	-137.182	-0.057	-137.173	0.000	-0.057	-137.182	90.000
100	5	-58.953	-13.951	-58.951	-0.001	-13.951	-58.953	90.001
100	6	-54.152	-13.951	-54.150	-0.001	-13.951	-54.152	90.001
100	7	-55.959	-13.951	-55.957	-0.001	-13.951	-55.959	90.001
100	8	-62.485	-13.951	-62.482	-0.001	-13.951	-62.485	90.001
100	9	9.999	-13.951	9.997	-0.001	9.999	-13.951	180.000
101	1	-68.286	-0.286	-68.282	-0.000	-0.286	-68.286	90.000
101	2	-68.130	-0.286	-68.126	-0.000	-0.286	-68.130	90.000
[illegible]	3	10.098	-14.180	10.095	0.000	10.098	-14.180	0.000
[illegible]	4	-137.239	-0.287	-137.231	-0.000	-0.287	-137.239	90.000
101	5	-59.010	-14.180	-59.009	0.000	-14.180	-59.010	89.999
101	6	-54.209	-14.180	-54.208	0.000	-14.180	-54.209	89.999
101	7	-56.016	-14.180	-56.015	0.000	-14.180	-56.016	89.999
101	8	-62.542	-14.180	-62.540	0.000	-14.180	-62.542	89.999
101	9	9.942	-14.180	9.939	0.000	9.942	-14.180	0.000
102	1	-68.273	-0.233	-68.269	0.005	-0.233	-68.273	89.995
102	2	-68.117	-0.233	-68.113	0.005	-0.233	-68.117	89.995
102	3	10.111	-14.113	10.109	0.006	10.111	-14.113	0.000
102	4	-137.226	-0.233	-137.218	0.005	-0.233	-137.226	89.998
102	5	-58.997	-14.113	-58.995	0.006	-14.113	-58.997	89.992
102	6	-54.196	-14.113	-54.195	0.006	-14.113	-54.196	89.991
102	7	-56.003	-14.113	-56.002	0.006	-14.113	-56.003	89.991
102	8	-62.529	-14.113	-62.527	0.006	-14.113	-62.529	89.992
102	9	9.955	-14.113	9.952	0.006	9.955	-14.113	0.000
103	1	-68.244	-0.115	-68.240	0.005	-0.115	-68.244	89.995
103	2	-68.088	-0.115	-68.084	0.005	-0.115	-68.088	89.995
103	3	10.140	-13.994	10.145	0.006	10.140	-13.994	0.000
103	4	-137.197	-0.115	-137.188	0.005	-0.115	-137.197	89.998
103	5	-58.968	-13.994	-58.959	0.006	-13.994	-58.968	89.992
103	6	-54.168	-13.994	-54.159	0.006	-13.994	-54.168	89.991
103	7	-55.974	-13.994	-55.965	0.006	-13.994	-55.974	89.991
[illegible]	8	-62.499	-13.994	-62.491	0.006	-13.994	-62.499	89.992

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NT	LOAD COMB	[illegible] (RADIAL)	[illegible] (AXIAL)	[illegible] (HOOP)	[illegible] (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
03	9	9.984	-13.994	9.988	0.006	9.984	-13.994	0.000
04	1	-68.229	-0.057	-68.225	-0.000	-0.057	-68.229	90.000
04	2	-68.073	-0.057	-68.069	-0.000	-0.057	-68.073	90.000
04	3	10.155	-13.951	10.152	0.001	10.155	-13.951	0.000
04	4	-137.182	-0.057	-137.174	-0.000	-0.057	-137.182	90.000
04	5	-58.953	-13.951	-58.952	0.001	-13.951	-58.953	89.999
04	6	-54.153	-13.951	-54.152	0.001	-13.951	-54.153	89.998
04	7	-55.959	-13.951	-55.958	0.001	-13.951	-55.959	89.998
04	8	-62.485	-13.951	-62.483	0.001	-13.951	-62.485	89.998
04	9	9.999	-13.951	9.996	0.001	9.999	-13.951	0.000
05	1	-68.286	-0.286	-68.282	0.000	-0.286	-68.286	90.000
05	2	-68.130	-0.286	-68.126	0.000	-0.286	-68.130	90.000
05	3	10.098	-14.177	10.095	-0.000	10.098	-14.177	180.000
05	4	-137.239	-0.287	-137.231	0.000	-0.287	-137.239	90.000
05	5	-59.010	-14.178	-59.009	-0.000	-14.178	-59.010	90.000
05	6	-54.209	-14.178	-54.209	-0.000	-14.178	-54.209	90.000
05	7	-56.016	-14.178	-56.015	-0.000	-14.178	-56.016	90.000
05	8	-62.542	-14.178	-62.540	-0.000	-14.178	-62.542	90.000
05	9	9.942	-14.177	9.939	-0.000	9.942	-14.177	180.000
06	1	-68.273	-0.233	-68.269	-0.004	-0.233	-68.273	90.004
06	2	-68.117	-0.233	-68.113	-0.004	-0.233	-68.117	90.004
06	3	10.111	-14.113	10.109	-0.006	10.111	-14.113	180.000
06	4	-137.226	-0.233	-137.218	-0.004	-0.233	-137.226	90.002
06	5	-58.997	-14.112	-58.995	-0.006	-14.112	-58.997	90.008
06	6	-54.196	-14.112	-54.195	-0.006	-14.112	-54.196	90.008
06	7	-56.003	-14.112	-56.002	-0.006	-14.112	-56.003	90.008
06	8	-62.528	-14.112	-62.527	-0.006	-14.112	-62.528	90.007
06	9	9.955	-14.112	9.952	-0.006	9.955	-14.113	180.000
[illegible]	1	-68.244	-0.115	-68.240	-0.004	-0.115	-68.244	90.004
[illegible]	2	-68.088	-0.115	-68.084	-0.004	-0.115	-68.088	90.004
[illegible]	3	10.140	-13.994	10.145	-0.006	10.140	-13.994	180.000
[illegible]	4	-137.197	-0.115	-137.189	-0.004	-0.115	-137.197	90.002
[illegible]	5	-58.968	-13.994	-58.960	-0.006	-13.994	-58.963	90.007
[illegible]	6	-54.167	-13.994	-54.159	-0.006	-13.994	-54.167	90.008
[illegible]	7	-55.974	-13.994	-55.966	-0.006	-13.994	-55.974	90.008
[illegible]	8	-62.499	-13.994	-62.492	-0.006	-13.994	-62.499	90.007
[illegible]	9	9.984	-13.994	9.988	-0.006	9.984	-13.994	180.000
	1	-68.229	-0.058	-68.225	0.000	-0.058	-68.229	89.999
	2	-68.073	-0.058	-68.069	0.000	-0.058	-68.073	89.999
	3	10.155	-13.948	10.152	-0.000	10.155	-13.948	180.000
	4	-137.182	-0.058	-137.174	0.000	-0.058	-137.182	89.999
	5	-58.953	-13.949	-58.952	-0.000	-13.949	-58.953	90.000
	6	-54.152	-13.949	-54.152	-0.000	-13.949	-54.152	90.000
	7	-55.959	-13.949	-55.959	-0.000	-13.949	-55.959	90.000
	8	-62.485	-13.949	-62.484	-0.000	-13.949	-62.485	90.000
	9	9.999	-13.948	9.995	-0.000	9.999	-13.948	180.000
	1	-68.286	-0.286	-68.283	0.000	-0.286	-68.286	90.000
	2	-68.130	-0.286	-68.127	0.000	-0.286	-68.130	90.000
	3	10.098	-14.177	10.095	-0.000	10.098	-14.177	180.000

ES56

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
92	9	9.998	-13.937	9.997	0.002	9.998	-13.937	0.000
[illegible]	1	-68.287	-0.236	-68.291	0.000	-0.286	-68.297	90.000
[illegible]	2	-68.131	-0.286	-68.125	0.000	-0.295	-68.131	90.000
[illegible]	3	10.097	-14.167	10.096	0.000	10.097	-14.167	0.000
93	4	-137.240	-0.286	-137.229	-0.000	-0.286	-137.240	90.000
93	5	-59.011	-14.167	-59.007	0.000	-14.167	-59.011	90.000
93	6	-54.211	-14.167	-54.207	0.000	-14.167	-54.211	90.000
93	7	-56.017	-14.167	-56.013	0.000	-14.167	-56.017	90.000
93	8	-62.542	-14.167	-62.539	0.000	-14.167	-62.542	90.000
93	9	9.941	-14.167	9.940	0.000	9.941	-14.167	0.000
94	1	-68.273	-0.233	-68.268	0.005	-0.233	-68.273	89.995
94	2	-68.117	-0.233	-68.112	0.005	-0.233	-68.117	89.995
94	3	10.111	-14.124	10.109	0.004	10.111	-14.124	0.000
94	4	-137.226	-0.233	-137.216	0.005	-0.233	-137.226	89.998
94	5	-58.997	-14.124	-58.994	0.004	-14.124	-58.997	89.994
94	6	-54.197	-14.124	-54.194	0.004	-14.124	-54.197	89.993
94	7	-56.003	-14.124	-56.000	0.004	-14.124	-56.003	89.993
94	8	-62.529	-14.124	-62.525	0.004	-14.124	-62.529	89.994
94	9	9.955	-14.124	9.953	0.004	9.955	-14.124	0.000
95	1	-68.244	-0.115	-68.239	0.005	-0.115	-68.244	89.995
95	2	-68.088	-0.115	-68.083	0.005	-0.115	-68.088	89.995
95	3	10.140	-14.007	10.138	0.004	10.141	-14.007	0.000
95	4	-137.197	-0.115	-137.188	0.005	-0.115	-137.197	89.998
95	5	-58.968	-14.007	-58.965	0.004	-14.007	-58.968	89.994
95	6	-54.168	-14.007	-54.165	0.004	-14.007	-54.168	89.994
[illegible]	7	-55.974	-14.007	-55.972	0.004	-14.007	-55.974	89.994
[illegible]	8	-62.500	-14.007	-62.497	0.004	-14.007	-62.500	89.995
95	9	9.984	-14.007	9.982	0.004	9.984	-14.007	0.000
96	1	-68.229	-0.057	-68.224	-0.000	-0.057	-68.229	90.000
96	2	-68.073	-0.057	-68.068	-0.000	-0.057	-68.073	90.000
96	3	10.155	-13.937	10.153	-0.002	10.155	-13.937	180.000
96	4	-137.183	-0.057	-137.173	-0.000	-0.057	-137.183	90.000
96	5	-58.954	-13.937	-58.951	-0.002	-13.937	-58.954	90.003
96	6	-54.153	-13.937	-54.150	-0.002	-13.937	-54.153	90.004
96	7	-55.960	-13.937	-55.957	-0.002	-13.937	-55.960	90.004
96	8	-62.485	-13.937	-62.482	-0.002	-13.937	-62.485	90.003
96	9	9.999	-13.937	9.997	-0.002	9.999	-13.937	180.000
97	1	-68.287	-0.286	-68.283	-0.000	-0.286	-68.287	90.000
97	2	-68.131	-0.286	-68.127	-0.000	-0.286	-68.131	90.000
97	3	10.097	-14.179	10.095	0.000	10.097	-14.179	0.000
97	4	-137.240	-0.286	-137.232	-0.000	-0.286	-137.240	90.000
97	5	-59.011	-14.179	-59.010	0.000	-14.179	-59.011	89.999
97	6	-54.211	-14.179	-54.209	0.000	-14.179	-54.211	89.999
97	7	-56.017	-14.179	-56.016	0.000	-14.179	-56.017	89.999
97	8	-62.543	-14.179	-62.542	0.000	-14.179	-62.543	89.999
97	9	9.941	-14.179	9.938	0.000	9.941	-14.179	0.000
98	1	-68.274	-0.233	-68.270	-0.004	-0.233	-68.274	90.004
[illegible]	2	-68.118	-0.233	-68.113	-0.004	-0.233	-68.118	90.004
[illegible]	3	10.111	-14.124	10.108	-0.004	10.111	-14.124	180.000

3667

750

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
81	9	9.941	-14.180	9.940	-0.000	9.941	-14.180	180.000
82	1	-68.274	-0.233	-68.268	-0.004	-0.233	-68.274	90.004
	2	-68.118	-0.233	-68.111	-0.004	-0.233	-68.118	90.004
	3	10.111	-14.113	10.110	-0.005	10.111	-14.113	180.000
82	4	-137.227	-0.233	-137.215	-0.004	-0.233	-137.227	90.002
82	5	-58.998	-14.113	-58.993	-0.005	-14.113	-58.998	90.007
82	6	-54.198	-14.113	-54.193	-0.005	-14.113	-54.198	90.008
82	7	-56.004	-14.113	-55.999	-0.005	-14.113	-56.004	90.008
82	8	-62.530	-14.113	-62.524	-0.005	-14.113	-62.530	90.006
82	9	9.954	-14.113	9.954	-0.005	9.954	-14.113	180.000
83	1	-68.245	-0.115	-68.238	-0.004	-0.115	-68.245	90.004
83	2	-68.088	-0.115	-68.082	-0.004	-0.115	-68.088	90.004
83	3	10.140	-13.995	10.139	-0.005	10.140	-13.995	180.000
83	4	-137.199	-0.115	-137.186	-0.004	-0.115	-137.199	90.002
83	5	-58.970	-13.995	-58.964	-0.005	-13.995	-58.970	90.007
83	6	-54.169	-13.995	-54.163	-0.005	-13.995	-54.169	90.008
83	7	-55.976	-13.995	-55.970	-0.005	-13.995	-55.976	90.008
83	8	-62.502	-13.995	-62.496	-0.005	-13.995	-62.502	90.007
83	9	9.984	-13.995	9.983	-0.005	9.984	-13.995	180.000
84	1	-68.231	-0.058	-68.224	0.000	-0.058	-68.231	89.999
84	2	-68.074	-0.058	-68.068	0.000	-0.058	-68.074	89.999
84	3	10.154	-13.951	10.153	-0.000	10.154	-13.951	180.000
84	4	-137.185	-0.058	-137.172	0.000	-0.058	-137.185	89.999
84	5	-58.956	-13.951	-58.950	-0.000	-13.951	-58.956	90.000
84	6	-54.155	-13.951	-54.150	-0.000	-13.951	-54.155	90.000
	7	-55.962	-13.951	-55.957	-0.000	-13.951	-55.962	90.000
	8	-62.488	-13.951	-62.482	-0.000	-13.951	-62.488	90.000
84	9	9.997	-13.951	9.997	-0.000	9.997	-13.951	180.000
85	1	-68.288	-0.286	-68.282	0.000	-0.286	-68.288	90.000
85	2	-68.131	-0.286	-68.126	0.000	-0.286	-68.131	90.000
85	3	10.097	-14.179	10.095	-0.000	10.097	-14.179	180.000
85	4	-137.242	-0.286	-137.231	0.000	-0.286	-137.242	90.000
85	5	-59.013	-14.179	-59.009	-0.000	-14.179	-59.013	90.000
85	6	-54.212	-14.179	-54.208	-0.000	-14.179	-54.212	90.000
85	7	-56.019	-14.179	-56.015	-0.000	-14.179	-56.019	90.000
95	8	-62.545	-14.179	-62.540	-0.000	-14.179	-62.545	90.000
85	9	9.940	-14.179	9.939	-0.000	9.940	-14.179	180.000
86	1	-68.274	-0.233	-68.269	0.005	-0.233	-68.275	89.995
86	2	-68.118	-0.233	-68.113	0.005	-0.233	-68.118	89.995
86	3	10.110	-14.128	10.109	0.004	10.110	-14.128	0.000
86	4	-137.229	-0.233	-137.218	0.004	-0.233	-137.229	89.998
86	5	-58.999	-14.128	-58.995	0.004	-14.128	-58.999	89.994
86	6	-54.199	-14.128	-54.195	0.004	-14.128	-54.199	89.994
86	7	-56.006	-14.128	-56.002	0.004	-14.128	-56.006	89.994
86	8	-62.531	-14.128	-62.527	0.004	-14.128	-62.531	89.995
86	9	9.954	-14.128	9.952	0.004	9.954	-14.128	0.000
87	1	-68.244	-0.115	-68.238	0.005	-0.115	-68.244	89.995
	2	-68.088	-0.115	-68.082	0.005	-0.115	-68.088	89.995
	3	10.140	-14.010	10.139	0.004	10.140	-14.010	0.000

3667

?	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
7	4	-137.197	-0.115	-137.186	0.004	-0.115	-137.197	89.998
7	5	-58.968	-14.010	-58.964	0.004	-14.010	-58.968	89.994
7	6	-54.168	-14.010	-54.163	0.004	-14.010	-54.168	89.993
7	7	-55.974	-14.010	-55.970	0.004	-14.010	-55.974	89.994
7	8	-62.500	-14.010	-62.496	0.004	-14.010	-62.500	89.994
7	9	9.984	-14.010	9.983	0.004	9.984	-14.010	0.000
38	1	-68.229	-0.057	-68.224	-0.000	-0.057	-68.229	90.000
38	2	-68.073	-0.057	-68.068	-0.000	-0.057	-68.073	90.000
38	3	10.155	-13.950	10.154	0.000	10.155	-13.950	0.000
38	4	-137.183	-0.057	-137.172	-0.000	-0.057	-137.183	90.000
38	5	-58.954	-13.950	-58.949	0.000	-13.950	-58.954	89.999
38	6	-54.153	-13.950	-54.149	0.000	-13.950	-54.153	89.999
38	7	-55.960	-13.950	-55.956	0.000	-13.950	-55.960	89.999
38	8	-62.485	-13.950	-62.481	0.000	-13.950	-62.485	89.999
38	9	9.999	-13.950	9.997	0.000	9.999	-13.950	0.000
39	1	-68.287	-0.286	-68.281	0.000	-0.286	-68.287	90.000
39	2	-68.131	-0.286	-68.125	0.000	-0.286	-68.131	90.000
39	3	10.097	-14.166	10.096	0.000	10.097	-14.166	0.000
39	4	-137.240	-0.286	-137.229	-0.000	-0.286	-137.240	90.000
39	5	-59.011	-14.166	-59.007	0.000	-14.166	-59.011	90.000
39	6	-54.211	-14.166	-54.207	0.000	-14.166	-54.211	90.000
39	7	-56.017	-14.166	-56.013	0.000	-14.166	-56.017	90.000
39	8	-62.543	-14.166	-62.539	0.000	-14.166	-62.543	90.000
39	9	9.941	-14.166	9.940	0.000	9.941	-14.166	0.000
90	1	-68.274	-0.233	-68.268	-0.004	-0.233	-68.274	90.004
90	2	-68.118	-0.233	-68.112	-0.004	-0.233	-68.118	90.004
90	3	10.111	-14.129	10.109	-0.004	10.111	-14.129	180.000
90	4	-137.227	-0.233	-137.216	-0.004	-0.233	-137.227	90.002
90	5	-58.998	-14.129	-58.994	-0.004	-14.129	-58.998	90.005
90	6	-54.197	-14.129	-54.194	-0.004	-14.129	-54.197	90.006
90	7	-56.004	-14.129	-56.000	-0.004	-14.129	-56.004	90.005
90	8	-62.530	-14.129	-62.525	-0.004	-14.129	-62.530	90.005
90	9	9.954	-14.129	9.953	-0.004	9.954	-14.129	180.000
91	1	-68.245	-0.115	-68.239	-0.004	-0.115	-68.245	90.004
91	2	-68.088	-0.115	-68.083	-0.004	-0.115	-68.088	90.004
91	3	10.140	-14.011	10.138	-0.003	10.140	-14.011	180.000
91	4	-137.198	-0.115	-137.188	-0.005	-0.115	-137.198	90.002
91	5	-58.969	-14.011	-58.965	-0.003	-14.011	-58.969	90.005
91	6	-54.168	-14.011	-54.165	-0.003	-14.011	-54.168	90.005
91	7	-55.975	-14.011	-55.972	-0.003	-14.011	-55.975	90.005
91	8	-62.501	-14.011	-62.497	-0.003	-14.011	-62.501	90.004
91	9	9.984	-14.011	9.982	-0.003	9.984	-14.011	180.000
92	1	-68.230	-0.058	-68.224	0.000	-0.058	-68.230	89.999
92	2	-68.074	-0.058	-68.068	0.000	-0.058	-68.074	89.999
92	3	10.154	-13.937	10.153	0.002	10.154	-13.937	0.000
92	4	-137.183	-0.058	-137.173	0.000	-0.058	-137.183	90.000
92	5	-58.954	-13.937	-58.951	0.002	-13.937	-58.954	89.996
92	6	-54.154	-13.937	-54.150	0.002	-13.937	-54.154	89.995
92	7	-55.960	-13.937	-55.957	0.002	-13.937	-55.960	89.996
92	8	-62.486	-13.937	-62.482	0.002	-13.937	-62.486	89.996

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
70	9	9.953	-14.128	9.947	0.004	9.953	-14.128	0.000
71	1	-68.246	-0.115	-68.238	0.005	-0.115	-68.246	89.995
[illegible]	2	-68.090	-0.115	-68.081	0.005	-0.115	-68.090	89.995
[illegible]	3	10.138	-14.010	10.133	0.003	10.138	-14.010	0.000
71	4	-137.202	-0.115	-137.184	0.005	-0.115	-137.202	89.998
71	5	-58.972	-14.010	-58.969	0.004	-14.010	-58.972	89.995
71	6	-54.172	-14.010	-54.169	0.004	-14.010	-54.172	89.994
71	7	-55.978	-14.010	-55.975	0.004	-14.010	-55.978	89.994
71	8	-62.504	-14.010	-62.500	0.004	-14.010	-62.504	89.995
71	9	9.982	-14.010	9.977	0.003	9.982	-14.010	0.000
72	1	-68.231	-0.057	-68.223	-0.000	-0.057	-68.231	90.000
72	2	-68.075	-0.057	-68.067	-0.000	-0.057	-68.075	90.000
72	3	10.160	-13.939	10.154	-0.002	10.160	-13.939	180.000
72	4	-137.187	-0.057	-137.170	-0.000	-0.057	-137.187	90.000
72	5	-58.951	-13.939	-58.947	-0.002	-13.939	-58.951	90.002
72	6	-54.150	-13.939	-54.147	-0.002	-13.939	-54.150	90.003
72	7	-55.957	-13.939	-55.954	-0.002	-13.939	-55.957	90.003
72	8	-62.483	-13.939	-62.479	-0.002	-13.939	-62.483	90.002
72	9	10.004	-13.939	9.998	-0.002	10.004	-13.939	180.000
73	1	-68.288	-0.286	-68.281	-0.000	-0.286	-68.288	90.000
73	2	-68.132	-0.286	-68.125	-0.000	-0.286	-68.132	90.000
73	3	10.103	-14.173	10.096	0.000	10.103	-14.173	0.000
73	4	-137.243	-0.286	-137.229	-0.000	-0.286	-137.243	90.000
73	5	-59.007	-14.173	-59.006	0.000	-14.173	-59.007	89.999
73	6	-54.206	-14.173	-54.206	0.000	-14.173	-54.206	89.999
[illegible]	7	-56.013	-14.173	-56.013	0.000	-14.173	-56.013	89.999
[illegible]	8	-62.539	-14.173	-62.538	0.000	-14.173	-62.539	89.999
[illegible]	9	9.947	-14.173	9.940	0.000	9.947	-14.173	0.000
74	1	-68.275	-0.233	-68.268	-0.004	-0.233	-68.275	90.004
74	2	-68.119	-0.233	-68.111	-0.004	-0.233	-68.119	90.004
74	3	10.109	-14.128	10.110	-0.003	10.109	-14.128	180.000
74	4	-137.230	-0.233	-137.215	-0.004	-0.233	-137.230	90.002
74	5	-59.001	-14.128	-58.993	-0.003	-14.128	-59.001	90.005
74	6	-54.200	-14.128	-54.193	-0.003	-14.128	-54.200	90.005
74	7	-56.007	-14.128	-55.999	-0.003	-14.128	-56.007	90.005
74	8	-62.533	-14.128	-62.524	-0.003	-14.128	-62.533	90.004
74	9	9.953	-14.128	9.954	-0.003	9.953	-14.128	180.000
75	1	-68.245	-0.115	-68.237	-0.004	-0.115	-68.245	90.004
75	2	-68.089	-0.115	-68.081	-0.004	-0.115	-68.089	90.004
75	3	10.139	-14.010	10.134	-0.004	10.139	-14.010	180.000
75	4	-137.199	-0.115	-137.184	-0.004	-0.115	-137.199	90.002
75	5	-58.970	-14.010	-58.968	-0.003	-14.010	-58.970	90.005
75	6	-54.170	-14.010	-54.168	-0.003	-14.010	-54.170	90.005
75	7	-55.976	-14.010	-55.975	-0.003	-14.010	-55.976	90.005
75	8	-62.502	-14.010	-62.500	-0.003	-14.010	-62.502	90.004
75	9	9.983	-14.010	9.977	-0.004	9.983	-14.010	180.000
76	1	-68.231	-0.058	-68.223	0.000	-0.058	-68.231	89.999
76	2	-68.074	-0.058	-68.067	0.000	-0.058	-68.074	89.999
[illegible]	3	10.154	-13.944	10.154	0.000	10.154	-13.944	0.000

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754

E550

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
76	4	-137.185	-0.058	-137.170	0.000	-0.058	-137.185	90.000
76	5	-58.956	-13.944	-58.947	0.000	-13.944	-58.956	89.999
76	6	-54.155	-13.944	-54.147	0.000	-13.944	-54.155	89.999
76	7	-55.962	-13.944	-55.954	0.000	-13.944	-55.962	89.999
76	8	-62.488	-13.944	-62.479	0.000	-13.944	-62.488	89.999
76	9	9.997	-13.944	9.998	0.000	9.997	-13.944	0.000
77	1	-68.288	-0.286	-68.281	-0.000	-0.286	-68.288	90.000
77	2	-68.131	-0.286	-68.124	-0.000	-0.286	-68.131	90.000
77	3	10.097	-14.173	10.097	0.000	10.097	-14.173	0.000
77	4	-137.242	-0.287	-137.228	-0.000	-0.287	-137.242	90.000
77	5	-59.013	-14.173	-59.006	0.000	-14.173	-59.013	89.999
77	6	-54.212	-14.173	-54.205	0.000	-14.173	-54.212	89.999
77	7	-56.019	-14.173	-56.012	0.000	-14.173	-56.019	89.999
77	8	-62.545	-14.173	-62.537	0.000	-14.173	-62.545	89.999
77	9	9.940	-14.173	9.940	0.000	9.940	-14.173	0.000
78	1	-68.274	-0.233	-68.268	0.005	-0.233	-68.275	89.995
78	2	-68.118	-0.233	-68.111	0.005	-0.233	-68.118	89.995
78	3	10.110	-14.113	10.110	0.006	10.110	-14.113	0.000
78	4	-137.229	-0.233	-137.215	0.005	-0.233	-137.229	89.998
78	5	-58.999	-14.113	-58.993	0.006	-14.113	-58.999	89.992
78	6	-54.199	-14.113	-54.193	0.006	-14.113	-54.199	89.991
78	7	-56.006	-14.113	-55.999	0.006	-14.113	-56.006	89.991
78	8	-62.531	-14.113	-62.524	0.006	-14.113	-62.531	89.992
78	9	9.954	-14.113	9.954	0.006	9.954	-14.113	0.000
79	1	-68.245	-0.115	-68.238	0.005	-0.115	-68.245	89.995
79	2	-68.089	-0.115	-68.082	0.005	-0.115	-68.089	89.995
79	3	10.139	-13.995	10.139	0.005	10.139	-13.995	0.000
79	4	-137.200	-0.115	-137.186	0.005	-0.115	-137.200	89.998
79	5	-58.971	-13.995	-58.963	0.005	-13.995	-58.971	89.992
79	6	-54.170	-13.995	-54.163	0.005	-13.995	-54.170	89.991
79	7	-55.977	-13.995	-55.970	0.005	-13.995	-55.977	89.992
79	8	-62.503	-13.995	-62.495	0.005	-13.995	-62.503	89.993
79	9	9.983	-13.995	9.983	0.005	9.983	-13.995	0.000
80	1	-68.231	-0.057	-68.224	-0.000	-0.057	-68.231	90.000
80	2	-68.074	-0.057	-68.068	-0.000	-0.057	-68.074	90.000
80	3	10.154	-13.944	10.154	-0.000	10.154	-13.944	180.000
80	4	-137.185	-0.057	-137.171	-0.000	-0.057	-137.185	90.000
80	5	-58.956	-13.944	-58.949	-0.000	-13.944	-58.956	90.000
80	6	-54.156	-13.944	-54.149	-0.000	-13.944	-54.156	90.001
80	7	-55.962	-13.944	-55.955	-0.000	-13.944	-55.962	90.001
80	8	-62.488	-13.944	-62.480	-0.000	-13.944	-62.488	90.000
80	9	9.997	-13.944	9.997	-0.000	9.997	-13.944	180.000
81	1	-68.287	-0.286	-68.281	0.000	-0.286	-68.287	90.000
81	2	-68.131	-0.286	-68.124	0.000	-0.286	-68.131	90.000
81	3	10.097	-14.180	10.097	-0.000	10.097	-14.180	180.000
81	4	-137.241	-0.287	-137.229	0.000	-0.287	-137.241	90.000
81	5	-59.012	-14.180	-59.006	-0.000	-14.180	-59.012	90.000
81	6	-54.211	-14.180	-54.206	-0.000	-14.180	-54.211	90.000
81	7	-56.018	-14.180	-56.012	-0.000	-14.180	-56.018	90.000
81	8	-62.544	-14.180	-62.537	-0.000	-14.180	-62.544	90.000

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MEMT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
59	9	9.988	-14.004	9.979	-0.005	9.988	-14.004	180.000
60	1	-68.233	-0.058	-68.221	0.000	-0.058	-68.233	89.999
[illegible]	2	-68.077	-0.058	-68.065	0.000	-0.058	-68.077	89.999
[illegible]	3	10.159	-13.958	10.150	-0.001	10.159	-13.958	180.000
60	4	-137.190	-0.058	-137.165	0.000	-0.058	-137.190	89.999
60	5	-58.954	-13.958	-58.950	-0.001	-13.958	-58.954	90.002
60	6	-54.153	-13.958	-54.150	-0.001	-13.958	-54.153	90.002
60	7	-55.960	-13.958	-55.957	-0.001	-13.958	-55.960	90.002
60	8	-62.486	-13.958	-62.482	-0.001	-13.958	-62.486	90.002
60	9	10.002	-13.958	9.993	-0.001	10.002	-13.958	180.000
61	1	-68.290	-0.286	-68.279	-0.000	-0.286	-68.290	90.000
61	2	-68.134	-0.286	-68.123	-0.000	-0.286	-68.134	90.000
61	3	10.101	-14.186	10.091	0.000	10.101	-14.186	0.000
61	4	-137.247	-0.286	-137.225	-0.000	-0.286	-137.247	90.000
61	5	-59.011	-14.186	-59.010	0.000	-14.186	-59.011	90.000
61	6	-54.210	-14.186	-54.210	0.000	-14.186	-54.210	90.000
61	7	-56.017	-14.186	-56.016	0.000	-14.186	-56.017	90.000
61	8	-62.543	-14.186	-62.541	0.000	-14.186	-62.543	90.000
61	9	9.945	-14.186	9.935	0.000	9.945	-14.186	0.000
62	1	-68.277	-0.233	-68.266	0.005	-0.233	-68.277	89.995
62	2	-68.121	-0.233	-68.110	0.005	-0.233	-68.121	89.995
62	3	10.114	-14.121	10.111	0.005	10.114	-14.121	0.000
62	4	-137.234	-0.233	-137.212	0.005	-0.233	-137.234	89.998
62	5	-58.998	-14.121	-58.990	0.005	-14.121	-58.998	89.993
62	6	-54.197	-14.121	-54.190	0.005	-14.121	-54.197	89.992
[illegible]	7	-56.004	-14.121	-55.996	0.005	-14.121	-56.004	89.993
[illegible]	8	-62.530	-14.121	-62.521	0.005	-14.121	-62.530	89.994
[illegible]	9	9.958	-14.121	9.955	0.005	9.958	-14.121	0.000
63	1	-68.247	-0.115	-68.236	0.005	-0.115	-68.247	89.995
63	2	-68.090	-0.115	-68.079	0.005	-0.115	-68.090	89.995
63	3	10.145	-14.003	10.135	0.005	10.145	-14.003	0.000
63	4	-137.203	-0.115	-137.181	0.004	-0.115	-137.203	89.998
63	5	-58.967	-14.003	-58.965	0.005	-14.003	-58.967	89.992
63	6	-54.165	-14.003	-54.165	0.005	-14.003	-54.165	89.991
63	7	-55.973	-14.003	-55.972	0.005	-14.003	-55.973	89.992
63	8	-62.499	-14.003	-62.497	0.005	-14.003	-62.499	89.993
63	9	9.988	-14.003	9.979	0.005	9.988	-14.003	0.000
64	1	-68.232	-0.057	-68.221	-0.000	-0.057	-68.232	90.000
64	2	-68.076	-0.057	-68.065	-0.000	-0.057	-68.076	90.000
64	3	10.152	-13.957	10.150	0.001	10.152	-13.957	0.000
64	4	-137.188	-0.057	-137.156	-0.000	-0.057	-137.188	90.000
64	5	-58.959	-13.957	-58.951	0.001	-13.957	-58.959	89.998
64	6	-54.158	-13.957	-54.151	0.001	-13.957	-54.158	89.997
64	7	-55.965	-13.957	-55.957	0.001	-13.957	-55.965	89.997
64	8	-62.491	-13.957	-62.482	0.001	-13.957	-62.491	89.998
64	9	9.996	-13.957	9.993	0.001	9.996	-13.957	0.000
65	1	-68.289	-0.286	-68.279	-0.000	-0.286	-68.289	90.000
65	2	-68.133	-0.286	-68.123	-0.000	-0.286	-68.133	90.000
[illegible]	3	10.102	-14.168	10.098	-0.000	10.102	-14.168	180.000

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LOAD COMB	R-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
4	-137.245	-0.286	-137.225	-0.000	-0.286	-137.245	90.000
5	-59.008	-14.168	-59.003	-0.000	-14.168	-59.008	90.000
6	-54.208	-14.168	-54.203	-0.000	-14.168	-54.208	90.000
7	-56.014	-14.168	-56.009	-0.000	-14.168	-56.014	90.000
8	-62.540	-14.168	-62.534	-0.000	-14.168	-62.540	90.000
9	9.946	-14.168	9.942	-0.000	9.946	-14.168	180.000
1	-68.276	-0.233	-68.266	-0.004	-0.233	-68.275	90.004
2	-68.120	-0.233	-68.110	-0.004	-0.233	-68.120	90.004
3	10.109	-14.122	10.104	-0.005	10.109	-14.122	180.000
4	-137.231	-0.233	-137.212	-0.004	-0.233	-137.231	90.002
5	-59.002	-14.122	-58.997	-0.005	-14.122	-59.002	90.006
6	-54.202	-14.122	-54.197	-0.005	-14.122	-54.202	90.007
7	-56.008	-14.122	-56.003	-0.005	-14.122	-56.008	90.007
8	-62.534	-14.122	-62.528	-0.005	-14.122	-62.534	90.006
9	9.952	-14.122	9.948	-0.005	9.952	-14.122	180.000
1	-68.247	-0.115	-68.237	-0.004	-0.115	-68.247	90.004
2	-68.090	-0.115	-68.081	-0.004	-0.115	-68.090	90.004
3	10.145	-14.003	10.140	-0.004	10.145	-14.003	180.000
4	-137.203	-0.115	-137.183	-0.005	-0.115	-137.203	90.002
5	-58.967	-14.003	-58.961	-0.004	-14.003	-58.967	90.006
6	-54.165	-14.003	-54.161	-0.004	-14.003	-54.165	90.006
7	-55.973	-14.003	-55.967	-0.004	-14.003	-55.973	90.006
8	-62.499	-14.003	-62.492	-0.004	-14.003	-62.499	90.005
9	9.988	-14.003	9.984	-0.004	9.988	-14.003	180.000
1	-68.232	-0.058	-68.222	0.000	-0.058	-68.232	89.999
2	-68.076	-0.058	-68.066	0.000	-0.058	-68.076	89.999
3	10.159	-13.939	10.155	0.002	10.159	-13.939	0.000
4	-137.188	-0.058	-137.169	0.000	-0.058	-137.188	89.999
5	-58.952	-13.940	-58.947	0.002	-13.940	-58.952	89.997
6	-54.151	-13.940	-54.146	0.002	-13.940	-54.151	89.996
7	-55.958	-13.940	-55.953	0.002	-13.940	-55.958	89.997
8	-62.484	-13.940	-62.478	0.002	-13.940	-62.484	89.997
9	10.003	-13.939	9.999	0.002	10.003	-13.939	0.000
1	-68.288	-0.286	-68.280	-0.000	-0.286	-68.288	90.000
2	-68.132	-0.296	-68.124	-0.000	-0.296	-68.132	90.000
3	10.103	-14.169	10.097	-0.000	10.103	-14.169	180.000
4	-137.243	-0.286	-137.226	-0.000	-0.286	-137.243	90.000
5	-59.007	-14.168	-59.004	-0.000	-14.168	-59.007	90.000
6	-54.206	-14.168	-54.204	-0.000	-14.168	-54.206	90.000
7	-56.013	-14.168	-56.010	-0.000	-14.168	-56.013	90.000
8	-62.539	-14.168	-62.535	-0.000	-14.168	-62.539	90.000
9	9.947	-14.168	9.941	-0.000	9.947	-14.168	180.000
1	-68.275	-0.233	-68.267	0.005	-0.233	-68.275	89.995
2	-68.119	-0.233	-68.111	0.005	-0.233	-68.119	89.995
3	10.109	-14.128	10.104	0.004	10.109	-14.128	0.000
4	-137.230	-0.233	-137.213	0.005	-0.233	-137.230	89.998
5	-59.001	-14.128	-58.998	0.004	-14.128	-59.001	89.994
6	-54.200	-14.128	-54.198	0.004	-14.128	-54.200	89.994
7	-56.007	-14.128	-56.004	0.004	-14.128	-56.007	89.994
8	-62.533	-14.128	-62.530	0.004	-14.128	-62.533	89.995

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
48	9	10.005	-13.944	9.990	-0.000	10.005	-13.944	180.000
49	1	-68.293	-0.286	-68.276	-0.000	-0.286	-68.293	90.000
	2	-68.136	-0.286	-68.120	-0.000	-0.286	-68.136	90.000
	3	10.099	-14.173	10.095	0.000	10.099	-14.173	0.000
49	4	-137.252	-0.286	-137.218	-0.000	-0.286	-137.252	90.000
49	5	-59.015	-14.173	-59.003	0.000	-14.173	-59.015	90.000
49	6	-54.215	-14.173	-54.203	0.000	-14.173	-54.215	90.000
49	7	-56.021	-14.173	-56.010	0.000	-14.173	-56.021	90.000
49	8	-62.548	-14.173	-62.534	0.000	-14.173	-62.548	90.000
49	9	9.943	-14.173	9.938	0.000	9.943	-14.173	0.000
50	1	-68.279	-0.233	-68.262	-0.004	-0.233	-68.279	90.004
50	2	-68.123	-0.233	-68.106	-0.004	-0.233	-68.123	90.004
50	3	10.112	-14.121	10.109	-0.004	10.112	-14.121	180.000
50	4	-137.238	-0.233	-137.204	-0.004	-0.233	-137.238	90.002
50	5	-59.002	-14.121	-58.988	-0.004	-14.121	-59.002	90.006
50	6	-54.202	-14.121	-54.189	-0.004	-14.121	-54.202	90.006
50	7	-56.008	-14.121	-55.995	-0.004	-14.121	-56.008	90.006
50	8	-62.534	-14.121	-62.520	-0.004	-14.121	-62.534	90.005
50	9	9.956	-14.121	9.952	-0.004	9.956	-14.121	180.000
51	1	-68.250	-0.115	-68.233	-0.004	-0.115	-68.250	90.004
51	2	-68.094	-0.115	-68.077	-0.004	-0.115	-68.094	90.004
51	3	10.141	-14.003	10.138	-0.004	10.141	-14.003	180.000
51	4	-137.210	-0.115	-137.175	-0.004	-0.115	-137.210	90.002
51	5	-58.974	-14.003	-58.960	-0.004	-14.003	-58.974	90.006
51	6	-54.172	-14.003	-54.160	-0.004	-14.003	-54.172	90.006
51	7	-55.980	-14.003	-55.967	-0.004	-14.003	-55.980	90.006
51	8	-62.506	-14.003	-62.491	-0.004	-14.003	-62.506	90.005
51	9	9.985	-14.003	9.981	-0.004	9.985	-14.003	180.000
52	1	-68.236	-0.058	-68.219	0.000	-0.058	-68.236	89.999
52	2	-68.079	-0.058	-68.063	0.000	-0.058	-68.079	89.999
52	3	10.156	-13.944	10.152	0.000	10.156	-13.944	0.000
52	4	-137.195	-0.058	-137.162	0.000	-0.058	-137.195	89.999
52	5	-58.959	-13.944	-58.947	0.000	-13.944	-58.959	89.999
52	6	-54.158	-13.944	-54.147	0.000	-13.944	-54.158	89.998
52	7	-55.965	-13.944	-55.953	0.000	-13.944	-55.965	89.999
52	8	-62.491	-13.944	-62.478	0.000	-13.944	-62.491	89.999
52	9	9.999	-13.944	9.995	0.000	10.000	-13.944	0.000
53	1	-68.291	-0.286	-68.277	-0.000	-0.286	-68.291	90.000
53	2	-68.135	-0.286	-68.120	-0.000	-0.286	-68.135	90.000
53	3	10.100	-14.173	10.094	0.000	10.100	-14.173	0.000
53	4	-137.249	-0.286	-137.220	-0.000	-0.286	-137.249	90.000
53	5	-59.013	-14.173	-59.004	0.000	-14.173	-59.013	90.000
53	6	-54.212	-14.173	-54.204	0.000	-14.173	-54.212	90.000
53	7	-56.019	-14.173	-56.011	0.000	-14.173	-56.019	90.000
53	8	-62.545	-14.173	-62.536	0.000	-14.173	-62.545	90.000
53	9	9.944	-14.173	9.938	0.000	9.944	-14.173	0.000
54	1	-68.278	-0.233	-68.264	0.005	-0.233	-68.278	89.995
54	2	-68.122	-0.233	-68.108	0.005	-0.233	-68.122	89.995
	3	10.113	-14.123	10.106	0.005	10.113	-14.123	0.000

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ZNT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
54	4	-137.236	-0.233	-137.208	0.005	-0.233	-137.236	89.997
54	5	-58.999	-14.123	-58.993	0.005	-14.123	-58.999	89.992
54	6	-54.199	-14.123	-54.193	0.005	-14.123	-54.199	89.992
54	7	-56.005	-14.123	-55.999	0.005	-14.123	-56.005	89.992
54	8	-62.532	-14.123	-62.524	0.005	-14.123	-62.532	89.993
54	9	9.957	-14.123	9.950	0.005	9.957	-14.123	0.000
55	1	-68.249	-0.115	-68.235	0.005	-0.115	-68.249	89.995
55	2	-68.093	-0.115	-68.079	0.005	-0.115	-68.093	89.995
55	3	10.143	-14.005	10.136	0.005	10.143	-14.005	0.000
55	4	-137.207	-0.115	-137.179	0.005	-0.115	-137.207	89.998
55	5	-58.971	-14.005	-58.963	0.005	-14.005	-58.971	89.993
55	6	-54.170	-14.005	-54.163	0.005	-14.005	-54.170	89.992
55	7	-55.977	-14.005	-55.970	0.005	-14.005	-55.977	89.992
55	8	-62.503	-14.005	-62.495	0.005	-14.005	-62.503	89.993
55	9	9.986	-14.005	9.979	0.005	9.986	-14.005	0.000
56	1	-68.234	-0.057	-68.220	-0.000	-0.057	-68.234	90.000
56	2	-68.078	-0.057	-68.063	-0.000	-0.057	-68.078	90.000
56	3	10.157	-13.944	10.151	-0.000	10.157	-13.944	180.000
56	4	-137.193	-0.057	-137.163	-0.000	-0.057	-137.193	90.000
56	5	-58.956	-13.944	-58.948	-0.000	-13.944	-58.956	90.001
56	6	-54.155	-13.944	-54.148	-0.000	-13.944	-54.155	90.001
56	7	-55.962	-13.944	-55.955	-0.000	-13.944	-55.962	90.001
56	8	-62.488	-13.944	-62.479	-0.000	-13.944	-62.488	90.000
56	9	10.001	-13.944	9.995	-0.000	10.001	-13.944	180.000
57	1	-68.291	-0.286	-68.279	-0.000	-0.286	-68.291	90.000
57	2	-68.135	-0.286	-68.122	-0.000	-0.286	-68.135	90.000
57	3	10.100	-14.186	10.092	0.000	10.100	-14.186	0.000
57	4	-137.249	-0.287	-137.224	-0.000	-0.287	-137.249	90.000
57	5	-59.013	-14.187	-59.009	0.000	-14.187	-59.013	90.000
57	6	-54.212	-14.187	-54.209	0.000	-14.187	-54.212	90.000
57	7	-56.019	-14.187	-56.015	0.000	-14.187	-56.019	90.000
57	8	-62.545	-14.187	-62.540	0.000	-14.187	-62.545	90.000
57	9	9.944	-14.186	9.936	0.000	9.944	-14.186	0.000
58	1	-68.278	-0.233	-68.265	-0.004	-0.233	-68.278	90.004
58	2	-68.122	-0.233	-68.109	-0.004	-0.233	-68.122	90.004
58	3	10.113	-14.123	10.105	-0.005	10.113	-14.123	180.000
58	4	-137.236	-0.233	-137.211	-0.004	-0.233	-137.236	90.002
58	5	-58.999	-14.123	-58.995	-0.004	-14.123	-58.999	90.006
58	6	-54.199	-14.123	-54.195	-0.004	-14.123	-54.199	90.007
58	7	-56.005	-14.123	-56.002	-0.004	-14.123	-56.005	90.007
58	8	-62.532	-14.123	-62.527	-0.004	-14.123	-62.532	90.006
58	9	9.957	-14.123	9.949	-0.005	9.957	-14.123	180.000
59	1	-68.247	-0.115	-68.235	-0.004	-0.115	-68.247	90.004
59	2	-68.091	-0.115	-68.079	-0.004	-0.115	-68.091	90.004
59	3	10.144	-14.004	10.136	-0.005	10.144	-14.004	180.000
59	4	-137.204	-0.115	-137.179	-0.004	-0.115	-137.204	90.002
59	5	-58.968	-14.004	-58.963	-0.005	-14.004	-58.968	90.007
59	6	-54.167	-14.004	-54.164	-0.005	-14.004	-54.167	90.007
59	7	-55.974	-14.004	-55.970	-0.005	-14.004	-55.974	90.007
59	8	-62.500	-14.004	-62.495	-0.005	-14.004	-62.500	90.006

MEM	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
37	9	9.950	-14.173	9.931	0.000	9.950	-14.173	0.000
38	1	-68.285	-0.233	-68.257	0.005	-0.233	-68.285	89.995
	2	-68.129	-0.233	-68.101	0.005	-0.233	-68.129	89.995
	3	10.120	-14.119	10.106	0.005	10.120	-14.119	0.000
38	4	-137.250	-0.234	-137.194	0.005	-0.234	-137.250	89.997
38	5	-59.000	-14.119	-58.986	0.005	-14.119	-59.000	89.993
38	6	-54.199	-14.119	-54.186	0.005	-14.119	-54.199	89.992
38	7	-56.006	-14.119	-55.992	0.005	-14.119	-56.006	89.992
38	8	-62.533	-14.119	-62.517	0.005	-14.119	-62.533	89.993
38	9	9.964	-14.119	9.950	0.005	9.964	-14.119	0.000
39	1	-68.256	-0.115	-68.228	0.005	-0.115	-68.256	89.995
39	2	-68.100	-0.115	-68.072	0.005	-0.115	-68.100	89.995
39	3	10.149	-14.001	10.136	0.005	10.149	-14.001	0.000
39	4	-137.222	-0.115	-137.165	0.004	-0.115	-137.222	89.998
39	5	-58.972	-14.001	-58.957	0.005	-14.001	-58.972	89.993
39	6	-54.170	-14.001	-54.157	0.005	-14.001	-54.170	89.992
39	7	-55.977	-14.001	-55.964	0.005	-14.001	-55.977	89.993
39	8	-62.504	-14.001	-62.488	0.005	-14.001	-62.504	89.993
39	9	9.993	-14.001	9.979	0.005	9.993	-14.001	0.000
40	1	-68.241	-0.057	-68.212	-0.000	-0.057	-68.241	90.000
40	2	-68.085	-0.057	-68.056	-0.000	-0.057	-68.085	90.000
40	3	10.164	-13.944	10.145	-0.000	10.164	-13.944	180.000
40	4	-137.206	-0.057	-137.148	-0.000	-0.057	-137.206	90.000
40	5	-58.956	-13.944	-58.947	-0.000	-13.944	-58.956	90.000
40	6	-54.155	-13.944	-54.147	-0.000	-13.944	-54.155	90.000
40	7	-55.962	-13.944	-55.954	-0.000	-13.944	-55.962	90.000
	8	-62.489	-13.944	-62.478	-0.000	-13.944	-62.489	90.000
	9	10.008	-13.944	9.988	-0.000	10.008	-13.944	180.000
41	1	-68.296	-0.287	-68.273	-0.000	-0.287	-68.296	90.000
41	2	-68.140	-0.287	-68.117	-0.000	-0.287	-68.140	90.000
41	3	10.102	-14.173	10.090	0.000	10.102	-14.173	0.000
41	4	-137.258	-0.287	-137.212	-0.000	-0.287	-137.258	90.000
41	5	-59.015	-14.173	-59.004	-0.000	-14.173	-59.015	90.000
41	6	-54.214	-14.173	-54.204	-0.000	-14.173	-54.214	90.000
41	7	-56.021	-14.173	-56.010	-0.000	-14.173	-56.021	90.000
41	8	-62.548	-14.173	-62.535	-0.000	-14.173	-62.548	90.000
41	9	9.946	-14.173	9.934	0.000	9.946	-14.173	0.000
42	1	-68.283	-0.233	-68.259	-0.004	-0.233	-68.283	90.004
42	2	-68.127	-0.233	-68.102	-0.004	-0.233	-68.127	90.004
42	3	10.116	-14.119	10.105	-0.004	10.116	-14.119	180.000
42	4	-137.245	-0.233	-137.197	-0.004	-0.233	-137.245	90.002
42	5	-59.002	-14.119	-58.988	-0.004	-14.119	-59.002	90.006
42	6	-54.201	-14.119	-54.189	-0.004	-14.119	-54.201	90.007
42	7	-56.008	-14.119	-55.995	-0.004	-14.119	-56.008	90.006
42	8	-62.534	-14.119	-62.519	-0.004	-14.119	-62.535	90.005
42	9	9.959	-14.119	9.949	-0.004	9.959	-14.119	180.000
43	1	-68.254	-0.115	-68.229	-0.004	-0.115	-68.254	90.004
43	2	-68.097	-0.115	-68.073	-0.004	-0.115	-68.097	90.004
43	3	10.145	-14.001	10.134	-0.004	10.145	-14.001	180.000

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NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
43	4	-137.217	-0.115	-137.168	-0.004	-0.115	-137.217	90.002
43	5	-58.974	-14.001	-58.960	-0.004	-14.001	-58.974	90.006
43	6	-54.172	-14.001	-54.160	-0.004	-14.001	-54.172	90.007
43	7	-55.979	-14.001	-55.967	-0.004	-14.001	-55.979	90.006
43	8	-62.506	-14.001	-62.491	-0.004	-14.001	-62.506	90.005
43	9	9.988	-14.001	9.978	-0.004	9.988	-14.001	180.000
44	1	-68.239	-0.058	-68.215	0.000	-0.058	-68.239	89.999
44	2	-68.083	-0.058	-68.060	0.000	-0.058	-68.083	89.999
44	3	10.159	-13.944	10.147	0.000	10.159	-13.944	0.000
44	4	-137.202	-0.058	-137.156	0.000	-0.058	-137.202	89.999
44	5	-58.959	-13.945	-58.947	0.000	-13.945	-58.959	89.999
44	6	-54.158	-13.945	-54.148	0.000	-13.945	-54.158	89.999
44	7	-55.965	-13.945	-55.954	0.000	-13.945	-55.965	89.999
44	8	-62.492	-13.945	-62.479	0.000	-13.945	-62.492	89.999
44	9	10.003	-13.944	9.991	0.000	10.003	-13.944	0.000
45	1	-68.294	-0.286	-68.274	-0.000	-0.286	-68.294	90.000
45	2	-68.138	-0.286	-68.118	-0.000	-0.286	-68.138	90.000
45	3	10.104	-14.173	10.090	0.000	10.104	-14.173	0.000
45	4	-137.254	-0.286	-137.214	-0.000	-0.286	-137.254	90.000
45	5	-59.011	-14.173	-59.006	-0.000	-14.173	-59.011	90.000
45	6	-54.211	-14.173	-54.206	-0.000	-14.173	-54.211	90.000
45	7	-56.017	-14.173	-56.012	-0.000	-14.173	-56.017	90.000
45	8	-62.543	-14.173	-62.537	-0.000	-14.173	-62.543	90.000
45	9	9.948	-14.173	9.934	0.000	9.948	-14.173	0.000
46	1	-68.281	-0.233	-68.261	0.005	-0.233	-68.281	89.995
46	2	-68.124	-0.233	-68.105	0.005	-0.233	-68.124	89.995
46	3	10.118	-14.121	10.109	0.005	10.118	-14.121	0.000
46	4	-137.241	-0.233	-137.202	0.005	-0.233	-137.241	89.997
46	5	-58.998	-14.121	-58.987	0.005	-14.121	-58.998	89.993
46	6	-54.197	-14.121	-54.187	0.005	-14.121	-54.197	89.992
46	7	-56.004	-14.121	-55.994	0.005	-14.121	-56.004	89.993
46	8	-62.530	-14.121	-62.518	0.005	-14.121	-62.530	89.994
46	9	9.961	-14.121	9.953	0.005	9.961	-14.121	0.000
47	1	-68.252	-0.115	-68.232	0.005	-0.115	-68.252	89.995
47	2	-68.095	-0.115	-68.076	0.005	-0.115	-68.095	89.995
47	3	10.147	-14.003	10.138	0.005	10.147	-14.003	0.000
47	4	-137.213	-0.115	-137.174	0.005	-0.115	-137.213	89.998
47	5	-58.970	-14.003	-58.959	0.005	-14.003	-58.970	89.993
47	6	-54.168	-14.003	-54.159	0.005	-14.003	-54.168	89.992
47	7	-55.975	-14.003	-55.965	0.005	-14.003	-55.975	89.993
47	8	-62.502	-14.003	-62.490	0.005	-14.003	-62.502	89.994
47	9	9.990	-14.003	9.982	0.005	9.990	-14.003	0.000
48	1	-68.237	-0.057	-68.217	-0.000	-0.057	-68.237	90.000
48	2	-68.081	-0.057	-68.061	-0.000	-0.057	-68.081	90.000
48	3	10.161	-13.944	10.147	-0.000	10.161	-13.944	180.000
48	4	-137.198	-0.057	-137.158	-0.000	-0.057	-137.198	90.000
48	5	-58.955	-13.944	-58.950	-0.000	-13.944	-58.955	90.000
48	6	-54.154	-13.944	-54.149	-0.000	-13.944	-54.154	90.000
48	7	-55.961	-13.944	-55.956	-0.000	-13.944	-55.961	90.000
48	8	-62.487	-13.944	-62.481	-0.000	-13.944	-62.487	90.000

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MENT	LOAD COMB	R-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	RZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
26	9	9.969	-14.122	9.940	-0.004	9.969	-14.122	180.000
27	1	-68.272	-0.115	-68.210	-0.005	-0.115	-68.272	90.004
	2	-68.115	-0.115	-68.054	-0.005	-0.115	-68.115	90.004
	3	10.154	-14.004	10.126	-0.004	10.154	-14.004	180.000
27	4	-137.253	-0.114	-137.129	-0.005	-0.114	-137.253	90.002
27	5	-58.982	-14.004	-58.948	-0.004	-14.004	-58.982	90.006
27	6	-54.179	-14.004	-54.150	-0.004	-14.004	-54.179	90.006
27	7	-55.987	-14.004	-55.956	-0.004	-14.004	-55.987	90.006
27	8	-62.515	-14.004	-62.478	-0.004	-14.004	-62.515	90.005
27	9	9.998	-14.004	9.970	-0.004	9.998	-14.004	180.000
28	1	-68.258	-0.058	-68.199	0.000	-0.058	-68.258	89.999
28	2	-68.101	-0.058	-68.043	0.000	-0.058	-68.101	89.999
28	3	10.168	-13.944	10.143	0.000	10.168	-13.944	0.000
28	4	-137.239	-0.058	-137.122	0.001	-0.058	-137.239	89.999
28	5	-58.968	-13.944	-58.935	0.000	-13.944	-58.968	89.999
28	6	-54.165	-13.944	-54.136	0.000	-13.944	-54.165	89.999
28	7	-55.973	-13.944	-55.942	0.000	-13.944	-55.973	89.999
28	8	-62.501	-13.944	-62.465	0.000	-13.944	-62.501	89.999
28	9	10.012	-13.944	9.987	0.000	10.012	-13.944	0.000
29	1	-68.307	-0.286	-68.260	-0.000	-0.286	-68.307	90.000
29	2	-68.151	-0.286	-68.104	-0.000	-0.286	-68.151	90.000
29	3	10.105	-14.174	10.090	0.000	10.105	-14.174	0.000
29	4	-137.281	-0.286	-137.186	-0.000	-0.286	-137.281	90.000
29	5	-59.024	-14.173	-58.992	-0.000	-14.173	-59.024	90.000
29	6	-54.222	-14.173	-54.193	-0.000	-14.173	-54.222	90.000
[illegible]	7	-56.029	-14.173	-55.999	-0.000	-14.173	-56.029	90.000
	8	-62.557	-14.173	-62.522	-0.000	-14.173	-62.557	90.000
[illegible]	9	9.949	-14.174	9.934	0.000	9.949	-14.174	0.000
30	1	-68.294	-0.234	-68.249	0.005	-0.234	-68.294	89.995
30	2	-68.138	-0.234	-68.093	0.005	-0.234	-68.138	89.995
30	3	10.118	-14.118	10.100	0.005	10.118	-14.118	0.000
30	4	-137.267	-0.234	-137.179	0.005	-0.234	-137.267	89.997
30	5	-59.011	-14.119	-58.984	0.005	-14.119	-59.011	89.993
30	6	-54.209	-14.119	-54.185	0.005	-14.119	-54.209	89.992
30	7	-56.016	-14.119	-55.991	0.005	-14.119	-56.016	89.992
30	8	-62.543	-14.119	-62.515	0.005	-14.119	-62.543	89.993
30	9	9.962	-14.118	9.944	0.005	9.962	-14.118	0.000
31	1	-68.265	-0.115	-68.220	0.005	-0.115	-68.265	89.995
31	2	-68.108	-0.115	-68.064	0.005	-0.115	-68.108	89.995
31	3	10.147	-14.000	10.129	0.005	10.147	-14.000	0.000
31	4	-137.239	-0.116	-137.150	0.004	-0.116	-137.239	89.998
31	5	-58.982	-14.000	-58.955	0.005	-14.000	-58.982	89.993
31	6	-54.180	-14.000	-54.156	0.005	-14.000	-54.180	89.992
31	7	-55.987	-14.000	-55.962	0.005	-14.000	-55.987	89.993
31	8	-62.515	-14.000	-62.486	0.005	-14.000	-62.515	89.994
31	9	9.991	-14.000	9.973	0.005	9.991	-14.000	0.000
32	1	-68.249	-0.057	-68.203	-0.000	-0.057	-68.249	90.000
32	2	-68.093	-0.057	-68.047	-0.000	-0.057	-68.093	90.000
[illegible]	3	10.163	-13.945	10.147	-0.000	10.163	-13.945	180.000

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ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
32	4	-137.223	-0.057	-137.130	0.000	-0.057	-137.223	90.000
32	5	-58.966	-13.944	-58.936	-0.000	-13.944	-58.966	90.000
32	6	-54.164	-13.944	-54.136	-0.000	-13.944	-54.164	90.000
32	7	-55.971	-13.944	-55.943	-0.000	-13.944	-55.971	90.000
32	8	-62.499	-13.944	-62.466	-0.000	-13.944	-62.499	90.000
32	9	10.006	-13.945	9.990	-0.000	10.006	-13.945	180.000
33	1	-68.302	-0.287	-68.267	-0.000	-0.287	-68.302	90.000
33	2	-68.145	-0.287	-68.111	-0.000	-0.287	-68.145	90.000
33	3	10.104	-14.173	10.090	0.000	10.104	-14.173	0.000
33	4	-137.270	-0.287	-137.200	-0.000	-0.287	-137.270	90.000
33	5	-59.020	-14.174	-58.999	-0.000	-14.174	-59.020	90.000
33	6	-54.218	-14.174	-54.199	-0.000	-14.174	-54.218	90.000
33	7	-56.026	-14.174	-56.006	-0.000	-14.174	-56.026	90.000
33	8	-62.553	-14.174	-62.530	-0.000	-14.174	-62.553	90.000
33	9	9.947	-14.173	9.934	0.000	9.947	-14.173	0.000
34	1	-68.288	-0.233	-68.252	-0.004	-0.233	-68.288	90.003
34	2	-68.132	-0.233	-68.096	-0.004	-0.233	-68.132	90.003
34	3	10.117	-14.119	10.104	-0.004	10.117	-14.119	180.000
34	4	-137.257	-0.233	-137.184	-0.004	-0.233	-137.257	90.001
34	5	-59.007	-14.118	-58.983	-0.004	-14.118	-59.007	90.006
34	6	-54.205	-14.118	-54.184	-0.004	-14.118	-54.205	90.006
34	7	-56.013	-14.118	-55.990	-0.004	-14.118	-56.013	90.006
34	8	-62.540	-14.118	-62.514	-0.004	-14.118	-62.540	90.005
34	9	9.961	-14.119	9.948	-0.004	9.961	-14.119	180.000
5	1	-68.259	-0.115	-68.223	-0.004	-0.115	-68.259	90.004
5	2	-68.103	-0.115	-68.067	-0.004	-0.115	-68.103	90.004
5	3	10.146	-14.000	10.134	-0.004	10.146	-14.000	180.000
5	4	-137.228	-0.115	-137.155	-0.005	-0.115	-137.228	90.002
5	5	-58.978	-14.000	-58.954	-0.004	-14.000	-58.978	90.006
5	6	-54.177	-14.000	-54.155	-0.004	-14.000	-54.177	90.007
5	7	-55.983	-14.000	-55.961	-0.004	-14.000	-55.983	90.006
5	8	-62.511	-14.000	-62.484	-0.004	-14.000	-62.511	90.006
5	9	9.990	-14.000	9.977	-0.004	9.990	-14.000	180.000
[illegible]	1	-68.245	-0.058	-68.211	0.000	-0.058	-68.245	89.999
[illegible]	2	-68.089	-0.058	-68.054	0.000	-0.058	-68.089	89.999
	3	10.160	-13.945	10.146	0.000	10.160	-13.945	0.000
	4	-137.214	-0.058	-137.145	0.000	-0.058	-137.214	89.999
	5	-58.964	-13.945	-58.943	0.000	-13.945	-58.964	89.999
	6	-54.163	-13.945	-54.144	0.000	-13.945	-54.163	89.999
	7	-55.969	-13.945	-55.950	0.000	-13.945	-55.969	89.999
	8	-62.497	-13.945	-62.474	0.000	-13.945	-62.497	89.999
	9	10.004	-13.945	9.990	0.000	10.004	-13.945	0.000
	1	-68.299	-0.286	-68.269	-0.000	-0.286	-68.299	90.000
	2	-68.143	-0.286	-68.113	-0.000	-0.285	-68.143	90.000
	3	10.106	-14.173	10.088	0.000	10.106	-14.173	0.000
	4	-137.264	-0.286	-137.204	-0.000	-0.286	-137.264	90.000
	5	-59.014	-14.173	-59.003	-0.000	-14.173	-59.014	90.000
	6	-54.213	-14.173	-54.204	-0.000	-14.173	-54.213	90.000
	7	-56.020	-14.173	-56.010	-0.000	-14.173	-56.020	90.000
	8	-62.546	-14.173	-62.534	-0.000	-14.173	-62.546	90.000

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
15	9	10.027	-14.004	9.942	0.006	10.027	-14.004	0.000
16	1	-68.324	-0.054	-68.118	0.004	-0.054	-68.324	89.996
	2	-68.167	-0.054	-67.962	0.004	-0.054	-68.167	89.996
	3	10.200	-13.943	10.100	-0.000	10.200	-13.943	180.000
16	4	-137.373	-0.050	-136.957	0.010	-0.050	-137.373	89.995
16	5	-59.005	-13.940	-58.895	0.004	-13.940	-59.005	89.994
16	6	-54.197	-13.940	-54.102	0.004	-13.940	-54.197	89.993
16	7	-56.007	-13.940	-55.906	0.004	-13.940	-56.007	89.994
16	8	-62.542	-13.940	-62.421	0.005	-13.940	-62.542	89.994
16	9	10.043	-13.943	9.944	-0.000	10.043	-13.943	180.000
17	1	-68.345	-0.287	-68.229	-0.000	-0.287	-68.345	90.000
17	2	-68.188	-0.287	-68.073	-0.000	-0.287	-68.188	90.000
17	3	10.123	-14.173	10.072	0.000	10.123	-14.173	0.000
17	4	-137.356	-0.288	-137.123	-0.001	-0.288	-137.356	90.000
17	5	-59.044	-14.174	-58.977	-0.000	-14.174	-59.044	90.000
17	6	-54.240	-14.174	-54.181	-0.000	-14.174	-54.240	90.000
17	7	-56.047	-14.174	-55.986	-0.000	-14.174	-56.047	90.000
17	8	-62.579	-14.174	-62.506	-0.000	-14.174	-62.579	90.000
17	9	9.967	-14.173	9.916	0.000	9.967	-14.173	0.000
18	1	-68.331	-0.232	-68.204	-0.002	-0.232	-68.331	90.002
18	2	-68.174	-0.232	-68.048	-0.002	-0.232	-68.174	90.002
18	3	10.137	-14.124	10.076	-0.005	10.137	-14.124	180.000
18	4	-137.342	-0.231	-137.088	-0.000	-0.231	-137.342	90.000
18	5	-59.029	-14.122	-58.963	-0.003	-14.122	-59.029	90.004
18	6	-54.224	-14.122	-54.167	-0.003	-14.122	-54.225	90.005
	7	-56.033	-14.122	-55.972	-0.003	-14.122	-56.033	90.004
	8	-62.564	-14.122	-62.491	-0.003	-14.122	-62.564	90.004
	9	9.981	-14.124	9.920	-0.005	9.981	-14.124	180.000
19	1	-68.302	-0.114	-68.175	-0.005	-0.114	-68.302	90.005
19	2	-68.145	-0.114	-68.019	-0.005	-0.114	-68.145	90.005
19	3	10.166	-14.006	10.112	-0.003	10.166	-14.006	180.000
19	4	-137.313	-0.113	-137.059	-0.007	-0.113	-137.313	90.003
19	5	-59.001	-14.004	-58.927	-0.005	-14.004	-59.001	90.006
19	6	-54.196	-14.005	-54.131	-0.005	-14.005	-54.196	90.007
19	7	-56.004	-14.005	-55.937	-0.005	-14.005	-56.004	90.007
19	8	-62.536	-14.004	-62.456	-0.005	-14.004	-62.536	90.006
19	9	10.010	-14.006	9.956	-0.003	10.010	-14.006	180.000
20	1	-68.289	-0.059	-68.172	0.001	-0.059	-68.289	89.998
20	2	-68.133	-0.059	-68.016	0.001	-0.059	-68.133	89.998
20	3	10.186	-13.944	10.129	0.000	10.186	-13.944	0.000
20	4	-137.301	-0.060	-137.067	0.002	-0.060	-137.301	89.999
20	5	-58.982	-13.945	-58.921	0.001	-13.945	-58.982	89.998
20	6	-54.177	-13.945	-54.124	0.001	-13.945	-54.177	89.998
20	7	-55.986	-13.945	-55.930	0.001	-13.945	-55.986	89.998
20	8	-62.517	-13.945	-62.450	0.001	-13.945	-62.517	89.998
20	9	10.029	-13.944	9.973	0.000	10.029	-13.944	0.000
21	1	-68.325	-0.286	-68.240	-0.000	-0.286	-68.325	90.000
21	2	-68.169	-0.286	-68.084	-0.000	-0.286	-68.169	90.000
	3	10.115	-14.174	10.075	0.000	10.115	-14.174	0.000

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E540

N°	LOAD COMB	Y-STRESS (RADIAL)	X-STRESS (AXIAL)	DELTA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
21	4	-137.317	-0.285	-137.145	-0.001	-0.285	-137.317	90.000
21	5	-59.032	-14.173	-58.886	-0.000	-14.173	-59.032	90.000
21	6	-54.229	-14.173	-54.188	-0.000	-14.173	-54.229	90.000
21	7	-56.036	-14.173	-55.994	-0.000	-14.173	-56.036	90.000
21	8	-62.566	-14.173	-62.515	-0.000	-14.173	-62.566	90.000
21	9	9.959	-14.174	9.919	0.000	9.959	-14.174	0.000
22	1	-68.313	-0.234	-68.233	0.005	-0.234	-68.313	89.995
22	2	-68.156	-0.234	-68.077	0.005	-0.234	-68.156	89.995
22	3	10.127	-14.121	10.089	0.004	10.127	-14.121	0.000
22	4	-137.305	-0.235	-137.145	0.006	-0.235	-137.305	89.997
22	5	-59.020	-14.122	-58.978	0.005	-14.122	-59.020	89.993
22	6	-54.217	-14.122	-54.180	0.005	-14.122	-54.217	89.992
2	7	-56.025	-14.122	-55.986	0.005	-14.122	-56.025	89.992
2	8	-62.554	-14.122	-62.508	0.005	-14.122	-62.554	89.993
2	9	9.971	-14.121	9.933	0.004	9.971	-14.121	0.000
3	1	-68.284	-0.116	-68.204	0.004	-0.116	-68.284	89.996
3	2	-68.127	-0.116	-68.047	0.004	-0.116	-68.127	89.996
3	3	10.157	-14.003	10.118	0.005	10.157	-14.003	0.000
3	4	-137.276	-0.116	-137.116	0.004	-0.116	-137.276	89.998
3	5	-58.992	-14.004	-58.950	0.004	-14.004	-58.992	89.993
3	6	-54.188	-14.004	-54.152	0.004	-14.004	-54.188	89.993
3	7	-55.996	-14.004	-55.957	0.004	-14.004	-55.996	89.993
3	8	-62.526	-14.004	-62.479	0.004	-14.004	-62.526	89.994
3	9	10.000	-14.003	9.962	0.005	10.000	-14.003	0.000
4	1	-68.268	-0.057	-68.183	0.000	-0.057	-68.268	89.999
4	2	-68.112	-0.057	-68.027	0.000	-0.057	-68.112	89.999
4	3	10.172	-13.945	10.132	-0.001	10.172	-13.945	180.000
4	4	-137.260	-0.056	-137.089	0.001	-0.056	-137.260	89.999
4	5	-58.976	-13.944	-58.929	-0.000	-13.944	-58.976	90.000
4	6	-54.172	-13.944	-54.132	-0.000	-13.944	-54.172	90.000
4	7	-55.980	-13.944	-55.938	-0.000	-13.944	-55.980	90.000
4	9	-62.510	-13.944	-62.459	-0.000	-13.944	-62.510	90.000
	9	10.015	-13.945	9.976	-0.001	10.015	-13.945	180.000
	1	-68.314	-0.287	-68.256	-0.000	-0.287	-68.314	90.000
	2	-68.158	-0.287	-68.100	-0.000	-0.287	-68.158	90.000
	3	10.112	-14.173	10.087	0.000	10.112	-14.173	0.000
	4	-137.295	-0.287	-137.178	-0.000	-0.287	-137.295	90.000
	5	-59.024	-14.173	-58.991	-0.000	-14.173	-59.024	90.000
	6	-54.222	-14.173	-54.192	-0.000	-14.173	-54.222	90.000
	7	-56.029	-14.173	-55.998	-0.000	-14.173	-56.029	90.000
	8	-62.558	-14.173	-62.521	-0.000	-14.173	-62.558	90.000
	9	9.956	-14.173	9.931	0.000	9.956	-14.173	0.000
	1	-68.301	-0.233	-68.239	-0.004	-0.233	-68.301	90.003
	2	-68.145	-0.233	-68.083	-0.004	-0.233	-68.145	90.003
	3	10.125	-14.122	10.097	-0.004	10.125	-14.122	180.000
	4	-137.281	-0.232	-137.157	-0.003	-0.232	-137.281	90.001
	5	-59.011	-14.122	-58.977	-0.004	-14.122	-59.011	90.005
	6	-54.208	-14.122	-54.179	-0.004	-14.122	-54.208	90.006
	7	-56.015	-14.122	-55.984	-0.004	-14.122	-56.015	90.005
	8	-62.544	-14.122	-62.507	-0.004	-14.122	-62.544	90.005

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ELEMENT	LOAD COMB	[illegible] (RADIAL)	[illegible] (AXIAL)	[illegible]-STRESS (HOOP)	[illegible]-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
4	9	9.682	-13.259	9.796	-0.180	9.684	-13.261	179.548
5	1	-68.663	-0.520	-67.727	0.277	-0.519	-68.664	89.766
	2	-68.506	-0.519	-67.572	0.277	-0.518	-68.507	89.766
	3	10.389	-13.343	10.024	-0.086	10.390	-13.343	179.790
5	4	-137.992	-0.762	-136.117	0.558	-0.760	-137.994	89.767
5	5	-59.096	-13.586	-58.520	0.194	-13.585	-59.097	89.755
5	6	-54.273	-13.569	-53.759	0.174	-13.568	-54.274	89.754
5	7	-56.085	-13.575	-55.551	0.182	-13.575	-56.086	89.754
5	8	-62.647	-13.598	-62.023	0.208	-13.597	-62.648	89.756
5	9	10.232	-13.343	9.869	-0.086	10.232	-13.344	179.790
6	1	-68.801	-0.240	-67.893	0.044	-0.240	-68.801	89.962
6	2	-68.643	-0.240	-67.738	0.044	-0.240	-68.643	89.962
6	3	10.286	-14.122	9.928	-0.040	10.286	-14.122	179.906
6	4	-138.282	-0.247	-136.463	0.084	-0.247	-138.282	89.965
6	5	-59.352	-14.129	-58.796	-0.000	-14.129	-59.352	90.000
6	6	-54.518	-14.128	-54.022	-0.003	-14.128	-54.518	90.004
6	7	-56.335	-14.129	-55.819	-0.002	-14.129	-56.335	90.003
6	8	-62.911	-14.129	-62.308	0.001	-14.129	-62.911	89.998
6	9	10.129	-14.122	9.772	-0.039	10.129	-14.122	179.905
7	1	-68.770	-0.114	-67.865	0.005	-0.114	-68.770	89.995
7	2	-68.613	-0.114	-67.709	0.005	-0.114	-68.613	89.995
7	3	10.317	-14.024	9.956	-0.036	10.317	-14.024	179.914
7	4	-138.252	-0.113	-136.435	0.005	-0.113	-138.252	89.997
7	5	-59.321	-14.023	-58.768	-0.035	-14.023	-59.321	90.046
7	6	-54.486	-14.023	-53.995	-0.036	-14.023	-54.486	90.051
	7	-56.304	-14.023	-55.791	-0.035	-14.023	-56.304	90.049
	8	-62.880	-14.023	-62.281	-0.036	-14.023	-62.880	90.043
	9	10.159	-14.024	9.801	-0.036	10.159	-14.024	179.913
8	1	-68.591	-0.301	-67.679	-0.265	-0.300	-68.592	90.223
8	2	-68.434	-0.300	-67.524	-0.265	-0.299	-68.435	90.223
8	3	10.315	-13.134	10.093	0.215	10.317	-13.136	0.525
8	4	-137.906	-0.546	-136.076	-0.531	-0.544	-137.908	90.221
8	5	-59.156	-13.380	-58.458	-0.051	-13.380	-59.156	90.064
8	6	-54.334	-13.363	-53.696	-0.032	-13.363	-54.334	90.046
8	7	-56.147	-13.370	-55.489	-0.039	-13.370	-56.147	90.053
8	8	-62.707	-13.393	-61.962	-0.064	-13.393	-62.707	90.075
8	9	10.158	-13.135	9.938	0.214	10.160	-13.137	0.527
9	1	-68.476	-0.289	-68.126	-0.004	-0.289	-68.476	90.004
9	2	-68.319	-0.289	-67.970	-0.004	-0.289	-68.319	90.004
9	3	10.208	-14.175	10.022	0.004	10.208	-14.175	0.000
9	4	-137.621	-0.291	-136.917	-0.009	-0.291	-137.621	90.004
9	5	-59.093	-14.178	-58.923	-0.000	-14.178	-59.093	90.000
9	6	-54.279	-14.177	-54.134	-0.000	-14.177	-54.279	90.000
9	7	-56.091	-14.178	-55.937	-0.000	-14.178	-56.091	90.000
9	8	-62.634	-14.178	-62.447	-0.000	-14.178	-62.634	90.000
9	9	10.051	-14.175	9.866	0.004	10.051	-14.175	0.000
10	1	-68.452	-0.201	-68.049	0.002	-0.201	-68.452	89.998
10	2	-68.295	-0.201	-67.893	0.002	-0.201	-68.295	89.998
	3	10.197	-14.126	10.009	0.031	10.197	-14.126	0.073

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ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
10	4	-137.584	-0.169	-136.775	0.038	-0.169	-137.584	89.996
10	5	-59.091	-14.093	-58.872	0.037	-14.093	-59.091	89.952
10	6	-54.278	-14.096	-54.088	0.036	-14.096	-54.278	89.947
10	7	-56.090	-14.095	-55.888	0.037	-14.095	-56.090	89.949
10	8	-62.632	-14.092	-62.392	0.037	-14.092	-62.633	89.955
10	9	10.040	-14.125	9.853	0.031	10.041	-14.125	0.074
11	1	-68.420	-0.075	-68.019	-0.036	-0.075	-68.420	90.030
11	2	-68.264	-0.075	-67.863	-0.036	-0.075	-68.264	90.030
11	3	10.221	-14.027	10.039	0.034	10.222	-14.027	0.081
11	4	-137.552	-0.035	-136.745	-0.069	-0.035	-137.552	90.029
11	5	-59.066	-13.987	-58.842	0.001	-13.987	-59.066	89.998
11	6	-54.253	-13.990	-54.058	0.003	-13.990	-54.253	89.995
11	7	-56.064	-13.989	-55.858	0.002	-13.989	-56.064	89.996
11	8	-62.607	-13.985	-62.363	-0.000	-13.985	-62.607	90.000
11	9	10.065	-14.027	9.883	0.034	10.065	-14.027	0.082
12	1	-68.406	-0.060	-68.068	0.001	-0.060	-68.406	89.999
12	2	-68.249	-0.060	-67.912	0.001	-0.050	-68.249	89.999
12	3	10.222	-13.944	10.080	0.001	10.222	-13.944	0.000
12	4	-137.537	-0.063	-136.858	0.001	-0.063	-137.537	89.999
12	5	-59.064	-13.947	-58.865	0.002	-13.947	-59.064	89.997
12	6	-54.251	-13.947	-54.076	0.002	-13.947	-54.251	89.997
12	7	-56.063	-13.947	-55.878	0.002	-13.947	-56.063	89.997
12	8	-62.605	-13.947	-62.389	0.002	-13.947	-62.605	89.997
12	9	10.065	-13.944	9.924	0.001	10.065	-13.944	0.000
13	1	-68.380	-0.279	-68.173	-0.004	-0.279	-68.380	90.004
13	2	-68.224	-0.279	-68.017	-0.004	-0.279	-68.224	90.004
13	3	10.143	-14.185	10.044	0.004	10.143	-14.185	0.000
13	4	-137.427	-0.271	-137.012	-0.009	-0.271	-137.427	90.004
13	5	-59.059	-14.177	-58.949	-0.000	-14.177	-59.059	90.000
13	6	-54.252	-14.177	-54.156	-0.000	-14.177	-54.252	90.000
13	7	-56.061	-14.177	-55.960	-0.000	-14.177	-56.061	90.000
13	8	-62.596	-14.176	-62.475	-0.000	-14.176	-62.596	90.000
13	9	9.987	-14.184	9.888	0.004	9.987	-14.184	0.000
14	1	-68.369	-0.235	-68.184	0.007	-0.235	-68.369	89.994
14	2	-68.212	-0.235	-68.027	0.007	-0.235	-68.212	89.994
14	3	10.155	-14.122	10.069	0.004	10.155	-14.122	0.000
14	4	-137.419	-0.238	-137.046	0.008	-0.238	-137.419	89.996
14	5	-59.051	-14.124	-58.948	0.006	-14.124	-59.051	89.991
14	6	-54.243	-14.124	-54.154	0.006	-14.124	-54.243	89.991
14	7	-56.053	-14.124	-55.958	0.006	-14.124	-56.053	89.991
14	8	-62.587	-14.125	-62.475	0.006	-14.125	-62.587	89.992
14	9	9.998	-14.122	9.913	0.004	9.998	-14.122	0.000
15	1	-68.340	-0.117	-68.154	0.003	-0.117	-68.340	89.997
15	2	-68.183	-0.117	-67.998	0.003	-0.117	-68.183	89.997
15	3	10.184	-14.004	10.098	0.006	10.184	-14.004	0.000
15	4	-137.390	-0.120	-137.017	0.001	-0.120	-137.390	89.999
15	5	-59.022	-14.006	-58.920	0.004	-14.006	-59.022	89.994
15	6	-54.215	-14.006	-54.126	0.004	-14.006	-54.215	89.993
15	7	-56.024	-14.006	-55.930	0.004	-14.006	-56.024	89.993
15	8	-62.559	-14.006	-62.447	0.004	-14.006	-62.559	89.994

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CASE 7 *
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LOAD CASE 8 *
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S REV 3.4 FINITE ELEMENT ANALYSIS

SYMETRIC 01/31/86 22:37:47

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RESSES *

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ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
1	1	-66.283	0.060	-67.206	0.277	0.061	-66.284	89.760
1	2	-66.131	0.059	-67.053	0.277	0.060	-66.132	89.760
1	3	9.791	-13.523	9.724	-0.086	9.792	-13.524	179.787
1	4	-133.216	0.403	-135.071	0.558	0.405	-133.218	89.760
1	5	-57.292	-13.180	-58.294	0.194	-13.179	-57.293	89.747
1	6	-52.632	-13.204	-53.569	0.174	-13.203	-52.633	89.746
1	7	-54.386	-13.195	-55.347	0.182	-13.194	-54.387	89.746
1	8	-60.721	-13.162	-61.770	0.208	-13.161	-60.722	89.748
1	9	9.640	-13.523	9.570	-0.086	9.640	-13.523	179.787
2	1	-65.957	-0.456	-69.009	-1.349	-0.428	-65.985	91.179
2	2	-65.806	-0.455	-68.851	-1.346	-0.427	-65.834	91.179
2	3	10.484	-9.738	10.760	0.181	10.486	-9.739	0.514
2	4	-132.565	-0.653	-138.698	-2.712	-0.597	-132.620	91.177
2	5	-56.273	-9.935	-59.087	-1.184	-9.905	-56.303	91.464
2	6	-51.636	-9.921	-54.236	-1.289	-9.893	-51.664	91.495
2	7	-53.381	-9.927	-55.061	-1.125	-9.897	-53.410	91.483
2	8	-59.684	-9.945	-62.656	-1.254	-9.914	-59.716	91.444
2	9	10.334	-9.738	10.602	0.178	10.335	-9.740	0.509
3	1	-65.934	-0.353	-68.995	1.360	-0.325	-65.962	88.812
3	2	-65.783	-0.353	-68.837	1.357	-0.324	-65.811	88.812
3	3	10.564	-9.594	11.003	-0.348	10.570	-9.600	179.009
3	4	-132.544	-0.552	-138.698	2.733	-0.496	-132.601	88.814
3	5	-56.197	-9.794	-58.857	1.027	-9.771	-56.220	88.732
3	6	-51.559	-9.780	-54.007	0.931	-9.760	-51.580	88.723
3	7	-53.305	-9.786	-55.831	0.967	-9.764	-53.326	88.727
3	8	-59.609	-9.804	-62.428	1.097	-9.780	-59.633	88.738
3	9	10.413	-9.595	10.845	-0.345	10.419	-9.601	179.011
4	1	-66.247	0.268	-67.175	-0.233	0.269	-66.249	90.244
4	2	-66.096	0.267	-67.021	-0.282	0.268	-66.097	90.244
4	3	9.834	-13.260	9.950	-0.180	9.835	-13.261	179.553
4	4	-133.197	0.598	-135.065	-0.573	0.600	-133.200	90.245
4	5	-57.267	-12.929	-58.093	-0.471	-12.924	-57.272	90.609
4	6	-52.605	-12.952	-53.366	-0.451	-12.947	-52.610	90.651
4	7	-54.360	-12.943	-55.145	-0.458	-12.938	-54.365	90.634
4	8	-60.696	-12.912	-61.570	-0.486	-12.907	-60.701	90.583

E537

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
164	4	-137.180	-0.058	-137.177	0.000	-0.058	-137.180	90.000
164	5	-58.951	-13.939	-58.947	0.002	-13.939	-58.951	89.997
[illegible]	6	-54.150	-13.939	-54.147	0.002	-13.939	-54.150	89.996
[illegible]	7	-55.957	-13.939	-55.954	0.002	-13.939	-55.957	89.996
164	8	-62.483	-13.939	-62.479	0.002	-13.939	-62.483	89.997
164	9	10.000	-13.939	10.002	0.002	10.000	-13.939	0.000
165	1	-68.285	-0.286	-68.284	0.000	-0.286	-68.285	90.000
165	2	-68.129	-0.286	-68.127	0.000	-0.286	-68.129	90.000
165	3	10.100	-14.168	10.101	-0.000	10.100	-14.168	180.000
165	4	-137.236	-0.286	-137.234	0.000	-0.286	-137.236	90.000
165	5	-59.007	-14.168	-59.004	-0.000	-14.168	-59.007	90.000
165	6	-54.206	-14.168	-54.204	-0.000	-14.168	-54.206	90.000
165	7	-56.013	-14.168	-56.011	-0.000	-14.168	-56.013	90.000
165	8	-62.539	-14.168	-62.536	-0.000	-14.168	-62.539	90.000
165	9	9.943	-14.168	9.945	-0.000	9.943	-14.168	180.000
166	1	-68.272	-0.233	-68.270	0.005	-0.233	-68.272	89.995
166	2	-68.115	-0.233	-68.114	0.005	-0.233	-68.115	89.995
166	3	10.113	-14.126	10.107	0.004	10.113	-14.126	0.000
166	4	-137.223	-0.233	-137.220	0.005	-0.233	-137.223	89.998
166	5	-58.994	-14.126	-58.998	0.004	-14.126	-58.994	89.994
166	6	-54.193	-14.126	-54.197	0.004	-14.126	-54.193	89.993
166	7	-56.000	-14.126	-56.004	0.004	-14.126	-56.000	89.993
166	8	-62.526	-14.126	-62.530	0.004	-14.126	-62.526	89.994
166	9	9.956	-14.126	9.951	0.004	9.956	-14.126	0.000
[illegible]	1	-68.243	-0.115	-68.241	0.005	-0.115	-68.243	89.995
[illegible]	2	-68.086	-0.115	-68.085	0.005	-0.115	-68.086	89.995
[illegible]	3	10.142	-14.008	10.136	0.004	10.142	-14.008	0.000
167	4	-137.195	-0.115	-137.191	0.005	-0.115	-137.195	89.998
167	5	-58.965	-14.008	-58.969	0.004	-14.008	-58.965	89.994
167	6	-54.165	-14.008	-54.169	0.004	-14.008	-54.165	89.994
167	7	-55.972	-14.008	-55.975	0.004	-14.008	-55.972	89.994
167	8	-62.497	-14.008	-62.501	0.004	-14.008	-62.497	89.995
167	9	9.986	-14.008	9.980	0.004	9.986	-14.008	0.000
168	1	-68.228	-0.057	-68.227	-0.000	-0.057	-68.228	90.000
168	2	-68.072	-0.057	-68.070	-0.000	-0.057	-68.072	90.000
168	3	10.156	-13.939	10.158	-0.002	10.156	-13.939	180.000
168	4	-137.180	-0.057	-137.177	-0.000	-0.057	-137.180	90.000
168	5	-58.951	-13.939	-58.947	-0.002	-13.939	-58.951	90.003
168	6	-54.150	-13.939	-54.147	-0.002	-13.939	-54.150	90.003
168	7	-55.957	-13.939	-55.954	-0.002	-13.939	-55.957	90.003
168	8	-62.483	-13.939	-62.479	-0.002	-13.939	-62.483	90.003
168	9	10.000	-13.939	10.002	-0.002	10.000	-13.939	180.000
169	1	-68.286	-0.286	-68.284	-0.000	-0.285	-68.286	90.000
169	2	-68.129	-0.285	-68.128	-0.000	-0.286	-68.129	90.000
169	3	10.099	-14.180	10.093	0.000	10.099	-14.180	0.000
169	4	-137.238	-0.286	-137.235	-0.000	-0.286	-137.238	90.000
169	5	-59.009	-14.180	-59.013	0.000	-14.180	-59.009	89.999
169	6	-54.208	-14.180	-54.212	0.000	-14.180	-54.208	89.999
[illegible]	7	-56.015	-14.180	-56.019	0.000	-14.180	-56.015	89.999
[illegible]	8	-62.540	-14.180	-62.544	0.000	-14.180	-62.540	89.999

3667

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
69	9	9.943	-14.180	9.937	0.000	9.943	-14.180	0.000
70	1	-68.272	-0.233	-68.271	-0.004	-0.233	-68.272	90.004
70	2	-68.116	-0.233	-68.115	-0.004	-0.233	-68.116	90.004
70	3	10.112	-14.126	10.106	-0.004	10.112	-14.126	180.000
70	4	-137.224	-0.233	-137.222	-0.004	-0.233	-137.224	90.002
70	5	-58.995	-14.126	-58.999	-0.004	-14.126	-58.995	90.005
70	6	-54.195	-14.126	-54.199	-0.004	-14.126	-54.195	90.005
70	7	-56.001	-14.126	-56.006	-0.004	-14.126	-56.001	90.006
70	8	-62.527	-14.126	-62.531	-0.004	-14.126	-62.527	90.005
70	9	9.956	-14.126	9.950	-0.004	9.956	-14.126	180.000
71	1	-68.242	-0.115	-68.240	-0.004	-0.115	-68.242	90.004
71	2	-68.086	-0.115	-68.084	-0.004	-0.115	-68.086	90.004
71	3	10.143	-14.007	10.137	-0.004	10.143	-14.007	180.000
71	4	-137.193	-0.115	-137.190	-0.004	-0.115	-137.193	90.002
71	5	-58.964	-14.007	-58.968	-0.004	-14.007	-58.964	90.006
1	6	-54.163	-14.007	-54.168	-0.004	-14.007	-54.163	90.006
1	7	-55.970	-14.007	-55.974	-0.004	-14.007	-55.970	90.006
1	8	-62.496	-14.007	-62.500	-0.004	-14.007	-62.496	90.005
1	9	9.986	-14.007	9.981	-0.004	9.986	-14.007	180.000
2	1	-68.227	-0.057	-68.225	0.000	-0.057	-68.227	89.999
2	2	-68.071	-0.057	-68.070	0.000	-0.057	-68.071	89.999
2	3	10.157	-13.951	10.152	-0.000	10.157	-13.951	180.000
2	4	-137.179	-0.057	-137.176	0.000	-0.057	-137.179	90.000
2	5	-58.949	-13.951	-58.954	-0.001	-13.951	-58.949	90.001
2	6	-54.149	-13.951	-54.153	-0.001	-13.951	-54.149	90.001
2	7	-55.956	-13.951	-55.960	-0.001	-13.951	-55.956	90.001
2	8	-62.481	-13.951	-62.485	-0.001	-13.951	-62.481	90.001
2	9	10.001	-13.951	9.995	-0.000	10.001	-13.951	180.000
3	1	-68.285	-0.286	-68.284	-0.000	-0.286	-68.285	90.000
3	2	-68.129	-0.286	-68.127	-0.000	-0.286	-68.129	90.000
3	3	10.093	-14.180	10.094	0.000	10.093	-14.180	0.000
3	4	-137.236	-0.287	-137.234	-0.000	-0.287	-137.236	90.000
3	5	-59.014	-14.180	-59.011	0.000	-14.180	-59.014	89.999
3	6	-54.213	-14.180	-54.211	0.000	-14.180	-54.213	89.999
3	7	-56.020	-14.180	-56.018	0.000	-14.180	-56.020	89.999
3	8	-62.545	-14.180	-62.543	0.000	-14.180	-62.546	89.999
3	9	9.936	-14.180	9.938	0.000	9.936	-14.180	0.000
	1	-68.272	-0.233	-68.270	0.005	-0.233	-68.272	89.995
	2	-68.115	-0.233	-68.114	0.005	-0.233	-68.115	89.995
	3	10.113	-14.114	10.114	0.006	10.113	-14.114	0.000
	4	-137.223	-0.233	-137.220	0.005	-0.233	-137.223	89.998
	5	-58.994	-14.114	-58.991	0.006	-14.114	-58.994	89.992
	6	-54.193	-14.114	-54.190	0.006	-14.114	-54.193	89.991
	7	-56.000	-14.114	-55.997	0.006	-14.114	-56.000	89.991
	8	-62.526	-14.114	-62.523	0.006	-14.114	-62.526	89.992
	9	9.956	-14.114	9.958	0.006	9.956	-14.114	0.000
	1	-68.243	-0.115	-68.241	0.005	-0.115	-68.243	89.995
	2	-68.086	-0.115	-68.085	0.005	-0.115	-68.086	89.995
	3	10.142	-13.995	10.143	0.006	10.142	-13.996	0.000

E568

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
175	4	-137.195	-0.115	-137.191	0.005	-0.115	-137.195	89.998
175	5	-58.965	-13.996	-58.962	0.006	-13.996	-58.965	89.992
[illegible]	6	-54.165	-13.996	-54.162	0.006	-13.996	-54.165	89.991
[illegible]	7	-55.972	-13.996	-55.968	0.006	-13.996	-55.972	89.991
[illegible]	8	-62.497	-13.996	-62.494	0.006	-13.996	-62.497	89.992
175	9	9.986	-13.996	9.987	0.006	9.986	-13.996	0.000
176	1	-68.228	-0.057	-68.227	-0.000	-0.057	-68.228	90.000
176	2	-68.072	-0.057	-68.070	-0.000	-0.057	-68.072	90.000
176	3	10.156	-13.951	10.151	0.000	10.156	-13.951	0.000
176	4	-137.179	-0.057	-137.177	-0.000	-0.057	-137.179	90.000
176	5	-58.950	-13.951	-58.954	0.000	-13.951	-58.950	89.999
176	6	-54.150	-13.951	-54.154	0.000	-13.951	-54.150	89.998
176	7	-55.956	-13.951	-55.961	0.000	-13.951	-55.956	89.999
176	8	-62.482	-13.951	-62.486	0.000	-13.951	-62.482	89.999
176	9	10.000	-13.951	9.995	0.000	10.000	-13.951	0.000
177	1	-68.285	-0.286	-68.284	0.000	-0.286	-68.285	90.000
177	2	-68.129	-0.286	-68.127	0.000	-0.286	-68.129	90.000
177	3	10.093	-14.178	10.094	-0.000	10.093	-14.178	180.000
177	4	-137.236	-0.287	-137.234	0.000	-0.287	-137.236	90.000
177	5	-59.014	-14.178	-59.011	-0.000	-14.178	-59.014	90.000
177	6	-54.213	-14.178	-54.211	-0.000	-14.178	-54.213	90.000
177	7	-56.020	-14.178	-56.018	-0.000	-14.178	-56.020	90.000
177	8	-62.546	-14.178	-62.543	-0.000	-14.178	-62.546	90.000
177	9	9.936	-14.178	9.938	-0.000	9.936	-14.178	180.000
178	1	-68.272	-0.233	-68.270	-0.004	-0.233	-68.272	90.004
[illegible]	2	-68.115	-0.233	-68.114	-0.004	-0.233	-68.115	90.004
[illegible]	3	10.113	-14.114	10.114	-0.006	10.113	-14.114	180.000
178	4	-137.223	-0.233	-137.220	-0.004	-0.233	-137.223	90.002
178	5	-58.994	-14.114	-58.991	-0.006	-14.114	-58.994	90.007
178	6	-54.193	-14.114	-54.190	-0.006	-14.114	-54.193	90.008
178	7	-56.000	-14.114	-55.997	-0.006	-14.114	-56.000	90.008
178	8	-62.526	-14.114	-62.523	-0.006	-14.114	-62.526	90.007
178	9	9.956	-14.114	9.958	-0.006	9.956	-14.114	180.000
179	1	-68.243	-0.115	-68.241	-0.004	-0.115	-68.243	90.004
179	2	-68.086	-0.115	-68.085	-0.004	-0.115	-68.086	90.004
179	3	10.142	-13.996	10.143	-0.005	10.142	-13.996	180.000
179	4	-137.194	-0.115	-137.191	-0.004	-0.115	-137.194	90.002
179	5	-58.965	-13.996	-58.962	-0.005	-13.996	-58.965	90.007
179	6	-54.165	-13.996	-54.162	-0.005	-13.996	-54.165	90.008
179	7	-55.971	-13.996	-55.968	-0.005	-13.996	-55.971	90.008
179	8	-62.497	-13.996	-62.494	-0.005	-13.996	-62.497	90.007
179	9	9.986	-13.996	9.987	-0.005	9.986	-13.996	180.000
180	1	-68.228	-0.058	-68.227	0.000	-0.058	-68.228	89.999
180	2	-68.072	-0.058	-68.070	0.000	-0.058	-68.072	89.999
180	3	10.156	-13.949	10.151	-0.000	10.156	-13.949	180.000
180	4	-137.179	-0.058	-137.177	0.000	-0.058	-137.179	89.999
180	5	-58.950	-13.949	-58.954	-0.000	-13.949	-58.950	90.000
180	6	-54.150	-13.949	-54.154	-0.000	-13.949	-54.150	90.000
[illegible]	7	-55.956	-13.949	-55.961	-0.000	-13.949	-55.956	90.000
[illegible]	8	-62.482	-13.949	-62.486	-0.000	-13.949	-62.482	90.000

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E569

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
80	9	10.000	-13.949	9.995	-0.000	10.000	-13.949	180.000
81	1	-68.286	-0.286	-68.284	0.000	-0.286	-68.286	90.000
81	2	-68.129	-0.286	-68.123	0.000	-0.286	-68.129	90.000
81	3	10.099	-14.177	10.093	-0.000	10.099	-14.177	180.000
81	4	-137.238	-0.286	-137.235	0.000	-0.286	-137.238	90.000
81	5	-59.009	-14.177	-59.013	-0.000	-14.177	-59.009	90.000
81	6	-54.208	-14.177	-54.212	-0.000	-14.177	-54.208	90.000
81	7	-56.015	-14.177	-56.019	-0.000	-14.177	-56.015	90.000
81	8	-62.540	-14.177	-62.544	-0.000	-14.177	-62.540	90.000
81	9	9.943	-14.177	9.937	-0.000	9.943	-14.177	180.000
82	1	-68.272	-0.233	-68.271	0.004	-0.233	-68.272	89.996
82	2	-68.116	-0.233	-68.115	0.004	-0.233	-68.116	89.996
82	3	10.112	-14.126	10.106	0.004	10.112	-14.126	0.000
82	4	-137.224	-0.233	-137.222	0.004	-0.233	-137.224	89.998
82	5	-58.995	-14.126	-58.999	0.004	-14.126	-58.995	89.994
82	6	-54.195	-14.126	-54.199	0.004	-14.126	-54.195	89.994
82	7	-56.002	-14.126	-56.006	0.004	-14.126	-56.002	89.994
82	8	-62.527	-14.126	-62.531	0.004	-14.126	-62.527	89.995
82	9	9.956	-14.126	9.950	0.004	9.956	-14.126	0.000
83	1	-68.242	-0.115	-68.240	0.004	-0.115	-68.242	89.996
83	2	-68.086	-0.115	-68.084	0.004	-0.115	-68.086	89.996
83	3	10.143	-14.008	10.137	0.004	10.143	-14.008	0.000
83	4	-137.193	-0.115	-137.190	0.004	-0.115	-137.193	89.998
83	5	-58.963	-14.008	-58.968	0.004	-14.008	-58.963	89.994
83	6	-54.163	-14.008	-54.168	0.004	-14.008	-54.163	89.993
83	7	-55.970	-14.008	-55.974	0.004	-14.008	-55.970	89.993
83	8	-62.495	-14.008	-62.500	0.004	-14.008	-62.495	89.994
83	9	9.986	-14.008	9.981	0.004	9.986	-14.008	0.000
84	1	-68.227	-0.057	-68.226	-0.000	-0.057	-68.227	90.000
84	2	-68.071	-0.057	-68.070	-0.000	-0.057	-68.071	90.000
84	3	10.157	-13.949	10.152	0.000	10.157	-13.949	0.000
84	4	-137.179	-0.057	-137.176	-0.000	-0.057	-137.179	90.000
84	5	-58.949	-13.949	-58.954	0.000	-13.949	-58.949	89.999
84	6	-54.149	-13.949	-54.153	0.000	-13.949	-54.149	89.999
84	7	-55.956	-13.949	-55.960	0.000	-13.949	-55.956	89.999
84	8	-62.481	-13.949	-62.485	0.000	-13.949	-62.481	89.999
84	9	10.001	-13.949	9.995	0.000	10.001	-13.949	0.000
85	1	-68.285	-0.286	-68.284	0.000	-0.286	-68.285	90.000
85	2	-68.129	-0.286	-68.127	0.000	-0.286	-68.129	90.000
85	3	10.100	-14.167	10.101	0.000	10.100	-14.167	0.000
85	4	-137.236	-0.286	-137.234	0.000	-0.286	-137.236	90.000
85	5	-59.007	-14.167	-59.004	0.000	-14.167	-59.007	90.000
85	6	-54.206	-14.167	-54.204	0.000	-14.167	-54.206	90.000
85	7	-56.013	-14.167	-56.011	0.000	-14.167	-56.013	90.000
85	8	-62.539	-14.167	-62.536	0.000	-14.167	-62.539	90.000
85	9	9.943	-14.167	9.945	0.000	9.943	-14.167	0.000
86	1	-68.272	-0.233	-68.270	-0.004	-0.233	-68.272	90.004
86	2	-68.115	-0.233	-68.114	-0.004	-0.233	-68.115	90.004
86	3	10.106	-14.126	10.107	-0.004	10.106	-14.126	180.000

E570

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
186	4	-137.223	-0.233	-137.220	-0.005	-0.233	-137.223	90.002
186	5	-59.001	-14.125	-58.998	-0.004	-14.126	-59.001	90.005
[illegible]	6	-54.200	-14.125	-54.197	-0.004	-14.125	-54.200	90.006
[illegible]	7	-56.007	-14.126	-56.004	-0.004	-14.125	-56.007	90.006
[illegible]	8	-62.533	-14.126	-62.530	-0.004	-14.126	-62.533	90.005
186	9	9.949	-14.126	9.951	-0.004	9.950	-14.126	180.000
187	1	-68.243	-0.115	-68.241	-0.004	-0.115	-68.243	90.004
187	2	-68.086	-0.115	-68.085	-0.004	-0.115	-68.086	90.004
187	3	10.142	-14.008	10.136	-0.003	10.142	-14.008	180.000
187	4	-137.194	-0.115	-137.192	-0.005	-0.115	-137.194	90.002
187	5	-58.965	-14.008	-58.970	-0.004	-14.008	-58.965	90.005
187	6	-54.165	-14.008	-54.169	-0.004	-14.008	-54.165	90.005
187	7	-55.971	-14.008	-55.976	-0.004	-14.008	-55.971	90.005
187	8	-62.497	-14.008	-62.501	-0.004	-14.008	-62.497	90.005
187	9	9.986	-14.008	9.980	-0.003	9.986	-14.008	180.000
188	1	-68.228	-0.057	-68.227	0.000	-0.057	-68.228	89.999
188	2	-68.072	-0.057	-68.070	0.000	-0.057	-68.072	89.999
188	3	10.156	-13.938	10.158	0.002	10.156	-13.938	0.000
188	4	-137.179	-0.058	-137.177	0.000	-0.058	-137.179	90.000
188	5	-58.950	-13.938	-58.948	0.002	-13.938	-58.950	89.996
188	6	-54.150	-13.938	-54.147	0.002	-13.938	-54.150	89.996
188	7	-55.956	-13.938	-55.954	0.002	-13.938	-55.956	89.996
188	8	-62.482	-13.938	-62.480	0.002	-13.938	-62.482	89.997
188	9	10.000	-13.938	10.002	0.002	10.000	-13.938	0.000
[illegible]	1	-68.285	-0.286	-68.284	0.000	-0.286	-68.285	90.000
[illegible]	2	-68.129	-0.286	-68.127	0.000	-0.286	-68.129	90.000
[illegible]	3	10.100	-14.167	10.101	0.000	10.100	-14.167	0.000
189	4	-137.236	-0.286	-137.234	0.000	-0.286	-137.236	90.000
189	5	-59.007	-14.167	-59.004	0.000	-14.167	-59.007	90.000
189	6	-54.206	-14.167	-54.204	0.000	-14.167	-54.206	90.000
189	7	-56.013	-14.167	-56.011	0.000	-14.167	-56.013	90.000
189	8	-62.539	-14.167	-62.536	0.000	-14.167	-62.539	90.000
189	9	9.943	-14.167	9.945	0.000	9.943	-14.167	0.000
190	1	-68.272	-0.233	-68.270	0.005	-0.233	-68.272	89.995
190	2	-68.115	-0.233	-68.114	0.005	-0.233	-68.115	89.995
190	3	10.106	-14.124	10.107	0.004	10.106	-14.124	0.000
190	4	-137.223	-0.233	-137.220	0.005	-0.233	-137.223	89.998
190	5	-59.001	-14.124	-58.998	0.004	-14.124	-59.001	89.994
190	6	-54.200	-14.124	-54.197	0.004	-14.124	-54.200	89.993
190	7	-56.007	-14.124	-56.004	0.004	-14.124	-56.007	89.993
190	8	-62.533	-14.124	-62.530	0.004	-14.124	-62.533	89.994
190	9	9.949	-14.124	9.951	0.004	9.950	-14.124	0.000
191	1	-68.243	-0.115	-68.241	0.005	-0.115	-68.243	89.995
191	2	-68.086	-0.115	-68.085	0.005	-0.115	-68.086	89.995
191	3	10.142	-14.007	10.136	0.004	10.142	-14.007	0.000
191	4	-137.194	-0.115	-137.192	0.005	-0.115	-137.194	89.998
191	5	-58.965	-14.007	-58.970	0.004	-14.007	-58.965	89.994
191	6	-54.165	-14.007	-54.169	0.004	-14.007	-54.165	89.994
[illegible]	7	-55.971	-14.007	-55.976	0.004	-14.007	-55.971	89.994
[illegible]	8	-62.497	-14.007	-62.501	0.004	-14.007	-62.497	89.995

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LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
9	9.986	-14.007	9.980	0.004	9.986	-14.007	0.000
1	-68.228	-0.057	-68.227	-0.000	-0.057	-68.228	90.000
2	-68.072	-0.057	-68.070	-0.000	-0.057	-68.072	90.000
192 3	10.156	-13.938	10.158	-0.002	10.156	-13.938	180.000
4	-137.179	-0.057	-137.177	-0.000	-0.057	-137.179	90.000
5	-58.950	-13.938	-58.948	-0.002	-13.938	-58.950	90.003
6	-54.150	-13.938	-54.147	-0.002	-13.938	-54.150	90.003
7	-55.956	-13.938	-55.954	-0.002	-13.938	-55.956	90.003
8	-62.482	-13.938	-62.480	-0.002	-13.938	-62.482	90.003
9	10.000	-13.938	10.002	-0.002	10.000	-13.938	180.000
1	-68.286	-0.286	-68.284	-0.000	-0.286	-68.286	90.000
2	-68.129	-0.286	-68.128	-0.000	-0.286	-68.129	90.000
3	10.099	-14.178	10.093	0.000	10.099	-14.178	0.000
4	-137.238	-0.286	-137.235	-0.000	-0.286	-137.238	90.000
193 5	-59.009	-14.178	-59.013	0.000	-14.178	-59.009	89.999
6	-54.208	-14.178	-54.213	0.000	-14.178	-54.208	89.999
7	-56.015	-14.178	-56.019	0.000	-14.178	-56.015	89.999
8	-62.540	-14.178	-62.544	0.000	-14.178	-62.540	89.999
9	9.943	-14.178	9.937	0.000	9.943	-14.178	0.000
1	-68.272	-0.233	-68.271	-0.004	-0.233	-68.272	90.004
2	-68.116	-0.233	-68.115	-0.004	-0.233	-68.116	90.004
3	10.112	-14.124	10.106	-0.004	10.112	-14.124	180.000
4	-137.224	-0.233	-137.222	-0.004	-0.233	-137.224	90.002
199 5	-58.995	-14.124	-58.999	-0.004	-14.124	-58.995	90.005
6	-54.195	-14.124	-54.199	-0.004	-14.124	-54.195	90.006
7	-56.002	-14.124	-56.006	-0.004	-14.124	-56.002	90.006
8	-62.527	-14.124	-62.531	-0.004	-14.124	-62.527	90.005
9	9.955	-14.124	9.950	-0.004	9.955	-14.124	180.000
1	-68.242	-0.115	-68.240	-0.004	-0.115	-68.242	90.004
2	-68.086	-0.115	-68.084	-0.004	-0.115	-68.086	90.004
3	10.143	-14.006	10.137	-0.004	10.143	-14.006	180.000
85 4	-137.193	-0.115	-137.190	-0.004	-0.115	-137.193	90.002
5	-58.963	-14.006	-58.968	-0.004	-14.006	-58.963	90.006
6	-54.163	-14.006	-54.158	-0.004	-14.006	-54.163	90.006
7	-55.970	-14.006	-55.974	-0.004	-14.006	-55.970	90.006
8	-62.495	-14.006	-62.500	-0.004	-14.006	-62.495	90.005
9	9.986	-14.006	9.981	-0.004	9.986	-14.006	180.000
1	-68.227	-0.058	-68.227	0.000	-0.058	-68.227	89.999
2	-68.071	-0.058	-68.070	0.000	-0.058	-68.071	89.999
196 3	10.157	-13.949	10.151	-0.000	10.157	-13.949	180.000
4	-137.178	-0.058	-137.177	0.000	-0.058	-137.178	89.999
5	-58.949	-13.949	-58.954	-0.000	-13.949	-58.949	90.001
6	-54.149	-13.949	-54.154	-0.000	-13.949	-54.149	90.001
7	-55.955	-13.949	-55.961	-0.000	-13.949	-55.955	90.001
8	-62.480	-13.949	-62.486	-0.000	-13.949	-62.480	90.001
9	10.001	-13.949	9.995	-0.000	10.001	-13.949	180.000
1	-68.285	-0.287	-68.284	-0.000	-0.287	-68.285	90.000
2	-68.129	-0.287	-68.127	-0.000	-0.287	-68.129	90.000
3	10.093	-14.178	10.094	0.000	10.093	-14.178	0.000

E572

T	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
7	4	-137.236	-0.287	-137.234	-0.000	-0.287	-137.236	90.000
7	5	-59.014	-14.178	-59.011	0.000	-14.178	-59.014	89.999
[illegible]	6	-54.213	-14.178	-54.211	0.000	-14.178	-54.213	89.999
[illegible]	7	-56.020	-14.178	-56.018	0.000	-14.178	-56.020	89.999
[illegible]	8	-62.546	-14.178	-62.543	0.000	-14.178	-62.546	89.999
7	9	9.936	-14.178	9.938	0.000	9.936	-14.178	0.000
8	1	-68.272	-0.235	-68.270	0.005	-0.235	-68.272	89.995
8	2	-68.115	-0.235	-68.114	0.005	-0.235	-68.115	89.995
8	3	10.113	-14.114	10.114	0.006	10.113	-14.114	0.000
8	4	-137.223	-0.236	-137.220	0.005	-0.236	-137.223	89.997
8	5	-58.994	-14.115	-58.991	0.006	-14.115	-58.994	89.992
8	6	-54.193	-14.115	-54.191	0.006	-14.115	-54.193	89.991
8	7	-56.000	-14.115	-55.997	0.006	-14.115	-56.000	89.991
8	8	-62.526	-14.115	-62.523	0.006	-14.115	-62.526	89.992
8	9	9.956	-14.114	9.958	0.006	9.956	-14.114	0.000
9	1	-68.243	-0.116	-68.241	0.004	-0.116	-68.243	89.996
9	2	-68.086	-0.116	-68.085	0.004	-0.116	-68.086	89.996
9	3	10.142	-13.995	10.143	0.006	10.142	-13.995	0.000
9	4	-137.194	-0.117	-137.192	0.004	-0.117	-137.194	89.998
9	5	-58.965	-13.996	-58.963	0.006	-13.996	-58.965	89.992
9	6	-54.165	-13.996	-54.162	0.006	-13.996	-54.165	89.991
9	7	-55.971	-13.996	-55.969	0.006	-13.996	-55.971	89.991
9	8	-62.497	-13.996	-62.494	0.006	-13.996	-62.497	89.993
9	9	9.986	-13.995	9.987	0.006	9.986	-13.995	0.000
0	1	-68.228	-0.058	-68.227	-0.000	-0.058	-68.228	90.000
[illegible]	2	-68.072	-0.058	-68.070	-0.000	-0.058	-68.072	90.000
[illegible]	3	10.156	-13.950	10.151	0.000	10.156	-13.950	0.000
0	4	-137.179	-0.058	-137.177	-0.000	-0.058	-137.179	90.000
0	5	-58.950	-13.950	-58.955	0.000	-13.950	-58.950	89.999
0	6	-54.149	-13.950	-54.154	0.000	-13.950	-54.149	89.999
0	7	-55.956	-13.950	-55.961	0.000	-13.950	-55.956	89.999
0	8	-62.482	-13.950	-62.487	0.000	-13.950	-62.482	89.999
0	9	10.000	-13.950	9.995	0.000	10.000	-13.950	0.000
1	1	-68.284	-0.295	-68.285	-0.001	-0.295	-68.284	90.001
1	2	-68.128	-0.295	-68.129	-0.001	-0.295	-68.128	90.001
1	3	10.093	-14.178	10.100	-0.000	10.093	-14.178	180.000
1	4	-137.235	-0.304	-137.236	-0.003	-0.304	-137.235	90.001
1	5	-59.013	-14.186	-59.007	-0.002	-14.186	-59.013	90.003
1	6	-54.212	-14.186	-54.207	-0.002	-14.186	-54.212	90.003
1	7	-56.019	-14.186	-56.013	-0.002	-14.186	-56.019	90.003
1	8	-62.544	-14.187	-62.539	-0.002	-14.187	-62.544	90.003
1	9	9.937	-14.178	9.943	-0.000	9.937	-14.178	180.000
2	1	-68.270	-0.234	-68.270	-0.005	-0.234	-68.270	90.004
2	2	-68.114	-0.234	-68.114	-0.005	-0.234	-68.114	90.004
2	3	10.114	-14.114	10.114	-0.006	10.114	-14.114	180.000
2	4	-137.220	-0.235	-137.220	-0.005	-0.235	-137.220	90.002
2	5	-58.991	-14.115	-58.991	-0.006	-14.115	-58.991	90.008
2	6	-54.191	-14.114	-54.190	-0.006	-14.114	-54.191	90.009
2	7	-55.997	-14.114	-55.997	-0.006	-14.114	-55.997	90.008
[illegible]	3	-62.523	-14.115	-62.523	-0.006	-14.115	-62.523	90.007

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E673

LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
9	9.958	-14.114	9.958	-0.006	9.958	-14.114	180.000
1	-68.241	-0.116	-68.241	-0.005	-0.116	-68.241	90.004
2	-68.085	-0.116	-68.085	-0.005	-0.116	-68.085	90.004
3	10.143	-13.994	10.143	-0.006	10.143	-13.994	180.000
4	-137.192	-0.117	-137.192	-0.006	-0.117	-137.192	90.002
203 5	-58.963	-13.995	-58.963	-0.006	-13.995	-58.963	90.008
6	-54.162	-13.995	-54.162	-0.006	-13.995	-54.162	90.009
7	-55.969	-13.995	-55.969	-0.006	-13.995	-55.969	90.009
8	-62.494	-13.995	-62.494	-0.006	-13.995	-62.494	90.008
9	9.987	-13.994	9.987	-0.006	9.987	-13.994	180.000
1	-68.231	-0.053	-68.227	-0.007	-0.053	-68.231	90.006
2	-68.074	-0.053	-68.070	-0.007	-0.053	-68.074	90.006
3	10.154	-13.948	10.151	-0.001	10.154	-13.948	180.000
204 4	-137.185	-0.049	-137.177	-0.015	-0.049	-137.185	90.006
5	-58.956	-13.944	-58.954	-0.009	-13.944	-58.956	90.012
6	-54.155	-13.944	-54.154	-0.009	-13.944	-54.155	90.013
7	-55.962	-13.944	-55.961	-0.009	-13.944	-55.962	90.013
8	-62.488	-13.944	-62.486	-0.010	-13.944	-62.488	90.012
9	9.997	-13.948	9.995	-0.001	9.997	-13.948	180.000
1	-68.269	-0.291	-68.282	-0.001	-0.291	-68.269	90.001
2	-68.113	-0.291	-68.126	-0.001	-0.291	-68.113	90.001
3	10.102	-14.177	10.095	-0.000	10.102	-14.177	180.000
205 4	-137.204	-0.296	-137.231	-0.003	-0.296	-137.204	90.001
5	-58.989	-14.182	-59.009	-0.002	-14.182	-58.989	90.003
6	-54.190	-14.181	-54.208	-0.002	-14.181	-54.190	90.003
7	-55.996	-14.181	-56.015	-0.002	-14.181	-55.996	90.003
8	-62.520	-14.182	-62.540	-0.002	-14.182	-62.520	90.003
9	9.945	-14.177	9.939	-0.000	9.945	-14.177	180.000
1	-68.265	-0.173	-68.258	-0.031	-0.173	-68.265	90.026
2	-68.109	-0.173	-68.102	-0.031	-0.173	-68.109	90.026
3	10.112	-14.112	10.113	-0.000	10.112	-14.112	180.000
4	-137.211	-0.112	-137.195	-0.067	-0.112	-137.211	90.028
206 5	-58.988	-14.051	-58.980	-0.036	-14.051	-58.988	90.047
6	-54.188	-14.056	-54.180	-0.034	-14.056	-54.188	90.049
7	-55.995	-14.054	-55.987	-0.035	-14.054	-55.995	90.048
8	-62.520	-14.048	-62.511	-0.038	-14.048	-62.520	90.046
9	9.956	-14.112	9.956	-0.000	9.956	-14.112	180.000
1	-68.240	-0.074	-68.232	-0.021	-0.074	-68.240	90.018
2	-68.084	-0.074	-68.076	-0.021	-0.074	-68.084	90.018
3	10.138	-13.997	10.138	0.002	10.138	-13.997	0.000
207 4	-137.189	-0.033	-137.174	-0.048	-0.033	-137.189	90.020
5	-58.967	-13.956	-58.959	-0.024	-13.956	-58.967	90.031
6	-54.166	-13.959	-54.159	-0.022	-13.959	-54.166	90.032
7	-55.973	-13.958	-55.965	-0.023	-13.957	-55.973	90.031
8	-62.498	-13.954	-62.490	-0.025	-13.954	-62.498	90.030
9	9.981	-13.997	9.982	0.002	9.981	-13.997	0.000
1	-68.252	-0.059	-68.231	0.002	-0.059	-68.252	89.998
2	-68.096	-0.059	-68.075	0.002	-0.059	-68.096	89.998
3	10.153	-13.948	10.153	0.001	10.153	-13.948	0.000

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NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
08	4	-137.228	-0.060	-137.187	0.004	-0.060	-137.228	89.998
08	5	-58.978	-13.949	-58.958	0.003	-13.949	-58.978	89.995
[illegible]	6	-54.176	-13.949	-54.157	0.003	-13.949	-54.176	89.995
[illegible]	7	-55.983	-13.949	-55.964	0.003	-13.949	-55.983	89.995
[illegible]	8	-62.511	-13.949	-62.490	0.003	-13.949	-62.511	89.995
08	9	9.997	-13.948	9.997	0.001	9.997	-13.948	0.000
09	1	-68.293	0.621	-68.105	0.263	0.622	-68.294	89.781
09	2	-68.137	0.619	-67.949	0.262	0.620	-68.138	89.781
09	3	10.098	-14.044	10.125	0.021	10.098	-14.044	0.050
09	4	-137.253	1.530	-136.876	0.527	1.532	-137.255	89.732
09	5	-59.017	-13.133	-58.800	0.286	-13.131	-59.019	89.642
09	6	-54.216	-13.197	-54.013	0.267	-13.196	-54.218	89.626
09	7	-56.023	-13.174	-55.814	0.274	-13.172	-56.024	89.633
09	8	-62.549	-13.085	-62.322	0.299	-13.083	-62.551	89.652
09	9	9.942	-14.042	9.970	0.022	9.942	-14.042	0.052
10	1	-68.302	-0.182	-68.267	0.037	-0.182	-68.302	89.968
10	2	-68.146	-0.182	-68.111	0.037	-0.182	-68.146	89.969
10	3	10.103	-14.116	10.111	0.000	10.103	-14.116	0.000
10	4	-137.284	-0.131	-137.213	0.079	-0.131	-137.284	89.967
10	5	-59.034	-14.064	-58.991	0.042	-14.064	-59.034	89.945
10	6	-54.231	-14.068	-54.190	0.039	-14.068	-54.231	89.943
10	7	-56.039	-14.067	-55.998	0.040	-14.066	-56.039	89.944
10	8	-62.567	-14.062	-62.523	0.044	-14.062	-62.567	89.947
10	9	9.947	-14.115	9.954	0.000	9.947	-14.115	0.000
11	1	-68.278	-0.084	-68.243	0.046	-0.083	-68.278	89.961
[illegible]	2	-68.122	-0.084	-68.086	0.046	-0.084	-68.122	89.961
[illegible]	3	10.127	-14.000	10.135	0.003	10.127	-14.000	0.000
11	4	-137.265	-0.052	-137.195	0.098	-0.052	-137.265	89.959
11	5	-59.015	-13.969	-58.972	0.055	-13.969	-59.015	89.930
11	6	-54.213	-13.971	-54.172	0.051	-13.971	-54.213	89.927
11	7	-56.020	-13.970	-55.979	0.052	-13.970	-56.020	89.928
11	8	-62.549	-13.967	-62.504	0.057	-13.967	-62.549	89.932
11	9	9.971	-14.000	9.979	0.003	9.971	-14.000	0.000
12	1	-68.152	-0.230	-68.246	0.290	-0.228	-68.153	89.755
12	2	-67.995	-0.229	-68.090	0.289	-0.228	-67.997	89.755
12	3	10.170	-13.993	10.145	0.070	10.170	-13.993	0.158
12	4	-137.027	-0.401	-137.215	0.579	-0.398	-137.029	89.757
12	5	-58.860	-14.165	-58.979	0.360	-14.162	-58.863	89.537
12	6	-54.065	-14.153	-54.177	0.340	-14.150	-54.068	89.511
12	7	-55.869	-14.157	-55.985	0.348	-14.154	-55.872	89.522
12	8	-62.388	-14.174	-62.512	0.375	-14.171	-62.391	89.554
12	9	10.014	-13.993	9.989	0.071	10.014	-13.994	0.170
13	1	-70.388	0.093	-68.645	0.263	0.094	-70.389	89.785
13	2	-70.227	0.093	-68.488	0.262	0.094	-70.228	89.785
13	3	9.932	-14.087	10.081	0.021	9.932	-14.087	0.051
13	4	-141.449	0.474	-137.953	0.527	0.475	-141.451	89.787
13	5	-61.290	-13.706	-59.383	0.286	-13.704	-61.291	89.655
13	6	-56.341	-13.733	-54.561	0.267	-13.731	-56.343	89.640
[illegible]	7	-58.202	-13.723	-56.374	0.274	-13.721	-58.204	89.646
[illegible]	8	-64.932	-13.686	-62.934	0.299	-13.684	-64.934	89.664

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	LOAD COMB	(RADIAL)	(AXIAL)	(HOOP)	(SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
3	9	9.770	-14.086	9.924	0.022	9.770	-14.086	0.053
4	1	-67.704	-0.673	-68.256	4.728	-0.341	-68.036	85.984
4	2	-67.549	-0.672	-68.100	4.717	-0.341	-67.891	85.984
4	3	9.922	-14.618	9.969	0.170	9.923	-14.619	0.397
4	4	-136.080	-1.102	-137.187	9.469	-0.441	-136.741	86.205
4	5	-58.608	-15.047	-59.118	4.921	-14.498	-59.157	83.533
4	6	-53.848	-15.020	-54.320	4.688	-14.485	-54.383	83.351
4	7	-55.639	-15.031	-56.125	4.712	-14.492	-55.179	83.467
4	8	-62.110	-15.067	-62.648	5.159	-14.505	-62.671	83.803
4	9	9.767	-14.619	9.813	0.131	9.768	-14.620	0.426
	1	-67.838	-1.223	-68.372	0.764	-1.215	-67.846	89.342
	2	-67.682	-1.221	-68.215	0.762	-1.212	-67.691	89.342
	3	10.108	-13.891	10.159	0.717	10.130	-13.913	1.711
	4	-136.382	-2.342	-137.454	1.506	-2.325	-136.399	89.356
	5	-58.591	-15.013	-59.079	1.461	-14.964	-58.640	88.092
	6	-53.819	-14.937	-54.270	1.406	-14.886	-53.870	87.930
	7	-55.615	-14.967	-56.080	1.426	-14.917	-55.665	87.993
	8	-62.101	-15.067	-62.617	1.502	-15.019	-62.149	88.172
	9	9.953	-13.894	10.002	0.719	9.975	-13.915	1.726
	1	-67.098	0.034	-67.975	-0.023	0.034	-67.098	90.020
	2	-66.944	0.034	-67.820	-0.023	0.034	-66.944	90.020
	3	10.548	-13.900	10.242	0.023	10.548	-13.900	0.054
	4	-134.926	0.126	-136.675	-0.047	0.126	-134.926	90.020
	5	-57.433	-13.808	-58.613	-0.001	-13.808	-57.433	90.001
	6	-52.713	-13.814	-53.830	0.000	-13.814	-52.713	89.999
	7	-54.490	-13.812	-55.630	-0.000	-13.812	-54.490	90.000
	8	-60.906	-13.803	-62.131	-0.001	-13.803	-60.906	90.002
	9	10.394	-13.900	10.086	0.022	10.394	-13.900	0.054
	1	-55.141	-3.534	-66.261	12.646	-0.602	-58.074	76.945
	2	-55.014	-3.527	-66.109	12.616	-0.601	-57.940	76.946
	3	7.557	-13.744	9.646	-1.809	7.709	-13.897	175.179
	4	-110.771	-6.688	-133.134	25.391	-0.824	-116.635	76.996
	5	-48.199	-16.906	-57.377	10.965	-13.446	-51.659	72.433
	6	-44.312	-16.678	-52.716	10.054	-13.407	-47.583	71.979
	7	-45.759	-16.760	-54.468	10.387	-13.424	-49.105	72.194
	8	-51.066	-17.077	-60.808	11.547	-13.469	-54.574	72.787
	9	7.430	-13.752	9.495	-1.779	7.578	-13.900	175.232
	1	-55.011	-3.056	-66.088	7.336	-2.040	-56.027	82.114
	2	-54.884	-3.050	-65.936	7.318	-2.036	-55.898	82.115
	3	7.584	-13.641	9.681	-1.210	7.653	-13.709	176.745
	4	-110.540	-5.851	-132.816	14.732	-3.817	-112.574	82.140
	5	-48.071	-16.442	-57.198	6.202	-15.259	-49.244	79.193
	6	-44.193	-16.249	-52.550	5.666	-15.144	-45.298	78.963
	7	-45.647	-16.322	-54.299	5.858	-15.195	-46.775	79.110
	8	-50.930	-16.583	-60.619	6.607	-15.356	-52.157	79.478
	9	7.458	-13.647	9.529	-1.193	7.525	-13.714	176.775
	1	-53.912	2.787	-64.742	7.015	3.643	-54.757	83.050
	2	-53.789	2.780	-64.594	6.998	3.633	-54.642	83.051
	3	8.022	-15.396	9.489	-1.959	8.187	-15.561	175.190

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NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
19	4	-108.374	5.851	-130.128	14.126	7.572	-110.095	83.053
19	5	-46.562	-12.025	-56.045	5.168	-11.269	-47.319	81.668
19	6	-42.774	-12.242	-51.495	4.670	-11.544	-43.473	81.494
[redacted]	7 214	-44.201	-12.162	-53.298	4.856	-11.442	-44.921	81.567
	8	-49.346	-11.865	-59.392	5.536	-11.064	-50.147	81.770
19	9	7.899	-15.089	9.340	-1.943	8.062	-15.252	175.202
20	1	-54.045	2.237	-64.857	3.051	2.402	-54.210	86.906
20	2	-53.922	2.231	-64.709	3.044	2.396	-54.086	86.906
20	3	8.204	-14.370	9.672	-1.412	8.292	-14.458	176.433
20	4 220	-108.675	4.610	-130.394	6.164	4.944	-109.010	86.894
20	5	-46.548	-11.991	-56.012	1.707	-11.907	-46.632	87.177
20	6	-42.749	-12.160	-51.452	1.488	-12.087	-42.821	87.220
20	7	-44.180	-12.098	-53.168	1.570	-12.021	-44.257	87.204
20	8	-49.341	-11.865	-59.367	1.869	-11.772	-49.434	87.150
20	9	8.081	-14.364	9.524	-1.405	8.168	-14.452	176.431
21	1	-54.989	-1.908	-65.813	2.621	-1.779	-55.118	87.179
21	2	-54.864	-1.903	-65.662	2.614	-1.774	-54.993	87.180
21	3	9.157	-13.608	10.011	-0.430	9.165	-13.616	178.918
21	4 221	-110.615	-3.775	-132.334	5.260	-3.516	-110.874	87.188
21	5	-46.594	-15.479	-56.661	2.215	-15.323	-46.751	85.947
21	6	-42.739	-15.340	-52.031	2.011	-15.194	-42.886	85.824
21	7	-44.197	-15.389	-53.774	2.079	-15.240	-44.347	85.892
21	8	-49.421	-15.586	-60.066	2.375	-15.420	-49.587	86.003
21	9	9.031	-13.613	9.860	-0.423	9.039	-13.621	178.930
22	1	-36.413	-3.302	-62.224	9.558	-0.741	-38.974	75.000
[redacted]	2	-36.329	-3.288	-62.080	9.535	-0.734	-38.883	75.003
	3	5.367	-14.177	9.058	-1.547	5.489	-14.299	175.500
22	4 222	-73.124	-6.085	-124.989	19.184	-0.983	-78.226	75.107
22	5	-31.427	-16.974	-53.851	8.101	-13.344	-35.057	65.866
22	6	-28.840	-16.644	-49.447	7.413	-13.143	-32.341	64.720
22	7	-29.801	-16.712	-51.090	7.664	-13.178	-33.335	65.245
22	8	-33.345	-17.283	-57.107	8.616	-13.535	-37.093	66.493
22	9	5.282	-14.191	8.914	-1.524	5.401	-14.309	175.549
23	1	-36.333	-3.017	-62.106	7.374	-1.457	-37.892	78.059
23	2	-36.249	-3.005	-61.962	7.358	-1.449	-37.804	78.060
23	3 223	5.392	-14.082	9.092	-1.281	5.476	-14.166	176.250
23	4	-72.990	-5.626	-124.781	14.800	-2.517	-76.098	78.139
23	5	-31.349	-16.703	-53.726	6.159	-14.456	-33.595	69.965
23	6	-28.774	-16.418	-49.336	5.647	-14.225	-30.966	68.783
23	7	-29.733	-16.483	-50.978	5.842	-14.275	-31.941	69.296
23	8	-33.254	-16.962	-56.967	6.534	-14.656	-35.551	70.632
23	9	5.308	-14.094	8.949	-1.265	5.390	-14.176	176.284
24	1	-39.379	0.444	-62.127	11.474	3.513	-42.448	75.023
24	2 229	-39.288	0.442	-61.985	11.448	3.505	-42.351	75.023
24	3	5.790	-14.192	9.174	-1.759	5.944	-14.345	175.007
24	4	-79.131	1.298	-124.835	23.056	7.438	-85.272	75.086
24	5	-34.052	-13.336	-53.675	9.849	-9.401	-37.987	68.221
24	6	-31.276	-13.389	-49.306	9.047	-9.610	-35.054	67.333
24	7	-32.317	-13.366	-50.949	9.351	-9.529	-36.155	67.688
[redacted]	8	-36.099	-13.301	-56.891	10.435	-9.245	-40.154	68.763

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LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
9	5.699	-14.190	9.031	-1.733	5.849	-14.340	175.056
1	-39.248	0.922	-61.354	5.164	1.847	-40.173	81.468
2	-39.158	0.919	-61.213	5.151	1.842	-40.081	81.468
3	5.817	-14.088	9.207	-1.160	5.885	-14.156	175.674
4	-78.900	2.135	-124.519	12.398	3.989	-80.755	81.493
5	-33.924	-12.873	-53.498	5.086	-11.708	-35.088	77.104
6	-31.157	-12.960	-49.141	4.659	-11.836	-32.281	76.440
7	-32.196	-12.928	-50.781	4.823	-11.788	-33.336	76.702
8	-35.962	-12.807	-56.704	5.396	-11.611	-37.159	77.503
9	5.727	-14.085	9.065	-1.146	5.793	-14.152	176.698
1	-41.066	-1.494	-62.668	4.409	-1.009	-41.551	83.718
2	-40.972	-1.490	-62.525	4.398	-1.006	-41.456	83.719
3	6.078	-13.878	9.287	-0.888	6.117	-13.917	177.457
4	-82.574	-2.774	-125.968	8.855	-1.804	-83.545	83.743
5	-35.523	-15.163	-54.156	3.568	-14.555	-36.130	80.341
6	-32.637	-15.046	-49.744	3.248	-14.465	-33.218	79.863
7	-33.725	-15.078	-51.402	3.364	-14.490	-34.314	80.077
8	-37.644	-15.262	-57.404	3.808	-14.632	-38.274	80.602
9	5.984	-13.882	9.143	-0.877	6.023	-13.921	177.476
1	-41.034	-1.374	-62.627	1.466	-1.320	-41.088	87.885
2	-40.941	-1.372	-62.483	1.460	-1.318	-40.995	87.888
3	6.101	-13.794	9.321	-0.359	6.108	-13.801	178.965
4	-82.537	-2.644	-125.913	2.952	-2.535	-82.646	87.886
5	-35.494	-15.067	-54.108	1.132	-15.004	-35.557	86.837
6	-32.618	-14.984	-49.706	0.991	-14.929	-32.673	86.791
7	-33.706	-15.018	-51.364	1.029	-14.961	-33.762	86.856
8	-37.604	-15.124	-57.344	1.253	-15.055	-37.674	86.818
9	6.008	-13.797	9.178	-0.354	6.014	-13.803	178.975
1	-41.140	1.589	-62.168	2.051	1.688	-41.238	87.257
2	-41.048	1.586	-62.026	2.047	1.684	-41.146	87.257
3	6.201	-14.351	9.250	-0.561	6.215	-14.367	178.436
4	-82.764	3.259	-125.006	4.137	3.458	-82.963	87.252
5	-35.514	-12.678	-53.728	1.528	-12.576	-35.616	86.187
6	-32.668	-12.793	-49.364	1.392	-12.696	-32.765	86.011
7	-33.760	-12.750	-51.011	1.447	-12.650	-33.859	86.077
8	-37.583	-12.593	-56.934	1.624	-12.488	-37.689	86.295
9	6.109	-14.348	9.109	-0.557	6.124	-14.363	178.441
1	-28.136	-3.449	-60.186	7.655	-1.268	-30.318	74.096
2	-28.077	-3.415	-60.044	7.644	-1.238	-30.254	74.102
3	4.569	-14.111	8.844	-1.622	4.709	-14.250	175.073
4	-56.443	-6.366	-120.881	15.329	-2.046	-60.763	74.261
5	-23.796	-17.061	-51.992	6.062	-13.493	-27.364	59.523
6	-22.911	-16.361	-47.685	5.640	-12.850	-25.422	58.100
7	-22.556	-16.421	-49.273	5.844	-12.914	-26.163	59.037
8	-25.140	-17.817	-55.199	6.320	-14.174	-28.782	60.044
9	4.510	-14.144	8.702	-1.611	4.648	-14.282	175.100
1	-28.057	-3.159	-60.077	6.363	-1.625	-29.592	75.453
2	-27.998	-3.129	-59.935	6.365	-1.594	-29.533	75.446
3	4.568	-14.118	8.848	-1.392	4.671	-14.222	175.760

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
30	4	-56.308	-5.883	-120.686	12.712	-2.860	-59.332	76.621
30	5	-23.741	-15.873	-51.901	4.954	-14.279	-26.335	62.363
30	6	-21.872	-16.234	-47.613	4.718	-13.557	-24.550	60.427
[illegible]	7	-22.616	-16.291	-49.198	4.391	-13.629	-25.278	61.441
[illegible]	8	-25.068	-17.559	-55.091	5.028	-15.039	-27.589	63.373
30	9	4.509	-14.149	8.707	-1.389	4.612	-14.252	175.754
31	1	-30.115	-1.664	-60.335	8.977	0.931	-32.712	73.872
31	2	-30.049	-1.655	-60.196	8.961	0.936	-32.641	73.969
31	3	4.605	-14.376	8.830	-1.473	4.719	-14.490	175.589
31	4	-60.476	-2.797	-121.196	18.006	2.362	-65.636	74.010
31	5	-25.822	-15.518	-52.169	7.572	-11.511	-29.828	62.115
31	6	-23.745	-15.320	-47.915	7.023	-11.342	-27.723	60.477
31	7	-24.542	-15.346	-49.509	7.262	-11.348	-28.540	61.169
31	8	-27.331	-15.721	-55.307	7.936	-11.693	-31.359	63.091
31	9	4.538	-14.385	8.691	-1.456	4.650	-14.497	175.623
32	1	-30.035	-1.380	-60.218	6.794	0.149	-31.564	77.314
32	2	-29.969	-1.373	-60.079	6.784	0.154	-31.497	77.307
32	3	4.630	-14.281	8.861	-1.206	4.707	-14.358	176.363
32	4	-60.343	-2.338	-120.989	13.622	0.701	-63.383	77.420
32	5	-25.743	-15.246	-52.047	5.630	-12.797	-28.192	66.493
32	6	-23.679	-15.093	-47.809	5.258	-12.598	-26.174	64.613
32	7	-24.474	-15.115	-49.400	5.440	-12.618	-26.971	65.348
32	8	-27.240	-15.400	-55.170	5.855	-12.994	-29.646	67.657
32	9	4.564	-14.288	8.723	-1.196	4.640	-14.364	176.382
33	1	-31.728	-1.629	-60.434	4.813	-0.878	-32.479	81.131
33	2	-31.652	-1.616	-60.293	4.814	-0.863	-32.405	81.113
[illegible]	3	4.657	-13.963	8.911	-1.223	4.737	-14.043	176.257
[illegible]	4	-63.795	-2.938	-121.455	9.601	-1.459	-65.274	81.244
33	5	-27.484	-15.285	-52.249	3.563	-14.320	-28.449	74.852
33	6	-25.197	-15.015	-47.954	3.434	-13.965	-26.248	72.997
33	7	-26.036	-15.044	-49.551	3.566	-13.988	-27.092	73.509
33	8	-29.193	-15.569	-55.431	3.560	-14.695	-30.067	76.203
33	9	4.581	-13.975	8.770	-1.223	4.662	-14.056	176.244
34	1	-31.659	-1.368	-60.352	3.130	-1.047	-31.979	84.150
34	2	-31.584	-1.358	-60.212	3.131	-1.037	-31.906	84.146
34	3	4.646	-14.015	8.907	-0.891	4.688	-14.057	177.270
34	4	-63.690	-2.507	-121.314	6.243	-1.876	-64.311	84.232
34	5	-27.449	-15.163	-52.194	2.219	-14.774	-27.838	80.066
34	6	-25.179	-14.959	-47.916	2.148	-14.526	-25.612	78.597
34	7	-26.017	-14.985	-49.513	2.234	-14.550	-26.452	78.971
34	8	-29.139	-15.373	-55.358	2.201	-15.029	-29.482	81.130
34	9	4.571	-14.024	8.767	-0.892	4.614	-14.067	177.258
35	1	-32.458	0.712	-60.239	4.370	1.278	-33.024	82.618
35	2	-32.379	0.713	-60.100	4.365	1.279	-32.946	82.609
35	3	4.527	-14.275	8.859	-0.787	4.560	-14.307	177.606
35	4	-65.310	1.652	-121.096	8.759	2.779	-66.437	82.669
35	5	-28.403	-13.335	-52.136	3.606	-12.517	-29.222	77.209
35	6	-26.039	-13.353	-47.874	3.392	-12.503	-26.889	75.331
35	7	-26.898	-13.327	-49.468	3.510	-12.472	-27.752	76.323
[illegible]		-30.178	-13.346	-55.284	3.719	-12.561	-30.964	78.077

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LOAD COMB	R-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	RZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
9	4.448	-14.275	8.720	-0.782	4.481	-14.308	177.611
1	-32.425	0.832	-60.198	1.427	0.893	-32.487	87.546
2	-32.348	0.831	-60.059	1.429	0.892	-32.409	87.540
3	4.550	-14.191	8.892	-0.258	4.553	-14.194	179.203
4	-65.273	1.782	-121.042	2.857	1.303	-65.394	87.564
5	-28.374	-13.239	-52.089	1.170	-13.150	-29.464	85.505
6	-26.020	-13.291	-47.837	1.134	-13.191	-26.120	84.944
7	-26.878	-13.266	-49.431	1.174	-13.165	-26.979	85.194
8	-30.139	-13.208	-55.225	1.164	-13.128	-30.219	86.083
9	4.472	-14.189	8.754	-0.259	4.475	-14.193	179.204
1	-32.896	-0.859	-60.483	1.120	-0.820	-32.935	87.999
2	-32.819	-0.860	-60.344	1.119	-0.820	-32.858	87.996
3	4.415	-13.673	8.952	-0.497	4.429	-13.686	179.426
4	-66.216	-1.652	-121.621	2.246	-1.574	-66.294	88.009
5	-28.981	-14.466	-52.324	0.629	-14.438	-29.009	87.521
6	-26.630	-14.461	-48.071	0.584	-14.433	-26.658	87.255
7	-27.502	-14.483	-49.673	0.615	-14.454	-27.531	87.300
8	-30.727	-14.445	-55.450	0.646	-14.419	-30.752	87.729
9	4.338	-13.672	8.813	-0.496	4.351	-13.686	178.421
1	-22.499	-4.409	-58.745	4.197	-3.482	-23.426	77.554
2	-22.478	-4.351	-58.608	4.202	-3.424	-23.405	77.563
3	4.395	-12.490	9.054	-1.586	4.543	-12.638	174.677
4	-44.961	-8.403	-117.972	8.363	-6.581	-46.783	77.706
5	-18.087	-16.542	-50.309	2.574	-14.627	-20.002	53.348
6	-17.072	-15.359	-46.124	2.555	-13.520	-18.911	54.265
7	-17.679	-15.434	-47.674	2.673	-13.657	-19.456	56.384
8	-18.567	-17.850	-53.418	2.456	-15.725	-20.692	49.153
9	4.374	-12.548	8.917	-1.592	4.522	-12.696	174.671
1	-22.339	-3.782	-58.570	4.304	-2.832	-23.289	77.555
2	-22.319	-3.724	-58.432	4.324	-2.768	-23.274	77.527
3	4.267	-13.003	8.930	-1.436	4.386	-13.122	175.276
4	-44.664	-7.243	-117.545	8.462	-5.418	-46.488	77.832
5	-18.077	-16.522	-50.282	2.700	-14.489	-20.110	53.233
6	-17.065	-15.347	-46.098	2.953	-13.130	-19.282	53.106
7	-17.668	-15.407	-47.644	3.080	-13.256	-19.819	55.074
8	-18.560	-17.837	-53.394	2.252	-15.919	-20.480	49.560
9	4.246	-13.062	8.793	-1.456	4.368	-13.183	175.222
1	-24.568	-2.483	-58.927	7.074	-0.411	-26.640	73.676
2	-24.532	-2.456	-58.792	7.072	-0.384	-26.604	73.675
3	3.922	-14.282	8.632	-1.239	4.006	-14.366	175.122
4	-49.180	-4.402	-118.327	14.111	-0.326	-53.256	73.889
5	-20.725	-16.229	-50.901	5.798	-12.258	-24.696	55.397
6	-19.379	-15.669	-46.758	5.563	-11.659	-23.389	54.221
7	-20.036	-15.705	-48.314	5.756	-11.720	-24.021	55.309
8	-21.538	-15.847	-53.953	5.947	-12.892	-25.493	55.928
9	3.886	-14.310	8.497	-1.237	3.969	-14.393	176.127
1	-24.488	-2.194	-58.818	5.797	-0.781	-25.901	76.280
2	-24.453	-2.169	-58.583	5.793	-0.753	-25.870	76.253
3	3.921	-14.290	8.537	-1.011	3.377	-14.346	176.832

E 580

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
41	4	-49.045	-3.920	-118.133	11.493	-1.151	-51.804	76.502
41	5	-23.579	-15.241	-50.811	4.588	-13.126	-23.584	58.136
[illegible]	6	-19.340	-15.543	-46.585	4.641	-12.427	-22.456	56.124
[illegible]	7	-19.996	-15.575	-48.239	4.802	-12.499	-23.072	57.356
41	8	-21.465	-16.590	-53.845	4.554	-13.961	-24.194	59.077
41	9	3.886	-14.315	8.503	-1.016	3.942	-14.371	176.312
242	1	-26.202	-2.136	-58.961	3.726	-1.572	-26.766	81.397
242	2	-26.146	-2.102	-58.821	3.755	-1.529	-26.719	81.325
242	3	4.038	-13.261	8.844	-1.040	4.100	-13.324	176.570
242	4	-52.625	-3.998	-118.486	7.223	-2.948	-53.677	81.726
242	5	-22.442	-15.158	-50.821	2.427	-14.423	-23.177	73.156
242	6	-20.663	-14.469	-46.581	2.874	-13.340	-21.792	68.567
242	7	-21.357	-14.499	-48.137	2.988	-13.379	-22.477	69.462
242	8	-23.720	-15.935	-53.986	1.765	-15.554	-24.102	77.803
242	9	3.981	-13.296	8.704	-1.069	4.047	-13.362	176.470
243	1	-26.071	-1.624	-58.818	3.159	-1.222	-26.473	82.754
243	2	-26.014	-1.589	-58.677	3.193	-1.178	-26.425	82.673
243	3	3.952	-13.611	8.763	-0.910	3.999	-13.658	177.039
243	4	-52.389	-3.072	-118.227	6.057	-2.339	-53.123	83.099
243	5	-22.422	-15.095	-50.786	1.953	-14.606	-22.910	75.966
243	6	-20.645	-14.412	-46.545	2.506	-13.529	-21.528	70.594
243	7	-21.336	-14.431	-48.098	2.607	-13.557	-22.210	71.471
243	8	-23.703	-15.878	-53.957	1.182	-15.703	-23.878	81.595
243	9	3.895	-13.646	8.622	-0.944	3.946	-13.696	176.925
244	1	-26.947	-0.356	-58.904	4.344	0.325	-27.639	80.948
[illegible]	2	-26.872	-0.354	-58.764	4.354	0.342	-27.569	80.909
[illegible]	3	3.703	-14.211	8.622	-0.712	3.731	-14.240	177.724
244	4	-54.258	-0.419	-118.397	8.588	0.916	-55.595	81.152
244	5	-23.681	-14.276	-51.010	3.520	-13.104	-24.854	71.588
244	6	-21.551	-14.050	-46.777	3.589	-12.610	-22.992	68.128
244	7	-22.259	-14.045	-48.333	3.712	-12.615	-23.688	68.945
244	8	-25.360	-14.550	-54.169	3.294	-13.625	-26.285	74.316
244	9	3.629	-14.223	8.482	-0.722	3.658	-14.253	177.684
245	1	-26.879	-0.105	-58.822	2.661	0.155	-27.140	84.377
245	2	-26.805	-0.096	-58.683	2.672	0.167	-27.069	84.342
245	3	3.692	-14.263	8.618	-0.381	3.700	-14.271	178.783
245	4	-54.143	0.211	-118.256	5.230	0.511	-54.644	84.533
245	5	-23.646	-14.155	-50.955	2.176	-13.679	-24.122	77.679
245	6	-21.532	-13.995	-46.739	2.303	-13.347	-22.130	74.284
245	7	-22.240	-13.986	-48.294	2.390	-13.349	-22.877	75.010
245	8	-25.306	-14.354	-54.094	1.936	-14.022	-25.639	80.252
245	9	3.618	-14.272	8.479	-0.392	3.627	-14.281	178.745
246	1	-27.402	-0.919	-58.918	2.137	-0.747	-27.574	85.414
246	2	-27.314	-0.917	-58.777	2.156	-0.741	-27.491	85.338
246	3	3.513	-13.594	8.673	-0.579	3.539	-13.721	177.742
246	4	-55.302	-1.631	-118.473	4.057	-1.326	-55.507	85.701
246	5	-24.474	-14.408	-51.022	1.211	-14.254	-24.617	83.235
246	6	-22.070	-14.361	-46.780	1.698	-14.003	-22.427	78.109
[illegible]	7	-22.795	-14.390	-48.338	1.758	-14.023	-23.142	78.586
[illegible]	8	-25.466	-14.441	-54.188	0.552	-14.416	-26.492	87.374

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LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
9	3.424	-13.696	8.533	-0.708	3.454	-13.725	177.634
1	-27.295	-0.496	-58.809	1.096	-0.451	-27.341	87.561
2	-27.208	-0.494	-58.658	1.129	-0.448	-27.254	87.625
3	3.447	-13.962	8.613	-0.608	3.468	-13.984	178.000
4	-55.115	-0.889	-119.232	2.109	-0.807	-55.197	87.775
5	-24.460	-14.358	-50.999	0.391	-14.343	-24.475	87.784
6	-22.055	-14.310	-46.756	0.604	-14.263	-22.102	85.563
7	-22.769	-14.320	-48.312	0.640	-14.272	-22.817	85.639
8	-26.455	-14.403	-54.170	0.097	-14.402	-26.456	89.535
9	3.359	-13.964	8.473	-0.621	3.381	-13.987	177.947
1	-27.022	0.674	-58.686	0.925	0.705	-27.053	88.087
2	-26.928	0.678	-58.544	0.932	0.709	-26.960	88.068
3	2.932	-14.055	8.526	-0.014	2.932	-14.055	179.952
4	-54.607	1.381	-118.061	1.300	1.438	-54.664	88.159
5	-24.745	-13.352	-50.990	0.854	-13.288	-24.809	85.734
6	-22.235	-13.311	-46.718	0.946	-13.212	-22.334	84.011
7	-22.939	-13.290	-48.269	0.974	-13.192	-23.036	84.290
8	-26.877	-13.425	-54.200	0.713	-13.387	-26.915	86.974
9	2.838	-14.058	8.384	-0.020	2.838	-14.058	179.930
1	-21.052	-3.309	-57.678	0.452	-3.297	-21.063	88.540
2	-21.077	-3.245	-57.551	0.463	-3.233	-21.089	88.510
3	3.896	-14.244	8.528	0.131	3.897	-14.245	0.416
4	-41.717	-6.121	-115.740	0.799	-6.103	-41.735	88.714
5	-16.743	-17.120	-49.560	0.467	-16.427	-17.435	34.002
6	-15.650	-15.852	-45.699	0.674	-15.467	-17.034	60.317
7	-17.236	-15.890	-47.223	0.590	-15.599	-17.527	67.118
8	-16.160	-18.572	-52.536	0.203	-16.143	-18.589	4.789
9	3.922	-14.308	8.401	0.120	3.923	-14.309	0.377
1	-23.135	-4.489	-58.513	2.535	-4.124	-23.501	82.108
2	-23.157	-4.442	-58.388	2.639	-4.077	-23.522	82.124
3	3.986	-12.602	8.900	0.306	3.992	-12.608	1.059
4	-45.388	-8.477	-117.415	5.159	-7.776	-46.589	82.276
5	-19.743	-16.637	-50.126	2.335	-14.664	-20.716	55.184
6	-18.515	-15.658	-46.175	2.841	-13.905	-20.257	58.344
7	-19.155	-15.739	-47.723	2.914	-14.070	-20.825	60.186
8	-18.257	-17.695	-52.961	2.745	-15.217	-20.736	47.916
9	4.008	-12.549	8.774	0.302	4.013	-12.555	1.040
1	-22.975	-3.863	-58.338	2.742	-3.477	-23.361	81.992
2	-22.997	-3.816	-58.212	2.761	-3.425	-23.386	81.968
3	3.859	-13.116	8.776	0.456	3.871	-13.128	1.540
4	-45.590	-7.317	-117.038	5.257	-6.605	-46.302	82.305
5	-18.734	-16.627	-50.099	2.952	-14.529	-20.822	54.832
6	-18.507	-15.646	-46.149	3.239	-13.535	-20.618	56.913
7	-19.144	-15.711	-47.693	3.320	-13.690	-21.166	58.652
8	-18.250	-17.584	-52.937	2.540	-15.411	-20.523	48.180
9	3.880	-13.163	8.650	0.438	3.891	-13.174	1.471
1	-23.974	-2.412	-58.060	1.283	-2.336	-24.050	86.606
2	-23.966	-2.339	-57.929	1.335	-2.277	-24.048	86.477
3	3.560	-14.059	8.502	0.073	3.564	-14.073	0.888

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ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
252	4	-47.779	-4.481	-116.582	2.135	-4.376	-47.884	87.183
252	5	-20.252	-16.191	-50.151	1.073	-15.925	-20.519	76.067
[illegible]	6	-19.454	-15.149	-46.088	2.009	-14.357	-20.247	68.483
[illegible]	7	-20.106	-15.174	-47.623	2.064	-14.424	-20.856	70.033
[illegible]	8	-20.424	-17.391	-53.133	-0.095	-17.388	-20.427	91.807
252	9	3.552	-14.122	8.370	0.221	3.555	-14.125	0.718
253	1	-23.855	-1.944	-57.936	1.428	-1.851	-23.948	86.286
253	2	-23.845	-1.880	-57.801	1.499	-1.778	-23.947	86.111
253	3	3.570	-14.035	8.515	0.379	3.578	-14.043	1.233
253	4	-47.592	-3.743	-116.386	2.268	-3.625	-47.709	87.046
253	5	-20.177	-15.897	-50.069	1.148	-15.609	-20.465	75.890
253	6	-19.330	-14.664	-45.952	2.450	-13.614	-20.381	66.794
253	7	-19.978	-14.676	-47.482	2.516	-13.671	-20.982	68.243
253	8	-20.411	-17.340	-53.122	-0.467	-17.270	-20.480	98.465
253	9	3.559	-14.099	8.380	0.307	3.565	-14.104	0.998
254	1	-24.790	-1.711	-58.246	2.511	-1.441	-25.061	83.861
254	2	-24.748	-1.680	-58.110	2.539	-1.404	-25.024	83.791
254	3	3.692	-13.359	8.703	0.357	3.699	-13.366	1.202
254	4	-49.710	-3.124	-117.030	4.747	-2.645	-50.189	84.240
254	5	-21.270	-14.802	-50.215	2.565	-13.908	-22.164	70.787
254	6	-19.787	-14.192	-46.077	3.027	-12.868	-21.112	66.368
254	7	-20.448	-14.213	-47.616	3.106	-12.929	-21.731	67.553
254	8	-22.239	-15.498	-53.282	1.926	-14.986	-22.751	75.122
254	9	3.649	-13.389	8.568	0.329	3.655	-13.396	1.108
255	1	-24.660	-1.198	-58.104	1.944	-1.038	-24.820	85.294
[illegible]	2	-24.617	-1.167	-57.968	1.977	-1.002	-24.783	85.213
[illegible]	3	3.635	-13.708	8.622	0.487	3.619	-13.722	1.612
255	4	-49.474	-2.198	-116.772	3.581	-1.928	-49.744	85.692
255	5	-21.251	-14.739	-50.181	2.091	-14.125	-21.865	73.644
255	6	-19.769	-14.136	-46.041	2.659	-13.078	-20.826	68.322
255	7	-20.427	-14.144	-47.577	2.724	-13.127	-21.444	69.533
255	8	-22.222	-15.441	-53.253	1.343	-15.184	-22.479	79.191
255	9	3.562	-13.739	8.486	0.454	3.574	-13.751	1.504
256	1	-24.919	-1.051	-57.947	1.568	-0.949	-25.022	96.257
256	2	-24.830	-1.031	-57.805	1.656	-0.916	-24.945	86.037
256	3	3.461	-14.071	8.498	0.386	3.469	-14.080	1.262
256	4	-50.338	-1.856	-116.520	2.416	-1.736	-50.458	87.153
256	5	-22.347	-14.897	-50.215	1.146	-14.717	-22.226	81.110
256	6	-19.695	-14.494	-45.952	2.765	-13.299	-20.890	66.618
256	7	-20.342	-14.504	-47.480	2.842	-13.349	-21.497	67.882
256	8	-24.058	-15.360	-53.444	-0.855	-15.277	-24.141	95.562
256	9	3.372	-14.092	8.355	0.298	3.377	-14.097	0.977
257	1	-24.763	-0.438	-57.786	1.438	-0.353	-24.848	86.627
257	2	-24.671	-0.403	-57.638	1.520	-0.308	-24.765	86.428
257	3	3.460	-14.080	8.501	0.276	3.465	-14.084	0.904
257	4	-50.086	-0.862	-116.259	2.213	-0.762	-50.186	87.431
257	5	-21.955	-14.539	-50.118	0.969	-14.414	-22.079	82.675
257	6	-19.534	-13.868	-45.775	2.473	-12.940	-20.462	69.433
[illegible]	7	-20.176	-13.859	-47.299	2.544	-12.961	-21.073	70.570
[illegible]	8	-24.053	-15.341	-53.444	-0.890	-15.251	-24.143	95.778

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LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	Z-STRESS (HOOP)	XY-STRESS (SHEAR)	MAX-PRIN-STRESS	MIN-PRIN-STRESS	PRIN-STRESS ANGLE
9	3.368	-14.115	8.354	0.194	3.370	-14.117	0.637
1	-24.561	-0.138	-57.854	1.205	-0.078	-24.621	87.181
2	-24.424	-0.124	-57.732	1.232	-0.062	-24.487	87.123
3	3.345	-13.747	8.574	0.473	3.359	-13.760	1.596
4	-50.024	-0.170	-116.446	2.150	-0.076	-50.117	87.523
5	-22.253	-13.793	-50.159	1.401	-13.566	-22.479	88.332
6	-19.013	-13.540	-45.736	1.883	-12.955	-19.598	72.729
7	-19.632	-13.533	-47.259	1.926	-12.976	-20.189	73.860
8	-25.346	-14.099	-53.602	0.782	-14.045	-25.400	86.037
9	3.209	-13.761	8.422	0.446	3.220	-13.772	1.506
1	-24.454	0.284	-57.745	0.164	0.286	-24.455	89.620
2	-24.317	0.299	-57.593	0.175	0.300	-24.319	89.592
3	3.280	-14.016	8.515	0.544	3.297	-14.033	1.801
4	-49.837	0.571	-116.256	0.212	0.572	-49.838	89.758
5	-22.238	-13.743	-50.147	0.582	-13.704	-22.278	86.098
6	-18.997	-13.490	-45.712	0.789	-13.379	-19.108	81.999
7	-19.614	-13.474	-47.233	0.797	-13.372	-19.715	82.717
8	-25.334	-14.062	-53.585	0.327	-14.052	-25.344	88.336
9	3.143	-14.030	8.363	0.533	3.160	-14.046	1.776
1	-23.826	-0.513	-57.502	0.980	-0.468	-23.867	87.595
2	-23.659	-0.540	-57.452	1.034	-0.494	-23.705	87.442
3	2.853	-14.060	8.395	0.060	2.853	-14.060	0.205
4	-48.808	-0.716	-115.957	1.530	-0.667	-48.857	88.178
5	-22.295	-14.236	-50.108	0.556	-14.198	-22.334	86.067
6	-18.502	-14.796	-45.729	1.544	-14.237	-19.061	70.095
7	-19.090	-14.820	-47.247	1.592	-14.292	-19.618	71.642
8	-26.078	-13.547	-53.484	-0.665	-13.512	-26.113	93.031
9	2.686	-14.030	8.246	0.006	2.686	-14.030	0.000
1	-24.070	-3.987	-58.052	0.452	-3.977	-24.080	88.710
2	-24.154	-3.941	-57.944	0.463	-3.930	-24.175	88.686
3	3.148	-14.442	8.288	0.131	3.149	-14.443	0.429
4	-47.130	-7.320	-116.323	0.799	-7.304	-47.146	88.850
5	-19.317	-17.921	-50.090	0.467	-17.717	-19.921	77.455
6	-20.929	-16.353	-46.475	0.674	-16.754	-21.038	80.827
7	-21.622	-16.927	-48.017	0.690	-16.827	-21.721	81.801
8	-17.697	-13.877	-52.535	0.203	-17.653	-18.911	9.439
9	3.242	-14.489	8.179	0.120	3.243	-14.490	0.388
1	-24.598	-6.362	-58.457	0.192	-6.350	-24.600	89.426
2	-24.691	-6.449	-58.376	0.218	-6.446	-24.693	89.313
3	3.192	-14.744	8.211	0.241	3.195	-14.747	0.772
4	-48.202	-11.051	-116.925	0.071	-11.050	-48.202	89.889
5	-20.318	-19.346	-50.338	0.094	-19.337	-20.327	84.497
6	-21.386	-20.328	-47.224	0.764	-20.293	-21.921	55.031
7	-22.093	-21.009	-49.787	0.783	-20.598	-22.504	62.328
8	-18.223	-17.382	-52.167	-0.718	-16.970	-18.635	119.842
9	3.295	-14.557	8.130	0.205	3.287	-14.560	0.656
1	-24.472	-5.860	-59.331	-0.555	-5.844	-24.489	91.709
2	-24.559	-5.924	-59.244	-0.511	-5.910	-24.573	91.571
3	3.246	-14.532	8.265	0.490	3.259	-14.545	1.578

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
53	4	-48.028	-10.352	-116.753	-1.473	-10.294	-48.086	92.236
53	5	-20.222	-18.960	-50.242	-0.471	-18.803	-20.378	108.380
[illegible]	6	-21.182	-20.019	-47.015	0.378	-19.907	-21.294	73.477
[illegible]	7	-21.884	-20.181	-48.573	0.379	-20.100	-21.965	77.980
53	8	-18.259	-17.517	-52.211	-1.476	-16.366	-19.410	127.952
53	9	3.333	[illegible].468	8.179	0.445	3.344	-14.479	1.433
54	1	-24.699	-2.521	-57.879	0.217	-2.519	-24.701	89.437
54	2	-24.749	-2.483	-57.763	0.236	-2.480	-24.752	89.390
54	3	3.286	-14.148	8.379	0.514	3.301	-14.163	1.690
54	4	-48.767	-4.582	-116.096	0.254	-4.580	-48.768	89.669
54	5	-20.730	-16.247	-49.952	0.532	-16.184	-20.793	83.315
54	6	-21.001	-15.480	-46.197	0.888	-15.341	-21.140	81.082
54	7	-21.695	-15.514	-47.732	0.900	-15.385	-21.823	81.874
54	8	-19.592	-17.112	-52.572	0.098	-17.108	-19.596	87.730
54	9	3.336	-14.187	8.263	0.495	3.350	-14.201	1.619
55	1	-24.580	-2.053	-57.754	0.362	-2.047	-24.586	89.077
55	2	-24.628	-2.004	-57.635	0.401	-1.997	-24.635	88.983
55	3	3.296	-14.114	8.393	0.620	3.318	-14.136	2.039
55	4	-48.580	-3.843	-115.899	0.388	-3.839	-48.583	89.502
55	5	-20.655	-15.953	-49.870	0.607	-15.876	-20.733	82.757
55	6	-20.876	-14.995	-46.059	1.329	-14.709	-21.162	77.837
55	7	-21.567	-15.015	-47.590	1.353	-14.746	-21.835	78.776
55	8	-19.579	-17.061	-52.560	-0.273	-17.031	-19.608	96.120
55	9	3.343	-14.163	8.274	0.581	3.363	-14.182	1.900
56	1	-25.203	-3.912	-58.078	-0.102	-3.911	-25.203	90.275
[illegible]	2	-25.198	-3.949	-57.966	0.012	-3.949	-25.198	89.965
[illegible]	3	3.478	-14.228	8.383	0.858	3.519	-14.269	2.768
66	4	-50.235	-6.914	-116.499	-1.127	-6.885	-50.264	91.489
66	5	-21.559	-17.194	-50.149	-0.282	-17.175	-21.577	93.681
66	6	-20.768	-17.800	-46.458	1.884	-16.886	-21.682	64.109
66	7	-21.454	-17.905	-48.001	1.925	-17.061	-22.298	66.330
66	8	-21.681	-16.353	-52.681	-2.887	-15.089	-22.946	113.653
66	9	3.472	-14.191	8.271	0.742	3.504	-14.222	2.404
267	1	-24.920	-2.784	-57.789	-0.065	-2.784	-24.920	90.169
267	2	-24.899	-2.760	-57.661	0.078	-2.760	-24.899	89.796
267	3	3.559	-13.910	8.471	1.080	3.625	-13.977	3.526
267	4	-49.822	-5.266	-116.083	-1.282	-5.229	-49.859	91.647
67	5	-21.364	-16.416	-49.950	-0.280	-16.400	-21.380	93.233
67	6	-20.288	-15.904	-45.957	2.429	-14.824	-21.368	66.032
67	7	-20.962	-15.958	-47.487	2.482	-14.935	-21.985	67.611
67	8	-21.837	-16.956	-52.856	-3.541	-15.095	-23.698	117.713
67	9	3.538	-13.934	8.343	0.936	3.588	-13.984	3.058
268	1	-24.813	-0.954	-57.567	0.069	-0.954	-24.814	89.833
268	2	-24.705	-0.929	-57.420	0.112	-0.928	-24.706	89.729
268	3	3.832	-13.988	8.538	0.756	3.864	-14.020	2.425
268	4	-50.296	-1.704	-115.800	-0.229	-1.703	-50.297	90.271
268	5	-21.758	-14.764	-49.841	0.414	-14.739	-21.782	86.524
268	6	-19.048	-14.276	-45.506	1.219	-13.982	-19.342	76.468
[illegible]	7	-19.685	-14.281	-47.022	1.236	-14.011	-19.955	77.702
[illegible]	8	-24.203	-15.333	-53.166	-0.557	-15.298	-24.238	93.580

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LAD CONS	(RADIAL)	(AXIAL)	(HOOP)	(SHEAR)	PRIN-STRESS	PRIN-STRESS	ANGLE
9	3.724	-14.014	8.391	0.713	3.752	-14.042	2.298
1	-24.558	-0.341	-57.404	-0.060	-0.341	-24.559	90.142
2	-24.546	-0.301	-57.253	-0.003	-0.301	-24.546	90.056
3	3.832	-13.997	8.542	0.546	3.955	-14.021	2.073
4	-50.044	-0.709	-115.535	-0.433	-0.715	-50.048	90.503
5	-21.666	-14.406	-49.742	0.235	-14.398	-21.674	89.133
6	-18.887	-13.650	-45.329	0.927	-13.490	-19.047	80.245
7	-19.519	-13.636	-46.840	0.939	-13.489	-19.666	81.142
8	-24.199	-15.315	-53.165	-0.592	-15.275	-24.238	93.799
9	3.720	-14.037	8.390	0.609	3.741	-14.058	1.963
1	-24.096	-1.028	-57.255	0.661	-1.009	-24.115	88.358
2	-23.880	-1.055	-57.096	0.830	-1.025	-23.910	87.913
3	4.066	-14.230	8.521	0.965	4.117	-14.281	3.011
4	-49.742	-1.597	-115.312	-0.027	-1.597	-49.742	90.033
5	-21.794	-14.772	-49.694	0.106	-14.770	-21.796	89.130
6	-17.077	-15.266	-45.138	3.267	-12.781	-19.562	52.744
7	-17.653	-15.299	-46.642	3.350	-12.924	-20.028	54.679
8	-26.681	-14.150	-53.294	-3.722	-13.128	-27.704	105.357
9	3.850	-14.203	8.362	0.795	3.885	-14.238	2.519
1	-23.759	0.384	-56.904	1.424	0.388	-23.843	86.623
2	-23.525	0.346	-56.726	1.566	0.448	-23.628	86.262
3	4.124	-14.006	8.584	0.514	4.139	-14.020	1.624
4	-49.239	0.396	-114.791	1.719	0.455	-49.298	88.018
5	-21.588	-13.956	-49.480	0.667	-13.898	-21.646	85.036
6	-16.548	-13.192	-44.579	3.281	-11.177	-18.553	58.573
7	-17.109	-13.155	-46.058	3.375	-11.220	-19.044	60.180
8	-26.873	-14.901	-53.505	-2.527	-14.390	-27.385	101.447
9	3.890	-14.047	8.406	0.373	3.898	-14.055	1.191
1	-22.311	-0.057	-56.855	-0.371	-0.051	-22.318	90.956
2	-21.965	-0.043	-56.650	-0.365	-0.037	-21.971	90.955
3	4.272	-13.715	8.696	0.396	4.281	-13.725	1.253
4	-47.237	-0.178	-114.839	-0.303	-0.165	-47.251	90.378
5	-20.999	-13.852	-49.482	-0.041	-13.852	-21.000	90.330
6	-13.895	-13.582	-44.267	0.080	-13.563	-13.914	76.297
7	-14.373	-13.577	-45.747	0.072	-13.571	-14.380	84.825
8	-28.820	-14.176	-53.888	-0.175	-14.174	-28.822	90.696
9	3.925	-13.731	8.501	0.390	3.935	-13.739	1.257
1	-22.973	-14.336	-59.255	-1.462	-14.095	-23.214	99.355
2	-23.103	-14.940	-59.287	-1.520	-14.666	-23.378	100.217
3	2.567	-16.834	7.597	-0.218	2.570	-16.837	179.355
4	-44.642	-22.822	-117.612	-2.456	-22.549	-44.915	96.345
5	-18.970	-24.716	-50.726	-1.154	-13.747	-24.940	159.053
6	-20.788	-35.691	-49.714	-2.206	-20.468	-36.001	171.748
7	-21.464	-36.279	-51.343	-2.268	-21.125	-36.619	171.486
8	-15.025	-11.069	-49.997	0.160	-11.064	-16.031	88.151
9	2.597	-16.231	7.629	-0.160	2.599	-16.232	179.515
1	-22.837	-5.855	-57.684	-0.872	-5.810	-22.882	92.933
2	-22.952	-5.948	-57.610	-0.899	-5.900	-22.999	93.020
3	2.550	-14.915	8.000	-0.024	2.550	-14.915	179.919

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EN#	LOAD COMB	R-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	RZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
274	4	-44.593	-9.990	-115.324	-1.518	-9.923	-44.570	92.514
274	5	-19.000	-18.957	-49.714	-0.643	-18.335	-19.622	134.046
274	6	-20.527	-20.552	-46.756	-1.134	-19.410	-21.680	135.442
[illegible]	7	-21.194	-20.732	-48.301	-1.169	-19.771	-22.155	129.418
[illegible]	8	-16.411	-16.862	-51.380	-0.022	-15.409	-15.863	177.134
[illegible]	9	2.665	-14.822	7.926	0.002	2.665	-14.822	0.000
275	1	-22.711	-5.353	-57.557	-1.611	-5.205	-22.860	95.258
275	2	-22.820	-5.423	-57.477	-1.530	-5.271	-22.971	95.306
275	3	2.604	-14.703	8.056	0.223	2.607	-14.706	0.740
275	4	-44.328	-9.291	-115.152	-3.063	-9.026	-44.594	94.959
75	5	-18.903	-18.572	-49.613	-1.209	-17.517	-19.958	131.097
75	6	-20.323	-19.755	-46.547	-1.521	-18.491	-21.586	129.707
75	7	-20.985	-19.905	-48.086	-1.572	-18.782	-22.108	125.526
75	8	-16.446	-16.998	-51.423	-0.780	-15.894	-17.550	144.739
75	9	2.713	-14.634	7.976	0.242	2.716	-14.637	0.801
76	1	-24.377	-12.593	-59.192	-2.594	-12.046	-24.923	101.885
76	2	-24.498	-13.113	-59.205	-2.585	-12.554	-25.058	102.215
76	3	2.645	-16.033	7.778	0.387	2.653	-16.041	1.187
76	4	-47.554	-20.229	-117.691	-5.247	-19.256	-48.527	100.505
76	5	-20.409	-23.148	-50.707	-2.274	-19.124	-24.434	150.529
76	6	-22.027	-32.597	-49.338	-2.032	-21.649	-32.975	169.480
76	7	-22.739	-33.122	-50.958	-2.100	-22.330	-33.531	168.985
76	8	-17.660	-11.377	-50.409	-2.478	-10.517	-18.520	109.139
6	9	2.767	-15.512	7.791	0.378	2.775	-15.519	1.185
7	1	-24.153	-11.692	-58.975	-4.874	-10.012	-25.833	109.018
7	2	-24.251	-12.120	-58.964	-4.936	-10.366	-26.006	109.570
[illegible]	3	2.817	-15.351	7.955	0.289	2.822	-15.355	0.913
[illegible]	4	-47.321	-19.279	-117.478	-9.230	-16.513	-50.086	106.679
7	5	-20.251	-22.509	-50.557	-4.004	-17.220	-25.541	142.872
7	6	-21.438	-30.248	-48.744	-5.034	-19.153	-32.532	155.593
7	7	-22.136	-30.715	-50.350	-5.191	-19.691	-33.160	154.783
7	8	-18.027	-12.823	-50.801	-2.603	-11.744	-19.105	112.506
7	9	2.915	-14.922	7.944	0.351	2.922	-14.929	1.129
3	1	-25.559	-3.937	-57.849	-2.870	-3.562	-25.933	97.434
3	2	-25.632	-3.994	-57.758	-2.923	-3.606	-26.020	97.560
3	3	2.907	-14.381	8.191	0.296	2.912	-14.386	0.982
3	4	-50.323	-6.808	-115.879	-5.311	-6.169	-50.962	96.859
3	5	-21.784	-17.195	-49.929	-2.092	-16.384	-22.595	111.180
	6	-22.458	-18.174	-46.638	-3.003	-16.627	-24.005	117.255
	7	-23.184	-18.288	-48.182	-3.103	-16.783	-24.689	115.863
	8	-20.130	-15.905	-51.988	-0.399	-15.721	-20.313	101.528
	9	2.980	-14.324	8.100	0.349	2.987	-14.331	1.155
	1	-25.275	-2.809	-57.561	-2.833	-2.457	-25.627	97.078
	2	-25.333	-2.805	-57.454	-2.857	-2.449	-25.690	97.116
	3	2.988	-14.063	8.279	0.518	3.003	-14.079	1.741
	4	-49.911	-5.159	-115.464	-5.466	-4.501	-50.569	96.864
	5	-21.589	-16.417	-49.731	-2.090	-15.677	-22.329	109.476
	6	-21.979	-15.278	-46.138	-2.459	-15.364	-22.893	110.393
	7	-22.693	-16.340	-47.669	-2.546	-15.446	-23.587	109.358
		-20.296	-16.507	-52.153	-1.553	-15.950	-20.842	109.711

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E587

LOAD COMB	R-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	RZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
9	3.045	-14.067	8.171	0.542	3.063	-14.084	1.814
1	-25.781	-5.293	-58.420	-3.998	-5.531	-27.533	100.657
2	-26.735	-6.496	-58.335	-3.903	-5.759	-27.462	100.548
3	3.756	-13.882	8.452	1.243	3.843	-13.969	4.011
4	-53.732	-10.435	-117.015	-8.721	-8.744	-55.423	100.971
5 280	-23.240	-17.821	-50.226	-3.574	-16.045	-25.016	116.419
6	-21.642	-21.651	-47.024	-1.685	-19.961	-23.332	135.074
7	-22.358	-21.894	-48.598	-1.758	-20.352	-23.900	131.241
8	-24.281	-13.015	-52.159	-5.717	-10.621	-26.675	112.713
9	3.710	-13.669	8.367	1.148	3.785	-13.745	3.763
1	-26.252	-4.169	-57.887	-3.066	-3.751	-26.670	97.761
2	-26.157	-4.188	-57.750	-2.900	-3.811	-26.533	97.395
3	4.043	-12.747	8.752	1.999	4.278	-12.982	6.697
4	-53.093	-7.867	-116.394	-7.429	-6.678	-54.282	99.093
5	-22.892	-16.426	-49.881	-2.529	-15.554	-23.764	109.020
6	-20.388	-16.674	-45.733	0.680	-16.553	-20.509	79.937
7	-21.071	-16.787	-47.263	0.660	-16.688	-21.171	81.426
8	-25.040	-16.000	-52.969	-6.294	-12.771	-28.270	117.159
9	3.948	-12.729	8.615	1.832	4.147	-12.928	6.198
1	-26.444	-1.552	-57.529	-2.678	-1.267	-26.729	96.072
2	-26.151	-1.560	-57.349	-2.700	-1.267	-26.444	96.192
3	5.336	-13.921	8.800	0.560	5.358	-13.944	1.962
4	-55.035	-2.797	-116.018	-5.174	-2.289	-55.543	95.603
5	-23.547	-15.158	-49.868	-1.813	-14.782	-23.923	101.691
6	-17.334	-15.277	-44.931	-2.144	-13.926	-18.684	122.190
7	-17.945	-15.316	-46.435	-2.226	-14.045	-19.216	119.722
8	-30.159	-14.971	-53.917	-1.326	-14.856	-30.274	94.953
9	5.043	-13.913	8.621	0.682	5.068	-13.938	2.058
1	-26.107	-0.219	-57.179	-1.914	-0.078	-26.248	94.207
2	-25.797	-0.158	-56.981	-1.964	-0.038	-25.947	94.356
3	5.393	-13.697	8.862	0.209	5.395	-13.699	0.630
4	-54.532	-0.802	-115.498	-3.427	-0.585	-54.750	93.635
5	-23.341	-14.341	-49.654	-1.252	-14.173	-23.512	97.777
6	-16.805	-13.193	-44.373	-2.130	-12.206	-17.792	114.853
7	-17.402	-13.172	-45.862	-2.201	-12.234	-18.340	113.073
8	-30.351	-15.722	-54.129	-0.132	-15.721	-30.353	90.517
9	5.083	-13.758	8.664	0.259	5.086	-13.761	0.799
1	-23.381	0.194	-56.402	0.623	0.210	-23.398	88.485
2	-22.742	0.074	-56.171	0.305	0.110	-22.777	87.730
3	5.389	-14.774	8.837	1.252	6.464	-14.850	3.402
4	-51.705	1.388	-114.216	-0.981	1.405	-51.724	91.058
5	-22.574	-13.460	-49.206	-0.624	-13.417	-22.616	93.901
6	-9.927	-15.713	-43.343	4.646	-7.347	-18.293	23.046
7	-10.322	-15.752	-44.798	4.772	-7.546	-18.528	30.180
8	-37.034	-10.755	-54.408	-6.993	-9.009	-38.779	104.012
9	5.749	-14.655	8.507	0.980	5.797	-14.702	2.745
1	-15.927	-12.506	-57.153	-1.462	-11.966	-15.467	110.267
2	-15.767	-13.038	-57.112	-1.520	-12.359	-16.445	114.049
3	3.594	-16.561	7.838	-0.213	3.696	-16.563	179.382

E 588

LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
4	-32.890	-19.749	-113.996	-2.456	-19.304	-33.334	100.251
5	-13.428	-23.272	-49.045	-1.154	-13.295	-23.405	173.398
6	-9.380	-32.921	-46.724	-2.206	-9.770	-33.131	174.557
	-10.351	-33.441	-48.257	-2.268	-10.130	-33.662	174.441
	-17.060	-11.269	-49.962	0.160	-11.254	-17.064	88.417
9	3.533	-16.029	7.797	-0.150	3.534	-16.031	179.530
1	-18.006	-25.554	-60.006	-2.315	-17.352	-26.208	164.235
2	-17.999	-27.293	-60.237	-2.411	-17.410	-27.882	166.287
3	2.849	-22.562	6.433	-0.471	2.858	-22.671	178.942
4	-35.830	-36.280	-117.555	-3.862	-32.186	-39.924	136.667
5	-14.981	-31.649	-50.884	-1.921	-14.762	-31.868	173.507
6	-14.356	-63.598	-53.577	-3.659	-14.086	-63.869	175.772
7	-14.843	-64.944	-55.303	-3.760	-14.562	-65.225	175.731
8	-15.144	7.647	-45.667	0.248	7.650	-15.147	89.375
9	2.842	-20.923	6.664	-0.374	2.848	-20.929	179.096
1	-18.088	-25.869	-60.102	-6.640	-14.282	-29.674	150.183
2	-18.076	-27.588	-60.328	-6.931	-14.425	-31.238	152.228
3	2.962	-22.208	6.546	-1.636	3.068	-22.314	176.295
4	-36.063	-37.186	-117.816	-10.937	-25.673	-47.576	136.469
5	-15.024	-31.806	-50.941	-5.642	-13.304	-33.526	163.041
6	-14.304	-63.375	-53.539	-10.931	-11.979	-65.700	167.992
7	-14.792	-64.725	-55.267	-11.226	-12.384	-67.133	167.894
8	-15.297	7.047	-45.833	0.949	7.087	-15.338	87.571
9	2.950	-20.489	6.772	-1.344	3.027	-20.566	176.727
1	-18.931	-11.167	-57.507	-4.525	-9.086	-21.011	114.689
2	-18.874	-11.643	-57.476	-4.746	-9.292	-21.225	116.351
	2.925	-15.971	7.804	-1.025	2.980	-16.027	176.903
4	-38.103	-17.738	-114.682	-7.277	-15.405	-40.436	107.777
5	-16.303	-22.066	-49.401	-3.556	-14.607	-23.762	154.509
6	-14.727	-30.719	-47.249	-7.575	-11.708	-33.738	158.274
7	-15.221	-31.189	-48.807	-7.784	-12.054	-34.356	157.861
8	-17.579	-11.300	-50.101	1.434	-10.987	-17.891	77.721
9	2.868	-15.495	7.773	-0.804	2.903	-15.530	177.496
1	-18.707	-10.265	-57.291	-6.805	-6.479	-22.494	119.096
2	-18.627	-10.650	-57.236	-7.096	-6.498	-22.780	120.331
3	3.097	-15.290	7.980	-1.123	3.165	-15.358	176.517
4	-37.870	-16.788	-114.470	-11.260	-11.904	-42.753	113.445
5	-16.145	-21.428	-49.253	-5.286	-12.876	-24.696	148.274
6	-14.138	-28.371	-46.656	-10.576	-8.507	-34.002	151.967
7	-14.618	-28.783	-48.200	-10.875	-8.722	-34.679	151.536
8	-17.946	-12.746	-50.494	1.310	-12.435	-18.257	76.625
9	3.017	-14.906	7.925	-0.831	3.055	-14.944	177.350
1	-24.301	-23.874	-60.985	-10.986	-13.099	-35.076	134.443
2	-24.460	-25.415	-61.209	-11.402	-13.525	-36.350	136.199
3	1.788	-20.114	6.736	-1.937	1.959	-20.284	174.982
4	-47.141	-34.842	-119.548	-18.611	-21.390	-60.593	125.857
5	-20.892	-29.541	-51.702	-9.146	-15.099	-35.334	147.652
6	-23.210	-57.815	-54.231	-16.658	-16.494	-64.531	158.043
7	-23.936	-59.048	-55.993	-17.119	-16.971	-66.013	157.861
	-17.299	5.285	-46.649	0.263	5.288	-17.302	89.332

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E 589

LOAD COMB	[illegible] (RADIAL)	[illegible] AXIAL)	[illegible] (BOOP)	[illegible] (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
9	1.947	-18.573	6.960	-1.521	2.050	-18.685	175.782
1	-24.249	-23.627	-50.971	-15.340	-8.534	-39.281	134.419
2	-24.363	-24.987	-61.149	-15.848	-9.823	-40.527	135.564
3	2.354	-17.854	7.305	-2.071	2.565	-18.064	174.205
4	-47.424	-35.893	-120.011	-25.559	-14.480	-68.637	129.376
5	-20.706	-28.759	-51.557	-12.782	-11.331	-38.135	143.742
6	-22.177	-53.653	-53.225	-21.903	-10.943	-64.886	152.849
7	-32.884	-54.913	-54.961	-22.520	-11.244	-66.454	152.666
8	-18.135	1.990	-47.537	-1.290	2.073	-18.219	93.653
9	2.468	-16.493	7.483	-1.563	2.595	-16.622	175.319
1	-29.327	-6.866	-58.738	-8.957	-3.731	-32.462	109.288
2	-29.460	-7.124	-58.749	-9.347	-3.728	-32.855	109.963
3	1.901	-14.355	7.941	-1.309	2.006	-14.460	175.424
4	-57.399	-11.244	-117.389	-14.780	-6.916	-61.727	106.319
5	-26.037	-18.475	-50.699	-6.743	-14.525	-29.987	120.359
6	-27.724	-23.130	-48.343	-13.803	-11.434	-39.421	130.275
7	-28.579	-23.407	-49.934	-14.198	-11.560	-40.425	129.839
8	-23.037	-12.654	-51.599	2.056	-12.261	-23.429	79.194
9	2.034	-14.097	7.902	-0.920	2.086	-14.150	176.746
1	-28.797	-4.752	-58.254	-8.025	-2.319	-31.230	106.862
2	-28.881	-4.816	-58.163	-8.343	-2.206	-31.491	107.368
3	2.188	-13.220	9.242	-0.553	2.208	-13.240	177.947
4	-56.759	-8.675	-116.758	-13.488	-5.150	-60.284	104.646
5	-25.689	-17.080	-50.352	-5.697	-14.244	-28.525	116.465
6	-26.471	-18.154	-47.050	-11.436	-10.143	-34.482	125.009
7	-27.292	-18.301	-48.608	-11.779	-10.188	-35.405	124.555
8	-23.796	-15.640	-52.408	1.480	-15.379	-24.056	80.021
9	2.272	-13.157	8.151	-0.235	2.275	-13.160	179.125
1	-36.395	-11.656	-60.986	-14.453	-4.949	-42.802	114.894
2	-36.163	-12.324	-61.012	-14.701	-5.317	-43.170	115.482
3	3.803	-11.322	8.925	0.832	3.848	-11.368	3.139
4	-71.425	-17.724	-121.295	-26.844	-6.607	-82.542	112.496
5	-31.458	-16.722	-51.357	-11.310	-10.591	-37.589	118.460
6	-31.751	-28.948	-50.168	-15.563	-14.722	-45.976	132.427
7	-32.766	-29.519	-51.846	-16.054	-15.006	-47.279	132.112
8	-29.914	-1.619	-50.778	-5.711	-0.510	-31.023	100.992
9	3.871	-10.654	8.950	1.079	3.951	-10.734	4.228
1	-34.201	-4.081	-59.091	-5.284	-3.181	-35.101	99.668
2	-34.083	-4.009	-58.925	-4.822	-3.254	-34.837	98.891
3	5.704	-3.757	10.866	6.993	9.416	-7.469	27.961
4	-59.151	-8.590	-119.050	-14.163	-5.441	-72.300	102.534
5	-29.364	-8.339	-49.268	-2.347	-3.080	-29.623	96.294
6	-26.207	-6.865	-44.531	6.459	-4.906	-28.166	73.131
7	-27.099	-6.945	-46.084	6.493	-5.034	-29.010	73.601
8	-32.036	-9.383	-53.024	-12.783	-4.128	-37.891	114.610
9	5.586	-3.830	10.699	6.531	8.929	-7.173	27.197
1	-34.441	-2.520	-58.913	-4.931	-1.775	-35.136	98.535
2	-33.537	-2.598	-58.538	-5.143	-1.768	-34.467	99.158
3	11.312	-13.545	10.363	0.706	11.332	-13.565	1.627

E590

NT	LOAD COMB	(RADIAL)	(AXIAL)	(HOOP)	(SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
96	4	-75.038	-4.350	-119.578	-8.153	-3.422	-75.966	96.495
96	5	-30.088	-15.297	-50.875	-2.303	-14.947	-30.438	98.649
96	6	-14.359	-16.590	-44.096	-5.144	-9.090	-21.658	141.043
96	7	-14.692	-16.788	-45.602	-6.361	-9.292	-22.187	139.676
[illegible]	8	-48.259	-13.538	-57.398	2.487	-13.361	-48.435	85.923
[illegible]	9	10.508	-13.467	9.788	0.918	10.543	-13.532	2.191
97	1	-8.889	-26.577	-58.031	-1.310	-8.792	-26.674	175.784
97	2	-8.346	-28.801	-58.249	-1.366	-8.255	-28.892	176.133
97	3	6.107	-26.189	6.359	-0.494	6.115	-26.197	179.123
97	4	-21.880	-34.463	-113.717	-2.169	-21.516	-34.827	170.487
97	5	-7.426	-31.851	-49.108	-1.296	-7.357	-31.920	176.969
7	6	3.006	-72.879	-51.608	-2.311	3.076	-72.949	178.257
7	7	2.977	-74.441	-53.274	-2.368	3.049	-74.513	178.249
7	8	-19.704	18.415	-44.189	-0.031	18.415	-19.704	90.047
7	9	5.564	-23.965	6.577	-0.438	5.571	-23.972	179.149
3	1	-10.391	-23.596	-57.828	-1.514	-10.220	-23.768	173.538
3	2	-10.031	-25.246	-57.969	-1.645	-9.855	-25.422	173.897
3	3	4.976	-22.134	6.946	-1.078	5.019	-22.177	177.726
3	4	-23.438	-33.076	-113.927	-1.977	-23.048	-33.466	168.844
1	5	-8.430	-29.964	-49.012	-1.410	-8.338	-30.056	176.269
1	6	-1.394	-60.305	-50.072	-3.818	-1.148	-60.552	176.307
	7	-1.536	-61.563	-51.703	-3.910	-1.283	-61.817	176.288
	8	-16.565	7.330	-45.833	1.540	7.429	-16.664	86.327
	9	4.616	-20.484	7.086	-0.947	4.652	-20.520	177.841
	1	-10.473	-23.911	-57.922	-5.839	-8.290	-25.094	159.502
	2	-10.108	-25.541	-58.058	-6.165	-7.947	-27.702	160.687
		5.089	-21.680	7.059	-2.243	5.276	-21.867	175.241
		-23.671	-33.981	-114.185	-9.052	-18.409	-39.244	149.830
	5	-8.472	-30.121	-49.067	-5.139	-7.318	-31.275	167.319
	6	-1.342	-60.081	-50.031	-11.090	0.682	-62.105	169.656
	7	-1.485	-61.344	-51.665	-11.376	0.603	-63.433	169.594
	8	-16.718	6.730	-45.998	2.240	6.942	-16.930	84.590
	9	4.724	-20.050	7.195	-1.917	4.872	-20.197	175.600
	1	-10.412	-28.008	-58.655	-6.830	-8.072	-30.348	161.087
	2	-9.935	-30.337	-58.907	-7.286	-7.599	-32.672	162.230
	3	5.575	-26.767	6.135	-3.310	5.910	-27.103	174.215
	4	-24.445	-36.702	-114.742	-10.018	-18.829	-42.318	150.727
	5	-8.935	-33.133	-49.699	-6.042	-7.510	-34.558	166.730
	6	0.305	-76.079	-52.823	-14.416	2.935	-78.710	169.660
	7	0.206	-77.727	-54.522	-14.779	2.915	-80.435	169.614
	8	-19.724	19.498	-44.006	4.259	19.957	-20.184	83.859
	9	5.097	-24.439	6.387	-2.854	5.371	-24.712	174.530
	1	-11.243	-31.296	-59.521	-10.772	-6.553	-35.986	156.473
	2	-10.814	-33.817	-59.821	-11.414	-6.111	-38.519	157.608
	3	5.269	-27.989	5.824	-5.021	6.010	-28.731	171.598
	4	-25.755	-41.872	-116.119	-16.406	-15.534	-52.092	148.079
	5	-9.671	-36.045	-50.472	-10.013	-6.300	-39.416	161.393
	6	-1.308	-82.494	-54.479	-21.768	4.160	-87.362	165.898
	7	-1.448	-84.308	-56.221	-22.312	4.177	-89.934	165.847
		-19.377	20.918	-43.585	4.501	21.415	-19.873	63.703

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NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
01	9	4.839	-25.469	6.124	-4.379	5.459	-26.089	171.940
02	1	-16.609	-21.902	-58.821	-11.156	-7.799	-30.721	141.673
02	2	-16.601	-23.402	-59.002	-11.897	-7.628	-32.375	142.975
02	3	2.055	-20.053	6.772	-5.905	3.486	-21.485	165.146
02	4	-33.128	-31.243	-115.670	-16.387	-15.770	-48.600	133.355
02	5	-14.471	-27.895	-49.395	-10.296	-8.892	-33.474	151.550
02	6	-13.877	-55.441	-51.690	-23.878	-3.904	-66.314	155.517
02	7	-14.329	-56.504	-53.367	-24.469	-3.131	-67.802	155.410
02	8	-14.638	5.989	-45.797	6.432	7.830	-16.480	74.323
02	9	2.047	-18.554	6.953	-5.065	3.225	-19.732	166.398
03	1	-16.556	-21.656	-58.806	-15.511	-3.387	-34.825	139.667
03	2	-16.504	-22.975	-58.942	-16.343	-3.079	-36.400	140.599
03	3	2.620	-17.794	7.342	-5.939	4.222	-19.396	164.903
03	4	-33.410	-32.295	-116.033	-24.335	-8.510	-57.195	134.343
03	5	-14.285	-27.114	-49.748	-13.931	-5.362	-36.037	147.361
03	6	-12.845	-51.279	-50.684	-29.124	2.830	-66.955	151.709
03	7	-13.277	-52.369	-52.344	-29.870	2.873	-68.520	151.599
03	8	-15.474	2.694	-46.584	4.879	3.921	-16.702	75.878
03	9	2.568	-16.475	7.477	-5.106	3.851	-17.758	165.336
04	1	-22.545	-35.765	-62.781	-21.120	-7.025	-51.285	143.689
04	2	-22.535	-38.491	-63.206	-22.311	-6.818	-54.208	144.837
04	3	2.202	-28.967	5.019	-8.819	4.524	-31.289	165.247
04	4	-45.013	-49.375	-121.688	-32.695	-14.426	-79.962	136.908
04	5	-20.275	-39.851	-53.462	-19.202	-8.509	-51.616	148.504
04	6	-19.466	-90.031	-59.709	-40.984	-0.670	-108.827	155.352
04	7	-20.080	-92.052	-61.590	-42.022	-0.741	-111.391	155.287
04	8	-20.504	21.761	-43.867	7.730	23.130	-21.874	79.953
04	9	2.192	-26.240	5.444	-7.627	4.109	-28.158	165.892
05	1	-24.552	-43.709	-64.871	-31.239	-1.455	-66.805	143.523
05	2	-24.581	-46.593	-65.335	-32.842	-0.950	-70.224	144.263
05	3	2.292	-28.604	5.108	-12.587	6.772	-33.083	150.413
05	4	-48.731	-54.086	-125.571	-49.621	-6.197	-106.620	139.397
05	5	-21.857	-46.097	-55.126	-29.367	-2.207	-65.746	146.213
05	6	-21.734	-99.011	-62.059	-58.577	9.800	-130.545	151.735
05	7	-22.418	-101.320	-64.012	-60.052	9.982	-133.721	151.651
05	8	-21.194	19.081	-44.636	6.849	20.224	-22.327	80.509
05	9	2.322	-25.720	5.572	-10.985	6.113	-29.511	150.961
06	1	-52.811	-15.809	-65.033	-27.895	-0.836	-67.783	118.223
06	2	-54.163	-16.798	-65.382	-29.484	-0.575	-70.385	118.320
06	3	-7.319	-14.113	6.097	-12.663	2.394	-23.827	142.507
06	4	-94.620	-23.467	-126.813	-43.054	-3.193	-114.895	115.216
06	5	-47.777	-20.782	-55.334	-26.232	-4.773	-63.781	121.386
06	6	-71.695	-38.922	-60.095	-55.276	2.345	-112.963	126.743
06	7	-73.565	-39.731	-62.009	-56.654	2.441	-115.838	125.654
06	8	-17.222	1.582	-47.454	9.673	5.670	-21.310	67.093
06	9	-5.968	-13.123	6.445	-11.074	2.092	-21.183	143.952
07	1	-50.918	-8.234	-63.139	-18.727	-1.182	-57.970	110.633
07	2	-52.084	-8.482	-63.296	-19.606	-0.963	-59.603	110.993
07	3	-5.419	-6.547	8.036	-6.502	0.543	-12.510	137.473

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ENT	LOAD COMB	RADIAL	AXIAL	BENDING	SHEAR	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
307	4	-92.349	-14.333	-124.581	-30.373	-3.902	-102.780	108.953
307	5	-45.584	-12.398	-53.247	-17.269	-5.057	-53.025	113.029
307	6	-56.154	-16.839	-54.462	-33.254	-0.098	-82.895	115.722
307	7	-67.999	-17.157	-56.250	-34.135	-0.041	-85.116	116.550
[illegible]	8	-19.345	-6.780	-49.701	2.502	-6.262	-19.863	78.751
[illegible]	9	-4.254	-6.298	8.193	-5.522	0.438	-13.991	140.152
308	1	-68.844	-2.835	-65.635	-23.854	4.882	-75.562	107.989
308	2	-67.881	-3.969	-65.517	-24.151	4.226	-75.977	108.525
308	3	21.437	-12.534	12.266	1.684	21.521	-12.618	2.832
308	4	-144.812	2.552	-131.724	-45.107	15.262	-157.523	125.737
308	5	-55.492	-6.113	-53.939	-19.261	0.511	-62.117	128.979
308	6	-35.545	-25.435	-49.936	-24.366	-5.604	-65.375	129.140
308	7	-37.054	-25.912	-51.686	-25.138	-5.734	-67.231	128.751
308	8	-77.252	17.254	-56.596	-12.323	18.834	-78.832	97.308
308	9	20.474	-11.500	12.149	1.991	20.598	-11.624	3.550
309	1	-6.096	-25.840	-57.139	-1.311	-6.009	-25.927	176.217
309	2	-5.429	-28.033	-57.323	-1.367	-5.347	-28.116	176.551
309	3	7.219	-25.912	6.638	-0.494	7.226	-25.919	179.145
309	4	-17.290	-33.244	-112.208	-2.169	-17.000	-33.533	172.392
309	5	-4.642	-31.122	-48.246	-1.296	-4.578	-31.186	177.202
309	6	8.030	-71.581	-50.133	-2.311	8.097	-71.648	178.338
309	7	8.124	-73.110	-51.762	-2.369	8.193	-73.179	178.331
309	8	-19.710	18.433	-44.096	-0.031	18.433	-19.710	90.047
309	9	6.552	-23.719	6.822	-0.438	6.558	-23.726	179.170
0	1	-5.493	-24.002	-56.751	-1.025	-6.433	-24.062	176.660
0	2	-5.782	-26.505	-56.996	-1.140	-5.720	-26.567	175.359
[illegible]	3	7.558	-27.916	6.306	-0.856	7.579	-27.936	178.613
[illegible]	4	-18.434	-27.173	-111.057	-1.143	-18.287	-27.320	172.667
[illegible]	5	-5.093	-28.595	-47.753	-0.859	-5.061	-28.616	177.308
[illegible]	6	8.417	-74.900	-50.616	-2.991	8.525	-75.007	177.945
[illegible]	7	8.517	-75.499	-52.255	-3.064	8.627	-76.609	177.938
[illegible]	8	-21.157	27.966	-42.439	1.743	28.028	-21.219	87.370
[illegible]	9	6.948	-25.414	6.541	-0.741	6.865	-25.431	178.535
[illegible]	1	-6.914	-25.572	-57.196	-2.973	-6.454	-25.132	171.205
[illegible]	2	-6.253	-28.375	-57.481	-3.100	-5.887	-28.802	172.170
[illegible]	3	7.134	-29.609	5.881	-0.858	7.154	-29.629	178.651
[illegible]	4	-18.912	-29.056	-111.561	-4.924	-16.915	-31.053	157.323
[illegible]	5	-5.523	-30.299	-48.197	-2.682	-5.236	-30.576	173.333
[illegible]	6	7.057	-80.321	-51.990	-4.991	7.341	-80.605	175.741
[illegible]	7	7.125	-82.048	-53.662	-5.122	7.418	-82.341	176.723
[illegible]	8	-20.452	30.799	-41.747	3.197	30.800	-20.452	39.779
[illegible]	9	6.474	-26.906	6.167	-0.731	6.493	-26.922	178.745
[illegible]	1	-6.132	-26.399	-57.333	-2.378	-5.713	-27.318	171.397
[illegible]	2	-5.448	-29.176	-57.590	-3.227	-5.019	-29.605	172.412
[illegible]	3	7.500	-26.287	6.617	-1.794	7.595	-26.382	176.968
[illegible]	4	-17.545	-34.906	-112.560	-4.039	-15.652	-35.800	167.521
[illegible]	5	-4.598	-32.017	-48.452	-2.615	-4.350	-32.264	174.599
[illegible]	6	9.403	-74.213	-50.582	-7.024	8.997	-74.627	175.153
[illegible]	7	9.502	-75.609	-52.225	-7.198	9.113	-75.220	175.143
[illegible]	8	-20.060	19.433	-43.998	2.791	19.630	-20.256	85.975

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E593

LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
9	6.816	-24.010	5.814	-1.555	6.894	-24.088	177.119
1	-6.962	-30.188	-58.259	-6.921	-5.056	-32.094	164.603
2	-6.326	-32.656	-58.504	-7.346	-4.415	-34.567	165.419
3	7.194	-27.508	6.306	-3.506	7.545	-27.859	174.288
4	-18.855	-40.075	-114.035	-10.428	-14.588	-44.342	157.748
5	-5.334	-34.928	-49.224	-6.588	-3.934	-36.328	168.000
6	6.790	-80.427	-52.238	-14.375	9.099	-82.736	170.877
7	6.847	-82.190	-53.924	-14.730	9.221	-84.564	170.845
8	-19.711	20.854	-43.676	3.022	21.078	-19.935	85.762
9	6.558	-25.040	6.552	-3.080	6.855	-25.338	174.482
1	-7.009	-30.790	-58.320	-7.095	-5.053	-32.746	164.587
2	-6.211	-34.083	-58.696	-7.661	-4.244	-36.051	165.600
3	8.857	-34.950	5.152	-4.703	9.356	-35.449	173.940
4	-20.227	-34.828	-113.136	-9.676	-15.406	-39.649	153.516
5	-5.158	-35.694	-49.288	-6.718	-3.746	-37.107	168.124
6	10.004	-96.649	-54.755	-17.149	12.694	-99.338	171.086
7	10.122	-98.749	-56.493	-17.563	12.886	-101.513	171.059
8	-23.195	38.723	-40.781	6.081	39.314	-23.786	84.443
9	8.059	-31.657	5.528	-4.137	8.485	-32.083	174.115
1	-9.432	-40.429	-60.797	-10.822	-6.027	-43.834	162.536
2	-8.903	-44.796	-61.442	-11.429	-5.572	-48.126	163.754
3	6.358	-44.946	2.652	-4.908	6.823	-45.412	174.583
4	-22.974	-45.709	-115.991	-16.786	-14.068	-54.614	152.052
5	-7.713	-45.860	-51.896	-10.265	-5.126	-48.447	165.854
6	2.480	-126.591	-62.334	-21.347	5.916	-130.127	170.855
7	2.427	-129.479	-64.245	-21.877	5.960	-133.013	170.824
8	-19.681	52.826	-37.320	3.439	52.989	-19.844	87.290
9	5.823	-40.580	3.297	-4.302	6.223	-40.975	174.747
1	-11.297	-32.919	-59.798	-11.985	-5.967	-38.249	156.025
2	-10.827	-35.530	-60.105	-12.995	-5.250	-41.107	156.772
3	6.446	-27.907	6.076	-9.063	8.691	-30.151	166.090
4	-26.229	-44.615	-116.669	-15.912	-17.045	-53.799	150.008
5	-9.955	-36.992	-50.487	-11.980	-4.533	-41.414	159.741
6	0.180	-85.083	-54.614	-30.603	10.027	-94.930	162.163
7	0.052	-86.982	-56.367	-31.321	10.152	-97.082	162.127
8	-19.586	22.009	-43.546	10.847	24.668	-22.245	75.227
9	5.976	-25.296	6.383	-8.053	7.928	-27.248	166.374
1	-13.304	-40.863	-61.887	-22.105	-1.035	-53.132	150.968
2	-12.873	-43.631	-62.234	-23.525	-0.145	-56.359	151.586
3	6.536	-27.544	6.165	-12.833	10.829	-31.836	161.508
4	-29.948	-59.326	-120.551	-32.838	-8.662	-80.611	147.049
5	-10.537	-43.239	-52.151	-22.145	0.639	-54.416	153.219
6	-2.087	-94.070	-56.963	-48.198	18.541	-114.700	156.829
7	-2.286	-96.252	-58.789	-49.352	18.871	-117.409	156.795
8	-20.276	19.329	-44.315	9.965	21.695	-22.642	76.644
9	6.105	-24.775	6.512	-11.412	9.865	-28.536	161.756
1	-31.305	-65.778	-70.458	-34.656	-9.835	-87.248	148.221
2	-31.171	-72.585	-71.670	-37.161	-9.337	-94.419	149.563
3	6.248	-68.184	-2.010	-22.758	12.655	-74.591	164.276

E594

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	ZETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
18	4	-63.471	-77.225	-130.832	-49.324	-20.546	-120.150	138.968
18	5	-26.051	-72.924	-61.172	-34.921	-7.408	-91.467	151.905
13	6	-22.681	-198.725	-81.979	-80.963	8.890	-230.298	158.696
[illegible]	7	-23.487	-203.157	-84.377	-82.880	8.904	-235.549	158.653
	8	-29.076	81.002	-33.781	21.681	85.119	-33.193	79.249
18	9	6.114	-61.378	-0.798	-20.254	11.726	-66.989	164.514
.9	1	-43.731	-115.229	-83.138	-74.576	3.221	-162.182	147.805
.9	2	-44.919	-127.322	-85.672	-77.175	1.363	-173.606	149.048
.9	3	-6.603	-119.614	-14.839	-19.103	-3.461	-122.756	170.660
9	4	-77.855	-134.251	-145.721	-128.102	25.114	-237.222	141.207
9	5	-39.539	-126.543	-74.888	-70.029	-0.599	-165.483	150.924
9	6	-60.627	-350.291	-120.138	-115.747	-19.431	-391.487	160.564
9	7	-62.284	-358.123	-123.399	-119.799	-19.857	-400.551	160.498
9	8	-12.692	146.779	-17.631	-11.286	147.574	-13.487	94.028
9	9	-5.415	-107.520	-12.305	-16.504	-2.813	-110.122	171.042
0	1	-157.687	-25.074	-87.986	-55.100	-5.168	-177.593	109.863
0	2	-161.582	-27.323	-89.086	-59.099	-5.015	-183.890	110.680
0	3	-19.436	-22.758	2.024	-37.875	16.814	-59.009	136.255
0	4	-283.547	-32.182	-166.656	-78.278	-9.798	-305.931	105.958
0	5	-141.401	-27.617	-75.545	-57.055	-3.936	-165.082	112.541
0	6	-210.159	-69.129	-93.784	-130.564	8.744	-288.034	120.813
0	7	-215.972	-70.684	-96.618	-133.625	8.766	-295.423	120.735
0	8	-53.381	23.213	-50.670	33.318	35.678	-65.846	69.488
0	9	-15.541	-20.509	3.124	-33.877	15.942	-51.993	137.097
	1	-5.881	-18.434	-55.282	-0.842	-5.825	-18.490	176.176
	2	-5.164	-20.745	-55.473	-0.826	-5.121	-20.788	176.972
	[illegible]	7.351	-25.650	6.723	0.153	7.352	-25.651	0.266
	4	-17.262	-17.559	-108.450	-1.804	-15.600	-19.221	137.349
	5	-4.746	-22.464	-46.253	-0.824	-4.707	-22.502	177.341
	6	8.864	-65.344	-48.333	-0.495	8.867	-65.348	179.617
	7	8.983	-66.717	-49.914	-0.512	8.986	-66.720	179.612
	8	-20.950	29.765	-41.931	-1.193	29.793	-20.978	91.347
	9	6.634	-23.339	6.914	0.137	6.635	-23.339	0.262
	1	-4.687	-23.516	-56.136	0.761	-4.656	-23.547	2.311
	2	-3.967	-26.015	-56.366	0.846	-3.934	-26.048	2.196
	3	7.557	-27.915	6.310	0.950	7.583	-27.941	1.533
	4	-14.915	-26.230	-109.857	0.857	-14.851	-26.294	4.310
	5	-3.390	-28.130	-47.181	0.951	-3.353	-28.167	2.221
	6	10.251	-74.401	-49.954	2.543	10.327	-74.477	1.719
	7	10.404	-75.986	-51.574	2.597	10.482	-76.064	1.720
	8	-19.672	28.353	-41.994	-0.970	28.372	-19.692	91.157
	9	6.837	-25.416	6.539	0.864	6.860	-25.439	1.534
	1	-5.138	-25.186	-56.571	-1.186	-5.038	-25.256	176.629
	2	-4.438	-27.836	-56.851	-1.113	-4.385	-27.939	177.287
	3	7.134	-29.639	5.885	0.947	7.158	-29.633	1.476
	4	-15.393	-28.112	-110.362	-2.923	-14.753	-29.752	167.657
	5	-3.820	-29.834	-47.625	-0.862	-3.791	-29.863	178.104
	6	8.891	-79.823	-51.329	0.543	8.895	-79.826	0.350
	7	9.013	-81.535	-52.981	0.539	9.016	-81.538	0.341
		-18.967	31.186	-41.303	-2.516	31.312	-19.093	92.865

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E595

LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
9	5.464	-26.909	6.155	9.874	6.487	-26.931	1.499
1	-5.385	-18.651	-55.403	1.006	-6.006	-18.741	4.545
2	-5.341	-21.085	-55.611	1.199	-5.250	-21.175	4.332
3	7.849	-26.515	5.648	2.256	7.998	-26.663	3.757
4	-17.934	-17.335	-108.628	3.480	-17.068	-18.201	63.972
5	-4.743	-22.765	-46.348	1.548	-4.611	-22.897	4.874
6	9.395	-67.739	-48.740	5.150	9.737	-68.082	3.803
7	9.518	-69.157	-50.333	5.252	9.868	-69.516	3.802
8	-21.576	32.001	-41.643	-2.824	32.150	-21.724	93.039
9	7.105	-24.291	6.856	2.073	7.242	-24.228	3.785
1	-6.271	-19.370	-55.618	-0.577	-6.245	-19.395	177.479
2	-5.588	-22.044	-55.888	-0.262	-5.584	-22.048	179.086
3	7.286	-29.774	6.087	3.521	7.626	-29.115	5.525
4	-17.843	-16.906	-108.578	-3.627	-13.716	-21.032	131.320
5	-4.968	-23.636	-46.602	0.156	-4.966	-23.637	0.480
6	8.000	-73.299	-50.159	6.084	8.452	-73.752	4.256
7	8.093	-74.847	-51.783	6.190	8.553	-75.306	4.245
8	-20.384	36.806	-40.486	-6.964	37.642	-21.220	96.844
9	6.603	-26.100	6.358	3.206	6.915	-26.411	5.547
1	-3.431	-29.860	-57.245	2.656	-3.167	-30.124	5.682
2	-2.597	-33.143	-57.608	3.162	-2.273	-33.467	5.849
3	9.051	-34.899	5.214	5.393	9.703	-35.551	6.895
4	-13.390	-33.053	-111.101	1.325	-13.301	-33.142	3.839
5	-1.742	-34.809	-48.277	3.556	-1.363	-35.187	6.070
6	14.013	-95.602	-53.526	12.981	15.530	-97.118	6.662
7	14.243	-97.673	-55.229	13.249	15.791	-99.220	6.660
8	-20.509	39.383	-40.070	-7.883	40.401	-21.628	97.362
9	8.215	-31.516	5.577	4.887	8.807	-32.207	6.893
1	-5.854	-39.498	-59.723	-1.071	-5.820	-39.532	178.177
2	-5.298	-43.355	-60.355	-0.635	-5.279	-43.865	179.100
3	6.552	-44.895	2.714	5.187	7.070	-45.413	5.701
4	-16.137	-43.934	-113.956	-5.784	-14.981	-45.090	168.701
5	-4.295	-44.974	-50.887	0.009	-4.295	-44.974	0.000
6	6.489	-125.642	-61.106	9.793	7.071	-126.224	3.786
7	6.548	-128.402	-62.982	8.935	7.137	-128.991	3.771
8	-17.094	53.493	-35.610	-10.525	55.329	-18.630	98.303
9	5.986	-40.538	3.345	4.721	6.461	-41.013	5.737
1	-6.684	-19.350	-55.828	6.242	-4.124	-21.910	22.293
2	-6.127	-22.325	-56.184	7.221	-3.375	-25.077	20.860
3	6.814	-31.602	5.426	10.205	9.357	-34.145	13.991
4	-17.717	-14.714	-108.375	4.734	-11.249	-21.182	53.797
5	-4.775	-23.991	-46.754	7.719	-2.059	-25.707	19.388
6	5.357	-79.293	-51.917	25.914	13.124	-86.559	15.653
7	5.890	-80.962	-53.591	26.463	13.319	-88.392	15.579
8	-17.363	43.249	-38.717	-14.406	46.499	-20.613	102.712
9	6.257	-28.527	5.782	9.226	8.547	-30.917	13.939
1	-5.594	-14.855	-54.811	2.977	-4.710	-15.739	16.343
2	-5.127	-18.241	-55.267	4.431	-3.770	-19.598	17.025
3	5.734	-35.930	4.354	15.625	10.943	-41.140	18.436

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E 596

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
29	4	-14.774	-2.771	-105.502	-5.502	-0.630	-16.915	111.259
29	5	-3.913	-20.461	-45.980	5.692	-2.144	-22.230	17.263
29	6	4.815	-83.187	-53.027	32.377	15.722	-94.293	18.352
	7	4.838	-85.093	-54.702	33.522	15.959	-96.213	18.352
	8	-14.242	55.816	-35.685	-27.154	65.108	-23.534	108.391
29	9	5.277	-32.555	4.309	14.173	9.397	-37.276	18.421
30	1	8.421	-55.811	-60.354	14.938	11.725	-59.116	12.472
30	2	8.646	-62.594	-61.539	17.715	12.808	-66.757	13.221
30	3	2.580	-59.097	-2.904	28.718	12.667	-79.184	19.353
30	4	14.950	-57.556	-110.915	7.922	15.806	-58.412	5.163
30	5	8.885	-64.059	-52.280	18.925	13.503	-68.677	13.712
30	6	12.869	-189.794	-72.852	70.615	35.047	-211.972	17.436
30	7	13.184	-193.943	-74.962	72.100	35.311	-216.569	17.422
30	8	3.810	89.237	-25.508	-43.834	107.727	-14.679	112.871
30	9	2.355	-62.314	-1.720	25.941	11.475	-71.434	19.369
1	1	-4.003	-105.263	-73.027	-24.981	1.824	-111.091	166.869
1	2	-5.100	-117.334	-75.533	-22.298	-0.832	-121.602	169.164
1	3	-10.271	-120.529	-15.729	32.373	-1.468	-129.331	15.211
1	4	0.569	-114.584	-125.795	-70.855	34.292	-148.306	154.548
1	5	-4.600	-117.779	-65.991	-16.183	-2.332	-120.047	172.020
1	6	-25.074	-341.361	-111.008	34.827	-21.284	-345.151	6.210
1	7	-25.611	-348.910	-113.978	35.182	-21.826	-352.694	6.139
1	8	20.196	155.013	-9.352	-76.808	189.797	-14.587	114.364
1	9	-9.173	-108.458	-13.223	29.690	-0.972	-116.660	15.441
2	1	63.245	-20.892	-42.771	22.155	68.722	-26.369	13.887
2	2	58.187	-23.854	-44.252	27.312	66.448	-32.115	16.828
		-60.575	-30.380	-7.821	54.276	10.858	-101.814	52.772
	4	165.674	-18.242	-73.596	3.546	165.742	-18.311	1.104
2	5	46.910	-24.768	-37.165	30.509	58.137	-35.996	20.203
2	6	-49.695	-79.766	-63.788	126.660	62.818	-192.280	41.615
2	7	-49.928	-81.482	-65.532	129.261	64.515	-195.926	41.520
2	8	151.203	42.168	-3.684	-86.043	205.308	-2.936	152.336
2	9	-55.518	-27.418	-6.340	49.118	9.620	-92.557	52.981
3	1	-4.529	-18.065	-54.792	-0.842	-4.477	-18.117	176.451
3	2	-3.943	-20.383	-54.988	-0.825	-3.802	-20.424	177.146
	3	7.082	-25.715	6.657	0.153	7.082	-25.716	0.268
	4	-14.332	-16.770	-107.436	-1.804	-13.373	-17.729	152.021
	5	-3.406	-22.103	-45.790	-0.824	-3.370	-22.139	177.479
	6	9.591	-65.124	-47.977	-0.495	9.594	-65.128	179.620
	7	9.735	-66.489	-49.546	-0.512	9.739	-66.493	179.615
	8	-18.918	30.284	-41.356	-1.193	30.312	-18.947	91.388
	9	6.395	-23.397	6.853	0.137	6.396	-23.398	0.264
	1	-7.155	-12.265	-54.093	0.666	-7.069	-12.351	7.314
	2	-6.713	-14.237	-54.267	0.753	-6.638	-14.312	5.651
	3	4.589	-21.973	6.904	0.946	4.623	-22.007	2.038
	4	-17.647	-7.972	-106.218	0.639	-7.930	-17.689	86.234
	5	-6.344	-15.709	-45.046	0.832	-6.270	-15.782	5.843
	6	2.141	-52.388	-45.850	2.434	2.250	-52.497	2.551
	7	2.119	-53.461	-48.393	2.486	2.230	-53.572	2.556
		-15.333	28.849	-41.094	-1.118	28.877	-16.360	91.417

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E 597

NT	LOAD COMB	R-STRESS (RADIAL)	Z-STRESS AXIAL	THETA-STRESS HOOP	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
34	9	4.147	-20.302	7.079	0.860	4.178	-20.032	2.038
35	1	-6.968	-11.501	-53.923	-0.268	-6.952	-11.517	176.618
35	2	-6.527	-13.479	-54.100	0.015	-6.527	-13.479	0.127
35	3	4.608	-21.904	6.922	3.035	4.951	-22.247	6.448
35	4	-17.292	-6.521	-105.899	-2.776	-5.847	-17.966	103.635
35	5	-6.156	-14.946	-44.877	0.243	-6.150	-14.953	1.587
35	6	2.294	-51.768	-46.715	5.586	2.865	-52.339	5.838
35	7	2.276	-52.825	-48.255	5.688	2.857	-53.407	5.833
35	8	-16.109	29.761	-40.888	-6.182	30.580	-16.928	97.543
35	9	4.158	-19.925	7.098	2.751	4.478	-20.236	6.432
36	1	-4.822	-18.316	-54.940	1.723	-4.606	-18.533	7.165
36	2	-4.186	-20.766	-55.172	2.135	-3.915	-21.037	7.222
36	3	6.753	-26.789	6.377	4.330	7.303	-27.339	7.238
36	4	-14.568	-16.438	-107.495	0.210	-14.545	-16.462	6.349
36	5	-3.528	-22.462	-45.945	2.405	-3.326	-22.764	7.166
36	6	8.442	-67.945	-48.807	10.083	9.751	-69.254	7.395
36	7	8.558	-69.373	-50.396	10.290	9.894	-70.709	7.397
36	8	-18.013	32.905	-40.689	-6.900	33.824	-18.931	97.582
36	9	6.116	-24.339	6.609	3.918	6.612	-24.835	7.215
37	1	-5.007	-19.023	-55.150	0.139	-5.005	-19.025	0.570
37	2	-4.433	-21.724	-55.445	0.673	-4.407	-21.750	2.225
37	3	6.188	-29.046	5.815	5.584	7.052	-29.910	8.794
37	4	-14.475	-16.008	-107.456	-3.897	-11.269	-19.214	140.562
37	5	-3.854	-23.330	-46.195	1.014	-3.801	-23.383	2.972
37	6	7.046	-73.498	-50.222	11.017	8.526	-74.978	7.650
37	7	7.131	-75.047	-51.842	11.227	8.638	-76.553	7.641
37	8	-16.820	37.708	-39.529	-11.040	39.858	-18.970	101.023
37	9	5.614	-26.345	6.110	5.051	6.393	-27.125	8.771
38	1	-9.227	-10.568	-54.259	2.256	-7.543	-12.251	36.726
38	2	-9.182	-12.437	-54.492	2.972	-7.421	-14.198	30.648
38	3	1.005	-20.476	6.488	7.525	3.379	-22.850	17.507
38	4	-18.719	-5.756	-106.172	-1.129	-5.658	-18.817	94.942
38	5	-8.531	-13.795	-45.191	3.423	-6.845	-15.482	26.224
38	6	-7.438	-48.588	-48.091	16.783	-1.461	-54.565	19.602
38	7	-7.672	-49.584	-49.663	17.122	-1.567	-55.690	19.625
38	8	-9.544	28.444	-39.911	-12.744	32.324	-13.424	106.929
38	9	0.961	-13.607	6.722	6.809	3.097	-20.744	17.419
39	1	-8.456	-7.430	-53.541	-0.632	-7.129	-8.757	115.480
39	2	-8.377	-9.164	-53.742	0.211	-8.324	-9.217	14.109
39	3	1.375	-18.995	6.855	9.127	4.867	-22.486	20.932
39	4	-17.479	-0.688	-105.035	-7.892	2.438	-20.606	111.616
39	5	-7.725	-10.519	-44.437	1.024	-7.390	-10.854	19.126
39	6	-6.021	-42.863	-46.734	16.867	0.534	-49.419	21.240
39	7	-6.223	-43.725	-48.275	17.177	0.455	-50.404	21.246
39	8	-9.498	28.572	-39.907	-18.040	35.848	-16.675	111.693
39	9	1.297	-17.251	7.055	8.294	4.457	-20.421	20.879
40	1	-3.953	-18.636	-54.993	2.422	-3.564	-19.026	9.130
40	2	-3.812	-21.715	-55.450	3.747	-3.060	-22.468	11.357
40	3	2.082	-32.783	4.241	14.050	7.039	-37.740	19.434

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NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
140	4	-9.003	-12.479	-105.910	-5.577	-4.899	-16.583	143.652
40	5	-3.109	-23.547	-46.213	4.725	-2.358	-24.587	12.408
40	6	-0.355	-30.828	-53.302	29.516	9.312	-90.475	18.135
[redacted]	7	-0.409	-82.498	-54.933	30.096	9.442	-92.350	18.125
	8	-6.293	46.030	-35.872	-25.218	56.226	-16.469	111.974
40	9	1.941	-29.704	4.699	12.725	6.423	-34.187	19.404
41	1	-2.854	-14.153	-53.980	-0.842	-2.791	-14.215	175.761
41	2	-2.813	-17.632	-54.537	0.957	-2.751	-17.694	3.681
41	3	1.001	-37.114	3.169	19.473	9.191	-45.303	22.808
41	4	-6.061	-0.537	-103.145	-15.815	12.755	-19.354	130.046
41	5	-2.246	-20.019	-45.437	2.700	-1.845	-20.420	8.452
41	6	-1.397	-84.909	-54.416	36.482	12.295	-98.601	20.572
41	7	-1.460	-86.630	-56.108	37.157	12.471	-100.562	20.553
41	8	-3.173	58.605	-32.842	-37.967	76.661	-21.230	115.434
41	9	0.960	-33.635	3.727	17.673	8.393	-41.067	22.808
42	1	-2.168	-6.049	-52.206	2.306	-1.095	-7.123	24.959
42	2	-4.056	-7.480	-52.741	4.405	-1.042	-10.494	34.381
42	3	-19.505	-15.435	3.384	22.623	5.243	-40.185	47.570
42	4	10.480	-0.563	-99.803	-11.919	18.095	-8.178	147.428
42	5	-4.968	-8.518	-43.677	6.298	-0.199	-13.287	37.129
42	6	-40.324	-35.195	-52.272	45.616	7.928	-83.448	46.608
42	7	-41.116	-35.908	-53.906	46.492	8.053	-85.078	46.603
42	8	37.695	23.808	-31.602	-41.141	72.475	-10.971	139.790
42	9	-17.618	-14.305	3.918	20.524	4.791	-36.415	47.514
43	1	-0.475	0.833	-50.620	-2.623	2.883	-2.524	127.996
[redacted]	2	-2.143	0.287	-50.939	-1.308	0.957	-2.713	113.560
	3	-17.189	-6.127	5.650	14.806	4.147	-27.464	55.242
	4	12.095	6.075	-98.360	-15.575	24.949	-6.777	140.468
43	5	-2.950	-0.337	-41.769	0.539	-0.230	-3.058	78.773
43	6	-34.230	-10.621	-46.382	25.281	5.475	-50.327	57.514
43	7	-34.891	-10.807	-47.891	25.718	5.548	-51.248	57.545
43	8	34.747	12.018	-34.543	-29.177	54.696	-7.929	145.540
3	9	-15.521	-5.580	5.970	13.491	3.827	-24.929	55.112
4	1	71.368	-18.793	-40.410	-12.384	73.038	-20.463	172.319
4	2	71.838	-20.373	-40.514	-11.194	73.178	-21.713	173.176
4	3	-0.765	-15.442	7.042	14.360	8.023	-24.230	31.466
4	4	138.370	-24.927	-79.731	-34.023	145.175	-31.732	168.689
4	5	65.766	-19.996	-32.174	-8.468	66.594	-20.824	174.414
4	6	72.645	-49.138	-33.016	14.206	74.281	-50.773	6.566
4	7	74.781	-50.261	-34.163	14.328	76.402	-51.882	6.454
4	8	55.122	15.725	-29.825	-35.374	75.913	-5.065	149.556
4	9	-1.236	-13.861	7.146	13.170	7.056	-22.153	32.195
5	1	-3.845	1.300	-50.180	-0.375	1.327	-3.873	94.151
5	2	-3.535	0.779	-50.087	-0.317	0.802	-3.558	94.179
5	3	3.204	-6.796	9.605	0.623	3.243	-6.835	3.553
5	4	-10.023	7.673	-100.525	-1.202	7.755	-10.104	93.871
5	5	-3.282	0.097	-40.832	-0.262	0.117	-3.302	94.414
5	6	2.640	-9.738	-37.722	0.845	2.697	-9.795	3.889
5	7	2.657	-9.876	-39.054	0.858	2.715	-9.935	3.898
[redacted]		-10.293	11.869	-42.930	-1.585	11.982	-10.406	94.070

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E 599

T	LOAD COMB	V-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
5	9	2.894	-6.275	9.512	0.564	2.929	-6.310	3.511
6	1	-5.539	-11.811	-53.386	-0.591	-5.533	-11.866	174.619
6	2	-5.534	-13.878	-53.555	-0.493	-5.505	-13.907	176.629
6	3	0.554	-22.987	5.864	1.024	0.599	-23.032	2.487
6	4	-11.495	-6.313	-104.073	-1.941	-5.556	-12.142	108.425
6	5	-5.406	-15.422	-44.553	-0.424	-5.388	-15.440	177.580
6	6	-4.222	-53.919	-48.143	1.431	-4.180	-53.960	1.548
6	7	-4.351	-55.017	-49.703	1.453	-4.310	-55.059	1.642
6	8	-6.651	31.309	-38.474	-2.639	31.492	-6.833	93.959
6	9	0.499	-20.920	6.133	0.926	0.539	-20.960	2.472
7	1	-5.401	-11.045	-53.213	-1.527	-5.015	-11.432	165.791
7	2	-5.348	-13.120	-53.483	-1.230	-5.157	-13.310	171.211
7	3	0.572	-22.918	5.882	3.113	0.978	-23.323	7.423
7	4	-11.139	-4.861	-103.747	-5.357	-1.790	-14.209	119.815
7	5	-5.218	-14.659	-44.381	-1.013	-5.111	-14.766	173.942
7	6	-4.069	-53.296	-48.005	4.582	-3.646	-53.719	5.273
7	7	-4.195	-54.379	-49.562	4.655	-3.767	-54.807	5.256
7	8	-6.426	32.220	-38.264	-7.703	33.699	-7.905	100.868
7	9	0.519	-20.843	6.152	2.817	0.884	-21.209	7.387
8	1	-3.481	1.581	-50.086	-1.453	1.968	-3.868	104.929
8	2	-3.309	1.114	-50.010	-1.286	1.461	-3.656	105.097
8	3	1.858	-5.996	9.489	1.799	2.250	-6.389	12.311
8	4	-8.251	7.574	-100.255	-4.179	8.610	-9.287	103.922
8	5	-3.084	0.463	-40.754	-1.093	0.773	-3.393	105.820
8	6	0.239	-8.366	-37.973	2.064	0.709	-9.836	12.817
	7	0.211	-8.483	-39.311	2.090	0.688	-8.959	12.837
	8	-6.974	11.023	-42.456	-4.850	12.247	-8.198	104.161
	9	1.685	-5.529	9.414	1.633	2.038	-5.881	12.182
	1	-3.354	2.115	-49.986	-2.242	2.917	-4.156	109.670
	2	-3.157	1.712	-49.896	-1.995	2.424	-3.879	109.638
	3	2.050	-5.214	9.671	2.695	2.941	-6.105	18.289
	4	-8.150	8.025	-100.200	-6.382	10.240	-10.365	109.139
	5	-2.932	1.098	-40.631	-1.691	1.714	-3.548	110.003
	6	0.582	-6.546	-37.579	3.001	1.756	-7.629	19.852
	7	0.563	-6.626	-38.909	3.036	1.762	-7.725	19.895
	8	-7.177	10.217	-42.663	-7.271	12.856	-9.816	109.950
	9	1.853	-4.810	9.581	2.448	2.655	-5.612	18.136
	1	-3.866	-9.164	-52.601	-3.595	-2.050	-10.981	153.191
	2	-4.071	-11.095	-52.896	-3.144	-2.969	-12.298	159.079
	3	-2.069	-21.254	5.672	4.838	-0.918	-22.406	13.382
	4	-6.077	-2.470	-102.386	-10.687	5.564	-15.113	130.211
	5	-4.075	-12.629	-43.818	-2.704	-3.291	-13.413	163.847
	6	-7.314	-48.528	-47.918	5.839	-6.995	-49.447	7.984
	7	-7.999	-49.611	-49.469	5.915	-7.174	-50.435	7.936
	8	0.555	31.017	-37.146	-12.879	35.732	-4.159	110.109
	9	-1.864	-19.323	5.967	4.388	-0.823	-20.364	13.344
	1	-3.095	-6.027	-51.384	-6.484	2.086	-11.209	141.368
	2	-3.267	-7.823	-52.146	-5.995	0.784	-11.875	145.547
	3	-1.699	-19.773	6.037	5.441	0.360	-21.834	17.740

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E600

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
51	4	-4.836	2.596	-101.248	-17.451	16.722	-18.962	128.988
51	5	-3.269	-9.353	-43.064	-5.103	-0.369	-12.253	150.398
51	6	-6.398	-42.903	-46.561	5.923	-5.460	-43.840	8.990
[illegible]	7	-6.549	-43.751	-46.381	5.371	-5.614	-44.685	8.898
[illegible]	8	0.602	31.244	-37.142	-13.175	39.695	-7.848	114.935
51	9	-1.528	-17.977	6.299	5.362	3.347	-19.853	17.742
52	1	1.150	2.018	-49.215	-2.929	4.546	-1.377	130.785
52	2	0.973	1.758	-49.172	-2.613	4.009	-1.276	130.729
52	3	-1.893	-3.427	9.214	3.507	0.929	-6.250	38.834
52	4	3.667	6.463	-98.347	-8.294	13.477	-3.346	130.216
52	5	0.800	1.278	-39.960	-2.174	3.226	-1.148	131.863
52	6	-2.549	-3.669	-37.808	3.838	0.769	-6.989	40.850
52	7	-2.587	-3.704	-39.137	3.881	0.775	-7.067	40.906
52	8	4.798	7.158	-40.931	-9.321	15.374	-3.417	131.392
52	9	-1.716	-3.166	9.171	3.190	0.830	-5.713	38.599
53	1	1.376	2.968	-49.036	-2.900	5.180	-0.835	127.326
53	2	1.234	2.851	-48.960	-2.621	4.786	-0.700	126.430
53	3	-1.496	-1.809	9.584	3.155	1.506	-4.812	43.579
53	4	3.813	7.120	-98.271	-7.951	13.588	-2.654	129.127
53	5	1.082	2.459	-39.726	-2.174	4.051	-0.509	126.221
53	6	-1.614	0.173	-36.972	3.142	2.546	-3.987	52.938
53	7	-1.632	0.217	-38.283	3.172	2.596	-4.012	53.128
53	8	4.287	5.104	-41.428	-8.485	13.191	-3.798	133.622
53	9	-1.354	-1.592	9.509	2.876	1.357	-4.404	43.319
54	1	7.120	-3.654	-49.515	-10.795	13.798	-10.331	148.261
54	2	6.759	-4.703	-49.671	-10.415	12.916	-10.860	149.411
[illegible]	3	-4.239	-11.637	7.108	4.728	-1.935	-13.941	25.981
[illegible]	4	16.985	1.213	-97.419	-24.477	34.815	-16.617	143.929
54	5	5.986	-5.720	-40.639	-9.333	11.149	-10.884	151.046
54	6	-0.983	-25.313	-42.205	-1.917	-0.833	-25.464	175.520
54	7	-0.929	-25.813	-43.620	-2.065	-0.759	-25.983	175.286
54	8	14.148	17.993	-37.120	-17.911	34.085	-1.942	131.936
54	9	-3.878	-10.588	7.263	4.348	-1.741	-12.725	26.175
55	1	8.813	3.229	-47.931	-15.724	21.992	-9.949	140.034
55	2	8.672	3.063	-47.872	-16.129	22.239	-10.503	139.931
55	3	-1.924	-2.329	9.374	-3.087	0.966	-5.220	136.873
55	4	18.600	7.853	-95.980	-28.133	41.868	-15.415	140.406
55	5	8.002	2.460	-38.733	-15.091	20.575	-10.112	140.203
55	6	5.108	-0.741	-36.316	-22.249	24.624	-20.257	138.744
55	7	5.291	-0.713	-37.606	-22.335	25.321	-20.743	138.745
55	8	11.202	6.206	-40.062	-5.949	15.157	2.251	146.387
55	9	-1.783	-2.163	9.315	-2.582	0.715	-4.662	137.026
56	1	20.883	1.547	-45.602	-1.437	20.989	1.441	175.772
56	2	21.282	1.493	-45.415	-1.228	21.358	1.417	176.460
56	3	2.969	-0.766	10.586	2.382	4.128	-1.926	25.953
56	4	38.385	3.563	-92.353	-4.488	38.955	2.994	172.772
56	5	20.372	1.304	-36.350	-0.876	20.113	1.263	177.330
56	6	26.989	3.233	-31.514	3.073	27.338	-0.115	6.469
56	7	27.723	0.255	-32.791	3.115	28.062	-0.093	6.392
[illegible]	[illegible]	11.054	2.541	-40.551	-5.588	13.823	-0.226	153.546

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E601

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS AXIAL	TEETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
6	9	2.570	-0.711	10.400	2.174	3.653	-1.794	26.478
7	1	-1.371	1.863	-49.238	-0.375	1.900	-2.308	95.539
7	2	-2.013	1.255	-49.232	-1.317	1.285	-2.043	95.489
7	3	-0.472	-7.731	8.507	0.523	-0.419	-7.784	4.872
7	4	-3.555	9.477	-97.972	-1.222	9.537	-3.665	95.229
7	5	-2.014	0.490	-40.132	-0.262	0.517	-2.041	95.919
7	6	-2.741	-11.006	-38.581	0.345	-2.655	-11.092	5.781
7	7	-2.809	-11.164	-40.021	0.358	-2.722	-11.251	5.824
7	8	-1.075	14.246	-40.261	-1.585	14.408	-1.237	95.845
7	9	-0.430	-7.123	8.602	0.564	-0.383	-7.170	4.791
8	1	-1.065	10.291	-47.149	-0.783	10.345	-1.119	93.923
8	2	-1.044	10.553	-46.957	-0.797	10.607	-1.099	93.913
8	3	0.185	1.487	10.535	-0.131	1.500	0.172	95.701
8	4	-2.250	19.288	-95.302	-1.438	19.383	-2.346	93.805
8	5	-1.020	10.222	-37.809	-0.773	10.275	-1.072	93.915
8	6	-0.601	14.826	-32.927	-1.005	14.891	-0.666	93.714
8	7	-0.621	15.232	-34.139	-1.032	15.299	-0.688	93.709
8	8	-1.490	4.308	-42.140	-0.467	4.345	-1.528	94.576
8	9	0.164	1.225	10.343	-0.117	1.238	0.152	96.257
9	1	-1.244	9.586	-47.340	-1.679	9.840	-1.499	98.617
9	2	-1.225	9.843	-47.151	-1.679	10.092	-1.474	98.440
9	3	0.204	1.567	10.547	0.026	1.568	0.203	88.867
9	4	-2.622	17.817	-95.694	-3.318	18.342	-3.147	98.994
	5	-1.193	9.542	-37.996	-1.611	9.773	-1.429	98.358
	6	-0.792	14.086	-33.143	-1.558	14.248	-0.953	95.916
	7	-0.818	14.468	-34.352	-1.503	14.635	-0.984	95.924
	8	-1.635	3.726	-42.284	-1.621	4.179	-2.087	105.535
	9	0.184	1.310	10.357	0.026	1.311	0.184	88.650
	1	-1.496	2.173	-49.112	-2.639	3.594	-2.917	117.850
	2	-1.566	1.645	-49.097	-2.715	3.194	-3.115	119.702
	3	-0.760	-6.567	8.748	-0.209	-0.752	-6.675	177.369
	4	-2.402	9.225	-97.844	-5.141	11.172	-4.349	110.742
	5	-1.595	0.912	-39.997	-2.635	2.576	-3.260	122.173
	6	-2.869	-9.058	-38.377	-3.050	-1.619	-10.318	157.729
	7	-2.935	-9.192	-39.712	-3.134	-1.635	-10.492	157.474
	8	-0.015	12.839	-40.333	-2.245	13.157	-0.333	98.830
	9	-0.690	-5.140	8.734	-0.183	-0.683	-5.146	178.072
	1	-1.369	2.707	-49.013	-3.478	4.700	-3.362	119.314
	2	-1.423	2.243	-48.984	-3.423	4.293	-3.474	120.914
	3	-0.567	-5.886	8.930	0.635	-0.480	-5.973	7.232
	4	-2.300	9.677	-97.789	-7.343	13.164	-5.788	116.400
	5	-1.444	1.547	-39.874	-3.233	3.614	-3.511	122.585
	6	-2.425	-7.248	-37.982	-2.114	-1.629	-8.044	159.375
	7	-2.483	-7.336	-39.309	-2.138	-1.642	-8.177	158.977
	8	-0.218	12.033	-40.540	-4.467	13.499	-1.674	109.053
	9	-0.513	-5.422	8.900	0.531	-0.433	-5.502	7.213
	1	-0.890	7.769	-47.534	-2.385	8.717	-1.838	108.159
	2	-0.122	8.036	-47.355	-2.329	8.979	-1.065	107.840
	3	-0.359	1.955	10.482	-0.351	2.011	-0.414	98.677

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NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
62	4	0.074	13.904	-96.035	-5.397	15.761	-1.782	108.986
62	5	-0.152	7.824	-38.197	-2.829	8.725	-1.053	107.561
62	6	-0.752	12.602	-33.546	-3.515	13.467	-1.617	103.854
[redacted]	7	-0.766	12.933	-34.776	-3.600	13.821	-1.655	103.363
[redacted]	8	0.551	1.794	-42.233	-1.920	3.191	-0.345	125.233
62	9	-0.327	1.689	10.304	-0.321	1.739	-0.377	98.342
63	1	-0.580	5.841	-48.054	-3.240	7.192	-1.931	112.631
63	2	-0.621	6.073	-47.886	-3.304	7.430	-1.977	112.315
63	3	-0.415	1.754	10.407	-0.592	1.905	-0.566	104.315
63	4	-0.850	10.249	-97.006	-5.914	12.809	-3.410	113.413
63	5	-0.644	5.929	-38.712	-3.201	7.231	-1.945	112.123
63	6	-1.392	10.111	-34.255	-4.312	11.548	-2.829	108.431
63	7	-1.424	10.373	-35.504	-4.425	11.848	-2.899	108.437
63	8	0.276	0.684	-42.497	-1.757	2.250	-1.288	131.688
63	9	-0.374	1.522	10.239	-0.528	1.659	-0.511	104.560
64	1	0.659	1.997	-48.832	-5.398	6.757	-4.111	131.468
64	2	0.594	1.764	-48.763	-5.512	6.723	-4.363	131.971
64	3	-0.752	-3.163	9.392	-1.007	-0.387	-3.528	160.058
64	4	1.821	6.206	-97.788	-9.845	14.100	-6.072	128.722
64	5	0.473	1.278	-39.632	-5.339	6.230	-4.478	132.845
64	6	-0.752	-3.148	-36.997	-7.328	5.475	-9.376	139.641
64	7	-0.759	-3.172	-38.304	-7.519	5.650	-9.581	139.557
64	8	1.928	6.531	-41.198	-2.766	7.828	0.631	115.120
64	9	-0.688	-2.930	9.322	-0.893	-0.376	-3.243	150.727
65	1	0.884	2.946	-48.653	-5.369	7.383	-3.551	129.566
65	2	0.855	2.857	-48.551	-5.520	7.467	-3.753	129.861
[redacted]	3	-0.355	-1.545	9.762	-1.358	0.532	-2.434	146.827
[redacted]	4	1.967	6.862	-97.712	-9.501	14.227	-5.396	127.777
65	5	0.756	2.459	-39.399	-5.340	7.015	-3.799	130.470
65	6	0.183	0.695	-36.159	-8.024	8.468	-7.588	134.087
65	7	0.195	0.749	-37.451	-8.229	8.706	-7.761	134.036
65	8	1.417	4.477	-41.696	-1.929	5.410	0.485	115.798
65	9	-0.326	-1.456	9.660	-1.207	0.442	-2.225	147.638
66	1	2.914	2.498	-48.118	-2.986	5.700	-0.287	136.993
66	2	2.966	2.642	-47.955	-3.091	5.889	-0.281	136.506
66	3	0.408	1.200	10.398	-0.906	1.793	-0.185	123.212
66	4	5.380	4.057	-97.136	-5.176	9.937	-0.499	138.541
66	5	2.822	2.515	-38.782	-3.002	5.723	-0.235	135.987
66	6	3.719	5.246	-34.418	-4.691	9.235	-0.269	130.379
66	7	3.819	5.376	-35.671	-4.803	9.466	-0.273	130.401
66	8	1.645	-0.643	-42.453	-0.870	1.939	-0.936	151.365
66	9	0.356	1.056	10.236	-0.812	1.590	-0.178	133.355
67	1	2.580	1.190	-48.479	-1.284	3.345	0.424	149.210
67	2	2.618	1.281	-48.333	-1.348	3.455	0.445	148.185
67	3	0.301	0.799	10.254	-0.642	1.239	-0.138	124.412
67	4	4.798	1.766	-97.753	-2.044	5.828	0.737	153.379
67	5	2.481	1.284	-39.155	-1.338	3.349	0.416	147.045
67	6	3.129	2.964	-35.087	-2.501	5.549	0.544	135.642
67	7	3.213	3.035	-36.358	-2.550	5.687	0.562	135.993
[redacted]		1.617	-0.783	-42.455	0.103	1.621	-0.787	2.453

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LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
9	0.263	0.707	10.118	-0.578	1.105	-0.134	124.494
368							
1	4.261	-2.486	-49.150	-3.932	6.058	-4.294	155.313
2	4.452	-2.592	-49.015	-4.208	6.417	-4.558	154.966
3	1.852	-1.061	10.226	-2.755	3.512	-2.721	148.935
4	5.948	-4.055	-99.014	-5.568	9.346	-6.453	157.074
5	4.349	-2.524	-39.772	-4.215	6.351	-4.525	154.595
6	7.818	-4.455	-35.889	-9.277	12.804	-9.442	151.743
7	8.007	-4.563	-37.182	-9.491	13.105	-9.661	151.757
8	0.032	-0.117	-42.828	2.010	1.969	-2.055	43.932
9	1.661	-0.955	10.091	-2.479	3.157	-2.450	148.908
369							
1	-14.904	-175.277	-143.756	-57.469	3.562	-193.745	162.185
2	-14.784	-179.333	-144.392	-57.346	3.229	-197.346	162.561
3	-7.309	-232.485	-36.420	10.119	-6.855	-232.939	2.568
4	-32.584	-132.848	-243.857	-116.641	44.172	-209.704	146.618
5	-25.209	-186.001	-135.885	-49.175	-11.362	-199.847	164.273
6	-25.000	-255.987	-153.513	-54.022	-12.985	-267.902	167.461
7	-22.897	-263.647	-148.056	-46.821	-14.112	-272.432	169.373
8	-27.937	-94.355	-121.519	-51.951	0.511	-122.805	151.294
9	-7.430	-228.430	-35.784	9.996	-6.979	-228.881	2.584
370							
1	12.279	-215.951	-119.861	38.444	18.554	-223.227	9.271
2	12.250	-221.463	-120.631	39.331	18.692	-227.905	9.301
3	-16.021	-257.024	-43.638	50.958	-5.689	-267.356	11.461
4	25.042	-190.132	-190.756	29.162	28.924	-194.014	7.583
5	-3.229	-225.692	-113.763	40.789	4.013	-232.936	10.069
6	-2.206	-305.747	-129.534	56.077	7.822	-315.776	10.139
7	-3.777	-312.390	-128.508	57.776	6.693	-322.561	10.272
8	-2.583	-123.715	-96.359	20.740	0.959	-127.168	9.452
9	-15.993	-252.511	-42.868	50.071	-5.329	-262.675	11.474
371							
1	0.480	-219.819	-122.416	14.127	1.392	-220.721	3.654
2	-0.379	-224.539	-123.393	17.032	0.906	-225.826	4.320
3	-37.004	-262.254	-48.823	44.657	-28.473	-270.785	10.814
4	19.764	-191.317	-191.421	-7.230	20.011	-191.565	178.040
5	-16.859	-229.033	-116.851	20.394	-14.917	-230.975	5.441
6	-30.401	-312.722	-136.229	71.459	-13.344	-329.778	13.425
7	-33.335	-319.410	-135.554	76.005	-14.395	-338.349	13.992
8	2.585	-122.361	-94.776	-45.240	17.245	-137.022	162.044
9	-36.143	-257.534	-47.847	41.752	-28.531	-265.147	10.333
372							
1	16.368	-266.930	-154.958	-66.266	31.102	-281.664	167.464
2	16.580	-272.888	-155.952	-65.999	30.918	-287.226	167.743
3	-7.947	-273.873	-44.674	12.701	-7.342	-274.478	2.728
4	25.814	-272.288	-238.368	-135.152	78.837	-324.310	158.947
5	2.286	-273.272	-147.091	-56.451	13.402	-284.389	168.860
6	7.645	-384.088	-171.763	-59.863	16.589	-393.032	171.502
7	6.346	-387.363	-165.123	-51.334	12.929	-393.946	172.692
8	-2.505	-138.620	-124.627	-62.489	21.331	-162.956	158.721
9	-8.159	-257.914	-43.680	12.434	-7.565	-269.508	2.734
1	-5.719	-272.354	-159.993	-71.611	12.396	-290.369	165.879
2	-5.469	-278.302	-160.973	-71.609	12.183	-295.954	166.152
3	-4.792	-273.060	-43.772	7.363	-4.561	-273.291	1.677

Elev 4

Nº	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
73	4	-17.386	-283.177	-258.612	-141.504	43.843	-344.407	156.601
73	5	-16.709	-277.935	-151.411	-52.032	-2.727	-291.918	167.297
73	6	-13.261	-389.217	-176.479	-70.597	-0.441	-402.036	169.708
[illegible]	7	-11.913	-391.827	-170.139	-51.992	-2.054	-401.687	170.963
[illegible]	8	-22.369	-143.515	-129.247	-62.078	3.791	-159.675	157.148
[illegible]	9	-5.042	-267.112	-42.791	7.861	-4.805	-267.348	1.716
4	1	-51.656	-281.187	-144.402	-62.035	-35.963	-296.880	165.803
4	2	-52.430	-285.795	-145.335	-64.856	-35.615	-302.609	165.466
4	3	-29.556	-252.888	-45.398	-38.281	-23.177	-259.268	170.538
4	4	-84.642	-314.671	-235.801	-88.250	-54.686	-344.628	161.250
4	5	-61.768	-281.764	-135.773	-61.574	-45.658	-297.875	165.360
4	6	-67.763	-368.856	-154.222	-116.251	-28.103	-408.517	161.162
4	7	-76.581	-369.997	-153.638	-115.697	-36.450	-410.129	160.870
4	8	-44.284	-177.629	-114.686	2.087	-44.252	-177.661	0.896
[illegible]	9	-28.783	-248.280	-44.374	-35.459	-23.136	-253.866	171.047
	1	-25.333	-274.548	-137.520	-59.655	-11.789	-288.092	167.208
	2	-25.308	-278.956	-138.252	-60.505	-11.615	-292.650	167.247
	3	-10.803	-248.188	-40.551	-47.868	-1.514	-257.477	169.018
	4	-50.123	-305.948	-226.690	-71.668	-31.414	-324.657	165.369
	5	-35.617	-275.180	-128.989	-59.031	-21.861	-288.936	166.882
	6	-25.995	-358.356	-143.479	-76.370	-9.286	-375.065	167.659
	7	-35.150	-359.584	-143.008	-75.297	-18.526	-376.208	167.550
	8	-36.169	-175.556	-112.441	-39.831	-25.589	-186.136	165.125
	9	-10.827	-243.780	-39.819	-47.018	-1.695	-252.912	169.008
	1	17.943	-271.583	-154.284	-59.893	29.844	-283.484	168.761
	2	17.976	-275.457	-154.890	-59.789	29.691	-287.172	168.914
		-12.962	-217.930	-34.209	7.433	-12.593	-218.099	2.075
		33.858	-325.365	-265.626	-118.895	69.562	-362.069	163.285
	5	2.919	-268.738	-144.945	-51.671	12.415	-278.235	169.586
	6	5.761	-347.810	-163.555	-57.674	14.831	-356.980	170.965
	7	3.550	-342.920	-156.538	-49.682	10.534	-349.903	171.998
	8	2.173	-181.184	-131.262	-54.018	16.903	-195.914	164.746
	9	-12.395	-213.956	-33.604	7.329	-12.728	-214.223	2.086
	1	-7.109	-100.840	-179.215	41.261	8.466	-116.416	20.681
	2	-7.224	-105.861	-180.363	41.350	7.816	-120.903	19.989
	3	-17.053	-272.341	-45.278	-1.287	-17.046	-272.347	179.711
	4	-10.784	40.422	-307.632	78.780	97.655	-68.017	54.002
	5	-20.613	-126.055	-172.848	35.142	-9.414	-137.255	17.216
	6	-23.255	-201.290	-199.381	42.161	-13.775	-210.770	12.671
	7	-22.816	-222.215	-189.087	37.841	-15.876	-229.155	10.392
	8	-18.013	-12.569	-153.681	34.135	18.952	-49.535	47.279
	9	-16.938	-267.319	-44.430	-1.376	-16.930	-267.327	179.685
	1	16.525	-173.312	-213.944	-88.291	51.240	-208.027	158.536
	2	16.502	-178.245	-214.741	-89.082	50.431	-212.174	158.934
	3	-15.053	-263.398	-42.595	13.916	-14.275	-264.176	3.197
	4	33.292	-103.607	-377.137	-177.666	155.239	-225.553	145.535
	5	1.737	-188.759	-204.991	-75.666	28.134	-215.157	160.768
	6	3.481	-271.132	-235.583	-82.743	26.485	-294.135	164.463
	7	1.291	-283.222	-220.256	-71.679	13.330	-300.260	166.629
		2.262	-77.263	-186.976	-80.370	52.168	-127.169	148.162

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E605

	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
8	9	-15.029	-258.465	-41.798	13.708	-14.260	-259.234	3.213
9	1	-20.151	-182.347	-222.458	-96.354	24.691	-227.189	155.043
9	2	-20.095	-187.260	-223.233	-96.137	23.713	-231.069	155.502
9	3	-9.594	-262.010	-41.142	14.640	-8.748	-262.856	3.308
9	4	-40.260	-121.760	-394.365	-193.464	115.598	-279.719	140.947
9	5	-29.760	-196.510	-212.274	-92.686	4.289	-230.559	157.619
9	6	-31.049	-279.623	-243.534	-90.590	-1.538	-309.134	151.956
9	7	-28.688	-290.590	-227.113	-78.539	-6.941	-312.337	164.523
9	8	-31.023	-85.479	-194.761	-87.577	33.460	-149.963	143.635
9	9	-9.650	-257.097	-40.368	14.423	-8.312	-257.935	3.324
0	1	11.901	-241.756	-202.465	32.834	16.082	-245.938	7.257
0	2	12.423	-246.500	-203.125	32.912	16.541	-250.618	7.132
0	3	-2.065	-251.250	-37.882	-2.167	-2.046	-251.269	179.501
0	4	12.992	-242.302	-357.458	63.801	28.049	-257.359	13.278
0	5	-1.496	-247.051	-192.215	28.721	1.818	-250.366	6.583
0	6	8.266	-334.242	-218.493	33.693	11.549	-337.525	5.565
0	7	8.493	-337.884	-204.854	30.215	11.108	-340.500	4.948
0	8	-13.286	-139.842	-177.299	26.958	-7.783	-145.346	11.538
0	9	-2.587	-246.506	-37.222	-2.245	-2.556	-246.527	179.472
1	1	-10.152	-247.152	-207.368	27.486	-7.006	-250.298	6.529
1	2	-9.591	-251.886	-208.014	27.299	-6.554	-254.924	6.349
1	3	1.089	-250.445	-36.987	-7.009	1.284	-250.640	178.405
1	4	-31.139	-253.129	-367.445	57.446	-17.154	-267.114	13.682
1	5	-20.458	-251.688	-196.417	23.139	-18.165	-253.981	5.658
1	6	-12.601	-339.336	-223.062	22.957	-10.996	-340.942	3.999
.	7	-9.734	-342.322	-208.803	19.555	-8.588	-343.468	3.353
.	8	-33.115	-144.711	-181.798	27.367	-26.765	-151.061	13.063
.	9	0.529	-245.711	-36.340	-6.822	0.718	-245.900	179.414
2	1	17.977	-314.708	-239.993	-95.854	43.619	-340.349	165.023
2	2	17.947	-319.357	-240.726	-95.672	43.194	-344.604	165.217
2	3	-15.546	-242.204	-38.185	13.972	-14.688	-243.062	3.514
2	4	36.393	-387.362	-429.844	-191.999	110.445	-461.414	158.909
2	5	2.980	-310.209	-227.303	-82.353	23.219	-330.548	166.127
2	6	4.698	-404.409	-259.958	-90.777	23.936	-423.647	168.034
2	7	2.315	-399.227	-241.353	-78.879	17.255	-414.166	169.275
2	8	3.589	-205.143	-210.720	-86.449	34.743	-236.298	160.132
2	9	-15.515	-237.555	-37.451	13.791	-14.552	-238.408	3.540
	1	-18.804	-323.756	-248.451	-89.597	5.571	-348.132	164.780
	2	-18.772	-328.389	-249.167	-89.439	5.207	-352.369	164.991
	3	-10.409	-240.910	-36.826	12.629	-9.719	-241.600	3.127
	4	-37.122	-405.472	-446.903	-179.154	35.640	-478.235	157.896
	5	-28.759	-317.993	-234.562	-77.085	-9.497	-337.255	155.970
	6	-30.281	-413.006	-267.944	-85.124	-12.202	-431.086	158.009
	7	-28.132	-406.694	-248.268	-74.066	-14.157	-420.669	159.314
	8	-29.498	-213.298	-218.386	-80.645	0.868	-243.656	159.366
	9	-10.442	-236.277	-36.111	12.472	-9.755	-236.964	3.151
	1	-21.678	-387.472	-236.439	34.404	-18.470	-390.680	5.326
	2	-21.782	-391.920	-237.218	34.175	-18.653	-395.049	5.231
	3	-15.647	-229.476	-35.981	-10.084	-15.172	-229.951	177.306

E606

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
84	4	-39.326	-534.691	-423.211	73.154	-28.749	-545.269	8.227
84	5	-33.191	-372.247	-221.974	28.894	-30.746	-374.692	4.836
84	6	-37.055	-472.194	-253.249	30.325	-34.952	-474.297	3.967
[illegible]	7	-35.191	-457.423	-235.723	24.496	-33.774	-458.840	3.309
[illegible]	8	-30.830	-271.708	-205.747	34.084	-26.100	-276.438	7.900
[illegible]	9	-15.542	-225.027	-35.253	-9.854	-15.090	-225.490	177.312
35	1	-29.231	-46.008	-269.243	-111.722	74.416	-149.656	137.147
35	2	-29.278	-51.240	-279.074	-111.417	71.697	-152.216	137.314
35	3	-13.490	-283.233	-45.601	20.124	-11.996	-284.726	4.243
35	4	-53.205	152.355	-484.997	-226.910	298.678	-199.527	122.815
35	5	-37.417	-79.635	-260.435	-95.368	39.149	-156.203	141.240
35	6	-41.029	-151.744	-300.388	-103.805	21.256	-214.030	149.035
5	7	-38.302	-179.834	-276.349	-89.521	5.045	-223.182	154.163
5	8	-36.370	38.609	-241.655	-102.264	110.039	-107.800	124.933
5	9	-13.443	-278.001	-44.770	19.819	-11.967	-279.477	4.260
6	1	15.822	-135.930	-254.847	76.499	47.693	-167.801	22.617
6	2	15.794	-140.902	-255.630	76.337	46.834	-171.942	22.127
6	3	-15.650	-266.263	-42.720	-11.328	-15.139	-266.774	177.417
5	4	31.592	-30.832	-458.414	153.386	156.910	-156.150	39.249
5	5	0.148	-156.193	-245.505	65.719	24.103	-180.149	20.027
5	6	1.401	-234.767	-282.354	72.111	21.678	-255.044	15.705
5	7	-0.388	-251.388	-260.498	62.615	14.364	-266.142	13.258
5	8	0.781	-43.840	-227.811	69.381	51.351	-94.409	36.087
5	9	-15.622	-261.291	-41.937	-11.166	-15.115	-261.798	177.403
	1	-20.822	-144.937	-263.229	68.439	9.505	-175.265	23.900
	2	-20.771	-149.888	-263.989	68.285	8.641	-179.302	23.303
	[illegible]	-10.192	-264.881	-41.260	-10.603	-9.751	-265.322	177.620
	[illegible]	-41.897	-48.923	-475.385	137.599	92.234	-183.055	44.268
	5	-31.318	-163.916	-252.656	58.710	-9.059	-186.175	20.763
	6	-33.094	-243.228	-290.152	64.272	-14.994	-261.328	15.727
	7	-30.339	-258.722	-267.225	55.755	-17.450	-271.611	13.014
	8	-32.473	-52.020	-235.453	62.185	20.701	-105.195	40.534
	9	-10.243	-259.930	-40.499	-10.449	-9.807	-260.367	177.507
	1	15.228	-241.798	-297.909	-110.594	56.329	-282.899	159.530
	2	15.115	-246.553	-298.654	-110.436	55.493	-286.932	159.916
	3	-19.330	-250.924	-39.952	17.521	-17.018	-252.237	4.284
	4	34.334	-242.863	-543.536	-222.749	158.084	-366.613	150.945
	5	0.898	-247.234	-284.834	-94.790	32.957	-279.303	161.309
	6	1.284	-334.843	-326.854	-103.687	30.696	-364.255	164.163
	7	-1.281	-338.278	-299.093	-89.852	21.178	-360.738	165.365
	8	3.449	-139.778	-268.008	-100.614	55.334	-191.663	152.721
	9	-18.217	-246.169	-39.208	17.263	-16.317	-247.469	4.306
	1	-29.561	-252.826	-308.222	-114.576	18.773	-301.161	157.127
	2	-29.597	-257.561	-308.945	-114.349	17.375	-305.034	157.454
	3	-12.643	-249.497	-38.459	15.872	-11.584	-250.555	3.817
	4	-54.656	-264.792	-564.150	-228.676	91.934	-411.383	147.338
	5	-37.701	-256.728	-293.674	-98.453	0.047	-294.477	159.022
	6	-41.279	-345.303	-336.562	-108.187	-6.710	-379.871	162.280
	7	-38.401	-347.395	-307.527	-94.107	-11.996	-373.901	164.326
	[illegible]	-36.874	-149.715	-277.326	-103.578	24.552	-211.242	149.289

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E607

LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	DELTA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
9	-12.606	-244.751	-37.736	15.645	-11.557	-245.811	3.838
1	0.975	-342.833	-296.874	69.715	14.574	-356.431	11.037
2	-0.977	-347.373	-297.559	69.599	14.367	-360.764	10.890
3	-13.784	-[illegible]5.603	-35.975	-9.831	-13.349	-236.037	177.467
4	2.109	-[illegible]5.568	-543.052	139.460	41.999	-485.458	15.962
5	-12.652	-[illegible]33.797	-281.469	60.029	-1.797	-344.651	10.249
6	-12.733	-429.784	-321.743	66.415	-2.411	-440.106	8.833
7	-12.632	-420.736	-294.577	57.303	-4.603	-428.755	7.908
8	-12.675	-231.187	-265.997	62.654	4.015	-247.877	14.916
9	-13.785	-231.062	-35.291	-9.715	-13.351	-231.496	177.445
1	-35.774	-351.847	-305.215	75.972	-18.462	-369.159	12.837
2	-35.710	-356.371	-305.881	75.832	-18.681	-373.400	12.656
3	-8.648	-234.302	-34.624	-11.174	-8.096	-234.854	177.172
4	-71.344	-463.621	-559.868	152.304	-19.154	-515.811	18.915
5	-44.281	-341.552	-288.611	65.297	-30.570	-355.262	11.858
6	-47.678	-438.340	-329.597	72.069	-34.807	-451.211	10.126
7	-43.051	-428.173	-301.376	62.617	-33.126	-438.098	9.007
8	-45.732	-239.305	-273.545	68.458	-23.968	-251.069	17.636
9	-8.712	-229.777	-33.958	-11.034	-8.163	-230.327	177.149
1	15.030	-448.680	-336.694	-108.624	39.214	-472.864	167.448
2	14.934	-453.048	-337.352	-108.427	38.835	-476.949	167.569
3	-17.207	-221.916	-33.720	14.301	-16.213	-222.911	3.977
4	32.894	-656.236	-621.665	-216.156	95.083	-718.425	163.949
5	0.752	-425.104	-318.033	-93.427	20.348	-444.699	168.154
6	1.304	-530.798	-363.277	-102.874	20.501	-549.995	169.430
7	-1.095	-508.736	-330.635	-89.545	14.270	-524.101	170.274
8	2.933	-326.388	-303.159	-97.887	29.332	-353.287	164.634
9	-17.111	-217.548	-33.062	14.104	-16.123	-218.536	4.005
1	-22.662	25.032	-320.993	94.729	98.869	-96.499	52.065
2	-22.536	20.075	-321.702	94.675	95.812	-98.273	51.341
3	-5.374	-269.028	-40.188	-6.206	-5.228	-269.174	178.652
4	-49.470	273.846	-593.056	183.252	356.553	-132.177	65.708
5	-33.309	-15.258	-311.542	82.370	59.026	-106.593	47.954
6	-33.408	-76.078	-357.756	92.159	39.853	-149.340	38.483
7	-29.888	-110.189	-325.135	81.341	20.672	-160.750	31.864
8	-35.165	96.775	-295.505	83.580	137.284	-75.574	64.142
9	-5.501	-264.071	-39.479	-6.152	-5.355	-264.217	178.637
1	25.537	-118.354	-361.520	-108.812	84.038	-176.855	151.736
2	25.484	-123.123	-362.223	-108.563	82.737	-180.376	152.194
3	-15.502	-[illegible]4.512	-39.529	16.422	-14.378	-255.635	3.912
4	51.337	-7.970	-671.799	-218.151	241.350	-198.483	138.870
5	19.350	-139.359	-349.105	-93.174	55.014	-184.023	154.389
6	12.681	-213.682	-400.659	-101.881	51.782	-252.783	159.004
7	9.339	-230.687	-362.564	-98.408	38.387	-259.735	161.811
8	11.542	-31.576	-333.224	-98.795	91.103	-111.137	141.155
9	-15.449	-249.743	-38.826	16.173	-14.339	-250.854	3.930
1	-27.018	-132.138	-373.652	-117.131	48.805	-207.962	147.083
2	-27.010	-136.898	-374.339	-116.928	47.239	-211.148	147.584
3	-10.720	-253.599	-38.318	13.981	-9.918	-254.401	3.284

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
95	4	-51.455	-34.634	-695.568	-231.740	188.847	-274.938	133.960
95	5	-35.165	-151.335	-359.547	-100.830	23.113	-209.615	149.972
95	6	-37.836	-227.043	-412.222	-111.020	13.421	-278.300	155.217
[illegible]	7	-35.013	-242.465	-372.595	-96.921	3.221	-280.699	158.471
[illegible]	8	-35.344	-43.777	-344.034	-105.439	65.962	-145.084	136.145
95	9	-10.728	-248.840	-37.631	13.777	-9.933	-249.634	3.300
96	1	17.072	-219.874	-359.965	100.083	53.687	-256.490	20.095
96	2	17.083	-224.486	-360.524	99.972	53.090	-260.492	19.807
96	3	-12.796	-242.893	-36.277	-9.603	-12.396	-243.293	177.614
96	4	31.397	-208.352	-669.506	196.236	141.476	-318.431	29.290
96	5	1.517	-226.759	-345.159	86.660	30.688	-255.930	18.604
96	6	3.309	-310.101	-395.006	96.354	30.562	-337.354	15.793
96	7	1.736	-315.050	-357.781	84.539	22.385	-336.199	14.045
96	8	1.256	-122.550	-330.263	89.159	47.895	-169.189	27.614
96	9	-12.808	-238.281	-35.618	-9.493	-12.409	-238.680	177.593
97	1	-31.367	-232.118	-371.069	95.305	6.671	-270.156	21.758
97	2	-31.273	-236.711	-371.706	95.162	6.032	-274.017	21.406
97	3	-6.692	-241.502	-34.699	-11.309	-6.148	-242.045	177.249
97	4	-64.803	-232.533	-691.671	188.669	57.800	-355.137	33.017
97	5	-40.222	-237.324	-354.664	82.197	-10.442	-267.103	19.915
97	6	-42.736	-321.790	-405.458	90.937	-15.718	-348.809	16.547
97	7	-38.428	-325.272	-366.864	79.458	-17.888	-345.812	14.493
97	8	-42.339	-133.522	-340.268	85.426	8.900	-184.762	30.955
97	9	-6.786	-236.908	-34.062	-11.166	-6.245	-237.449	177.228
[illegible]	1	22.062	-358.958	-406.916	-111.944	52.517	-389.413	164.780
[illegible]	2	22.024	-363.382	-407.541	-111.785	52.100	-393.458	164.941
[illegible]	[illegible]	-14.287	-228.459	-33.853	11.485	-13.673	-229.073	3.061
	4	43.590	-481.993	-761.777	-219.827	123.411	-561.814	160.043
	5	7.278	-347.070	-388.089	-96.556	31.881	-371.672	165.705
	6	9.335	-443.479	-443.631	-106.736	33.233	-467.377	167.379
	7	6.551	-431.784	-400.052	-93.510	25.666	-450.899	168.447
	8	8.135	-247.083	-373.972	-100.146	42.740	-281.687	160.938
	9	-14.249	-224.034	-33.229	11.326	-13.639	-224.644	3.081
9	1	-30.454	-371.833	-418.729	-112.409	3.234	-405.523	153.316
9	2	-30.434	-376.243	-419.337	-112.274	2.819	-409.498	163.501
9	3	-9.627	-227.327	-32.629	10.357	-9.135	-227.818	2.718
9	4	-59.017	-507.132	-784.955	-219.843	30.824	-596.974	157.772
[illegible]	5	-38.210	-358.215	-398.247	-97.211	-10.994	-385.432	164.359
	6	-41.184	-455.861	-454.868	-107.798	-14.835	-482.209	166.254
	7	-37.821	-442.659	-409.896	-94.612	-15.801	-463.679	167.474
	8	-38.669	-258.541	-384.499	-100.273	0.192	-297.403	158.816
	9	-9.647	-222.916	-32.029	10.222	-9.159	-223.405	2.738
	1	8.240	-478.208	-410.069	102.062	28.787	-498.754	11.382
	2	8.258	-482.450	-410.647	101.892	28.574	-502.766	11.276
	3	-12.426	-214.915	-30.404	-12.864	-11.612	-215.729	176.379
	4	14.441	-717.262	-768.487	202.698	66.840	-769.662	14.494
	5	-6.243	-449.727	-388.244	87.941	10.558	-466.529	10.816
	6	-5.315	-556.791	-442.548	97.090	11.278	-573.385	9.699
	7	-5.907	-530.944	-399.317	84.688	7.414	-544.266	8.940
[illegible]	[illegible]	-6.640	-353.861	-375.177	91.776	16.124	-376.626	13.931

3667

812

E609

LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
9	-12.443	-210.673	-29.826	-12.694	-11.634	-211.483	176.350
1	-25.199	37.795	-400.722	-115.618	127.095	-114.498	127.442
2	-25.151	33.137	-401.380	-115.488	124.068	-116.092	127.975
3	-9.111	-251.112	-38.991	9.233	-8.759	-251.464	2.132
4	-48.894	282.192	-753.025	-225.696	397.355	-164.057	116.930
5	-32.844	-2.057	-390.637	-100.974	84.630	-119.592	130.665
6	-34.858	-58.093	-449.062	-111.965	66.090	-159.042	137.962
7	-32.119	-91.273	-403.248	-98.491	41.139	-164.533	143.357
8	-33.697	103.226	-375.760	-103.899	159.191	-89.662	118.309
9	-9.149	-246.454	-38.333	9.104	-8.800	-246.802	2.194
1	25.770	-83.409	-395.305	111.388	95.227	-152.866	31.945
2	25.766	-87.990	-395.956	111.372	93.944	-156.168	31.473
3	-12.985	-243.761	-37.706	-4.182	-12.909	-243.836	178.962
4	48.670	48.634	-741.747	212.803	261.455	-164.150	44.997
5	9.919	-107.136	-383.497	97.247	64.893	-162.110	29.479
6	12.444	-175.274	-440.256	109.312	62.664	-225.494	24.674
7	9.829	-194.847	-395.962	96.938	48.452	-233.470	21.724
8	10.022	-3.618	-368.792	97.608	101.049	-94.644	43.001
9	-12.980	-239.180	-37.055	-4.166	-12.903	-239.257	178.945
1	-26.520	-96.222	-407.083	104.013	48.326	-171.068	35.738
2	-26.462	-100.786	-407.716	103.952	46.770	-174.019	35.164
3	-8.123	-242.529	-36.403	-6.707	-7.931	-242.721	178.362
4	-53.689	23.532	-764.910	201.070	189.665	-219.822	50.435
5	-35.350	-118.210	-393.598	90.410	22.670	-176.231	32.690
6	-37.775	-187.551	-451.409	101.083	13.138	-238.465	26.733
7	-34.247	-205.618	-405.723	89.222	3.770	-243.636	23.079
8	-36.650	-15.048	-379.293	91.808	66.592	-118.290	48.355
9	-8.180	-237.965	-35.770	-6.645	-7.988	-238.157	178.344
1	25.608	-221.569	-439.833	-117.270	72.391	-268.352	158.251
2	25.587	-226.033	-440.460	-117.138	71.677	-272.123	158.522
3	-13.101	-234.125	-36.224	9.264	-12.714	-234.513	2.396
4	49.673	-219.160	-828.696	-227.860	179.810	-349.296	150.268
5	10.984	-227.252	-424.460	-101.458	48.336	-264.604	159.798
6	13.662	-309.119	-486.743	-112.430	48.963	-344.420	162.569
7	10.591	-312.732	-436.469	-98.922	38.455	-340.596	164.258
8	11.446	-126.364	-410.291	-104.444	67.667	-182.585	151.707
9	-13.081	-229.561	-35.597	9.131	-12.696	-230.045	2.410
1	-30.023	-235.194	-452.312	-117.847	23.633	-288.851	155.519
2	-29.990	-239.644	-452.924	-117.718	22.809	-292.445	155.842
3	-9.018	-233.092	-35.125	9.003	-8.657	-233.453	2.297
4	-58.269	-245.609	-952.986	-228.781	95.275	-399.153	146.133
5	-37.296	-239.057	-435.187	-102.059	5.325	-281.579	157.333
6	-39.399	-322.232	-498.611	-113.166	-0.226	-362.004	160.636
7	-36.662	-324.273	-446.902	-99.594	-5.541	-355.394	162.547
8	-38.044	-138.474	-421.367	-104.960	28.095	-204.614	147.783
9	-9.351	-228.542	-34.513	8.874	-8.593	-229.000	2.310
1	14.209	-356.736	-448.402	106.916	42.818	-385.345	14.980
2	14.195	-361.061	-448.997	106.921	42.473	-389.338	14.827
3	-13.155	-223.249	-33.400	-8.538	-12.805	-223.599	177.663

E610

LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
4	26.989	-481.867	-844.900	208.126	101.271	-556.149	19.642
5	-0.363	-344.354	-429.303	92.717	23.053	-367.471	14.174
6	0.783	-438.756	-491.104	103.305	23.852	-461.826	12.588
[illegible]	-0.598	-426.868	-440.702	90.387	17.970	-445.437	11.547
8	-0.087	-246.305	-415.852	94.872	32.227	-278.520	18.809
9	-13.143	-218.923	-32.805	-8.493	-12.793	-219.273	177.640
1	-38.277	-369.569	-460.097	106.749	-6.859	-400.987	16.400
2	-38.231	-373.879	-460.675	106.630	-7.221	-404.890	16.215
3	-8.484	-222.067	-32.161	-9.730	-8.041	-222.509	177.397
4	-75.567	-506.970	-867.856	208.693	8.864	-591.402	22.027
5	-45.820	-355.157	-439.342	92.332	-20.356	-380.621	15.418
6	-49.694	-451.076	-502.201	102.541	-25.015	-475.755	13.532
7	-44.934	-437.687	-450.424	90.048	-25.272	-457.349	12.317
8	-46.864	-257.743	-426.265	95.022	-10.364	-294.243	21.012
9	-8.530	-217.756	-31.583	-9.611	-8.089	-218.197	177.375
1	20.536	-494.673	-491.236	-116.430	45.626	-519.763	167.839
2	20.504	-498.856	-491.803	-116.309	45.362	-523.713	167.936
3	-13.345	-212.092	-31.657	8.843	-12.952	-212.484	2.542
4	40.118	-750.529	-928.893	-225.955	100.137	-810.548	165.124
5	6.268	-463.765	-468.747	-100.802	26.974	-484.471	168.392
6	8.154	-571.847	-535.840	-111.854	28.978	-592.670	169.454
7	5.668	-543.840	-479.609	-98.475	22.783	-560.954	170.141
8	6.975	-369.243	-455.931	-103.542	33.589	-395.857	165.585
9	-13.313	-207.909	-31.090	8.722	-12.923	-208.299	2.561
1	-29.951	47.566	-434.249	114.437	129.630	-112.015	54.355
[illegible]	-29.934	42.824	-434.931	114.327	126.421	-113.531	53.825
[illegible]	-9.898	-253.140	-40.903	-8.658	-9.590	-253.448	177.964
4	-58.169	302.178	-819.382	222.126	408.016	-164.007	64.523
5	-38.133	6.213	-425.354	99.140	85.629	-117.549	51.303
6	-41.437	-50.079	-489.979	110.187	64.513	-156.030	43.877
7	-37.816	-84.599	-438.407	97.030	38.601	-161.018	38.223
8	-38.506	113.379	-409.959	101.624	154.301	-89.429	63.385
9	-9.915	-248.398	-40.222	-8.548	-9.609	-248.704	177.949
1	28.029	-81.048	-463.340	-115.458	101.191	-154.201	147.642
2	28.000	-85.650	-464.004	-115.317	99.733	-157.383	148.116
3	-13.086	-243.359	-40.337	9.126	-12.725	-243.720	2.256
4	54.670	52.321	-876.587	-224.269	277.768	-170.776	135.150
5	13.583	-105.386	-452.920	-99.324	70.302	-162.106	150.395
6	16.437	-173.911	-521.451	-110.395	67.021	-224.495	155.382
7	13.035	-193.513	-465.641	-97.125	51.532	-232.010	158.378
8	14.228	-1.381	-437.915	-103.002	109.721	-96.874	137.166
9	-13.058	-238.756	-39.673	8.986	-12.701	-239.114	2.276
1	-27.543	-94.638	-475.715	-115.513	59.195	-181.378	143.097
2	-27.509	-99.225	-476.361	-115.369	57.446	-184.180	143.633
3	-8.895	-242.294	-39.194	9.026	-8.546	-242.643	2.211
4	-53.222	25.920	-900.687	-224.314	214.126	-241.428	129.997
5	-34.607	-117.148	-463.521	-99.918	32.227	-133.984	146.221
6	-36.959	-186.929	-533.124	-110.430	21.538	-245.427	152.088
7	-33.956	-204.972	-475.901	-97.148	9.955	-248.883	155.676
[illegible]	-35.374	-13.506	-448.918	-103.179	79.316	-128.198	131.975

3667

814

E611

N°	LOAD COMB	[illegible] (RADIAL)	[illegible] (AXIAL)	[illegible] (HOOP)	[illegible] (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
11	9	-8.929	-237.708	-38.548	8.381	-8.584	-238.052	2.220
12	1	19.189	-218.645	-474.854	114.618	65.434	-264.890	21.972
12	2	19.172	-223.094	-475.479	114.515	64.733	-268.655	21.695
12	3	-12.985	-232.546	-37.229	-8.401	-12.564	-232.867	177.812
12	4	36.589	-214.777	-898.507	222.334	156.305	-344.494	30.252
12	5	4.430	-224.229	-460.257	99.418	41.611	-251.409	20.574
12	6	6.035	-305.514	-528.486	110.638	41.327	-340.807	17.592
12	7	4.105	-309.406	-472.233	97.446	31.925	-337.226	15.933
12	8	4.813	-123.697	-446.129	101.739	60.889	-179.774	28.362
12	9	-12.968	-228.097	-36.604	-8.298	-12.649	-228.417	177.734
13	1	-36.418	-232.243	-487.236	114.041	15.976	-284.638	24.676
13	2	-36.381	-236.677	-487.845	113.935	15.163	-288.223	24.342
13	3	-8.902	-231.509	-36.130	-8.668	-8.565	-231.846	177.773
13	4	-71.305	-241.174	-922.602	221.414	80.906	-393.385	34.506
13	5	-43.825	-236.006	-470.887	98.810	-2.087	-277.744	22.900
13	6	-47.597	-318.595	-540.243	109.895	-8.634	-357.558	19.521
13	7	-43.124	-320.918	-482.568	96.766	-12.739	-351.302	17.432
13	8	-44.652	-135.786	-457.107	101.216	20.780	-201.220	32.881
	9	-8.938	-227.074	-35.520	-8.562	-8.603	-227.410	177.755
	1	22.054	-361.006	-516.034	-114.770	53.808	-392.761	164.534
	2	22.022	-365.305	-516.632	-114.627	53.402	-396.686	164.689
	3	-12.952	-221.868	-35.757	9.053	-12.560	-222.260	2.476
	4	43.054	-491.208	-979.111	-222.884	123.826	-571.980	160.080
	5	8.080	-347.771	-498.236	-99.203	33.867	-373.558	165.429
	6	10.114	-442.687	-571.555	-109.631	35.261	-467.834	167.081
	7	7.464	-430.083	-509.694	-96.451	27.782	-450.401	158.134
	8	8.805	-250.618	-484.721	-102.445	44.381	-286.194	160.849
	9	-12.920	-217.569	-35.159	8.909	-12.532	-217.956	2.488
	1	-33.685	-374.604	-528.305	-115.652	1.845	-410.134	152.922
	2	-33.655	-378.887	-528.886	-115.513	1.429	-413.972	163.105
	3	-8.759	-220.803	-34.629	9.000	-8.377	-221.185	2.425
	4	-65.150	-517.623	-1,003.004	-224.589	27.397	-610.171	157.604
	5	-40.254	-359.539	-508.747	-100.075	-11.480	-388.314	163.958
	6	-43.447	-455.715	-583.131	-110.708	-15.599	-483.563	165.880
	7	-39.573	-441.541	-519.868	-97.402	-17.313	-463.904	167.069
	8	-40.938	-262.743	-495.626	-103.224	-0.332	-303.348	158.525
	9	-8.789	-216.520	-34.048	8.861	-8.412	-216.898	2.438
	1	12.311	-499.243	-527.798	115.249	37.077	-524.039	12.128
	2	12.289	-503.386	-528.358	115.137	36.929	-527.925	12.031
	3	-13.347	-210.997	-32.767	-8.702	-12.965	-211.379	177.484
	4	23.819	-759.538	-1,001.392	223.742	83.219	-818.939	14.868
	5	-1.817	-467.149	-505.802	99.901	18.723	-487.691	11.519
	6	-1.044	-574.847	-578.840	111.034	19.692	-595.583	10.578
	7	-2.237	-546.465	-516.518	97.752	14.788	-563.490	9.380
	8	-1.323	-373.520	-493.159	102.433	25.304	-399.849	14.414
	9	-13.325	-206.854	-32.208	-8.590	-12.945	-207.234	177.463
	1	-23.544	43.338	-490.083	-111.555	126.357	-106.563	126.655
	2	-23.509	38.566	-490.784	-111.411	123.182	-108.125	127.215
	3	-8.702	-252.231	-44.166	8.373	-8.415	-252.519	1.367

E612

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
17	4	-45.341	292.997	-930.784	-216.279	398.409	-150.753	115.984
17	5	-30.534	2.198	-484.166	-96.494	93.704	-112.040	130.186
17	6	-32.356	-55.432	-559.333	-106.486	63.214	-151.003	138.392
[illegible]	7	-29.865	-89.175	-497.615	-93.723	38.782	-157.823	143.779
[illegible]	8	-31.322	110.032	-468.309	-99.757	161.612	-82.901	117.341
17	9	-8.737	-247.460	-43.465	8.229	-8.454	-247.743	1.972
18	1	22.342	-80.388	-492.430	116.666	98.450	-156.496	33.118
18	2	22.307	-85.007	-493.107	116.532	96.943	-159.642	32.538
18	3	-13.251	-242.479	-42.031	-9.119	-12.888	-242.841	177.725
18	4	43.157	52.909	-934.746	226.637	274.723	-178.656	45.616
18	5	7.598	-104.562	-483.670	100.984	67.029	-163.993	30.477
18	6	9.294	-173.321	-557.749	111.868	62.387	-225.414	25.389
18	7	6.937	-192.993	-496.650	98.417	47.254	-233.310	22.275
18	8	8.375	-0.194	-468.362	104.006	108.185	-100.004	43.820
18	9	-13.216	-237.861	-41.354	-8.986	-12.857	-238.219	177.713
19	1	-33.209	-93.958	-504.722	116.618	56.924	-184.092	37.700
19	2	-33.181	-98.560	-505.381	116.488	55.116	-186.858	37.152
19	3	-9.056	-241.407	-40.881	-9.213	-8.691	-241.772	177.733
19	4	-64.694	26.557	-958.680	226.599	212.078	-250.215	50.692
19	5	-40.569	-116.289	-494.180	100.897	29.337	-186.196	34.716
19	6	-44.076	-186.307	-569.326	111.833	17.337	-247.721	28.773
19	7	-40.030	-204.416	-506.819	98.402	5.989	-250.437	25.064
19	8	-41.204	-12.284	-479.274	103.836	78.093	-131.583	48.964
19	9	-9.084	-236.805	-40.222	-9.083	-8.722	-237.167	177.719
0	1	23.786	-219.979	-530.131	-109.847	65.982	-262.175	158.986
0	2	23.754	-224.430	-530.778	-109.702	65.292	-265.968	159.261
[illegible]	[illegible]	-12.628	-231.927	-40.695	8.297	-12.314	-232.240	2.164
[illegible]	4	46.508	-218.082	-1,308.646	-212.938	164.901	-336.475	150.926
0	5	10.125	-225.578	-518.563	-94.938	43.609	-259.062	160.573
0	6	12.386	-307.274	-597.249	-104.673	43.612	-338.499	163.339
0	7	9.517	-310.815	-530.958	-92.151	34.135	-335.432	165.043
0	8	10.842	-124.981	-503.945	-98.219	62.341	-176.481	152.330
0	9	-12.596	-227.475	-40.048	8.152	-12.287	-227.784	2.169
1	1	-30.521	-233.215	-541.993	-110.222	17.855	-281.601	156.299
1	2	-30.487	-237.649	-542.621	-110.077	17.080	-285.217	156.629
1	3	-8.686	-230.926	-39.614	8.221	-8.392	-231.229	2.115
1	4	-58.773	-243.751	-1,031.697	-213.632	81.331	-384.056	146.704
1	5	-36.973	-237.027	-528.690	-95.334	1.130	-275.131	158.138
1	6	-39.677	-319.915	-608.368	-105.138	-4.618	-354.974	161.558
1	7	-36.313	-321.933	-540.729	-92.550	-8.946	-349.300	163.527
1	8	-37.749	-136.808	-514.493	-98.610	23.071	-197.629	149.334
1	9	-8.720	-226.491	-38.986	8.076	-8.421	-226.790	2.121
[illegible]	1	17.308	-356.805	-543.972	116.840	50.800	-390.297	15.995
[illegible]	2	17.278	-361.087	-544.575	116.711	50.383	-394.191	15.835
[illegible]	3	-13.165	-221.205	-37.491	-9.093	-12.768	-221.601	177.502
[illegible]	4	33.421	-483.531	-1,034.957	226.968	118.929	-569.038	20.643
[illegible]	5	2.977	-343.649	-527.873	101.163	30.341	-371.013	15.135
[illegible]	6	4.147	-437.566	-606.409	112.173	30.996	-464.515	13.460
[illegible]	7	2.409	-425.624	-539.429	98.694	24.069	-447.285	12.378
[illegible]	[illegible]	3.646	-246.888	-514.243	104.069	41.236	-284.478	15.859

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E613

T	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
2	9	-13.136	-216.923	-36.888	-8.965	-12.742	-217.317	177.486
3	1	-38.411	-370.381	-556.159	115.958	-1.918	-406.874	17.469
3	2	-38.378	-374.647	-556.745	115.825	-2.344	-410.681	17.281
3	3	-8.970	-220.140	-36.356	-9.139	-8.575	-220.535	177.525
3	4	-74.743	-509.904	-1,058.639	225.270	20.865	-605.513	22.997
3	5	-45.336	-355.397	-538.300	100.304	-15.715	-385.016	16.451
3	6	-49.388	-450.666	-617.888	111.097	-20.683	-479.371	14.487
3	7	-44.707	-437.062	-549.520	97.757	-21.709	-460.070	13.244
3	8	-46.375	-258.999	-525.066	103.304	-4.193	-300.881	22.068
3	9	-9.003	-215.874	-35.770	-9.006	-8.612	-216.266	177.511
4	1	16.642	-497.006	-581.902	-110.937	39.578	-519.942	168.319
4	2	16.610	-501.121	-582.476	-110.793	39.323	-523.834	168.414
4	3	-12.588	-210.642	-36.177	8.408	-12.232	-210.998	2.426
	4	32.748	-755.698	-1,109.282	-215.091	87.609	-810.558	165.691
	5	3.549	-465.219	-562.983	-95.890	22.406	-484.075	168.875
	6	4.916	-572.243	-646.173	-105.784	23.694	-591.020	169.934
	7	2.939	-543.993	-573.977	-93.121	18.359	-559.413	170.597
	8	4.267	-372.229	-550.015	-99.151	28.783	-396.744	166.112
	9	-12.556	-206.527	-35.604	8.263	-12.205	-206.879	2.435
	1	-30.524	33.610	-515.256	113.937	119.907	-116.821	52.859
	2	-30.493	28.836	-515.976	113.793	116.768	-118.425	52.305
	3	-8.547	-250.066	-46.060	-8.775	-8.328	-250.384	177.921
	4	-59.478	272.975	-981.455	221.071	383.341	-169.845	63.470
	5	-37.632	-5.927	-511.539	98.502	77.989	-121.549	49.571
	6	-40.756	-64.840	-591.930	108.791	56.657	-162.255	41.842
	7	-37.042	-97.354	-525.338	95.742	33.180	-167.578	36.258
	8	-38.326	101.957	-495.270	101.751	155.400	-91.769	62.290
	9	-8.677	-245.292	-45.340	-8.631	-8.363	-245.606	177.913
	1	25.663	-87.041	-536.687	-104.388	87.938	-149.317	149.181
	2	25.631	-91.662	-537.398	-104.251	86.599	-152.631	149.680
	3	-12.021	-241.159	-46.183	7.762	-11.759	-241.432	1.938
	4	50.037	38.983	-1,023.676	-202.237	246.923	-157.802	135.792
	5	12.384	-110.523	-532.461	-90.223	60.094	-158.234	152.130
	6	14.877	-180.392	-616.013	-99.437	56.599	-222.114	157.238
	7	11.777	-199.013	-546.091	-87.585	43.420	-230.656	160.136
	8	13.098	-6.090	-516.390	-93.328	97.324	-90.316	137.935
	9	-11.990	-236.548	-45.472	7.624	-11.731	-236.807	1.942
	1	-25.568	-99.499	-547.743	-102.527	46.453	-171.522	144.913
	2	-25.536	-104.104	-548.435	-102.393	44.850	-174.491	145.495
	3	-8.417	-240.243	-45.172	7.474	-8.176	-240.484	1.844
	4	-49.190	14.839	-1,045.144	-198.553	183.942	-218.293	130.420
	5	-32.071	-121.299	-541.880	-88.685	22.589	-175.960	148.352
	6	-34.214	-192.267	-626.312	-97.756	12.463	-238.945	154.476
	7	-31.456	-209.479	-555.161	-86.114	3.381	-244.317	157.974
	8	-32.794	-17.236	-526.220	-91.711	67.025	-117.056	132.575
	9	-8.449	-235.638	-44.479	7.340	-8.212	-235.875	1.848
	1	19.774	-217.958	-552.208	115.499	66.647	-264.831	22.088
	2	19.740	-222.408	-552.872	115.356	65.896	-268.565	21.897
	3	-12.914	-231.141	-42.914	-8.830	-12.558	-231.498	177.686

E614

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
428	4	38.278	-214.731	-1,053.150	224.120	169.132	-345.585	30.278
428	5	5.623	-223.463	-543.191	99.933	43.089	-260.929	20.551
428	6	6.981	-304.371	-626.680	110.451	42.138	-340.027	17.656
[illegible]	7	4.951	-308.679	-555.918	97.182	32.623	-336.351	15.894
[illegible]	8	6.414	-122.881	-528.194	103.171	63.518	-179.386	28.964
428	9	-12.879	-226.690	-42.249	-8.687	-12.527	-227.043	177.677
429	1	-34.517	-231.173	-564.006	115.124	18.555	-284.246	24.749
429	2	-34.486	-235.607	-564.652	114.981	17.705	-287.798	24.414
429	3	-8.971	-230.133	-41.825	-9.907	-8.612	-230.492	177.697
429	4	-66.973	-240.363	-1,076.075	223.425	85.988	-393.324	34.396
429	5	-41.457	-234.890	-553.249	99.537	0.612	-276.960	22.911
429	6	-45.061	-317.484	-637.715	109.986	-6.199	-356.346	19.460
429	7	-40.861	-319.782	-565.619	96.783	-10.568	-350.075	17.380
429	8	-42.159	-134.692	-538.663	102.779	24.287	-201.139	32.882
429	9	-9.002	-225.700	-41.180	-8.763	-8.648	-226.054	177.688
430	1	18.069	-352.687	-586.173	-102.006	44.281	-378.899	165.589
430	2	18.041	-356.968	-586.809	-101.872	43.928	-382.855	165.742
430	3	-12.027	-221.170	-41.865	7.536	-11.756	-221.441	2.061
430	4	35.439	-476.045	-1,119.754	-197.574	102.868	-543.474	161.156
430	5	5.370	-340.246	-574.809	-88.164	26.561	-361.437	166.485
430	6	6.972	-433.916	-662.506	-97.152	27.431	-454.375	168.108
430	7	4.835	-422.215	-586.999	-85.591	21.351	-438.731	169.078
430	8	5.999	-243.493	-560.434	-91.192	35.777	-273.270	161.916
430	9	-11.999	-215.888	-41.229	7.402	-11.732	-217.156	2.066
431	1	-33.311	-365.152	-597.131	-104.444	-3.174	-395.288	163.905
[illegible]	2	-33.275	-369.417	-597.749	-104.307	-3.538	-399.154	164.088
[illegible]	3	-8.407	-220.237	-40.861	7.664	-8.130	-220.513	2.059
431	4	-64.077	-500.202	-1,141.027	-202.314	15.319	-579.599	158.572
431	5	-39.210	-351.321	-584.138	-90.342	-14.926	-375.305	164.954
431	6	-42.254	-445.798	-672.715	-99.597	-19.011	-469.041	166.864
431	7	-38.518	-432.673	-595.983	-87.716	-19.879	-451.313	168.003
431	8	-40.024	-254.638	-570.170	-93.432	-5.048	-289.614	159.477
431	9	-8.443	-215.972	-40.243	7.527	-8.171	-216.244	2.074
432	1	15.619	-483.194	-600.826	114.062	40.463	-508.039	12.288
432	2	15.584	-487.304	-601.416	113.919	40.187	-511.906	12.186
432	3	-13.206	-211.199	-38.700	-8.643	-12.830	-211.576	177.505
432	4	30.454	-728.922	-1,247.513	221.252	90.216	-788.683	15.115
432	5	1.663	-452.818	-584.798	98.690	32.168	-473.323	11.737
432	6	2.536	-557.958	-672.347	109.020	22.994	-578.417	10.628
432	7	1.011	-531.493	-596.100	95.944	17.770	-548.252	9.908
432	8	2.430	-359.944	-571.468	101.923	29.131	-386.644	14.679
432	9	-13.172	-207.090	-38.111	-8.499	-12.801	-207.462	177.495
433	1	-19.973	17.129	-547.993	-95.548	95.911	-98.754	129.506
433	2	-19.949	12.377	-548.759	-95.432	93.005	-100.577	130.193
433	3	-8.110	-247.893	-51.085	6.866	-7.913	-248.089	1.639
433	4	-38.417	239.939	-1,048.037	-185.001	332.269	-130.747	115.522
433	5	-26.578	-20.330	-550.363	-82.702	59.307	-106.216	133.918
433	6	-28.184	-81.064	-639.152	-91.263	40.392	-149.641	143.078
433	7	-26.121	-111.342	-565.357	-80.464	22.318	-159.782	148.952
[illegible]	8	-27.115	87.067	-533.043	-85.336	132.648	-72.696	118.108

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*	LOAD COMB	X-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	XZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
3	9	-8.134	-243.140	-50.319	6.749	-7.940	-243.334	1.644
4	1	20.495	-94.597	-554.972	108.458	85.728	-159.830	31.025
4	2	20.462	-99.203	-555.705	108.315	84.372	-163.113	30.542
4	3	-12.177	-239.474	-48.656	-8.052	-11.892	-239.759	177.973
4	4	39.519	23.588	-1,060.985	210.177	241.381	-178.774	43.915
4	5	6.878	-116.682	-553.337	93.908	57.423	-167.227	29.316
4	6	8.349	-187.153	-641.874	103.451	52.925	-231.739	23.310
4	7	6.244	-204.389	-567.890	91.074	40.101	-238.745	20.392
4	8	7.624	-12.590	-537.270	97.027	95.070	-100.035	42.026
4	9	-12.144	-234.363	-47.923	-7.909	-11.863	-235.148	177.968
5	1	-30.725	-107.041	-565.979	110.326	47.855	-185.622	35.460
5	2	-30.695	-111.631	-566.693	110.180	46.213	-188.540	34.916
5	3	-8.571	-238.548	-47.631	-8.340	-8.269	-238.850	177.925
5	4	-59.587	-0.527	-1,082.249	213.867	185.796	-246.011	48.937
5	5	-37.563	-127.443	-563.187	95.347	22.903	-187.911	32.392
5	6	-40.724	-199.024	-652.097	105.131	11.720	-251.470	26.512
5	7	-36.975	-215.333	-575.890	92.545	2.366	-254.675	23.030
5	8	-38.256	-23.722	-547.032	98.644	67.923	-129.901	47.106
5	9	-8.602	-233.958	-46.916	-8.194	-8.304	-234.255	177.920
6	1	19.589	-219.173	-583.847	-92.854	51.449	-251.033	161.062
6	2	19.564	-223.624	-584.558	-92.743	50.896	-254.956	161.333
6	3	-11.406	-230.465	-48.016	6.729	-11.200	-230.673	1.758
6	4	38.299	-217.851	-1,117.565	-179.791	130.969	-310.520	152.732
6	5	7.328	-224.693	-581.023	-80.319	32.419	-249.784	162.651
6	6	9.171	-306.453	-672.770	-88.638	32.360	-329.642	165.339
6	7	6.843	-309.916	-594.660	-78.184	25.089	-328.163	166.863
6	8	7.900	-124.110	-564.948	-82.830	47.808	-164.018	154.275
6	9	-11.381	-226.015	-47.305	6.618	-11.177	-226.219	1.764
7	1	-27.932	-230.673	-593.840	-93.048	8.297	-266.904	158.725
7	2	-27.901	-235.129	-594.535	-92.937	7.674	-270.686	159.053
7	3	-8.152	-229.528	-47.083	6.645	-7.962	-229.327	1.717
7	4	-53.593	-240.123	-1,136.951	-180.139	55.919	-349.736	148.680
7	5	-33.953	-234.541	-589.500	-80.556	-5.619	-262.975	160.621
7	6	-36.440	-317.428	-682.034	-88.930	-10.560	-343.209	163.833
7	7	-33.359	-319.587	-602.823	-78.430	-13.277	-339.669	165.638
7	8	-34.653	-134.385	-573.794	-83.055	12.356	-181.395	150.490
7	9	-8.193	-225.192	-46.388	6.534	-7.996	-225.388	1.723
8	1	17.519	-341.888	-599.722	110.358	48.735	-373.074	15.778
8	2	17.483	-346.181	-600.386	110.222	48.282	-376.380	15.611
8	3	-12.623	-221.251	-44.761	-8.242	-12.298	-221.575	177.741
8	4	33.970	-455.480	-1,147.564	213.924	114.289	-535.799	20.579
8	5	3.863	-330.549	-592.039	95.458	29.193	-355.880	14.861
8	6	4.892	-423.383	-683.743	105.277	29.387	-447.578	13.398
8	7	3.174	-412.743	-604.775	92.670	22.899	-432.456	12.009
8	8	4.674	-233.534	-577.322	98.741	40.281	-269.142	19.830
8	9	-12.587	-216.353	-44.097	-8.097	-12.257	-217.278	177.734
9	1	-33.849	-354.347	-610.639	107.930	-0.392	-387.304	16.980
9	2	-33.821	-358.523	-611.285	107.788	-1.306	-391.139	16.786
9	3	-9.001	-220.325	-43.750	-8.114	-8.690	-220.636	177.804

E616

MEM#	LOAD COMB	A-STRESS (RADIAL)	B-STRESS (AXIAL)	THETA-STRESS (HOOP)	TAU-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
439	4	-65.524	-479.616	-1,168.854	209.183	21.752	-566.893	22.647
439	5	-40.703	-341.318	-501.319	93.281	-14.111	-367.910	15.912
439	6	-44.313	-434.951	-693.888	102.833	-18.901	-460.368	13.883
[illegible]	7	-40.165	-423.194	-613.709	90.545	-19.839	-443.520	12.552
[illegible]	8	-41.337	-244.673	-586.712	96.501	-2.830	-283.180	21.753
439	9	-9.029	-216.048	-43.104	-7.972	-8.723	-215.355	177.798
440	1	11.493	-467.368	-629.562	-95.131	29.700	-485.574	159.155
440	2	11.475	-471.502	-630.202	-95.015	29.495	-489.522	159.251
440	3	-11.438	-212.175	-44.029	6.936	-11.199	-212.415	1.975
440	4	22.757	-698.668	-1,206.223	-184.223	67.077	-742.989	166.473
440	5	-0.157	-439.342	-620.049	-82.272	14.748	-454.248	169.730
440	6	0.795	-543.201	-715.541	-90.763	15.539	-557.945	170.773
440	7	-0.499	-518.486	-632.320	-80.029	11.583	-530.568	171.414
440	8	0.244	-345.909	-605.582	-84.910	19.951	-365.616	166.934
440	9	-11.420	-208.041	-43.388	6.819	-11.184	-208.277	1.984
41	1	-27.368	-3.999	-563.833	100.604	85.596	-116.964	48.312
41	2	-27.336	-8.692	-564.618	100.473	82.890	-118.919	47.650
41	3	-8.083	-245.116	-53.729	-7.408	-7.851	-245.347	178.211
41	4	-53.226	198.349	-1,080.493	194.841	304.479	-159.356	61.423
41	5	-33.973	-38.074	-569.604	86.959	50.959	-123.007	44.324
41	6	-36.686	-100.173	-662.555	95.847	32.537	-169.396	35.838
41	7	-33.358	-127.944	-584.652	84.453	16.142	-177.445	30.376
41	8	-34.697	67.972	-551.869	89.909	120.169	-86.894	59.862
41	9	-8.115	-240.423	-52.944	-7.277	-7.887	-240.651	178.207
42	1	21.035	-105.374	-577.368	-85.701	64.193	-149.061	153.255
2	2	20.983	-110.453	-578.157	-85.615	63.195	-152.666	153.755
[illegible]	3	-10.716	-237.919	-54.449	6.158	-10.548	-238.086	1.554
[illegible]	4	40.953	0.941	-1,107.407	-166.012	188.160	-146.265	138.435
2	5	9.254	-126.523	-583.599	-74.227	41.955	-159.225	156.223
2	6	11.322	-198.049	-579.152	-82.201	39.739	-226.465	160.930
2	7	8.797	-214.208	-598.841	-72.588	30.343	-235.754	163.468
2	8	9.790	-23.041	-565.854	-76.152	71.276	-84.527	141.282
2	9	-10.592	-233.340	-53.659	6.083	-10.526	-233.506	1.564
43	1	-21.863	-115.222	-586.201	-82.833	26.284	-164.369	149.832
43	2	-21.844	-120.790	-586.977	-82.759	25.101	-167.736	150.435
3	3	-7.874	-237.185	-53.589	5.351	-7.724	-237.335	1.460
3	4	-42.045	-19.095	-1,124.547	-160.467	130.307	-191.448	132.955
3	5	-28.074	-135.491	-591.158	-71.856	7.927	-171.493	153.398
3	6	-30.059	-207.965	-687.312	-79.729	0.441	-238.467	159.065
3	7	-27.721	-222.965	-606.049	-70.438	-4.962	-245.724	162.094
[illegible]	8	-28.489	-32.256	-573.608	-73.522	43.173	-103.919	135.734
	9	-7.892	-232.618	-52.812	5.777	-7.743	-232.766	1.472
	1	17.801	-217.944	-594.013	103.083	56.517	-256.660	28.585
	2	17.770	-222.392	-594.757	102.946	55.958	-260.481	28.303
	3	-11.860	-229.631	-51.125	-7.525	-11.600	-229.891	178.023
	4	34.379	-215.023	-1,138.986	199.627	144.818	-325.462	28.952
	5	4.749	-223.262	-595.354	89.155	35.470	-253.984	19.013
	6	5.888	-304.801	-690.847	98.243	34.347	-333.259	16.155
	7	4.146	-308.439	-609.618	85.535	25.503	-330.796	14.485
[illegible]		5.457	-122.730	-578.543	92.239	53.684	-170.958	27.603

3667

820

E617

T	LOAD COMB	A-STRESS (RADIAL)	A-STRESS (AXIAL)	DELTA-STRESS (HOOP)	Q-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
4	9	-11.829	-225.183	-50.381	-7.388	-11.573	-225.438	178.019
5	1	-29.713	-229.437	-603.979	102.888	13.806	-272.958	22.927
5	2	-29.688	-233.871	-604.706	102.751	13.066	-276.627	22.592
5	3	-8.613	-228.792	-50.178	-7.609	-8.351	-229.054	178.023
5	4	-57.598	-238.281	-1,138.317	199.279	70.861	-366.741	32.806
5	5	-36.523	-233.201	-603.789	88.918	-2.284	-267.441	21.050
5	6	-39.710	-315.760	-700.055	97.951	-8.486	-346.985	17.681
5	7	-36.045	-318.100	-617.737	86.288	-11.741	-342.404	15.730
5	8	-37.086	-132.996	-587.349	92.013	18.728	-188.802	31.236
5	9	-8.638	-224.358	-49.451	-7.472	-8.380	-224.616	178.018
6	1	12.903	-332.666	-618.840	-82.520	31.597	-351.361	167.235
6	2	12.891	-336.985	-619.568	-82.446	31.346	-355.439	167.383
6	3	-10.837	-221.492	-50.783	5.928	-10.671	-221.658	1.610
6	4	25.453	-438.318	-1,187.797	-159.891	75.234	-488.099	162.706
6	5	1.723	-322.825	-619.012	-71.516	16.784	-337.885	168.108
	6	2.979	-414.944	-717.847	-79.326	17.529	-429.494	169.606
	7	1.501	-405.506	-632.971	-70.090	13.233	-417.238	170.497
	8	1.984	-225.229	-602.560	-73.190	23.519	-246.764	163.604
	9	-10.826	-217.173	-50.055	5.854	-10.660	-217.339	1.623
	1	-30.084	-343.020	-627.604	-85.631	-8.184	-364.920	165.654
	2	-30.053	-347.328	-628.319	-85.547	-8.457	-368.924	165.831
	3	-7.983	-220.758	-49.937	6.063	-7.811	-220.931	1.631
	4	-57.773	-458.369	-1,204.791	-165.853	1.979	-518.122	160.187
	5	-35.703	-331.800	-626.409	-74.241	-18.131	-349.372	166.684
	6	-38.511	-424.868	-725.944	-82.243	-21.732	-441.646	168.469
	7	-35.112	-414.270	-640.119	-72.617	-21.680	-427.702	169.520
	8	-36.398	-234.451	-610.249	-76.150	-10.504	-260.345	161.220
	9	-8.014	-216.451	-49.222	5.979	-7.843	-216.622	1.641
	1	15.318	-443.756	-634.055	100.548	36.374	-464.813	11.828
	2	15.279	-447.946	-634.742	100.418	36.111	-468.778	11.720
	3	-12.372	-213.279	-47.589	-7.310	-12.106	-213.545	177.919
	4	29.738	-653.377	-1,216.610	194.710	81.339	-704.978	14.843
	5	2.086	-428.710	-629.457	86.981	19.356	-435.981	11.230
	6	2.743	-520.743	-728.249	95.895	19.756	-537.756	10.060
	7	1.353	-498.916	-642.623	84.490	15.237	-512.800	9.332
	8	2.948	-324.027	-613.936	89.912	26.042	-347.121	14.404
	9	-12.334	-209.090	-46.902	-7.180	-12.072	-209.351	177.912
	1	-15.727	-25.960	-575.881	-74.881	54.212	-95.900	136.954
	2	-15.728	-30.574	-576.733	-74.845	52.061	-98.364	137.832
	3	-7.486	-242.824	-60.302	5.299	-7.367	-242.943	1.289
	4	-30.360	155.314	-1,106.934	-145.290	234.895	-109.941	118.711
	5	-22.118	-56.935	-590.504	-65.144	27.903	-106.957	142.490
	6	-23.714	-120.328	-689.902	-72.826	15.369	-159.412	151.778
	7	-22.137	-145.293	-606.838	-64.449	5.422	-172.853	156.847
	8	-22.094	47.338	-571.259	-65.957	87.157	-61.913	121.120
	9	-7.485	-238.210	-59.451	5.263	-7.365	-238.330	1.306
	1	17.015	-117.701	-585.499	91.048	62.913	-163.599	26.753
	2	16.995	-122.231	-586.316	90.945	61.912	-167.147	26.284
	3	-10.996	-236.071	-57.698	-6.492	-10.909	-236.258	178.349

E618

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
50	4	32.799	-22.369	-1,124.865	176.285	183.645	-173.215	40.553
50	5	4.807	-136.210	-596.247	78.847	40.073	-171.477	24.098
50	6	5.106	-208.149	-695.131	87.118	37.058	-239.101	19.559
[illegible]	7	4.434	-222.951	-611.913	76.857	27.975	-246.492	17.029
	8	5.244	-33.840	-577.787	81.188	69.209	-97.805	38.233
50	9	-10.977	-231.541	-56.881	-6.388	-10.792	-231.726	178.342
51	1	-25.850	-128.041	-594.326	93.909	29.963	-183.856	30.725
51	2	-25.827	-132.560	-595.129	93.794	28.719	-187.107	30.180
51	3	-8.151	-235.331	-56.838	-6.816	-7.947	-235.535	178.283
51	4	-50.190	-42.393	-1,141.977	181.822	135.572	-228.156	45.614
51	5	-32.514	-145.164	-603.685	81.211	9.992	-187.671	27.628
51	6	-35.265	-218.052	-703.263	89.583	1.316	-254.635	22.213
51	7	-32.076	-231.694	-619.099	79.000	-4.594	-259.176	19.181
51	8	-33.028	-43.048	-585.522	83.811	45.922	-122.000	43.289
51	9	-8.174	-230.812	-56.034	-6.701	-7.972	-231.014	178.277
52	1	14.261	-218.812	-604.798	-71.895	34.654	-239.205	164.154
52	2	14.253	-223.258	-605.612	-71.872	34.309	-243.314	164.408
52	3	-10.159	-228.991	-57.758	5.183	-10.037	-229.114	1.356
52	4	28.026	-218.442	-1,162.987	-139.609	91.011	-281.427	155.717
52	5	3.612	-224.175	-615.133	-62.554	19.660	-240.222	165.611
52	6	5.143	-305.975	-716.965	-70.097	20.207	-321.039	167.871
52	7	3.473	-309.312	-630.748	-62.099	15.350	-321.189	169.171
52	8	3.774	-123.687	-596.734	-63.083	29.716	-149.628	157.646
52	9	-10.152	-224.545	-56.944	5.159	-10.028	-224.669	1.378
53	1	-23.848	-227.951	-612.381	-71.944	-1.038	-250.761	162.408
[illegible]	2	-23.833	-232.391	-613.187	-71.921	-1.436	-254.788	162.703
	3	-7.687	-228.343	-56.986	5.085	-7.570	-228.461	1.319
[illegible]	4	-45.847	-236.161	-1,177.708	-139.674	28.003	-310.013	152.133
53	5	-29.701	-232.114	-621.507	-62.667	-11.870	-249.945	164.117
53	6	-32.054	-314.820	-723.986	-70.256	-15.560	-331.314	166.788
53	7	-29.414	-317.138	-636.965	-62.225	-16.534	-330.019	168.305
53	8	-30.038	-131.763	-603.292	-63.181	0.209	-162.012	154.417
53	9	-7.702	-223.903	-56.180	5.062	-7.584	-224.021	1.340
54	1	15.294	-318.999	-620.555	93.825	39.828	-343.533	14.653
54	2	15.264	-323.362	-621.333	93.712	39.468	-347.566	14.482
54	3	-11.608	-221.626	-54.500	-6.711	-11.393	-221.840	178.171
54	4	29.592	-412.549	-1,192.875	181.635	94.640	-477.597	19.703
54	5	2.720	-310.813	-626.042	81.212	22.507	-330.600	13.693
54	6	3.519	-402.118	-727.972	89.611	22.433	-421.032	11.918
54	7	2.137	-394.340	-640.964	79.016	17.304	-409.507	10.866
54	8	3.406	-212.222	-608.456	83.794	32.140	-240.956	18.927
54	9	-11.577	-217.263	-53.722	-6.597	-11.365	-217.475	178.165
55	1	-27.690	-329.347	-629.305	90.715	-2.511	-354.525	15.512
55	2	-27.678	-333.698	-630.070	90.611	-2.861	-358.515	15.317
55	3	-8.751	-220.886	-53.647	-6.569	-8.548	-221.089	178.228
55	4	-53.627	-432.587	-1,209.841	175.666	15.274	-501.490	21.417
55	5	-34.700	-319.774	-633.417	78.486	-14.520	-339.955	14.419
55	6	-37.961	-412.027	-736.041	86.594	-18.846	-431.143	12.434
55	7	-34.470	-403.383	-648.089	76.489	-19.228	-418.325	11.269
[illegible]	8	-34.970	-221.437	-616.126	80.834	-4.807	-251.600	20.463

LOAD COMB	(-STRESS (RADIAL)	(-STRESS (AXIAL)	THETA-STRESS (HOOP)	(-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
9	-8.763	-216.534	-52.881	-5.465	-8.562	-215.735	178.219
1	5.041	-421.124	-641.223	-74.680	18.721	-433.804	170.363
2	5.050	-425.397	-641.977	-74.644	18.599	-437.946	170.456
3	-10.345	-214.501	-54.463	5.362	-10.304	-214.642	1.503
4	12.348	-610.536	-1,233.531	-144.907	44.409	-642.597	167.524
5	-4.047	-399.640	-646.087	-54.900	5.328	-410.015	173.317
6	-3.278	-500.798	-750.916	-72.520	7.077	-511.154	171.873
7	-3.877	-481.437	-660.809	-64.194	4.600	-489.915	172.476
8	-4.248	-303.093	-628.693	-65.727	9.568	-315.900	168.128
9	-10.354	-210.229	-53.594	5.326	-10.212	-210.371	1.525
1	-22.259	-51.754	-582.743	81.027	45.351	-119.365	39.342
2	-22.236	-56.237	-583.605	80.961	43.489	-121.964	39.370
3	-7.625	-240.119	-63.689	-5.816	-7.479	-240.264	178.567
4	-43.277	105.574	-1,121.779	157.037	204.930	-142.633	57.679
5	-28.666	-78.307	-601.862	70.259	21.028	-128.001	35.271
6	-30.949	-142.143	-704.249	78.041	9.274	-182.366	27.267
7	-28.227	-164.170	-618.413	68.979	0.642	-193.041	22.711
8	-29.181	23.016	-582.366	71.762	73.278	-79.443	54.993
9	-7.647	-235.635	-62.826	-5.749	-7.502	-235.781	178.556
1	15.485	-130.402	-589.145	-64.413	39.854	-154.772	159.277
2	15.481	-134.870	-590.031	-64.436	39.317	-158.707	159.699
3	-9.397	-234.520	-64.885	4.747	-9.297	-234.720	1.207
4	30.316	-47.335	-1,134.968	-125.496	122.855	-139.874	143.595
5	5.438	-147.085	-609.822	-56.311	23.975	-165.623	161.779
6	7.221	-219.509	-714.229	-63.917	23.998	-236.287	165.292
7	5.354	-232.638	-626.806	-56.757	18.197	-245.481	167.250
8	5.534	-46.118	-589.815	-55.778	41.175	-81.759	147.422
9	-9.393	-230.152	-63.999	4.771	-9.289	-230.255	1.237
1	-17.477	-138.256	-595.472	-61.238	8.139	-163.873	157.300
2	-17.486	-142.725	-596.355	-61.282	7.510	-167.723	157.809
3	-7.251	-234.044	-64.168	4.432	-7.175	-234.131	1.119
4	-33.797	-52.621	-1,147.307	-119.452	72.109	-168.528	138.439
5	-23.572	-153.940	-615.119	-53.737	-4.078	-173.235	160.249
6	-25.523	-227.257	-720.152	-61.399	-3.398	-244.482	164.329
7	-23.757	-239.513	-632.074	-54.577	-10.737	-252.533	166.592
8	-23.353	-52.951	-595.146	-52.739	16.623	-92.928	142.837
9	-7.252	-229.576	-63.284	4.477	-7.161	-229.666	1.153
1	14.328	-218.222	-605.055	83.791	41.374	-245.268	17.889
2	14.313	-222.665	-605.912	83.711	40.901	-249.253	17.630
3	-10.749	-228.118	-61.595	-5.325	-10.599	-228.278	178.444
4	27.702	-217.844	-1,165.204	152.274	109.414	-298.556	26.444
5	2.639	-223.297	-620.877	72.656	23.986	-244.645	16.373
6	3.542	-304.924	-725.527	80.520	23.390	-324.672	13.780
7	2.347	-309.374	-637.314	71.118	17.851	-323.879	13.298
8	2.980	-122.881	-601.512	74.462	37.542	-157.444	24.898
9	-10.734	-223.674	-60.729	-5.826	-10.575	-223.834	178.434
1	-23.781	-227.361	-612.631	33.749	6.244	-257.296	19.723
2	-23.774	-231.798	-613.490	33.669	5.701	-261.274	19.407
3	-8.274	-227.457	-60.792	-5.997	-8.110	-227.631	178.434

E620

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
51	4	-46.169	-235.562	-1,179.917	162.218	46.969	-328.701	29.862
51	5	-30.670	-231.232	-627.230	72.551	-7.177	-254.725	17.942
[illegible]	6	-33.550	-313.766	-732.529	90.374	-12.133	-335.183	14.920
[illegible]	7	-30.534	-316.191	-643.509	71.000	-13.860	-332.865	13.216
[illegible]	8	-30.828	-130.954	-598.352	74.372	9.761	-170.544	28.027
51	9	-8.281	-223.030	-59.944	-5.916	-8.119	-223.193	178.423
52	1	7.631	-307.493	-620.562	-61.099	19.063	-318.925	159.402
52	2	7.549	-311.910	-621.425	-61.143	18.949	-323.209	159.529
52	3	-9.584	-221.854	-61.862	4.524	-9.487	-221.951	1.220
52	4	15.319	-391.334	-1,196.029	-119.212	47.690	-423.705	164.808
52	5	-1.914	-301.279	-636.466	-53.544	7.374	-310.567	170.158
52	6	-0.760	-392.506	-743.784	-61.154	8.564	-401.831	171.330
52	7	-1.573	-385.854	-653.013	-54.371	5.970	-393.398	172.100
52	8	-2.316	-201.451	-615.972	-52.563	10.706	-214.474	166.085
52	9	-9.602	-217.437	-60.999	4.568	-9.501	-217.537	1.258
53	1	-25.411	-315.361	-625.840	-64.256	-11.809	-328.962	168.048
53	2	-25.399	-319.779	-627.701	-64.280	-11.975	-333.203	168.204
53	3	-7.435	-221.286	-61.152	4.645	-7.334	-221.387	1.244
53	4	-48.954	-406.640	-1,208.270	-125.169	-9.504	-446.091	162.506
53	5	-30.991	-308.147	-641.722	-56.243	-20.012	-319.125	168.955
53	6	-33.679	-400.263	-749.659	-63.867	-22.870	-411.072	170.394
53	7	-30.751	-392.736	-658.240	-56.700	-22.078	-401.409	171.302
53	8	-31.271	-208.298	-622.260	-55.697	-15.205	-224.364	163.910
53	9	-7.447	-216.968	-60.291	4.659	-7.343	-216.972	1.276
54	1	12.708	-394.131	-634.874	80.888	28.200	-409.624	10.842
[illegible]	2	12.677	-398.528	-635.717	80.823	27.993	-413.844	10.730
[illegible]	3	-11.383	-215.452	-58.703	-5.697	-11.224	-215.611	178.402
54	4	24.618	-559.556	-1,223.210	156.732	64.013	-598.951	14.109
54	5	0.557	-376.480	-646.197	70.212	13.207	-389.130	10.213
54	6	0.956	-476.847	-753.694	78.013	13.372	-489.262	9.042
54	7	-0.033	-460.652	-662.352	68.948	10.065	-470.751	8.333
54	8	1.252	-277.111	-627.148	71.695	18.633	-294.491	13.627
54	9	-11.352	-211.055	-57.861	-5.631	-11.194	-211.214	178.386
55	1	-11.591	-74.493	-577.951	-53.633	19.132	-105.216	150.193
55	2	-11.634	-78.831	-578.884	-53.738	18.145	-108.610	151.007
55	3	-6.836	-238.004	-71.502	3.848	-6.822	-238.068	0.953
55	4	-22.535	61.779	-1,115.474	-105.102	132.832	-93.688	124.060
55	5	-17.887	-97.393	-608.092	-47.514	4.310	-119.591	154.958
55	6	-19.821	-161.236	-715.097	-55.500	-0.640	-180.416	160.935
55	7	-18.697	-180.472	-625.997	-49.532	-4.736	-194.433	164.259
55	8	-16.930	0.645	-537.306	-45.128	37.833	-54.118	129.490
55	9	-6.843	-233.666	-70.569	3.954	-6.774	-233.735	0.998
56	1	12.949	-143.555	-588.673	69.944	39.653	-170.258	20.895
56	2	12.958	-147.935	-589.581	69.934	39.106	-174.083	20.500
56	3	-9.815	-232.803	-69.790	-5.024	-9.702	-232.916	178.710
56	4	25.095	-72.789	-1,135.623	135.947	120.542	-163.336	35.100
56	5	2.321	-157.557	-614.831	60.989	22.920	-178.256	18.662
56	6	3.677	-229.842	-721.618	68.597	22.336	-248.501	15.217
[illegible]	7	2.487	-241.520	-632.259	60.785	16.791	-255.824	13.242
[illegible]	8	2.123	-58.680	-594.306	61.223	40.077	-96.634	31.796

LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
9	-9.824	-228.423	-67.881	-5.013	-9.709	-228.538	178.686
1	-20.015	-151.409	-595.013	73.113	12.584	-184.009	24.030
2	-20.011	-155.790	-595.320	73.087	11.851	-187.654	23.556
3	-7.676	-232.227	-68.066	-5.336	-7.549	-232.354	178.639
4	-39.023	-88.075	-1,147.982	141.989	30.543	-207.641	40.100
5	-26.687	-164.513	-620.128	53.556	-1.347	-189.353	21.344
6	-29.163	-237.589	-727.527	71.118	-7.209	-259.543	17.155
7	-26.622	-248.389	-637.524	62.967	-9.990	-265.021	14.795
8	-26.763	-65.521	-599.639	64.264	20.380	-113.265	36.609
9	-7.679	-227.847	-67.159	-5.305	-7.552	-227.975	178.620
1	8.965	-218.611	-599.020	-50.855	19.813	-229.458	167.959
2	8.989	-223.048	-599.954	-50.982	19.697	-233.756	168.139
3	-8.862	-227.524	-69.419	3.735	-8.799	-227.587	0.978
4	17.873	-219.292	-1,156.551	-99.883	54.334	-255.753	159.946
5	0.021	-223.767	-626.017	-45.156	8.792	-232.539	169.009
6	1.506	-305.537	-735.263	-53.218	10.468	-314.500	170.440
7	0.478	-308.739	-643.936	-47.584	7.635	-315.896	171.446
8	-0.519	-123.482	-604.911	-42.307	12.630	-136.632	162.733
9	-8.886	-223.086	-68.486	3.861	-8.817	-223.156	1.032
1	-19.140	-225.256	-604.124	-50.793	-7.303	-237.094	166.881
2	-19.157	-229.704	-605.065	-50.920	-7.488	-241.372	167.093
3	-7.082	-227.043	-68.774	3.628	-7.022	-227.103	0.944
4	-37.072	-232.289	-1,166.579	-99.732	4.868	-274.229	157.191
5	-24.997	-229.628	-630.288	-45.183	-15.464	-239.161	168.086
6	-27.468	-312.319	-740.156	-53.264	-17.834	-321.953	169.747
7	-25.305	-314.779	-648.340	-47.614	-17.675	-322.410	170.895
8	-24.531	-129.126	-609.024	-42.309	-9.648	-144.109	160.500
9	-7.065	-222.596	-67.833	3.755	-7.000	-222.662	0.998
1	11.843	-293.631	-613.368	72.944	28.367	-310.156	12.764
2	11.831	-298.131	-614.295	72.914	28.126	-314.426	12.598
3	-10.460	-221.908	-66.191	-5.231	-10.330	-222.038	178.593
4	22.889	-365.583	-1,183.927	141.631	59.043	-411.737	18.049
5	0.598	-289.361	-635.823	53.485	13.889	-302.652	11.824
6	1.284	-380.527	-745.541	71.048	14.076	-393.320	10.115
7	0.374	-375.501	-653.620	62.900	10.621	-385.748	9.252
8	0.859	-187.681	-614.859	64.168	20.526	-207.448	17.121
9	-10.448	-217.409	-65.263	-5.201	-10.317	-217.540	178.551
1	-21.203	-301.493	-619.652	69.784	-4.790	-317.906	13.235
2	-21.220	-305.992	-620.578	69.773	-5.043	-322.169	13.053
3	-8.308	-221.326	-65.467	-5.115	-8.185	-221.449	178.525
4	-41.389	-380.881	-1,196.182	135.670	6.166	-428.437	19.317
5	-28.477	-296.215	-641.071	60.781	-15.324	-309.357	12.210
6	-31.631	-389.270	-751.402	68.333	-18.987	-400.915	10.483
7	-28.801	-382.368	-658.836	60.565	-18.714	-392.455	9.455
8	-28.094	-194.520	-620.143	61.028	-8.113	-214.501	18.128
9	-8.291	-215.826	-64.541	-5.104	-8.166	-215.951	178.598
1	1.364	-369.590	-625.131	-53.551	8.940	-377.165	171.947
2	1.414	-374.137	-626.073	-53.657	8.930	-381.552	172.026
3	-9.039	-216.332	-66.698	3.964	-8.964	-216.508	1.084

E622

NT	LOAD COMB	R-STRESS (RADIAL)	A-STRESS (AXIAL)	THETA-STRESS (HOOP)	AV-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
72	4	3.329	-513.796	-1,207.538	-104.992	23.833	-534.300	168.950
72	5	-7.124	-356.192	-548.153	-47.369	-0.810	-362.506	172.407
72	6	-6.181	-456.847	-760.270	-55.307	0.505	-463.535	173.104
[illegible]	7	-6.167	-443.243	-666.231	-49.369	-0.560	-448.750	173.635
[illegible]	8	-8.253	-253.437	-626.880	-45.005	-0.253	-261.437	169.920
72	9	-9.089	-211.986	-65.756	4.069	-9.008	-212.067	1.143
73	1	-16.451	-99.784	-576.958	59.729	14.708	-130.945	27.550
73	2	-16.449	-103.911	-577.880	59.785	13.892	-134.252	25.908
73	3	-7.077	-235.070	-75.394	-4.433	-6.991	-235.157	178.895
73	4	-32.183	13.470	-1,114.908	116.651	109.508	-128.220	50.536
73	5	-22.811	-117.688	-612.422	52.432	0.457	-140.958	23.931
73	6	-24.830	-180.262	-721.104	60.133	-4.282	-200.810	19.865
73	7	-22.770	-196.708	-630.129	53.501	-7.631	-211.847	15.799
73	8	-22.859	-24.430	-591.573	51.164	27.525	-74.815	44.560
73	9	-7.079	-230.944	-74.472	-4.489	-6.989	-231.034	178.851
4	1	10.072	-155.312	-577.583	-44.252	21.169	-166.408	165.923
4	2	10.101	-159.589	-578.548	-44.450	21.039	-170.527	166.175
4	3	-8.128	-231.290	-77.013	3.072	-8.086	-231.332	0.788
4	4	20.036	-95.676	-1,116.985	-87.444	67.031	-142.671	151.745
4	5	1.806	-167.377	-615.451	-39.920	10.753	-176.324	167.368
4	6	3.587	-239.114	-725.888	-48.609	12.961	-248.488	169.085
4	7	2.346	-249.268	-633.974	-43.710	9.723	-256.645	170.420
4	8	1.169	-70.726	-593.640	-35.446	15.705	-85.263	157.701
4	9	-8.156	-227.013	-76.048	3.270	-8.108	-227.062	0.856
5	1	-13.283	-160.777	-581.548	-41.222	-2.544	-171.516	165.398
5	2	-13.338	-165.074	-582.531	-41.450	-2.753	-175.659	165.675
[illegible]	[illegible]	-6.800	-230.914	-76.454	2.717	-6.767	-230.947	0.694
[illegible]	4	-25.928	-106.445	-1,124.857	-81.727	24.917	-157.291	148.112
[illegible]	5	-19.390	-172.285	-618.781	-37.558	-10.662	-181.013	166.917
[illegible]	6	-21.863	-245.013	-729.923	-46.525	-12.551	-254.325	168.682
[illegible]	7	-20.439	-254.558	-637.642	-41.935	-13.154	-261.843	170.145
[illegible]	8	-18.151	-75.183	-596.572	-32.391	-3.512	-89.822	155.679
[illegible]	9	-6.745	-226.618	-75.472	2.946	-6.705	-226.657	0.767
[illegible]	1	10.454	-218.479	-591.708	62.285	26.303	-234.327	14.275
[illegible]	2	10.471	-222.913	-592.683	62.319	26.069	-238.511	14.052
[illegible]	3	-9.551	-225.605	-73.780	-4.546	-9.456	-226.701	178.800
[illegible]	4	20.314	-219.594	-1,144.044	121.440	71.055	-270.335	22.676
[illegible]	5	0.291	-223.286	-625.142	54.575	12.901	-235.997	13.011
[illegible]	6	1.411	-304.928	-736.333	62.155	13.542	-317.059	11.043
[illegible]	7	0.601	-308.192	-643.859	55.214	10.177	-317.758	9.839
[illegible]	8	-0.076	-123.074	-603.099	53.814	20.143	-143.295	20.593
[illegible]	9	-9.568	-222.171	-72.805	-4.579	-9.469	-222.270	178.766
[illegible]	1	-17.556	-225.124	-596.826	62.348	-0.351	-242.420	15.504
[illegible]	2	-17.680	-229.568	-597.808	62.381	-0.679	-246.570	15.245
[illegible]	3	-7.767	-226.117	-73.128	-4.652	-7.668	-226.216	178.780
[illegible]	4	-34.639	-232.594	-1,154.093	121.592	23.167	-290.401	25.427
[illegible]	5	-24.726	-229.143	-629.412	54.558	-11.076	-242.793	14.246
[illegible]	6	-27.561	-311.708	-741.236	62.110	-14.578	-324.691	11.985
[illegible]	7	-25.181	-314.227	-648.261	55.185	-15.003	-324.405	10.449
[illegible]	[illegible]	-24.188	-128.720	-607.214	53.812	-1.437	-151.471	22.917

LOAD COMB	R-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	RZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
9	-7.743	-221.673	-72.145	-4.685	-7.641	-221.776	178.746
1	2.748	-282.048	-598.958	-41.234	8.598	-287.898	171.925
2	2.810	-286.635	-599.969	-41.461	8.632	-292.457	172.006
3	-8.461	-222.259	-74.636	2.809	-8.424	-222.296	0.753
4	6.157	-344.395	-1,158.990	-81.767	24.291	-362.530	167.495
5	-5.114	-288.019	-633.657	-37.496	-0.391	-285.041	172.370
6	-3.704	-371.769	-747.138	-46.421	2.059	-377.533	172.921
7	-3.934	-367.848	-653.064	-41.854	0.817	-372.600	173.523
8	-6.506	-176.355	-610.801	-32.351	-0.553	-182.308	169.573
9	-8.523	-217.672	-73.624	3.037	-8.479	-217.716	0.832
1	-20.662	-287.520	-602.909	-44.068	-13.573	-294.609	170.861
2	-20.684	-292.128	-603.938	-44.266	-13.647	-299.164	170.968
3	-7.129	-221.884	-74.098	2.946	-7.088	-221.925	0.786
4	-39.912	-355.175	-1,166.827	-87.040	-17.478	-377.610	165.547
5	-26.357	-284.932	-636.987	-39.827	-20.362	-290.928	171.439
6	-29.211	-377.680	-751.166	-48.518	-22.581	-384.309	172.219
7	-26.771	-373.145	-656.728	-43.617	-21.363	-378.553	172.932
8	-25.867	-180.811	-613.736	-35.353	-18.182	-188.497	167.735
9	-7.107	-217.277	-73.069	3.144	-7.060	-217.324	0.857
1	9.191	-344.034	-611.541	59.496	18.943	-353.786	9.308
2	9.181	-348.786	-612.576	59.553	18.829	-358.434	9.202
3	-10.227	-217.640	-71.527	-4.337	-10.137	-217.731	178.802
4	17.744	-466.078	-1,183.159	116.188	44.200	-492.534	12.827
5	-1.665	-334.932	-642.111	52.298	6.349	-342.946	8.712
6	-1.368	-436.597	-756.437	60.009	6.754	-444.719	7.708
7	-1.852	-425.909	-661.965	53.378	4.762	-432.525	7.065
8	-1.446	-227.541	-618.724	51.017	9.532	-238.520	12.144
9	-10.218	-212.888	-70.493	-4.393	-10.122	-212.984	178.758
1	-7.827	-120.347	-559.597	-34.515	1.916	-130.090	164.235
2	-7.929	-124.251	-560.563	-34.832	1.703	-133.884	164.541
3	-6.309	-232.737	-84.056	2.196	-6.288	-232.759	0.556
4	-15.748	-25.737	-1,083.994	-69.370	48.806	-90.293	137.059
5	-14.128	-134.224	-607.487	-32.341	-5.972	-142.379	165.846
6	-16.835	-194.997	-718.881	-42.302	-7.301	-204.531	167.299
7	-16.094	-208.986	-626.046	-38.412	-8.725	-216.354	169.142
8	-11.809	-45.986	-585.643	-25.177	1.531	-59.326	152.082
9	-6.207	-228.833	-83.090	2.513	-6.178	-228.861	0.647
1	8.996	-167.840	-570.430	49.199	21.763	-180.607	14.546
2	9.050	-171.985	-571.397	49.345	21.627	-184.562	14.298
3	-8.600	-229.315	-81.342	-3.395	-8.547	-229.367	179.118
4	17.718	-119.716	-1,104.529	95.675	57.610	-169.608	27.297
5	0.067	-177.046	-614.474	43.934	10.367	-187.345	13.193
6	1.842	-247.589	-726.131	52.187	12.321	-258.068	11.353
7	1.101	-256.415	-633.046	46.723	9.317	-264.630	9.972
8	-1.153	-83.365	-592.611	40.638	15.543	-100.063	22.336
9	-8.654	-225.170	-80.374	-3.541	-8.596	-225.228	179.063
1	-14.366	-173.312	-574.430	52.230	1.260	-188.939	16.656
2	-14.395	-177.477	-575.415	52.345	0.960	-192.833	16.349
3	-7.258	-228.934	-80.776	-3.750	-7.205	-228.998	179.031

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
33	4	-28.259	-130.497	-1,112.457	102.392	35.065	-193.822	31.734
33	5	-21.132	-131.954	-617.818	46.297	-8.756	-194.330	14.965
33	6	-23.510	-253.488	-730.180	54.271	-11.441	-265.656	12.638
[illegible]	7	-21.586	-261.713	-636.726	48.498	-12.257	-271.142	11.002
	8	-20.477	-87.824	-595.558	43.594	1.013	-109.315	26.132
3	9	-7.239	-224.769	-79.791	-3.865	-7.170	-224.838	178.932
4	1	4.140	-219.361	-573.298	-32.119	8.684	-222.904	171.948
4	2	4.210	-222.784	-574.328	-32.466	8.762	-227.337	172.018
4	3	-7.652	-225.027	-82.515	2.098	-7.632	-226.048	0.550
4	4	8.825	-220.029	-1,111.140	-64.968	25.982	-237.187	165.206
4	5	-3.037	-223.272	-619.328	-30.403	1.082	-227.392	172.282
4	6	-1.235	-304.902	-733.298	-40.673	4.117	-310.256	172.501
4	7	-1.707	-307.974	-639.097	-37.059	2.712	-312.394	173.198
4	8	-4.606	-123.300	-596.054	-22.549	-0.467	-127.440	169.597
4	9	-7.722	-221.604	-81.486	2.445	-7.694	-221.632	0.655
5	1	-14.760	-222.722	-576.187	-31.974	-9.955	-227.527	171.453
5	2	-14.825	-227.178	-577.247	-32.322	-10.014	-231.989	171.534
5	3	-6.695	-225.743	-82.032	1.991	-6.677	-225.761	0.520
5	4	-28.860	-228.741	-1,117.004	-64.660	-9.767	-247.835	163.549
5	5	-20.730	-227.306	-621.789	-30.346	-16.365	-231.672	171.813
5	6	-23.695	-310.057	-736.583	-40.632	-18.041	-315.711	172.078
5	7	-21.974	-312.641	-642.137	-37.010	-17.336	-317.280	172.856
5	8	-19.262	-126.586	-597.831	-22.484	-14.742	-131.106	168.633
5	9	-6.630	-221.287	-80.972	2.338	-6.605	-221.312	0.624
6	1	7.906	-269.562	-585.659	52.029	17.342	-278.997	10.279
6	2	7.930	-274.275	-586.737	52.143	17.256	-283.601	10.140
[illegible]	[illegible]	-9.448	-222.383	-79.452	-3.623	-9.386	-222.444	179.325
6	4	15.523	-321.563	-1,135.001	101.957	43.963	-349.999	15.585
6	5	-1.854	-269.657	-627.715	46.189	5.387	-277.410	9.515
6	6	-0.995	-362.420	-742.958	54.168	6.947	-370.363	8.343
6	7	-1.412	-359.306	-648.399	48.394	5.005	-366.324	7.554
6	8	-2.377	-163.156	-603.361	43.582	8.675	-174.210	14.232
6	9	-9.471	-217.670	-78.374	-3.738	-9.404	-217.737	178.971
7	1	-15.511	-275.034	-589.631	49.194	-6.498	-284.046	10.381
7	2	-15.571	-279.767	-590.726	49.339	-6.657	-288.681	10.240
7	3	-8.112	-221.997	-78.893	-3.486	-8.056	-222.054	179.066
7	4	-30.558	-332.345	-1,142.872	96.684	-2.240	-360.663	16.324
	5	-23.099	-274.575	-631.039	43.858	-15.669	-282.005	9.614
	6	-26.503	-368.313	-746.979	52.071	-18.746	-376.069	8.472
	7	-24.250	-365.203	-652.054	46.632	-17.987	-371.466	7.649
	8	-21.741	-167.613	-606.291	40.581	-11.211	-178.143	14.546
	9	-8.052	-217.264	-77.798	-3.631	-7.989	-217.327	179.006
	1	-2.815	-320.302	-589.858	-34.576	0.900	-324.617	173.967
	2	-2.708	-325.879	-590.991	-34.892	1.015	-329.603	173.907
	3	-8.028	-219.032	-80.504	2.304	-8.002	-219.057	0.625
	4	-4.332	-423.351	-1,144.102	-69.512	6.897	-434.582	170.822
	5	-9.652	-316.504	-633.616	-32.316	-6.295	-319.871	174.052
	6	-8.117	-420.152	-750.972	-42.237	-3.832	-424.437	174.207
	7	-7.610	-411.798	-655.168	-38.364	-4.001	-415.407	174.625
		-12.260	-204.027	-608.236	-25.130	-8.812	-207.275	172.550

T	LOAD COMB	X-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	XZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
8	9	-8.134	-214.055	-79.381	2.620	-8.101	-214.088	0.729
9	1	-11.046	-143.395	-552.645	40.013	0.110	-154.552	15.580
	2	-11.078	-146.998	-553.559	40.260	-0.047	-158.028	15.321
	3	-6.605	-229.915	-88.357	-2.748	-6.571	-229.949	179.295
9	4	-21.882	-68.894	-1,071.503	79.572	37.582	-128.359	36.771
9	5	-17.409	-151.811	-606.302	36.563	-8.107	-161.114	14.275
9	6	-19.465	-209.172	-717.854	45.725	-9.018	-219.619	12.868
9	7	-18.014	-220.791	-623.843	41.281	-9.932	-228.873	11.077
9	8	-16.695	-70.388	-585.662	30.994	-2.537	-84.546	24.550
9	9	-6.574	-226.312	-87.444	-2.995	-6.533	-226.353	179.219
0	1	5.309	-177.951	-548.826	-26.344	9.021	-181.663	171.980
0	2	5.384	-181.946	-549.801	-26.790	9.140	-185.702	172.019
0	3	-6.828	-227.889	-90.301	1.604	-6.816	-227.901	0.416
0	4	11.082	-138.997	-1,065.093	-54.492	28.781	-155.696	152.007
0	5	-1.129	-184.941	-605.593	-26.097	2.503	-188.574	172.074
0	6	1.015	-253.850	-718.784	-37.691	6.472	-259.307	171.761
0	7	0.306	-261.425	-624.329	-34.645	4.814	-265.933	172.586
0	8	-2.823	-94.661	-583.546	-16.015	-0.110	-97.374	170.386
0	9	-6.902	-223.895	-89.326	2.050	-6.883	-223.914	0.541
	1	-9.411	-181.270	-550.736	-23.681	-6.207	-184.474	172.296
	2	-9.530	-185.313	-551.757	-24.169	-6.267	-188.576	172.312
	3	-6.233	-227.680	-89.889	1.269	-6.226	-227.688	0.328
	4	-18.934	-145.807	-1,069.159	-49.590	-1.851	-162.891	160.992
	5	-15.637	-188.175	-607.291	-24.151	-12.320	-191.492	172.180
	6	-18.993	-258.386	-721.493	-36.303	-13.609	-263.771	171.564
	7	-17.928	-265.577	-626.898	-33.500	-13.476	-270.028	172.430
		-12.935	-96.813	-584.217	-13.125	-10.929	-98.819	171.310
	9	-6.114	-223.638	-88.868	1.755	-6.100	-223.652	0.462
	1	6.617	-218.569	-560.708	42.236	14.278	-226.230	10.281
	2	6.683	-222.390	-561.759	42.450	14.277	-230.585	10.143
	3	-8.416	-225.106	-87.252	-2.839	-8.379	-225.143	179.249
	4	13.217	-220.981	-1,088.231	83.618	40.008	-247.771	17.765
	5	-1.881	-223.096	-613.724	38.328	4.571	-229.549	9.556
	6	-0.261	-304.650	-728.673	47.115	6.864	-311.776	8.600
	7	-0.625	-307.751	-633.911	42.417	5.125	-313.502	7.720
	8	-3.363	-123.175	-589.963	33.501	5.367	-131.906	14.607
	9	-8.481	-220.684	-86.201	-3.052	-8.437	-220.728	179.176
	1	-12.293	-222.937	-563.638	42.381	-4.085	-231.145	10.960
	2	-12.361	-227.391	-564.720	42.595	-4.231	-235.521	10.806
	3	-7.455	-224.816	-96.752	-2.946	-7.415	-224.856	179.223
	4	-24.484	-229.707	-1,094.164	83.927	5.465	-259.659	19.640
	5	-19.578	-227.132	-616.206	38.386	-12.707	-234.004	10.149
	6	-22.725	-309.807	-731.979	47.157	-15.177	-317.355	9.093
	7	-20.896	-312.421	-635.970	42.467	-14.836	-319.481	8.121
	8	-18.024	-126.469	-591.763	33.567	-8.475	-136.019	15.880
	9	-7.387	-220.362	-85.680	-3.159	-7.340	-220.409	179.150
	1	-1.151	-258.680	-561.145	-23.774	1.014	-260.357	174.769
	2	-1.040	-263.517	-562.270	-24.261	1.193	-265.741	174.763
		-7.244	-222.588	-88.583	1.387	-7.236	-222.697	0.369

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LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
4	-1.104	-302.063	-1,090.201	-49.807	5.923	-310.092	170.843
5	-7.309	-261.335	-616.513	-24.158	-5.031	-263.513	174.613
6	-5.213	-355.414	-733.708	-36.277	-1.495	-359.133	174.147
7	-4.988	-353.849	-638.113	-33.436	-1.833	-357.835	174.566
8	-10.045	-151.926	-591.088	-13.156	-8.835	-153.136	174.746
9	-7.366	-217.852	-87.458	1.874	-7.349	-217.863	0.519
1	-15.898	-252.005	-563.341	-26.117	-13.157	-264.748	174.008
2	-15.972	-255.891	-564.211	-26.562	-13.191	-269.672	174.023
3	-6.638	-222.484	-88.170	1.497	-6.628	-222.494	0.397
4	-31.153	-308.384	-1,094.239	-54.017	-21.026	-319.320	169.371
5	-21.829	-254.476	-613.197	-25.958	-19.083	-267.222	173.361
6	-25.248	-359.960	-736.398	-37.531	-21.391	-364.117	173.680
7	-23.248	-358.015	-640.659	-34.486	-19.732	-361.530	174.179
8	-20.154	-154.084	-591.754	-15.899	-18.293	-155.946	173.321
9	-6.564	-217.599	-86.399	1.942	-6.546	-217.617	0.527
1	5.354	-298.236	-571.687	39.770	10.477	-303.359	7.340
2	5.382	-303.509	-572.906	40.016	10.482	-308.609	7.263
3	-9.250	-219.989	-85.663	-2.634	-9.217	-220.022	179.283
4	10.575	-382.051	-1,110.864	79.065	25.898	-397.375	10.968
5	-4.057	-298.530	-623.621	36.423	0.378	-302.966	6.945
6	-3.538	-405.444	-742.784	45.569	1.563	-410.546	6.388
7	-3.524	-399.520	-647.019	41.129	0.702	-403.747	5.867
8	-4.688	-179.347	-596.071	30.847	0.599	-184.635	9.727
9	-9.278	-214.715	-84.444	-2.391	-9.237	-214.755	179.196
1	-4.612	-160.395	-525.756	-18.180	-2.519	-162.489	173.431
2	-4.796	-163.587	-527.642	-18.785	-2.505	-165.878	173.348
3	-5.726	-227.780	-97.587	0.689	-5.724	-227.782	0.173
4	-10.114	-100.396	-1,023.492	-39.728	4.877	-115.388	159.324
5	-11.045	-154.489	-593.427	-20.253	-8.416	-157.117	172.606
6	-15.029	-217.756	-705.333	-34.140	-9.434	-223.351	170.692
7	-14.552	-227.505	-610.447	-31.944	-9.902	-232.166	171.674
8	-6.998	-90.093	-573.411	-6.586	-6.380	-90.611	175.501
9	-5.542	-224.498	-96.701	1.294	-5.535	-224.496	0.338
1	5.486	-198.395	-536.993	30.578	10.193	-193.592	8.732
2	5.605	-192.711	-537.926	30.952	10.324	-197.430	8.668
3	-7.175	-225.989	-94.939	-1.889	-7.360	-225.005	179.504
4	11.354	-159.537	-1,043.189	62.161	31.573	-179.756	18.018
5	-1.627	-192.314	-600.203	29.319	1.767	-197.210	8.525
6	1.032	-259.331	-713.215	39.972	7.030	-265.330	8.534
7	0.657	-265.867	-618.130	36.494	5.561	-270.771	7.655
8	-4.322	-106.582	-579.115	20.866	-0.228	-110.676	11.130
9	-7.496	-222.173	-94.006	-2.253	-7.472	-222.197	179.396
1	-9.243	-192.229	-538.944	33.241	-3.392	-198.080	9.983
2	-9.313	-196.092	-539.922	33.573	-3.467	-201.944	9.887
3	-6.773	-225.780	-94.513	-2.225	-6.755	-225.802	179.418
4	-19.681	-166.370	-1,047.332	67.064	7.226	-192.278	21.122
5	-16.140	-196.059	-601.922	31.264	-10.862	-201.336	9.582
6	-18.980	-263.876	-715.937	41.360	-12.183	-270.573	9.332
7	-17.532	-270.127	-620.720	37.629	-12.092	-275.517	8.300
8	-14.440	-108.743	-579.807	23.755	-8.793	-114.389	13.370

NT	LOAD COMB	R-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	RZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
.99	9	-6.702	-221.915	-93.534	-2.557	-5.672	-221.947	179.319
00	1	0.132	-218.020	-534.048	-16.236	1.334	-219.222	175.766
[illegible]	2	0.263	-222.424	-535.087	-16.882	1.535	-223.697	175.689
[illegible]	3	-6.512	-224.563	-96.546	0.608	-6.513	-224.565	0.160
[illegible]	4	1.511	-220.515	-1,038.796	-36.294	7.293	-226.297	170.947
00	5	-5.264	-222.654	-600.254	-18.803	-3.650	-224.268	175.092
00	6	-2.721	-304.007	-715.770	-33.273	0.909	-307.637	173.772
00	7	-2.767	-306.979	-620.219	-31.178	0.395	-310.142	174.208
00	8	-8.208	-123.132	-576.765	-4.213	-8.054	-123.286	177.903
00	9	-6.642	-220.159	-95.506	1.254	-6.635	-220.167	0.336
1	1	-10.830	-220.416	-535.076	-16.050	-9.608	-221.638	175.646
1	2	-10.964	-224.885	-536.178	-16.696	-9.669	-226.181	175.564
1	3	-6.312	-224.452	-96.199	0.493	-6.311	-224.453	0.129
1	4	-21.694	-225.647	-1,041.268	-35.896	-15.561	-231.781	170.304
1	5	-17.042	-225.214	-601.289	-18.706	-15.374	-226.882	174.905
1	6	-20.979	-308.108	-718.048	-33.173	-17.196	-311.891	173.494
1	7	-19.608	-310.787	-622.453	-31.075	-16.329	-314.066	173.975
.	8	-14.015	-124.210	-576.385	-4.122	-13.861	-124.364	177.860
.	9	-6.178	-219.983	-95.097	1.138	-6.172	-219.989	0.305
	1	4.326	-248.277	-544.104	32.997	8.565	-252.517	7.321
	2	4.402	-253.291	-545.275	33.329	8.643	-257.532	7.251
	3	-8.259	-222.695	-93.650	-2.117	-8.238	-222.716	179.434
	4	8.836	-283.729	-1,058.817	66.560	23.268	-298.160	12.233
	5	-3.824	-253.133	-607.192	31.113	-0.000	-256.957	7.007
	6	-2.391	-349.633	-725.374	41.190	2.428	-354.452	6.673
	7	-2.363	-349.147	-629.690	37.462	1.637	-353.148	6.096
	[illegible]	-5.549	-139.820	-580.713	23.622	-1.514	-143.855	9.692
	[illegible]	-8.335	-217.681	-92.479	-2.449	-8.306	-217.710	179.329
	1	-10.420	-251.611	-546.048	30.655	-6.584	-255.446	7.131
	2	-10.538	-256.673	-547.265	31.028	-6.687	-260.524	7.075
	3	-7.648	-222.483	-93.223	-2.008	-7.630	-222.502	179.464
	4	-21.240	-290.565	-1,062.938	62.349	-7.506	-304.299	12.422
	5	-18.350	-256.375	-608.897	29.312	-14.793	-259.932	6.918
	6	-22.430	-354.178	-728.083	39.936	-17.690	-358.918	6.768
	7	-20.628	-353.306	-632.256	36.461	-16.673	-357.256	6.182
	8	-15.664	-141.980	-581.400	20.879	-12.392	-145.342	9.146
	9	-7.530	-217.421	-92.006	-2.381	-7.503	-217.448	179.350
	1	-6.074	-278.131	-542.374	-18.348	-4.842	-279.363	176.159
	2	-5.895	-283.715	-543.629	-18.952	-4.609	-285.002	176.115
	3	-7.086	-221.231	-95.164	0.780	-7.083	-221.234	0.209
	4	-10.058	-345.956	-1,056.588	-40.059	-5.346	-350.668	173.292
	5	-11.248	-283.472	-608.122	-20.327	-9.739	-284.982	175.753
	6	-8.674	-394.502	-728.479	-34.181	-5.669	-397.506	174.976
	7	-7.822	-390.396	-632.217	-31.894	-5.181	-393.037	175.267
	8	-15.288	-157.292	-579.761	-6.688	-14.973	-157.506	177.309
	9	-7.255	-215.647	-93.989	1.384	-7.256	-215.657	0.380
	1	-6.349	-180.138	-515.694	22.879	-3.387	-183.100	7.375
	2	-6.429	-183.037	-516.456	23.391	-3.383	-186.083	7.418
	[illegible]	-6.102	-225.119	-102.129	-1.201	-6.095	-225.126	179.685

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E628

LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
4	-13.086	-136.295	-1,092.442	48.174	3.512	-152.895	19.312
5	-12.759	-178.378	-588.115	23.580	-9.467	-181.670	7.947
6	-15.242	-225.373	-698.291	35.096	-9.228	-231.884	9.459
7	-14.294	-233.857	-602.752	33.391	-9.328	-238.823	8.459
8	-10.949	-112.860	-570.901	12.011	-9.552	-114.255	5.631
9	-6.022	-222.220	-101.368	-1.713	-6.008	-222.234	179.545
1	1.374	-197.027	-508.777	-11.371	2.023	-197.677	175.739
2	1.511	-200.642	-509.617	-12.143	2.237	-201.369	176.574
3	-5.594	-224.667	-104.298	0.277	-5.594	-224.668	0.072
4	3.897	-174.511	-990.138	-27.949	8.173	-178.787	171.331
5	-3.207	-198.536	-584.819	-15.529	-1.960	-199.763	175.432
6	-0.275	-262.104	-696.631	-32.040	3.588	-265.967	173.124
7	-0.586	-267.727	-600.971	-30.322	2.812	-271.125	173.605
8	-6.297	-116.852	-565.832	1.909	-6.265	-116.885	0.989
9	-5.731	-221.053	-103.458	1.048	-5.726	-221.058	0.279
1	-6.050	-198.555	-508.993	-9.054	-5.625	-198.980	177.313
2	-6.255	-202.254	-509.915	-9.878	-5.758	-202.751	177.122
3	-5.687	-224.626	-103.999	0.002	-5.687	-224.626	0.000
4	-13.081	-178.117	-991.186	-23.857	-9.701	-181.496	171.937
5	-12.513	-200.488	-585.269	-13.977	-11.479	-201.522	175.770
6	-17.243	-265.899	-698.638	-31.315	-13.360	-269.783	172.931
7	-16.435	-271.303	-603.005	-29.765	-13.005	-274.733	173.426
8	-7.889	-116.886	-564.416	4.535	-7.692	-117.083	2.431
9	-5.482	-220.927	-103.076	0.825	-5.479	-220.930	0.219
1	3.220	-219.388	-513.236	24.718	5.944	-221.112	6.299
2	3.355	-222.792	-519.250	25.186	6.126	-225.564	6.278
3	-7.306	-223.603	-101.472	-1.263	-7.299	-223.610	179.665
4	7.151	-221.921	-1,009.294	51.365	18.146	-232.816	12.082
5	-3.511	-222.632	-591.507	24.915	-0.714	-225.429	6.406
6	-0.911	-303.977	-706.736	36.770	3.486	-309.374	6.819
7	-0.918	-306.957	-610.992	33.882	2.787	-310.663	6.242
8	-6.559	-123.123	-568.588	14.338	-4.830	-124.841	5.912
9	-7.442	-219.199	-100.458	-1.731	-7.427	-219.213	179.531
1	-7.753	-220.805	-519.319	24.905	-4.880	-223.678	6.579
2	-7.882	-225.274	-520.396	25.373	-4.960	-228.197	6.570
3	-7.103	-223.498	-101.118	-1.378	-7.094	-223.507	179.635
4	-16.074	-226.984	-1,011.854	51.755	-4.054	-239.005	13.072
5	-15.295	-225.238	-592.576	25.013	-12.355	-229.148	6.702
6	-19.174	-308.098	-709.055	36.870	-14.543	-312.729	7.159
7	-17.766	-310.788	-613.263	33.985	-13.875	-314.673	6.530
8	-12.381	-124.204	-568.241	14.431	-10.549	-125.037	7.235
9	-6.974	-219.029	-100.041	-1.846	-6.958	-219.045	179.531
1	-4.419	-238.638	-513.534	-9.232	-4.055	-239.002	177.746
2	-4.223	-243.812	-514.665	-10.055	-3.802	-244.233	177.631
3	-6.248	-222.955	-103.172	0.129	-6.248	-222.955	0.029
4	-5.736	-266.365	-1,001.561	-24.224	-4.550	-269.201	174.726
5	-8.911	-246.109	-590.068	-14.058	-7.391	-246.939	176.621
6	-5.606	-344.956	-707.826	-31.375	-2.729	-347.832	174.751
7	-5.367	-345.179	-611.799	-29.931	-2.471	-347.775	175.035
8	-13.223	-129.193	-564.504	4.533	-13.046	-129.369	2.235

F629

LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
9	-6.443	-217.782	-102.041	0.932	-6.439	-217.786	0.253
1	-11.843	-240.166	-513.763	-11.151	-11.299	-240.710	177.210
2	-11.990	-245.424	-514.976	-11.920	-11.383	-246.031	177.084
3	-6.337	-222.912	-102.393	0.164	-6.336	-222.913	0.043
4	-23.770	-270.573	-1,002.629	-27.468	-20.750	-273.593	173.725
5	-18.117	-248.061	-590.546	-15.383	-17.093	-249.086	176.189
6	-22.596	-348.752	-709.847	-31.839	-19.517	-351.831	174.476
7	-20.940	-348.761	-613.844	-30.124	-18.195	-351.507	174.793
8	-14.798	-129.234	-563.134	1.994	-14.753	-129.268	0.998
9	-6.189	-217.654	-101.580	0.933	-6.185	-217.658	0.253
1	1.822	-259.138	-521.881	22.654	3.774	-261.091	4.925
2	1.907	-265.115	-523.209	23.165	3.902	-267.110	4.921
3	-8.299	-221.991	-100.473	-1.065	-8.294	-221.996	179.714
4	4.169	-312.678	-1,018.723	47.674	11.187	-319.696	8.374
5	-6.037	-269.554	-595.987	23.443	-3.968	-271.623	5.044
6	-4.849	-386.354	-717.506	35.927	-1.495	-389.708	5.333
7	-4.402	-384.029	-621.488	33.227	-1.516	-386.915	4.964
8	-7.968	-134.480	-565.975	11.904	-6.857	-135.591	5.329
9	-8.385	-216.014	-99.145	-1.576	-8.373	-216.026	179.565
1	-1.808	-194.194	-485.013	-4.386	-1.708	-194.294	178.694
2	-2.093	-196.695	-485.616	-5.353	-1.946	-196.843	178.425
3	-5.007	-223.466	-111.644	-0.311	-5.006	-223.467	179.918
4	-5.574	-160.955	-944.081	-16.079	-3.927	-162.602	174.153
5	-8.488	-187.726	-570.109	-11.037	-7.811	-188.403	176.489
6	-14.259	-228.851	-677.520	-30.829	-9.918	-233.192	171.984
7	-13.944	-235.577	-581.718	-29.579	-10.065	-239.456	172.527
8	-2.056	-131.194	-555.486	10.816	-1.157	-132.094	4.755
9	-4.722	-220.965	-111.041	0.655	-4.720	-220.967	0.173
1	2.397	-206.499	-494.194	14.870	3.450	-207.553	4.051
2	2.602	-209.891	-494.915	15.549	3.733	-211.023	4.163
3	-6.231	-223.034	-109.124	-0.446	-6.231	-223.035	179.882
4	6.056	-191.592	-962.263	33.925	11.717	-197.253	9.473
5	-2.777	-204.735	-576.472	17.928	-1.198	-206.314	5.034
6	1.265	-264.748	-686.284	32.952	5.287	-268.769	6.957
7	1.150	-269.655	-590.365	30.940	4.640	-273.145	6.435
8	-7.408	-128.086	-560.153	2.588	-7.352	-128.142	1.228
9	-6.436	-219.643	-108.402	-1.125	-6.430	-219.648	179.697
1	-5.039	-208.034	-494.458	17.187	-3.594	-209.479	4.805
2	-5.176	-211.511	-495.263	17.814	-3.649	-213.037	4.898
3	-6.321	-222.984	-108.811	-0.721	-6.319	-222.987	179.809
4	-10.944	-195.216	-963.408	38.017	-3.409	-202.751	11.211
5	-12.090	-206.689	-576.957	19.482	-10.158	-208.621	5.661
6	-15.709	-268.547	-688.326	33.677	-11.300	-272.956	7.458
7	-14.706	-273.234	-592.437	31.497	-10.924	-277.016	6.847
8	-9.005	-128.122	-558.768	5.315	-8.768	-128.359	2.550
9	-6.185	-219.508	-108.006	-1.347	-6.176	-219.516	179.638
1	-2.952	-217.520	-486.895	-2.342	-2.924	-217.558	179.241
2	-2.756	-221.898	-487.771	-3.860	-2.688	-221.966	179.991
3	-5.332	-223.085	-110.972	-0.336	-5.331	-223.085	179.911

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E630

N°	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
16	4	-3.962	-220.652	-949.326	-13.553	-3.117	-221.497	176.434
.6	5	-5.537	-221.339	-573.029	-10.029	-6.071	-222.305	177.338
.6	6	-2.840	-302.762	-685.826	-30.684	0.266	-305.869	174.213
.6	7	-2.601	-305.662	-539.366	-29.555	0.254	-303.513	174.481
.6	8	-11.177	-122.898	-553.240	12.982	-9.688	-124.397	6.541
.6	9	-5.537	-218.707	-110.097	0.681	-5.535	-218.709	0.183
.7	1	-7.149	-218.256	-486.395	-2.531	-7.116	-218.289	179.286
.7	2	-7.372	-222.741	-487.375	-3.648	-7.310	-222.803	179.029
.7	3	-5.656	-223.098	-110.722	-0.448	-5.656	-223.099	179.881
.7	4	-15.431	-222.913	-949.674	-13.101	-14.607	-223.737	176.401
.7	5	-13.715	-223.270	-573.021	-9.902	-13.249	-223.737	177.300
7	6	-19.127	-306.399	-687.729	-30.529	-15.919	-309.607	174.000
.7	7	-18.000	-309.140	-591.857	-29.399	-15.061	-312.079	174.291
7	8	-8.665	-121.925	-550.877	13.077	-7.175	-123.415	6.581
.7	9	-5.433	-218.614	-109.743	0.568	-5.431	-218.615	0.152
8	1	1.093	-230.027	-494.590	16.956	2.330	-231.265	4.174
8	2	1.243	-235.429	-495.716	17.581	2.542	-236.728	4.225
8	3	-7.227	-222.726	-108.307	-0.604	-7.225	-222.728	179.839
8	4	3.143	-252.722	-966.161	37.516	8.531	-258.109	8.172
8	5	-5.326	-240.019	-578.751	19.330	-3.745	-241.601	4.677
8	6	-2.814	-342.519	-696.319	33.475	0.452	-345.786	5.574
8	7	-2.442	-343.465	-600.397	31.299	0.406	-346.314	5.200
8	8	-8.728	-117.951	-553.293	5.218	-8.480	-118.200	2.729
9	9	-7.377	-217.324	-107.190	-1.229	-7.370	-217.332	179.664
9	1	-6.342	-231.569	-494.861	15.039	-5.342	-232.569	3.803
9	2	-6.534	-237.055	-496.069	15.716	-5.467	-238.122	3.882
9	3	-7.312	-222.682	-108.000	-0.550	-7.310	-222.684	179.853
9	4	-13.362	-256.354	-967.312	34.271	-9.111	-261.105	7.892
9	5	-14.640	-241.981	-579.243	18.005	-13.222	-243.398	4.500
9	6	-19.813	-346.328	-698.347	33.011	-16.509	-349.632	5.715
9	7	-18.322	-347.057	-602.459	31.004	-15.424	-349.956	5.341
9	8	-10.299	-117.995	-551.933	2.678	-10.233	-118.061	1.424
9	9	-7.120	-217.196	-105.791	-1.228	-7.113	-217.203	179.665
0	1	-8.268	-241.611	-488.305	-4.572	-8.179	-241.700	178.877
0	2	-8.304	-247.975	-489.556	-5.538	-7.876	-248.103	178.678
0	3	-5.971	-222.710	-110.063	-0.183	-5.970	-222.710	179.951
0	4	-13.769	-282.694	-955.459	-15.478	-12.763	-283.700	176.506
0	5	-11.735	-257.430	-575.966	-11.122	-11.233	-257.932	177.413
0	6	-7.707	-380.422	-696.041	-30.893	-5.164	-382.965	175.293
0	7	-6.662	-379.336	-600.005	-29.546	-4.318	-381.680	175.480
0	8	-17.714	-113.600	-547.688	10.709	-16.533	-114.782	5.296
0	9	-6.235	-216.346	-108.812	0.782	-6.232	-216.349	0.213
1	1	-2.409	-210.624	-471.583	8.336	-2.074	-210.959	2.289
1	2	-2.551	-212.647	-471.956	9.131	-2.149	-213.048	2.500
1	3	-5.493	-221.212	-116.331	-0.108	-5.493	-221.212	179.971
1	4	-5.940	-189.336	-917.532	22.824	-3.142	-192.134	5.988
1	5	-8.882	-197.901	-561.907	13.524	-7.919	-198.854	4.072
1	6	-12.197	-230.895	-665.166	31.424	-7.774	-235.318	3.014
1	7	-11.620	-236.555	-569.113	29.915	-7.710	-240.467	7.447
1	8	-5.654	-152.197	-553.473	-5.797	-5.425	-152.426	177.738

E631

LOAD COMB	[illegible] (RADIAL)	[illegible] (AXIAL)	[illegible] (HOOP)	[illegible] (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
9	-5.350	-219.190	-115.958	-0.363	-5.346	-219.194	179.742
1	-1.769	-212.312	-462.673	0.985	-1.765	-212.817	0.267
[illegible]	-1.557	-215.951	-463.133	-0.181	-1.557	-215.952	179.951
[illegible]	-4.453	-221.911	-118.605	-0.757	-4.451	-221.914	179.803
4	-1.577	-202.437	-901.473	-7.340	-1.309	-202.705	177.910
5	-4.474	-208.397	-556.945	-7.916	-4.167	-208.704	177.799
6	-0.344	-264.104	-661.819	-31.243	3.305	-267.755	173.335
7	-0.397	-268.475	-565.815	-30.295	2.983	-271.856	173.632
8	-9.277	-137.447	-546.557	18.456	-6.673	-140.052	8.033
9	-4.666	-218.772	-118.145	0.409	-4.665	-218.773	0.109
1	-3.115	-212.854	-461.520	2.882	-3.075	-212.893	0.737
2	-3.424	-216.123	-462.109	1.655	-3.411	-216.136	0.446
3	-5.064	-221.993	-118.387	-1.044	-5.059	-221.998	179.724
4	-8.309	-203.544	-900.255	-4.124	-8.222	-203.631	178.790
5	-9.949	-209.414	-556.532	-6.824	-9.716	-209.647	178.042
6	-16.546	-267.735	-663.749	-31.219	-12.724	-271.557	173.020
7	-15.874	-271.986	-567.873	-30.357	-12.325	-275.535	173.331
8	-2.967	-135.526	-543.233	20.907	0.252	-138.746	8.753
9	-4.755	-218.724	-117.798	0.182	-4.755	-218.724	0.049
1	0.406	-217.993	-469.590	9.800	0.845	-218.431	2.564
2	0.631	-222.375	-470.358	10.600	1.134	-222.878	2.715
3	-6.140	-222.144	-115.962	-0.142	-6.140	-222.144	179.962
4	2.343	-222.174	-916.781	25.168	5.130	-224.961	6.318
5	-4.428	-221.943	-562.386	14.425	-3.475	-222.896	3.778
6	-0.336	-302.963	-673.104	31.359	2.879	-306.178	5.854
[illegible]	-0.098	-305.859	-577.167	29.755	2.769	-308.728	5.507
[illegible]	-9.531	-122.894	-545.028	-3.645	-9.414	-123.011	178.150
[illegible]	-6.365	-217.751	-115.194	-0.941	-6.361	-217.766	179.744
1	-3.793	-218.743	-469.131	10.011	-3.328	-219.208	2.661
2	-3.995	-223.232	-470.004	10.812	-3.464	-223.764	2.815
3	-6.461	-222.155	-115.692	-0.254	-6.461	-222.157	179.932
4	-9.149	-224.460	-916.712	25.621	-6.142	-227.467	6.693
5	-11.614	-223.384	-562.400	14.553	-10.619	-224.379	3.813
6	-16.632	-306.611	-675.041	31.515	-13.246	-309.997	6.131
7	-15.507	-309.346	-579.186	29.911	-12.494	-312.360	5.753
8	-7.026	-121.922	-542.679	-3.549	-6.916	-122.032	178.232
9	-6.258	-217.567	-114.819	-1.055	-6.253	-217.672	179.714
1	-6.715	-221.673	-461.166	2.572	-6.682	-221.706	0.712
2	-6.433	-227.266	-462.096	1.446	-6.424	-227.275	0.375
3	-5.143	-222.816	-117.874	-0.929	-5.139	-222.820	179.755
4	-10.621	-238.878	-902.242	-4.563	-10.530	-238.970	178.855
5	-9.332	-234.428	-558.020	-6.938	-9.118	-234.642	178.236
6	-4.538	-340.168	-671.777	-31.328	-1.738	-343.068	174.711
7	-3.930	-341.551	-575.915	-30.467	-1.202	-344.278	174.894
8	-15.696	-108.030	-536.995	20.787	-11.232	-112.494	12.120
9	-5.425	-217.223	-116.944	0.297	-5.424	-217.224	0.080
1	-8.038	-221.708	-460.034	1.187	-8.031	-221.714	0.313
2	-8.279	-227.431	-461.092	0.026	-8.279	-227.431	0.000
[illegible]	-5.749	-222.891	-117.668	-0.869	-5.745	-222.894	179.770

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F632

?	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
7	4	-17.325	-239.979	-901.050	-6.973	-17.113	-240.191	178.233
7	5	-14.794	-235.439	-557.627	-7.769	-14.521	-235.712	177.986
7	6	-20.860	-343.793	-573.739	-10.994	-17.912	-346.741	174.567
7	7	-19.429	-345.056	-577.368	-10.050	-16.679	-347.806	174.771
7	8	-9.330	-106.105	-533.719	18.487	-5.919	-109.516	10.455
7	9	-5.507	-217.168	-116.611	0.292	-5.507	-217.168	0.079
8	1	-0.943	-226.118	-467.156	8.088	-0.652	-226.408	2.054
8	2	-0.779	-232.971	-468.432	8.939	-0.435	-233.315	2.091
8	3	-7.096	-223.080	-115.321	-0.010	-7.096	-223.080	180.000
8	4	-0.810	-257.351	-916.008	22.297	1.112	-259.275	4.930
8	5	-7.127	-247.459	-562.897	13.346	-6.388	-248.198	3.169
8	6	-4.767	-378.788	-682.965	31.158	-2.187	-381.368	4.731
8	7	-3.988	-378.759	-587.218	29.573	-1.653	-381.893	4.499
8	8	-10.829	-92.564	-534.296	-5.898	-10.405	-92.988	175.893
8	9	-7.259	-216.226	-114.055	-0.862	-7.256	-216.229	179.763
9	1	0.440	-221.423	-439.166	6.456	0.628	-221.611	1.665
9	2	0.041	-222.967	-439.173	5.358	0.156	-223.083	1.301
9	3	-4.416	-219.456	-125.798	-1.511	-4.405	-219.466	179.597
9	4	-2.141	-207.073	-854.208	1.499	-2.130	-207.084	0.419
9	5	-6.599	-203.561	-540.833	-5.080	-6.468	-203.692	178.523
9	6	-14.546	-228.007	-636.972	-32.478	-9.713	-232.839	171.537
9	7	-14.265	-233.045	-541.026	-31.712	-9.761	-237.549	171.916
9	8	2.431	-168.657	-540.679	26.297	6.382	-172.608	8.544
9	9	-4.016	-217.911	-125.791	-0.123	-4.016	-217.911	179.967
0	1	-0.149	-220.479	-446.902	1.755	-0.134	-220.493	0.456
0	2	0.161	-223.360	-447.130	2.812	0.197	-223.396	0.721
0	3	-5.074	-220.224	-123.401	0.564	-5.073	-220.225	0.150
0	4	1.971	-215.752	-870.415	11.717	2.600	-215.381	3.071
0	5	-3.264	-212.615	-546.686	9.468	-2.837	-213.043	2.584
0	6	2.669	-253.739	-647.124	30.830	6.189	-257.260	6.516
0	7	2.690	-267.742	-551.115	29.736	5.921	-270.973	6.201
0	8	-10.281	-147.495	-541.536	-14.417	-8.783	-148.994	174.066
0	9	-5.385	-217.342	-123.173	-0.492	-5.384	-217.344	179.367
1	1	-1.505	-220.527	-445.798	3.653	-1.445	-220.589	0.355
1	2	-1.717	-223.539	-446.155	4.[illegible]	-1.619	-223.636	1.202
1	3	-5.681	-220.297	-123.169	0.277	-5.681	-220.297	0.074
1	4	-4.783	-216.375	-869.294	14.934	-3.736	-217.922	4.008
1	5	-8.747	-213.634	-546.308	10.551	-8.204	-214.177	2.943
1	6	-13.543	-267.373	-649.097	30.854	-9.846	-271.069	6.832
1	7	-12.796	-271.257	-553.217	29.674	-9.433	-274.620	6.466
1	8	-3.976	-145.571	-538.239	-11.364	-2.972	-146.575	175.204
1	9	-5.470	-217.285	-122.812	-0.719	-5.468	-217.289	179.305
2	1	-5.353	-216.932	-436.798	7.604	-5.080	-217.175	2.056
2	2	-5.092	-221.248	-437.136	6.157	-4.397	-221.424	1.532
2	3	-4.257	-221.625	-125.448	-1.563	-4.246	-221.637	179.588
2	4	-7.895	-220.488	-852.754	3.213	-7.846	-220.537	0.865
2	5	-7.090	-220.865	-541.055	-4.507	-6.995	-220.961	178.792
2	6	-1.892	-301.217	-645.138	-32.686	1.699	-304.809	173.735
2	7	-1.508	-304.082	-549.331	-31.254	1.894	-307.484	173.930
2	8	-13.665	-122.644	-531.399	28.135	-6.803	-129.507	13.679

MEMT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
532	9	-4.548	-217.280	-125.020	-0.116	-4.548	-217.280	179.968
533	1	-4.143	-216.319	-435.013	7.813	-3.855	-216.606	2.106
[illegible]	2	-4.474	-220.820	-435.595	6.370	-4.287	-221.008	1.685
[illegible]	3	-5.173	-221.775	-125.290	-1.676	-5.150	-221.798	179.556
533	4	-10.498	-220.592	-850.679	3.678	-10.434	-220.657	1.002
533	5	-11.196	-221.547	-540.373	-4.368	-11.106	-221.637	178.811
533	6	-18.563	-304.968	-647.249	-32.781	-14.859	-308.672	173.553
533	7	-17.556	-307.740	-551.593	-32.061	-14.056	-311.240	173.759
533	8	-3.703	-119.816	-527.224	28.261	2.809	-126.329	12.978
533	9	-4.841	-217.273	-124.708	-0.232	-4.841	-217.273	179.937
534	1	-1.519	-214.909	-441.944	3.439	-1.463	-214.965	0.923
534	2	-1.273	-220.778	-442.777	4.431	-1.183	-220.867	1.156
534	3	-6.125	-222.612	-122.986	0.389	-6.124	-222.613	0.103
534	4	-1.239	-228.608	-865.590	14.448	-0.325	-229.522	3.621
534	5	-6.092	-230.442	-545.798	10.406	-5.610	-230.924	2.650
534	6	-1.981	-341.119	-657.534	30.604	0.757	-343.858	5.115
534	7	-1.379	-342.858	-561.843	29.427	1.138	-345.376	4.889
534	8	-11.647	-97.817	-526.961	-12.011	-10.004	-99.460	172.211
534	9	-6.371	-216.744	-122.152	-0.602	-6.369	-216.745	179.836
35	1	-2.854	-214.958	-440.868	1.954	-2.836	-214.976	0.528
35	2	-3.131	-220.957	-441.829	3.011	-3.090	-220.998	0.792
35	3	-6.727	-222.686	-122.767	0.449	-6.727	-222.687	0.119
35	4	-7.966	-229.733	-864.503	12.137	-7.304	-230.396	3.123
35	5	-11.562	-231.462	-545.440	9.575	-11.146	-231.878	2.488
35	6	-18.214	-344.756	-659.513	30.937	-15.308	-347.661	5.364
35	7	-16.889	-346.373	-563.940	29.843	-14.207	-349.054	5.134
[illegible]	8	-5.287	-95.887	-523.709	-14.310	-3.080	-98.093	171.234
[illegible]	9	-6.450	-216.687	-121.805	-0.607	-6.448	-216.688	179.834
36	1	-9.885	-211.784	-432.604	6.231	-9.693	-211.976	1.766
36	2	-9.529	-219.092	-433.604	4.842	-9.417	-219.204	1.323
36	3	-5.003	-223.946	-124.958	-1.395	-4.994	-223.955	179.635
36	4	-16.172	-234.022	-849.299	1.030	-16.167	-234.027	0.271
36	5	-11.646	-238.876	-540.653	-5.208	-11.527	-238.996	178.687
36	6	-5.914	-378.305	-655.437	-32.503	-3.081	-381.138	175.034
36	7	-4.811	-379.902	-559.904	-31.837	-2.120	-381.592	175.170
36	8	-19.698	-73.714	-518.039	26.158	-9.100	-84.312	22.047
36	9	-5.359	-216.639	-123.958	-0.007	-5.359	-216.639	180.000
7	1	0.724	-234.354	-424.812	-3.314	0.771	-234.400	179.192
7	2	0.504	-235.373	-424.449	-2.050	0.522	-235.391	179.502
7	3	-4.827	-216.960	-130.345	1.034	-4.822	-216.966	0.279
7	4	-0.530	-228.428	-824.790	3.606	-0.473	-228.485	0.906
7	5	-5.862	-210.015	-530.686	6.591	-5.543	-210.234	1.875
7	6	-10.443	-224.759	-619.701	31.778	-5.831	-229.371	8.259
[illegible]	7	-10.096	-229.413	-523.799	30.924	-5.919	-233.695	7.374
[illegible]	8	-0.873	-186.978	-538.879	-21.864	1.660	-189.512	173.388
[illegible]	9	-4.606	-215.941	-130.708	-0.228	-4.606	-215.941	179.938
	1	-4.144	-225.027	-414.902	10.606	-3.636	-225.535	2.743
	2	-3.847	-227.521	-414.519	9.000	-3.485	-227.982	2.299
	[illegible]	-3.392	-229.979	-132.709	-2.023	-3.283	-228.997	179.462

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F634

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
8	4	-5.485	-222.952	-806.737	7.711	-5.210	-223.227	2.033
8	5	-4.940	-214.309	-524.827	-3.091	-4.389	-214.361	179.099
8	6	0.702	-260.339	-615.249	-34.338	5.276	-264.662	172.520
8	7	0.769	-263.913	-519.461	-[illegible]	5.095	-268.238	172.773
8	8	-11.669	-155.690	-531.232	33.214	-4.461	-162.898	12.315
8	9	-3.600	-216.384	-132.993	-0.416	-3.599	-216.385	179.888
9	1	-0.715	-223.902	-412.715	12.126	-0.058	-224.559	3.101
9	2	-1.140	-226.577	-412.613	10.458	-0.656	-227.161	2.649
9	3	-4.536	-219.202	-132.606	-2.323	-4.511	-219.227	179.380
9	4	-4.606	-222.213	-803.932	10.203	-4.129	-222.691	2.678
9	5	-8.003	-214.738	-523.925	-2.578	-7.971	-214.770	179.285
9	6	-16.805	-264.070	-617.666	-35.297	-11.865	-269.010	172.033
9	7	-16.149	-267.810	-522.339	-34.575	-11.486	-272.473	172.317
9	8	1.594	-152.034	-526.230	35.114	9.239	-159.679	12.283
9	9	-4.112	-216.427	-132.708	-0.555	-4.110	-216.429	179.823
[illegible]	1	-1.971	-217.354	-419.347	-2.195	-1.949	-217.376	179.416
[illegible]	2	-1.636	-221.712	-419.541	-0.995	-1.632	-221.717	179.741
[illegible]	3	-5.048	-220.679	-130.354	0.976	-5.043	-220.684	0.259
[illegible]	4	-1.377	-222.041	-818.611	5.225	-1.254	-222.165	1.356
[illegible]	5	-4.789	-221.088	-529.423	7.197	-4.550	-221.248	1.904
[illegible]	6	1.277	-301.605	-628.902	31.101	4.437	-304.766	5.802
[illegible]	7	1.636	-304.462	-533.225	30.216	4.591	-307.417	5.584
[illegible]	8	-12.362	-122.504	-525.023	-19.929	-8.866	-125.999	170.052
	9	-5.383	-216.321	-130.159	-0.223	-5.383	-216.321	179.939
	1	-0.772	-216.784	-417.701	-1.985	-0.754	-216.802	179.473
	2	-1.060	-221.299	-418.050	-0.782	-1.057	-221.301	179.796
	3	-5.960	-220.827	-130.175	0.363	-5.957	-220.830	0.230
	4	-4.004	-222.171	-816.641	5.699	-3.856	-222.320	1.493
	5	-8.904	-221.699	-529.766	7.336	-8.651	-221.952	1.972
	6	-15.404	-305.375	-631.055	31.306	-12.063	-308.716	6.092
	7	-14.422	-308.137	-535.535	30.419	-11.305	-311.254	5.851
	8	-2.403	-119.678	-520.868	-19.353	0.869	-122.951	170.643
	9	-5.672	-216.312	-129.826	-0.339	-5.672	-216.313	179.907
[illegible]	1	-8.390	-207.986	-408.534	11.902	-7.683	-208.593	3.400
[illegible]	2	-8.320	-214.060	-408.932	10.233	-7.513	-214.567	2.836
[illegible]	3	-4.111	-222.301	-132.446	-2.105	-4.389	-222.824	179.422
[illegible]	4	-13.141	-217.595	-799.772	9.727	-12.579	-218.057	2.718
	5	-9.333	-226.337	-523.285	-3.711	-9.199	-226.371	179.284
	6	-2.861	-340.797	-626.409	-35.450	0.817	-344.476	174.075
	7	-2.118	-342.700	-530.387	-34.727	1.386	-346.205	174.237
	8	-17.613	-89.068	-514.295	35.001	-3.324	-103.357	22.206
	9	-4.482	-216.727	-132.048	-0.538	-4.481	-216.729	179.854
	1	-4.925	-206.861	-406.374	10.781	-4.351	-207.435	3.047
	2	-5.280	-213.116	-406.952	9.183	-4.875	-213.521	2.525
	3	-5.342	-223.026	-132.341	-2.128	-5.321	-223.047	179.440
	4	-12.213	-215.857	-797.001	8.168	-11.388	-217.182	2.282
	5	-12.276	-226.767	-522.390	-3.142	-12.230	-226.813	179.161
	6	-20.397	-344.785	-629.805	-34.525	-16.753	-348.419	173.991
	7	-19.059	-346.595	-533.535	-33.901	-15.617	-350.047	174.169
	8	-4.271	-85.408	-509.338	32.975	7.440	-97.120	19.553

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E635

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
543	9	-4.988	-216.771	-131.763	-0.529	-4.987	-216.772	179.856
544	1	-3.417	-199.755	-412.284	-3.517	-3.354	-199.819	178.974
[illegible]	2	-3.151	-207.615	-413.188	-2.259	-3.126	-207.640	179.367
[illegible]	3	-6.171	-224.548	-130.193	1.144	-6.165	-224.554	0.330
544	4	-4.770	-215.777	-810.535	3.130	-4.724	-215.823	0.350
544	5	-7.790	-232.709	-527.535	6.534	-7.601	-232.899	1.662
544	6	-3.687	-382.349	-640.243	31.500	-1.084	-384.951	4.723
544	7	-2.700	-383.309	-544.943	30.651	-0.247	-385.761	4.575
544	8	-13.790	-55.100	-507.105	-21.883	-4.354	-64.537	156.673
544	9	-6.437	-216.589	-129.284	-0.112	-6.437	-216.689	179.969
545	1	2.320	-242.423	-393.131	14.906	3.225	-243.328	3.472
545	2	1.801	-242.930	-392.110	13.077	2.498	-243.627	3.050
545	3	-3.835	-215.071	-139.527	-2.794	-3.799	-215.108	179.242
545	4	0.496	-240.588	-760.562	14.241	1.335	-241.427	3.369
545	5	-5.140	-212.729	-507.978	-1.630	-5.127	-212.741	179.350
545	6	-15.470	-217.655	-584.034	-37.535	-8.727	-224.398	169.815
545	7	-15.104	-222.298	-488.470	-36.715	-8.790	-228.611	170.242
545	8	6.595	-201.264	-531.056	39.694	13.918	-208.587	10.452
545	9	-3.316	-214.563	-140.548	-0.965	-3.312	-214.568	179.738
546	1	-2.226	-231.876	-399.263	-8.504	-1.910	-231.391	177.874
546	2	-1.798	-233.406	-398.594	-7.017	-1.586	-233.619	178.266
546	3	-3.880	-217.231	-137.351	1.799	-3.865	-217.246	0.483
546	4	-1.103	-233.075	-774.705	-4.673	-1.009	-233.170	178.846
546	5	-3.184	-216.900	-513.462	4.143	-3.104	-216.980	1.110
546	6	4.978	-257.649	-596.312	33.397	9.158	-261.829	7.134
[illegible]	7	5.015	-261.446	-500.700	32.665	8.962	-265.392	6.888
[illegible]	8	-12.847	-164.232	-528.587	-29.460	-7.316	-169.763	159.367
[illegible]	9	-4.307	-214.900	-138.020	0.312	-4.307	-214.901	0.085
47	1	1.191	-229.965	-397.118	-6.985	1.402	-230.176	178.279
47	2	0.896	-232.476	-396.631	-5.559	1.028	-232.609	178.636
47	3	-5.110	-217.453	-137.221	1.498	-5.100	-217.453	0.404
47	4	-0.248	-232.363	-771.992	-2.202	-0.227	-232.384	179.456
47	5	-6.255	-217.339	-512.582	4.855	-6.143	-217.451	1.317
547	6	-12.542	-261.645	-598.763	32.938	-8.260	-265.927	7.406
547	7	-11.916	-265.357	-503.317	32.199	-7.889	-269.384	7.128
547	8	8.412	-160.581	-523.586	-27.361	4.936	-165.104	170.613
47	9	-4.815	-214.941	-137.708	0.072	-4.815	-214.941	0.020
48	1	-7.056	-216.138	-387.333	15.764	-5.874	-217.320	4.287
48	2	-6.678	-220.449	-386.898	13.874	-5.732	-221.346	3.699
48	3	-3.168	-220.143	-139.571	-2.852	-3.130	-220.181	179.247
48	4	-10.478	-220.026	-753.953	15.352	-9.359	-221.144	4.158
48	5	-6.967	-219.720	-506.627	-1.375	-6.958	-219.729	179.639
48	6	-0.113	-299.395	-593.687	-38.497	4.759	-304.268	172.786
48	7	0.295	-302.253	-498.356	-37.648	4.899	-306.877	173.012
48	8	-15.511	-122.291	-516.464	41.349	-1.371	-136.430	18.878
48	9	-3.546	-215.832	-140.006	-0.962	-3.541	-215.837	179.740
9	1	-1.601	-214.527	-384.736	15.956	-0.412	-215.716	4.362
9	2	-2.051	-219.245	-384.508	14.072	-1.142	-219.954	3.695
[illegible]	[illegible]	-4.724	-220.444	-139.522	-2.963	-4.683	-220.485	179.213

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NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
49	4	-6.551	-218.563	-750.578	15.305	-5.379	-219.734	4.240
49	5	-9.224	-219.961	-505.592	-1.230	-9.216	-219.968	179.665
49	6	-18.364	-303.704	-596.486	-33.237	-13.821	-308.748	172.485
49	7	-17.854	-306.478	-501.314	-37.392	-13.289	-311.243	172.737
49	8	0.943	-117.853	-510.725	41.362	13.925	-130.335	17.426
49	9	-4.274	-215.926	-139.749	-1.078	-4.269	-215.932	179.708
50	1	-3.585	-202.756	-390.236	-7.167	-3.423	-203.014	177.940
50	2	-3.326	-209.130	-390.391	-5.749	-3.156	-209.291	178.401
50	3	-5.085	-222.671	-137.440	1.505	-5.073	-222.683	0.423
50	4	-4.521	-210.504	-753.759	-2.652	-4.486	-210.539	179.262
50	5	-6.279	-224.045	-510.808	4.703	-6.178	-224.147	1.236
50	6	-0.094	-344.256	-609.111	32.629	2.971	-347.322	5.368
50	7	0.610	-346.157	-513.873	31.895	3.520	-349.067	5.211
50	8	-14.399	-79.998	-507.288	-27.335	-4.502	-89.895	160.096
50	9	-5.444	-216.297	-137.284	0.188	-5.444	-216.298	0.051
51	1	-0.232	-201.645	-388.124	-8.288	0.108	-201.986	177.647
51	2	-0.597	-208.200	-388.461	-6.800	-0.375	-208.423	178.125
51	3	-6.312	-222.895	-137.329	1.684	-6.299	-222.908	0.445
51	4	-3.616	-209.791	-761.086	-4.211	-3.530	-209.877	178.830
51	5	-9.330	-224.486	-509.954	4.273	-9.245	-224.571	1.137
51	6	-17.642	-348.256	-611.569	33.552	-14.271	-351.627	5.736
51	7	-16.352	-350.077	-516.481	32.819	-13.155	-353.274	5.563
51	8	-1.060	-76.347	-502.354	-29.359	9.035	-86.443	161.024
51	9	-5.946	-216.340	-136.993	0.195	-5.946	-216.340	0.053
52	1	-10.913	-188.137	-378.993	14.579	-9.705	-189.394	4.702
52	2	-10.469	-196.515	-379.348	12.849	-9.586	-197.399	3.932
52	3	-4.047	-225.518	-139.571	-2.678	-4.014	-225.551	179.307
52	4	-17.427	-197.952	-744.050	13.758	-15.385	-198.994	4.333
52	5	-11.005	-226.955	-504.272	-1.759	-10.991	-226.969	179.530
52	6	-3.524	-385.579	-606.131	-37.701	0.160	-389.264	174.417
52	7	-2.489	-386.577	-511.175	-35.880	1.019	-390.087	174.564
52	8	-21.034	-38.723	-496.232	39.586	10.683	-70.441	38.702
52	9	-4.491	-217.190	-139.215	-0.948	-4.487	-217.193	179.771
53	1	3.078	-253.597	-379.173	-12.438	3.682	-253.200	177.221
53	2	2.773	-252.580	-377.605	-10.729	3.223	-253.030	177.598
53	3	-4.196	-212.558	-143.855	2.317	-4.171	-212.584	0.637
53	4	3.348	-256.439	-739.459	-10.442	3.757	-256.858	177.702
53	5	-3.621	-216.417	-496.709	2.534	-3.590	-216.448	0.701
53	6	-9.724	-210.991	-561.972	36.139	-3.432	-217.283	9.977
53	7	-9.474	-215.919	-466.710	35.384	-3.578	-221.815	9.460
53	8	3.273	-216.794	-532.149	-36.309	9.015	-222.537	170.939
53	9	-3.891	-212.574	-145.423	0.609	-3.890	-212.576	0.167
54	1	-5.879	-234.325	-369.013	18.113	-4.452	-235.753	4.505
54	2	-5.495	-236.354	-367.495	16.075	-4.381	-237.468	3.964
54	3	-2.149	-215.960	-146.245	-3.282	-2.099	-216.010	179.120
54	4	-8.132	-237.555	-711.710	18.618	-6.631	-239.057	4.609
54	5	-4.786	-217.162	-490.460	-0.741	-4.783	-217.164	179.800
54	6	2.519	-251.940	-556.575	-40.863	8.920	-258.341	171.097
54	7	2.581	-255.901	-461.421	-39.831	8.580	-261.900	171.435
54	8	-13.464	-171.326	-524.774	45.295	-1.391	-183.399	14.925

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
554	9	-2.533	-213.931	-147.763	-1.245	-2.526	-213.939	179.662
555	1	1.297	-232.298	-366.334	19.304	2.882	-233.883	4.692
[illegible]	2	0.759	-234.558	-364.751	17.216	2.312	-235.811	4.162
[illegible]	3	-4.015	-216.336	-146.244	-3.564	-3.955	-216.395	179.038
555	4	-1.688	-235.492	-707.821	20.496	0.095	-237.275	4.972
555	5	-6.462	-217.270	-489.314	-0.284	-6.462	-217.270	179.922
555	6	-17.555	-256.605	-559.805	-41.462	-10.568	-263.592	170.434
555	7	-16.797	-260.453	-464.792	-40.363	-10.285	-266.965	170.834
555	8	5.709	-166.290	-518.307	46.914	17.679	-178.170	14.313
555	9	-3.476	-214.076	-147.527	-1.475	-3.466	-214.086	179.598
556	1	-3.872	-216.513	-371.027	-11.574	-3.243	-217.142	176.893
556	2	-3.417	-220.848	-370.185	-9.932	-2.964	-221.301	177.390
556	3	-3.919	-219.209	-144.254	2.252	-3.895	-219.233	0.599
556	4	-4.082	-221.516	-720.484	-9.365	-3.680	-221.919	177.538
556	5	-4.584	-219.878	-494.553	2.820	-4.547	-219.915	0.750
556	6	3.782	-300.014	-573.583	35.029	7.769	-304.001	6.493
556	7	4.139	-302.870	-478.481	34.316	7.928	-306.659	6.300
556	8	-14.861	-121.918	-513.589	-34.283	-4.823	-131.956	163.680
556	9	-4.373	-214.875	-145.097	0.611	-4.372	-214.877	0.166
557	1	1.572	-214.916	-368.479	-11.381	2.168	-215.513	176.998
557	2	1.198	-219.458	-367.846	-9.734	1.627	-219.887	177.479
557	3	-5.472	-219.510	-144.193	2.142	-5.450	-219.531	0.573
557	4	-0.178	-220.879	-717.193	-8.912	0.182	-220.440	177.683
557	5	-6.848	-220.130	-493.540	2.965	-6.807	-220.172	0.796
557	6	-14.982	-304.343	-576.437	35.290	-10.740	-308.584	6.854
[illegible]	7	-14.014	-307.102	-481.484	34.573	-9.991	-311.125	6.637
[illegible]	8	1.590	-117.484	-507.846	-34.271	10.749	-126.643	165.037
[illegible]	9	-5.098	-214.968	-144.826	0.495	-5.097	-214.969	0.135
558	1	-9.488	-196.999	-358.902	19.085	-7.566	-198.922	5.753
558	2	-9.039	-203.571	-358.290	16.994	-7.566	-205.045	4.955
558	3	-3.112	-222.860	-146.491	-3.449	-3.058	-222.914	179.101
558	4	-14.582	-201.763	-699.318	20.014	-12.466	-203.879	6.035
558	5	-8.655	-221.052	-487.519	-0.429	-8.654	-221.052	179.884
558	6	-0.694	-345.177	-570.687	-41.665	4.273	-350.144	173.200
558	7	-0.036	-346.973	-475.866	-40.565	4.643	-351.653	173.419
558	8	-18.802	-72.528	-501.354	46.836	8.327	-99.658	30.082
558	9	-3.551	-216.288	-147.104	-1.358	-3.553	-216.296	179.634
559	1	-2.265	-194.972	-355.965	18.247	-0.552	-196.684	5.362
559	2	-2.742	-201.775	-355.585	16.223	-1.429	-203.089	4.629
559	3	-4.976	-223.239	-146.502	-3.381	-4.924	-223.291	179.112
559	4	-8.074	-199.699	-695.482	19.008	-6.207	-201.567	5.610
559	5	-10.309	-221.152	-486.398	-0.595	-10.307	-221.164	179.838
559	6	-20.809	-349.852	-573.916	-40.477	-15.903	-354.758	173.089
559	7	-19.458	-351.532	-479.218	-39.453	-14.835	-356.155	173.316
559	8	0.469	-67.400	-494.965	45.166	23.028	-89.960	26.540
559	9	-4.499	-216.435	-146.881	-1.356	-4.490	-216.444	179.633
560	1	-5.311	-178.777	-360.395	-12.604	-4.400	-179.688	175.865
560	2	-4.929	-187.677	-360.485	-10.905	-4.280	-188.326	176.597
[illegible]	3	-5.185	-226.175	-144.603	2.421	-5.158	-226.202	0.627

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[illegible]	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
0	[illegible]	-7.509	-185.103	-707.304	-10.376	-5.845	-185.767	176.508
0	5	-7.765	-223.511	-491.422	2.452	-7.737	-223.639	0.650
0	5	-1.492	-393.511	-539.034	35.792	1.749	-396.752	5.174
0	7	-0.424	-394.201	-493.224	35.143	1.133	-397.299	5.146
0	8	-16.414	-22.458	-499.405	-35.942	15.532	-55.503	157.433
0	9	-5.567	-217.275	-144.513	3.722	-5.565	-217.278	0.155
1	1	3.948	-258.479	-350.236	21.434	5.533	-260.219	4.640
1	2	3.231	-257.991	-347.630	19.216	4.537	-259.397	4.155
1	3	-3.235	-210.763	-152.484	-3.957	-3.129	-210.838	178.909
1	4	2.533	-264.413	-668.491	23.392	4.567	-266.448	4.970
1	5	-3.902	-217.196	-473.345	0.219	-3.932	-217.196	0.058
1	6	-16.312	-202.152	-518.145	-43.714	-6.543	-211.922	157.432
1	7	-15.750	-207.629	-423.458	-42.344	-6.821	-216.558	158.292
1	8	10.047	-228.216	-532.228	50.334	20.244	-238.413	11.452
1	9	-2.587	-211.251	-155.090	-1.740	-2.573	-211.265	179.522
2	1	-3.922	-238.958	-354.590	-16.495	-2.770	-240.110	176.305
2	2	-3.378	-240.765	-352.494	-14.572	-2.487	-241.656	176.500
2	3	-2.688	-214.289	-150.605	3.075	-2.643	-214.333	0.832
2	4	-3.397	-245.124	-680.466	-16.510	-2.274	-246.246	176.110
2	5	-2.707	-218.547	-478.577	1.137	-2.701	-218.653	0.301
2	6	7.791	-248.890	-533.256	38.954	13.573	-254.671	8.442
2	7	7.725	-253.141	-438.458	38.053	13.163	-258.579	8.132
2	8	-14.993	-177.802	-525.949	-42.342	-4.640	-188.155	165.259
2	9	-3.232	-212.481	-152.701	1.152	-3.225	-212.488	0.315
3	1	3.244	-236.944	-351.659	-15.304	4.215	-237.915	175.368
3	2	2.865	-239.983	-349.800	-13.432	3.509	-239.727	175.830
3	3	-4.550	-214.665	-150.599	2.793	-4.512	-214.702	0.761
3	4	3.024	-243.085	-676.568	-14.632	3.891	-243.952	175.609
3	5	-4.390	-218.767	-477.467	1.593	-4.379	-218.779	0.425
3	6	-12.298	-253.574	-536.562	39.354	-6.348	-259.525	8.819
3	7	-11.667	-257.712	-441.893	37.520	-6.073	-263.307	8.430
3	8	4.179	-172.579	-519.486	-40.723	13.135	-181.635	157.536
3	9	-4.170	-212.625	-152.458	0.921	-4.155	-212.630	0.253
4	1	-8.206	-215.270	-341.861	22.052	-5.884	-217.593	5.112
4	2	-7.756	-219.547	-340.009	19.781	-5.924	-221.379	5.193
4	3	-2.111	-219.663	-152.918	-3.391	-2.039	-219.737	178.944
4	4	-12.052	-219.351	-658.286	24.065	-9.395	-222.108	5.335
4	5	-5.407	-219.467	-471.196	0.293	-5.406	-219.467	0.079
4	6	1.937	-297.449	-530.326	-44.747	8.482	-303.994	171.678
4	7	2.234	-300.356	-435.764	-43.292	8.303	-306.425	172.217
4	8	-16.581	-121.808	-513.053	51.598	4.497	-142.887	22.221
4	9	-2.561	-214.386	-154.770	-1.721	-2.547	-214.400	179.534
5	1	0.548	-212.868	-338.590	22.215	2.836	-215.155	5.880
5	2	-0.014	-217.399	-335.997	19.954	1.802	-219.215	5.221
5	3	-4.264	-219.113	-152.976	-4.097	-4.195	-219.186	178.909
5	4	-3.373	-226.765	-654.031	24.489	-1.339	-219.540	5.453
5	5	-7.624	-218.475	-470.011	0.437	-7.623	-218.475	0.119
5	6	-19.550	-302.494	-534.013	-44.422	-13.740	-309.304	171.284
5	7	-18.419	-305.242	-439.547	-42.951	-12.122	-311.539	171.551
5	8	5.088	-116.068	-506.016	51.537	24.244	-135.025	20.195

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
565	9	-3.702	-214.577	-154.569	-1.836	-3.686	-214.593	179.501
566	1	-5.396	-192.986	-342.458	-15.445	-4.133	-194.249	175.324
[illegible]	2	-4.914	-199.840	-341.398	-13.584	-3.972	-200.782	176.032
[illegible]	3	-4.016	-222.695	-151.175	2.894	-3.978	-222.733	0.758
566	4	-6.831	-197.033	-665.301	-15.032	-5.550	-198.214	175.508
566	5	-5.933	-219.888	-475.079	1.446	-5.923	-219.898	0.387
566	6	2.631	-349.757	-549.486	37.974	6.676	-353.803	6.381
566	7	3.314	-351.235	-454.856	37.146	7.164	-355.085	5.917
566	8	-16.827	-64.985	-499.021	-40.503	6.299	-88.112	150.334
566	9	-4.498	-215.840	-152.236	1.034	-4.493	-215.846	0.280
567	1	1.816	-190.958	-339.562	-16.283	3.182	-192.324	175.205
567	2	1.372	-198.044	-338.737	-14.356	2.400	-199.072	175.903
567	3	-5.876	-223.059	-151.175	2.962	-5.835	-223.100	0.781
567	4	-0.346	-194.981	-661.550	-16.039	0.966	-196.294	175.320
567	5	-7.595	-219.996	-473.987	1.279	-7.587	-220.004	0.345
567	6	-17.499	-354.438	-552.770	39.161	-13.007	-358.930	6.543
567	7	-16.122	-355.792	-458.264	38.257	-11.866	-360.048	6.347
567	8	2.444	-59.848	-492.628	-42.273	23.806	-81.210	153.191
567	9	-5.432	-215.973	-151.999	1.035	-5.426	-215.978	0.281
568	1	-11.429	-169.576	-330.277	21.220	-8.631	-172.374	7.511
568	2	-10.929	-178.881	-329.434	18.999	-8.807	-181.003	6.374
568	3	-3.160	-227.013	-153.413	-3.843	-3.094	-227.079	179.016
568	4	-17.849	-171.617	-543.913	22.917	-14.506	-174.960	8.299
568	5	-10.080	-219.749	-467.892	0.074	-10.080	-219.750	0.020
568	6	-1.333	-397.952	-546.166	-43.931	3.474	-402.759	173.754
[illegible]	7	-0.475	-398.125	-451.813	-42.560	4.028	-402.629	173.959
[illegible]	8	-21.387	-9.465	-486.957	50.276	35.201	-66.054	48.380
[illegible]	9	-3.661	-217.709	-154.256	-1.622	-3.648	-217.721	179.566
569	1	4.841	-266.131	-337.618	-19.535	6.242	-267.533	175.897
569	2	4.450	-265.253	-334.271	-17.409	5.569	-266.372	176.322
569	3	-3.568	-208.542	-156.528	3.547	-3.506	-208.603	0.991
569	4	6.052	-276.007	-639.306	-20.571	7.544	-277.500	175.850
569	5	-1.966	-219.296	-461.563	0.384	-1.965	-219.296	0.101
569	6	-9.744	-195.881	-491.576	42.356	-0.559	-205.066	12.235
569	7	-9.469	-202.234	-397.455	41.190	-1.036	-210.666	11.570
569	8	6.869	-239.141	-537.194	-47.669	15.783	-248.055	169.408
569	9	-3.177	-209.420	-159.874	1.420	-3.167	-209.429	0.394
570	1	-7.077	-241.124	-327.798	23.797	-4.682	-243.520	5.747
570	2	-6.625	-242.675	-324.435	21.432	-4.695	-244.606	5.146
570	3	-1.038	-213.134	-158.845	-4.298	-0.951	-213.221	178.839
570	4	-9.822	-247.644	-620.748	25.404	-6.325	-250.540	6.260
570	5	-4.235	-218.102	-455.157	0.673	-4.233	-218.104	0.180
570	6	4.500	-242.942	-484.798	-46.529	12.960	-251.402	169.694
570	7	4.444	-247.657	-390.744	-44.725	12.144	-255.366	170.232
570	8	-14.455	-183.050	-531.159	54.119	1.422	-198.927	16.350
570	9	-1.490	-211.583	-162.208	-1.934	-1.473	-211.601	179.472
571	1	2.972	-238.402	-324.235	24.595	5.472	-240.903	5.782
571	2	2.344	-240.225	-321.153	22.303	4.373	-242.259	5.210
[illegible]	3	-3.434	-213.631	-158.938	-4.525	-3.337	-213.728	178.767

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
71	4	0.667	-244.624	-616.132	27.840	3.787	-247.744	6.394
71	5	-5.111	-213.330	-453.317	1.011	-5.107	-218.935	0.272
71	6	-18.131	-248.289	-488.902	-46.849	-8.960	-257.460	168.924
71	7	-17.158	-252.817	-394.891	-44.911	-8.889	-261.095	169.567
71	8	9.069	-176.829	-623.577	55.070	24.159	-191.913	15.323
71	9	-2.807	-211.808	-162.020	-2.133	-2.785	-211.838	179.415
72	1	-5.381	-215.513	-327.486	-18.885	-3.697	-217.197	174.305
72	2	-4.812	-219.328	-325.004	-16.816	-3.505	-221.135	175.555
72	3	-2.796	-217.748	-157.254	3.505	-2.739	-217.805	0.934
72	4	-6.015	-220.704	-625.747	-19.880	-4.190	-222.529	174.753
72	5	-4.000	-218.624	-458.997	0.440	-3.999	-218.625	0.117
72	6	6.677	-298.350	-505.722	41.209	12.147	-303.819	7.560
72	7	6.911	-301.233	-411.490	40.150	12.056	-306.378	7.303
72	8	-15.849	-121.115	-515.086	-46.323	0.757	-138.722	159.188
72	9	-3.365	-213.434	-159.736	1.436	-3.355	-213.443	0.391
73	1	3.364	-213.118	-324.249	-18.722	4.971	-214.725	175.093
73	2	2.920	-217.687	-322.028	-16.643	4.168	-218.936	175.709
73	3	-4.945	-218.187	-157.299	3.400	-4.891	-218.241	0.913
73	4	2.640	-218.137	-622.577	-19.457	4.342	-219.839	175.002
73	5	-5.224	-218.637	-457.848	0.587	-5.223	-218.639	0.157
73	6	-14.826	-303.402	-509.472	41.536	-8.966	-309.262	8.029
73	7	-13.758	-306.137	-415.344	40.471	-8.259	-311.636	7.737
73	8	4.821	-115.366	-508.045	-46.384	20.640	-131.185	161.168
73	9	-4.501	-213.618	-159.520	1.322	-4.492	-213.626	0.362
74	1	-10.086	-188.325	-314.868	24.490	-6.782	-191.630	7.683
74	2	-9.592	-195.315	-312.611	22.092	-7.000	-197.907	6.691
74	3	-2.187	-222.749	-159.548	-4.423	-2.098	-222.838	178.351
74	4	-15.225	-190.096	-604.652	27.371	-11.041	-194.281	8.691
74	5	-7.820	-217.531	-451.590	0.855	-7.817	-217.535	0.234
74	6	1.197	-353.351	-502.415	-47.113	7.403	-356.557	172.497
74	7	1.664	-351.480	-408.404	-45.178	7.353	-357.168	172.824
74	8	-18.985	-59.577	-502.596	55.045	19.386	-97.949	34.880
74	9	-2.681	-215.761	-161.805	-2.025	-2.661	-215.780	179.455
75	1	0.015	-185.597	-311.347	23.880	3.038	-188.620	7.215
75	2	-0.574	-192.858	-309.368	21.532	1.806	-195.240	6.312
75	3	-4.585	-223.243	-159.646	-4.394	-4.497	-223.331	178.849
75	4	-4.665	-187.069	-600.097	26.738	-0.826	-190.908	8.170
75	5	-8.676	-217.454	-450.375	0.811	-8.673	-217.457	0.222
75	6	-21.489	-355.697	-505.493	-46.066	-15.255	-361.930	172.294
75	7	-19.994	-356.630	-412.524	-44.272	-14.269	-362.355	172.631
75	8	4.651	-53.346	-495.099	53.885	36.946	-85.540	30.856
75	9	-3.995	-215.981	-161.624	-2.046	-3.976	-216.001	179.447
76	1	-6.781	-162.423	-314.187	-19.655	-4.337	-164.867	172.912
76	2	-6.270	-172.194	-312.826	-17.543	-4.435	-174.029	174.330
76	3	-4.165	-227.417	-158.035	3.641	-4.105	-227.475	0.934
76	4	-9.315	-162.748	-610.118	-20.950	-6.506	-165.557	172.362
76	5	-7.210	-217.971	-455.326	0.233	-7.210	-217.971	0.063
76	6	1.563	-406.049	-523.583	41.929	5.832	-410.317	5.812
76	7	2.582	-405.311	-429.341	40.771	5.518	-409.347	5.652
76	8	-18.746	2.854	-486.075	-47.604	40.770	-56.662	128.595

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
576	9	-4.675	-217.646	-159.395	1.529	-4.664	-217.657	0.411
577	1	4.379	-270.298	-312.965	26.147	7.441	-272.760	5.378
	2	4.316	-269.082	-308.122	23.708	6.357	-271.123	4.919
	3	-2.483	-207.087	-164.386	-4.732	-2.373	-207.196	178.575
577	4	4.091	-281.184	-581.824	29.858	7.182	-284.276	5.911
577	5	-2.708	-219.189	-438.087	1.417	-2.699	-219.198	1.375
577	6	-16.298	-188.193	-438.499	-47.791	-3.904	-200.587	165.461
577	7	-15.439	-195.615	-345.291	-45.432	-4.631	-206.423	166.519
577	8	12.273	-246.676	-547.527	56.557	24.087	-258.490	11.798
577	9	-1.820	-208.303	-169.229	-2.293	-1.794	-208.328	179.354
578	1	-5.275	-244.506	-315.402	-22.642	-3.151	-246.631	174.640
578	2	-4.640	-245.941	-311.239	-20.353	-2.935	-247.645	175.212
578	3	-1.551	-211.700	-162.837	4.180	-1.468	-211.783	1.139
578	4	-5.115	-253.320	-591.531	-25.017	-2.619	-255.816	174.301
578	5	-2.026	-219.079	-443.128	-0.483	-2.025	-219.081	179.872
578	6	10.456	-241.091	-456.861	45.017	18.270	-248.905	9.846
578	7	10.173	-246.389	-363.374	43.460	17.335	-253.551	9.358
578	8	-16.389	-186.666	-537.208	-52.222	-1.649	-201.406	164.238
578	9	-2.186	-210.266	-166.999	1.891	-2.169	-210.283	0.521
579	1	4.764	-241.798	-311.881	-21.743	6.667	-243.701	174.998
579	2	4.320	-243.505	-308.001	-19.481	5.842	-245.027	175.532
579	3	-3.944	-212.199	-162.918	3.953	-3.869	-212.274	1.087
579	4	5.353	-250.326	-587.008	-23.581	7.509	-252.483	174.774
579	5	-2.911	-219.020	-441.925	-0.146	-2.911	-219.020	179.961
579	6	-12.193	-246.462	-461.041	44.697	-3.955	-254.700	10.443
	7	-11.447	-251.564	-367.597	43.274	-3.887	-259.124	9.910
	8	7.138	-180.446	-529.611	-51.271	20.237	-193.545	165.658
	9	-3.499	-210.493	-166.798	1.691	-3.485	-210.506	0.468
580	1	-8.793	-214.298	-302.611	25.512	-5.428	-217.663	7.234
580	2	-8.309	-218.549	-298.659	24.045	-5.594	-221.264	6.442
580	3	-1.075	-217.194	-165.118	-4.725	-0.972	-217.297	178.747
580	4	-12.806	-218.514	-569.104	30.191	-8.467	-222.854	8.179
580	5	-5.572	-217.159	-435.562	1.419	-5.563	-217.168	1.384
580	6	3.630	-295.582	-453.243	-48.460	11.283	-303.234	171.025
580	7	3.728	-298.546	-359.874	-45.950	10.559	-305.377	171.544
580	8	-16.518	-121.081	-524.861	57.166	9.658	-146.268	23.778
580	9	-1.559	-212.943	-169.069	-2.259	-1.535	-212.967	179.387
581	1	2.431	-211.298	-298.847	26.640	5.702	-214.569	6.399
581	2	1.787	-215.834	-295.190	24.187	4.443	-218.490	5.266
581	3	-3.647	-217.730	-165.239	-4.819	-3.533	-217.839	178.711
581	4	-0.670	-215.117	-564.266	30.575	3.603	-219.391	7.958
581	5	-6.104	-217.013	-434.315	1.568	-6.093	-217.025	0.425
581	6	-19.839	-301.160	-457.673	-48.052	-11.857	-309.141	170.569
581	7	-18.473	-303.873	-364.294	-45.550	-11.380	-310.967	171.148
581	8	8.455	-114.505	-516.951	57.021	30.827	-136.877	21.422
581	9	-3.003	-213.194	-168.895	-2.365	-2.975	-213.221	179.355
582	1	-6.700	-185.277	-300.986	-21.331	-4.070	-187.908	173.130
582	2	-6.186	-192.476	-298.017	-19.586	-4.070	-194.512	174.065
	3	-2.964	-222.413	-163.774	4.051	-2.890	-222.487	1.057

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E442

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS SHEAR	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
382	4	-8.358	-186.946	-573.510	-23.923	-5.219	-190.095	172.500
382	5	-5.227	-215.883	-439.267	-0.285	-5.225	-216.883	179.922
382	6	5.641	-354.353	-476.194	44.236	10.997	-359.709	6.903
382	7	6.179	-354.865	-382.445	42.322	11.139	-359.874	5.672
382	8	-18.660	-54.191	-506.349	-51.043	17.620	-90.472	144.595
382	9	-3.559	-215.214	-166.743	1.805	-3.543	-215.229	0.488
383	1	3.391	-182.562	-297.499	-22.440	6.061	-185.232	173.215
383	2	2.901	-190.034	-294.811	-20.145	4.983	-192.115	174.102
383	3	-5.359	-222.909	-163.853	4.080	-5.283	-222.985	1.074
383	4	2.171	-183.945	-569.040	-24.555	5.356	-187.130	172.609
383	5	-5.090	-216.820	-438.082	-0.329	-5.090	-216.820	179.910
383	6	-17.062	-359.722	-480.340	45.288	-11.178	-365.606	7.403
383	7	-15.497	-360.036	-386.634	43.728	-10.034	-365.499	7.121
383	8	4.980	-47.966	-498.835	-52.202	37.038	-80.024	148.445
383	9	-4.869	-215.437	-166.541	1.785	-4.854	-215.452	0.485
384	1	-11.263	-155.208	-288.569	25.968	-6.721	-159.749	9.920
384	2	-10.765	-165.220	-285.799	23.520	-7.263	-168.723	8.469
384	3	-2.234	-227.860	-165.980	-4.617	-2.140	-227.954	178.828
384	4	-17.457	-152.345	-551.653	29.415	-11.321	-158.481	11.782
384	5	-8.926	-214.985	-431.834	1.276	-8.918	-214.993	0.355
384	6	0.036	-408.736	-472.374	-48.073	5.614	-414.314	173.382
384	7	0.634	-406.993	-378.822	-45.712	5.698	-412.057	173.679
384	8	-20.174	11.304	-494.434	56.581	54.295	-63.164	52.772
384	9	-2.732	-217.847	-168.749	-2.170	-2.710	-217.869	179.422
385	1	6.168	-275.034	-302.291	-24.893	8.354	-277.221	174.980
385	2	5.708	-273.734	-296.518	-22.475	7.504	-275.531	175.430
385	3	-2.862	-205.320	-168.053	4.420	-2.765	-205.417	1.250
385	4	7.940	-289.082	-554.685	-27.358	10.531	-291.673	174.688
385	5	-0.629	-220.668	-426.220	-0.962	-0.624	-220.673	179.749
385	6	-9.872	-196.668	-407.902	47.472	2.067	-198.608	14.118
385	7	-9.462	-195.457	-315.569	45.434	1.043	-205.962	13.019
385	8	9.769	-250.047	-556.687	-55.576	21.158	-261.435	168.419
385	9	-2.401	-206.620	-173.826	2.003	-2.382	-206.640	0.562
386	1	-7.772	-245.444	-293.361	27.335	-4.659	-248.547	6.477
386	2	-7.293	-246.751	-287.461	24.881	-4.735	-249.309	5.870
386	3	0.011	-210.719	-170.211	-5.004	0.129	-210.837	179.640
386	4	-10.791	-254.245	-537.044	31.559	-6.757	-258.270	7.267
386	5	-3.486	-218.212	-419.794	1.673	-3.473	-218.225	0.446
386	6	5.979	-237.035	-399.027	-48.437	15.277	-246.334	169.133
386	7	5.713	-243.073	-306.715	-45.452	13.761	-251.123	169.962
386	8	-14.313	-188.665	-553.131	57.133	2.740	-205.713	16.620
386	9	-0.468	-209.411	-176.111	-2.550	-0.436	-209.442	179.300
387	1	4.157	-242.270	-289.437	27.759	7.255	-245.359	5.348
387	2	3.515	-243.864	-283.939	25.329	6.332	-246.431	5.786
387	3	-2.744	-211.297	-170.346	-5.217	-2.613	-211.427	178.567
387	4	2.482	-250.583	-532.005	32.491	6.534	-254.685	7.198
387	5	-3.776	-218.015	-418.512	1.933	-3.759	-218.033	0.517
387	6	-17.587	-242.670	-403.531	-47.399	-7.818	-252.439	168.472
387	7	-16.303	-248.380	-311.229	-44.740	-7.977	-256.707	169.457
387	8	10.962	-191.991	-545.034	56.345	26.464	-197.493	15.253

E643

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
587	9	-2.091	-209.703	-175.944	-2.788	-2.054	-209.740	179.230
588	1	-6.459	-214.388	-290.354	-24.592	-3.611	-217.237	173.359
[illegible]	2	-5.808	-218.695	-286.013	-22.114	-3.535	-220.968	174.131
[illegible]	3	-1.676	-216.331	-168.985	4.498	-1.535	-216.422	1.176
588	4	-7.316	-219.693	-540.478	-27.492	-3.315	-223.194	172.742
588	5	-3.183	-217.329	-423.450	-0.969	-3.179	-217.334	179.740
588	6	9.320	-296.831	-423.541	46.741	15.297	-303.808	8.490
588	7	9.318	-299.773	-330.701	44.858	15.700	-306.155	8.094
588	8	-17.900	-120.009	-532.847	-54.931	6.037	-143.948	156.452
588	9	-2.327	-212.025	-173.826	2.020	-2.307	-212.045	0.552
589	1	4.757	-211.402	-287.118	-24.374	7.472	-214.117	173.645
589	2	4.279	-215.994	-282.574	-21.973	6.450	-218.164	174.358
589	3	-4.244	-216.871	-159.088	4.314	-4.156	-216.958	1.162
589	4	4.800	-216.321	-535.713	-27.199	8.075	-219.596	173.111
589	5	-3.723	-217.198	-422.227	-0.820	-3.720	-217.201	179.779
589	6	-14.169	-302.439	-428.048	47.148	-6.653	-309.955	9.057
589	7	-12.903	-305.120	-335.180	45.267	-6.051	-311.972	8.607
589	8	7.079	-113.433	-524.909	-55.077	28.459	-134.812	158.785
589	9	-3.766	-212.279	-173.631	1.913	-3.748	-212.297	0.525
590	1	-9.871	-181.895	-278.416	27.606	-5.549	-186.217	8.897
590	2	-9.402	-189.095	-273.746	25.167	-5.944	-192.553	7.824
590	3	-1.158	-222.256	-171.177	-5.193	-1.040	-222.373	178.678
590	4	-14.959	-181.618	-518.462	32.067	-9.001	-187.575	10.524
590	5	-6.714	-214.779	-415.892	1.796	-6.699	-214.794	0.494
590	6	2.090	-352.813	-419.201	-48.225	8.526	-359.250	172.398
590	7	2.290	-352.788	-326.437	-45.065	7.920	-358.418	172.878
[illegible]	8	-17.304	-52.072	-521.423	56.927	24.833	-94.211	36.509
[illegible]	9	-1.627	-215.056	-175.847	-2.653	-1.593	-215.090	179.285
591	1	2.133	-178.722	-274.534	27.381	6.187	-182.777	8.423
591	2	1.466	-186.208	-270.163	24.948	4.725	-189.468	7.444
591	3	-3.907	-222.837	-171.316	-5.278	-3.790	-222.955	178.672
591	4	-1.601	-177.954	-513.483	31.347	3.973	-183.529	9.929
591	5	-6.975	-214.584	-414.636	1.820	-6.959	-214.599	0.502
591	6	-21.530	-358.455	-423.777	-47.880	-14.858	-365.127	172.067
591	7	-19.782	-358.097	-330.916	-44.922	-13.918	-363.961	172.564
591	8	8.099	-45.396	-513.416	56.816	44.149	-81.446	32.395
591	9	-3.240	-215.351	-175.687	-2.645	-3.207	-215.384	179.285
592	1	-7.786	-150.638	-275.749	-24.968	-3.548	-154.877	170.366
92	2	-7.158	-160.845	-272.133	-22.570	-3.912	-164.091	171.816
92	3	-3.048	-227.884	-170.022	4.497	-2.958	-227.973	1.145
92	4	-10.339	-146.799	-521.605	-28.191	-4.748	-152.390	168.779
92	5	-6.229	-213.837	-419.494	-1.113	-6.223	-213.843	179.692
92	6	4.976	-412.774	-443.638	46.950	10.188	-417.986	6.334
92	7	5.824	-409.602	-350.256	44.926	10.527	-414.405	6.102
92	8	-20.424	16.841	-501.222	-55.309	56.572	-60.154	125.691
92	9	-3.676	-217.677	-173.638	2.059	-3.656	-217.697	0.562
93	1	5.314	-276.138	-282.305	27.320	8.037	-278.862	5.591
93	2	4.703	-274.837	-275.047	25.494	7.309	-277.143	5.168
[illegible]	3	-1.827	-203.365	-174.922	-5.573	-1.573	-204.019	178.421

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E644

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	DELTA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
93	4	4.940	-290.365	-503.054	33.173	8.613	-294.638	6.318
93	5	-1.589	-219.993	-402.929	2.100	-1.569	-220.013	0.551
93	6	-14.572	-194.458	-345.369	-46.298	-2.779	-196.251	165.706
93	7	-13.335	-194.724	-234.173	-42.601	-3.823	-204.231	167.419
93	8	12.222	-249.399	-578.277	54.677	23.190	-260.356	11.342
93	9	-1.215	-205.166	-182.580	-3.247	-1.154	-205.228	179.088
94	1	-6.044	-246.799	-293.351	-26.861	-3.084	-249.759	173.713
94	2	-5.381	-248.209	-276.438	-24.407	-2.952	-250.638	174.316
94	3	-0.411	-209.344	-173.688	4.881	-0.297	-209.458	1.337
94	4	-6.191	-257.726	-510.556	-30.903	-2.449	-261.467	173.037
94	5	-1.220	-218.862	-407.306	-1.614	-1.298	-218.874	179.575
94	6	12.106	-238.868	-366.548	48.138	21.023	-247.784	10.493
94	7	11.509	-245.690	-275.111	45.597	19.324	-253.504	9.743
94	8	-16.201	-186.974	-564.249	-57.068	1.113	-204.290	163.121
94	9	-1.074	-207.934	-180.611	2.427	-1.045	-207.962	0.672
95	1	5.889	-243.631	-279.465	-26.436	8.659	-246.402	174.018
95	2	5.419	-245.330	-272.847	-23.958	7.688	-247.598	174.590
95	3	-3.163	-209.920	-173.819	4.668	-3.057	-210.025	1.292
95	4	7.064	-254.082	-505.597	-29.980	10.462	-257.480	173.534
95	5	-1.518	-218.673	-406.569	-1.353	-1.510	-218.681	179.643
95	6	-11.480	-244.524	-371.249	48.677	-1.722	-254.283	11.336
95	7	-10.529	-251.019	-279.722	46.229	-1.948	-259.599	10.515
95	8	9.084	-180.292	-556.131	-57.356	25.101	-196.309	164.397
95	9	-2.594	-208.222	-180.437	2.190	-2.670	-208.245	0.610
96	1	-8.770	-213.173	-271.312	27.799	-5.057	-216.886	7.608
96	2	-8.326	-217.418	-264.496	25.493	-5.263	-220.482	6.852
96	3	-0.152	-215.747	-175.878	-5.575	-0.008	-215.891	178.519
96	4	-12.877	-217.512	-488.850	33.139	-7.645	-222.744	8.973
96	5	-4.703	-215.840	-400.232	2.089	-4.683	-215.860	0.561
96	6	4.008	-294.050	-361.083	-46.137	10.986	-301.029	171.399
96	7	3.833	-297.116	-259.597	-42.254	9.653	-302.936	172.157
96	8	-14.741	-119.901	-554.263	54.190	8.185	-142.828	22.932
96	9	-0.596	-211.502	-182.694	-3.269	-0.545	-211.552	179.112
97	1	3.567	-209.916	-267.368	27.881	7.149	-213.497	7.319
97	2	2.913	-214.440	-260.848	25.592	5.885	-217.413	6.625
97	3	-3.154	-216.385	-176.070	-5.661	-3.004	-216.535	179.480
97	4	1.256	-213.667	-483.765	33.469	6.348	-218.759	8.649
97	5	-4.311	-215.612	-398.987	2.215	-4.737	-215.635	0.602
7	6	-19.068	-299.590	-365.708	-45.648	-11.827	-306.831	170.986
7	7	-17.375	-302.248	-274.041	-41.776	-11.374	-308.248	171.827
7	8	9.970	-113.373	-546.319	53.945	30.235	-133.637	20.588
7	9	-2.500	-211.861	-182.590	-3.372	-2.445	-211.915	179.077
8	1	-7.468	-180.479	-267.826	-26.487	-3.504	-184.443	171.488
8	2	-6.798	-187.703	-262.124	-24.030	-3.661	-190.841	172.561
8	3	-1.827	-221.900	-174.881	4.741	-1.725	-222.002	1.233
8	4	-9.188	-180.220	-491.013	-30.275	-3.987	-185.421	170.252
8	5	-4.217	-214.428	-403.773	-1.503	-4.205	-214.428	179.590
8	6	8.367	-353.808	-386.826	48.116	14.650	-360.091	7.440
8	7	8.648	-352.922	-294.513	45.624	14.331	-358.605	7.091
8	8	-19.360	-51.152	-532.531	-57.040	23.957	-94.469	142.786

E645

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
598	9	-2.497	-214.676	-180.583	2.284	-2.472	-214.700	0.616
599	1	4.528	-177.395	-263.972	-26.711	8.371	-181.148	171.813
[illegible]	2	4.062	-184.817	-258.571	-24.248	7.125	-187.880	172.800
[illegible]	3	-4.574	-222.472	-175.015	4.766	-4.479	-222.575	1.252
599	4	4.150	-176.569	-486.105	-30.494	9.156	-181.575	178.676
599	5	-4.486	-214.224	-402.550	-1.479	-4.475	-214.234	178.596
599	6	-15.275	-359.467	-391.493	48.461	-8.582	-366.160	7.863
599	7	-13.446	-358.254	-299.090	45.827	-7.460	-364.240	7.443
599	8	6.051	-44.455	-524.597	-57.149	43.277	-81.682	146.920
599	9	-4.108	-214.960	-180.416	2.303	-4.083	-214.985	0.626
600	1	-10.460	-146.847	-255.958	27.663	-5.063	-152.244	11.040
600	2	-10.064	-156.927	-250.377	25.325	-5.820	-161.171	9.514
600	3	-1.501	-228.288	-177.051	-5.481	-1.369	-228.420	178.616
600	4	-16.473	-140.092	-469.683	32.755	-8.330	-148.235	13.960
600	5	-7.910	-211.453	-396.356	1.948	-7.892	-211.472	0.548
600	6	-0.581	-409.368	-381.694	-46.670	4.678	-414.628	173.569
600	7	-0.302	-404.811	-289.437	-42.979	4.213	-409.327	174.001
600	8	-16.847	16.348	-522.479	54.788	56.997	-57.496	53.427
600	9	-1.897	-218.208	-182.631	-3.143	-1.851	-218.254	179.167
601	1	6.945	-276.631	-274.159	-27.638	9.613	-279.300	174.485
601	2	6.464	-275.759	-265.319	-25.208	8.698	-277.993	174.935
601	3	-2.096	-202.113	-178.020	5.279	-1.957	-202.252	1.511
601	4	9.093	-294.795	-478.458	-32.215	12.471	-298.172	174.014
601	5	0.532	-221.149	-391.159	-1.727	0.545	-221.162	179.553
601	6	-9.326	-192.046	-311.249	48.243	2.628	-204.001	13.918
[illegible]	7	-8.696	-204.053	-221.645	44.958	1.152	-213.903	12.357
[illegible]	8	11.391	-240.875	-590.951	-56.648	23.528	-253.012	167.907
[illegible]	9	-1.615	-202.986	-186.861	2.849	-1.575	-203.026	0.810
602	1	-7.783	-245.874	-266.708	27.315	-4.689	-248.968	6.461
602	2	-7.353	-247.394	-257.576	25.206	-4.734	-250.012	5.930
602	3	0.984	-208.346	-179.986	-5.711	1.140	-208.501	178.438
602	4	-11.038	-256.921	-462.388	33.384	-6.586	-261.373	7.596
602	5	-2.700	-217.873	-384.798	2.467	-2.671	-217.901	0.657
602	6	6.113	-238.972	-299.298	-42.516	13.279	-246.139	170.433
602	7	5.568	-246.752	-209.694	-38.090	11.193	-252.377	171.600
602	8	-12.420	-183.542	-591.187	50.135	1.186	-197.149	15.184
602	9	0.554	-206.827	-189.118	-3.602	0.617	-206.889	179.035
603	1	4.437	-242.645	-262.805	27.125	7.380	-245.588	5.192
603	2	3.874	-244.418	-253.951	25.124	6.391	-246.935	5.720
603	3	-2.149	-209.009	-180.194	-5.857	-1.984	-209.175	178.379
603	4	3.473	-252.994	-457.284	33.752	7.840	-257.362	7.373
603	5	-2.551	-217.585	-383.527	2.770	-2.516	-217.621	0.739
603	6	-15.030	-244.063	-303.631	-40.354	-8.128	-250.965	170.294
603	7	-13.369	-251.349	-213.756	-35.720	-8.122	-256.595	171.645
603	8	10.163	-177.513	-583.638	47.997	21.726	-189.076	13.544
603	9	-1.587	-207.236	-189.048	-3.856	-1.515	-207.309	178.926
604	1	-6.999	-213.055	-262.569	-27.632	-3.358	-216.696	172.493
604	2	-6.337	-217.374	-254.591	-25.180	-3.374	-220.337	173.289
[illegible]	3	-0.647	-214.916	-179.181	5.258	-0.517	-215.045	1.407

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F641

*	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
4	4	-8.037	-218.454	-463.702	-32.198	-3.220	-223.270	171.491
4	5	-2.347	-215.995	-388.293	-1.749	-2.333	-216.009	179.531
4	6	10.538	-295.573	-325.006	48.430	18.172	-303.146	8.772
4	7	10.365	-298.689	-235.354	45.356	16.884	-305.208	8.179
4	8	-17.302	-118.377	-568.590	-57.170	8.464	-144.144	155.738
4	9	-1.309	-210.596	-187.159	2.815	-1.271	-210.634	0.771
5	1	5.333	-209.805	-258.652	-27.551	8.805	-213.277	172.817
5	2	4.895	-214.404	-250.974	-25.081	7.727	-217.236	173.558
5	3	-3.647	-215.552	-179.370	5.182	-3.520	-215.679	1.400
5	4	6.079	-214.628	-458.697	-31.868	10.589	-219.137	171.946
5	5	-2.463	-215.776	-387.093	-1.604	-2.451	-215.788	179.559
5	6	-12.402	-301.238	-330.729	48.920	-4.342	-309.298	9.356
5	7	-10.868	-303.850	-239.909	45.833	-3.865	-310.853	8.586
5	8	7.419	-111.836	-560.618	-57.416	30.568	-134.986	158.041
5	9	-3.209	-210.953	-187.048	2.713	-3.174	-210.988	0.748
6	1	-8.983	-178.958	-251.166	27.070	-4.776	-183.165	8.834
6	2	-8.652	-185.963	-243.231	25.056	-5.180	-189.435	7.891
6	3	-0.409	-221.726	-181.277	-5.683	-0.263	-221.872	178.530
6	4	-14.091	-176.699	-442.766	33.442	-7.481	-183.309	11.179
6	5	-5.847	-212.463	-380.812	2.702	-5.811	-212.498	0.749
6	6	0.629	-348.346	-319.441	-40.686	5.310	-353.027	173.437
6	7	0.517	-346.784	-228.712	-36.045	4.219	-350.486	174.136
6	8	-13.318	-54.145	-560.143	48.232	18.642	-86.106	33.530
6	9	-0.739	-214.721	-189.212	-3.668	-0.676	-214.784	179.018
7	1	3.320	-175.722	-247.298	27.377	7.413	-179.815	8.502
7	2	2.654	-182.981	-239.638	25.293	6.039	-186.365	7.621
7	3	-3.515	-222.386	-181.478	-5.704	-3.366	-222.534	178.508
7	4	0.524	-172.765	-437.725	33.677	6.839	-179.080	10.620
7	5	-5.545	-212.170	-379.554	2.679	-5.610	-212.204	0.743
7	6	-20.533	-353.432	-323.728	-41.803	-15.364	-358.601	172.951
7	7	-18.436	-351.376	-232.735	-37.400	-14.286	-355.526	173.669
7	8	9.400	-48.105	-552.672	49.786	38.140	-76.845	29.996
7	9	-2.849	-215.127	-189.138	-3.620	-2.787	-215.188	179.023
8	1	-8.538	-146.069	-247.124	-27.629	-3.195	-151.412	169.055
8	2	-7.839	-155.868	-240.304	-25.222	-3.659	-160.047	170.591
8	3	-2.202	-228.305	-180.523	5.376	-2.074	-228.433	1.361
8	4	-10.946	-138.102	-444.026	-32.446	-3.145	-145.902	166.481
8	5	-5.309	-210.539	-384.245	-1.946	-5.293	-210.556	179.484
8	6	7.553	-404.944	-345.427	47.666	12.990	-410.380	6.506
8	7	8.122	-398.553	-253.552	44.400	12.913	-403.344	6.159
8	8	-21.120	10.911	-538.385	-56.252	53.383	-63.591	127.053
8	9	-2.901	-218.506	-187.343	2.969	-2.861	-218.547	0.789
9	1	4.632	-273.604	-260.236	25.578	6.964	-275.936	5.209
9	2	4.240	-273.305	-248.961	23.914	6.285	-275.350	4.889
9	3	-1.473	-201.075	-183.862	-6.071	-1.289	-201.260	178.259
9	4	4.999	-293.087	-433.558	33.151	8.641	-296.730	6.270
9	5	-0.715	-220.858	-368.459	3.164	-0.669	-220.904	0.323
9	6	-9.914	-200.992	-239.593	-34.083	-4.016	-206.889	170.193
9	7	-8.261	-214.727	-152.206	-28.365	-4.302	-218.687	172.189
9	8	8.135	-227.615	-623.283	40.761	14.983	-234.465	9.537

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
609	9	-1.082	-201.374	-195.137	-4.408	-0.385	-201.471	178.739
610	1	-5.031	-244.597	-259.229	-27.763	-2.842	-247.785	173.448
[illegible]	2	-5.453	-246.578	-248.395	-25.523	-2.781	-249.250	174.023
[illegible]	3	0.613	-207.260	-182.930	5.577	0.768	-207.415	1.563
[illegible]	4	-6.594	-258.022	-439.069	-33.516	-2.203	-262.413	172.536
610	5	-0.527	-218.704	-373.104	-2.314	-0.502	-218.728	179.392
610	6	11.566	-247.763	-263.249	44.759	19.074	-255.271	9.522
610	7	10.584	-256.430	-174.937	40.743	16.663	-262.509	8.485
610	8	-13.587	-173.923	-606.638	-52.940	2.315	-189.826	163.280
610	9	0.035	-205.279	-193.263	3.437	0.093	-205.336	0.959
611	1	6.185	-241.374	-255.340	-27.953	9.302	-244.492	173.637
611	2	5.769	-243.611	-245.288	-25.605	8.371	-246.213	174.197
611	3	-2.518	-207.924	-183.122	5.531	-2.369	-208.073	1.541
611	4	7.901	-254.114	-434.031	-33.148	12.029	-258.242	172.900
611	5	-0.386	-218.427	-371.865	-2.011	-0.367	-218.445	179.471
611	6	-9.502	-252.881	-267.674	46.922	-0.866	-261.618	10.547
611	7	-8.378	-261.054	-179.105	43.113	-1.225	-268.208	9.421
611	8	9.009	-167.884	-599.049	-55.079	24.757	-183.632	164.044
611	9	-2.102	-205.688	-193.174	3.183	-2.052	-205.737	0.895
612	1	-8.368	-211.847	-248.909	25.261	-5.279	-214.936	6.972
612	2	-8.094	-216.123	-238.483	23.707	-5.426	-218.791	6.420
612	3	-0.015	-214.399	-185.096	-5.755	0.138	-214.553	178.463
612	4	-12.707	-216.346	-419.108	32.925	-7.515	-221.537	8.960
612	5	-4.627	-214.622	-365.721	3.462	-4.570	-214.679	0.944
612	6	1.168	-293.310	-254.310	-31.899	4.584	-296.726	173.887
612	7	0.655	-296.491	-165.793	-26.468	2.995	-298.830	174.949
[illegible]	8	-10.822	-117.977	-601.356	38.579	1.622	-130.422	17.878
[illegible]	9	-0.289	-210.122	-195.522	-4.201	-0.205	-210.207	178.853
13	1	3.356	-208.763	-245.187	25.066	6.277	-211.685	6.648
13	2	2.809	-213.252	-234.999	23.530	5.342	-215.785	6.144
13	3	-3.166	-215.074	-185.290	-6.029	-2.995	-215.245	178.371
13	4	1.916	-212.430	-414.124	32.948	6.866	-217.381	8.544
13	5	-4.059	-214.252	-364.415	3.388	-4.005	-214.307	0.923
13	6	-16.619	-297.600	-257.954	-31.598	-13.109	-301.109	173.662
13	7	-14.566	-300.202	-169.074	-26.201	-12.182	-302.585	174.802
13	8	8.287	-112.820	-594.558	38.104	19.278	-123.811	16.090
13	9	-2.620	-210.586	-195.477	-4.493	-2.523	-210.683	178.762
4	1	-7.773	-179.798	-244.277	-27.988	-3.334	-184.237	170.987
4	2	-7.107	-186.507	-234.963	-25.665	-3.508	-190.107	172.015
4	3	-0.907	-221.176	-184.319	5.558	-0.766	-221.315	1.444
4	4	-9.548	-177.233	-419.519	-33.419	-3.133	-183.647	169.134
4	5	-3.347	-211.902	-368.874	-2.194	-3.324	-211.925	179.397
4	6	9.512	-343.140	-230.237	46.247	15.475	-349.104	7.348
4	7	9.440	-340.561	-190.320	42.459	14.517	-345.638	6.819
4	8	-19.389	-60.283	-579.369	-54.707	19.243	-97.917	145.475
4	9	-1.572	-214.467	-193.633	3.234	-1.523	-214.515	0.870
5	1	4.525	-176.562	-240.430	-27.681	3.662	-180.699	171.500
5	2	4.193	-183.525	-231.395	-25.428	7.577	-186.909	172.420
[illegible]	[illegible]	-4.010	-221.827	-184.512	5.537	-3.869	-221.968	1.455

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F 1.48

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
615	4	5.351	-173.309	-414.534	-33.182	11.024	-179.283	169.795
615	5	-3.133	-211.611	-367.651	-2.217	-3.129	-211.634	179.390
615	6	-11.675	-348.245	-294.531	45.129	-5.729	-354.191	7.586
615	7	-9.538	-345.174	-294.443	41.103	-4.578	-350.135	6.381
615	8	4.341	-54.223	-571.353	-53.153	35.744	-85.625	149.415
615	9	-3.678	-214.863	-193.547	3.283	-3.627	-214.914	3.890
616	1	-8.359	-145.613	-233.631	25.709	-3.733	-151.243	10.200
616	2	-8.229	-155.579	-224.284	24.040	-4.408	-159.500	9.030
616	3	-0.738	-228.061	-186.268	-5.596	-0.601	-228.199	178.591
616	4	-14.362	-135.281	-399.458	32.992	-5.946	-143.697	14.310
616	5	-6.872	-207.663	-361.441	3.354	-6.816	-207.719	0.337
616	6	-4.315	-389.555	-272.274	-33.964	-1.343	-392.527	175.000
616	7	-4.348	-381.580	-182.254	-28.763	-2.167	-383.761	175.664
616	8	-9.809	-2.855	-572.698	41.056	34.865	-47.540	47.417
616	9	-0.868	-218.999	-195.615	-3.928	-0.798	-219.070	178.968
617	1	6.887	-269.097	-253.465	-26.524	9.413	-271.623	174.559
617	2	6.461	-270.084	-241.076	-24.559	8.625	-272.248	174.954
617	3	-1.821	-200.160	-186.517	5.965	-1.642	-200.339	1.721
617	4	9.396	-292.895	-411.763	-33.087	12.975	-296.474	173.825
617	5	1.113	-222.971	-357.204	-2.562	1.142	-223.000	179.345
617	6	-7.989	-225.331	-205.130	40.000	-0.877	-232.944	10.082
617	7	-7.080	-241.458	-119.565	35.225	-1.900	-246.638	8.365
617	8	10.744	-200.665	-637.190	-46.956	20.705	-210.626	158.024
617	9	-1.395	-199.173	-198.906	4.301	-1.314	-199.254	1.158
618	1	-9.572	-240.784	-248.361	25.552	-6.782	-243.574	5.231
618	2	-9.420	-243.278	-235.464	24.530	-6.874	-245.823	5.924
618	3	-2.294	-206.198	-188.832	-3.654	-2.229	-206.264	178.973
618	4	-13.083	-254.820	-398.047	34.465	-8.265	-259.638	7.958
618	5	-5.957	-217.741	-351.415	6.280	-5.771	-217.927	1.697
618	6	-2.237	-255.553	-189.616	-19.521	-0.742	-257.053	175.619
618	7	-3.905	-265.260	-104.048	-13.456	-2.316	-265.949	177.070
618	8	-9.436	-161.391	-642.874	29.366	-3.929	-166.858	10.564
618	9	-2.447	-203.705	-201.729	-2.633	-2.412	-203.740	179.250
619	1	-0.329	-238.319	-245.263	22.291	1.738	-240.387	5.303
619	2	-0.721	-240.957	-232.545	21.423	1.174	-242.852	5.056
619	3	-5.197	-207.057	-199.207	-6.567	-5.983	-207.271	178.129
619	4	-0.481	-251.420	-393.636	31.906	3.512	-255.413	7.134
619	5	-5.958	-217.520	-350.297	3.915	-5.885	-217.592	1.060
619	6	-15.490	-258.755	-192.336	-18.984	-14.017	-260.228	175.564
619	7	-13.498	-267.822	-106.356	-12.700	-12.865	-268.455	177.140
619	8	2.886	-157.908	-637.738	23.319	6.199	-161.221	3.037
619	9	-5.806	-204.419	-201.925	-5.709	-5.642	-204.583	178.355
620	1	-6.922	-210.534	-242.986	-27.370	-3.307	-214.149	172.475
620	2	-6.383	-214.889	-231.153	-25.304	-3.356	-217.916	173.173
620	3	-0.182	-212.763	-187.561	5.633	-0.332	-212.912	1.517
620	4	-9.295	-215.958	-397.424	-33.803	-2.931	-221.332	170.984
620	5	-2.094	-213.842	-353.832	-2.865	-2.055	-213.881	179.225
620	6	9.032	-294.172	-214.124	41.409	14.535	-299.726	7.638
620	7	9.296	-297.215	-125.998	36.368	12.672	-301.603	5.734
620	8	-14.391	-115.432	-621.248	-49.559	5.944	-135.657	157.739

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ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
620	9	-0.721	-208.408	-199.394	3.567	-0.660	-208.469	0.983
[illegible]	1	4.798	-207.451	-239.284	-27.566	8.320	-210.973	172.719
[illegible]	2	4.516	-212.018	-237.695	-25.482	7.475	-214.977	173.377
[illegible]	3	-3.330	-213.432	-187.752	5.358	-3.134	-213.559	1.460
621	4	6.313	-212.063	-392.500	-33.780	11.419	-217.169	171.404
621	5	-1.534	-213.477	-352.558	-2.939	-1.493	-213.518	179.235
621	6	-8.783	-298.489	-217.884	41.720	-2.897	-304.375	8.032
621	7	-6.962	-300.944	-130.307	37.136	-2.343	-305.563	7.389
621	8	4.832	-110.257	-614.495	-50.035	23.543	-128.958	159.496
621	9	-3.049	-208.864	-199.342	3.274	-2.997	-208.917	0.911
622	1	-8.513	-180.819	-233.937	20.326	-6.148	-183.184	6.637
622	2	-8.575	-186.962	-221.931	19.449	-6.479	-189.058	6.150
622	3	-2.282	-221.056	-190.074	-7.345	-2.036	-221.303	178.079
622	4	-13.603	-175.899	-378.785	29.317	-8.469	-181.033	9.932
622	5	-7.310	-209.993	-346.928	2.523	-7.278	-210.025	0.713
622	6	-8.162	-331.101	-204.148	-20.483	-6.868	-332.395	176.385
622	7	-8.466	-327.815	-116.684	-14.445	-7.814	-328.468	177.415
622	8	-5.911	-71.163	-618.281	22.349	1.009	-78.084	17.206
622	9	-2.220	-214.913	-202.080	-6.468	-2.024	-215.110	178.259
623	1	0.782	-178.347	-230.874	20.854	3.178	-180.743	6.553
623	2	0.180	-184.633	-219.043	19.775	2.273	-186.725	6.039
623	3	-6.286	-221.936	-190.473	-8.067	-5.985	-222.237	177.860
623	4	-0.842	-172.470	-374.404	29.761	4.171	-177.484	9.563
623	5	-7.310	-209.774	-345.834	1.918	-7.292	-209.792	0.543
623	6	-21.382	-334.292	-206.836	-24.793	-19.430	-336.235	175.497
[illegible]	7	-18.887	-330.349	-118.958	-18.929	-17.741	-331.495	175.535
[illegible]	8	6.294	-67.717	-613.243	26.320	14.700	-76.123	17.711
623	9	-5.684	-215.650	-202.305	-6.987	-5.452	-215.882	178.096
624	1	-8.629	-152.124	-229.472	-27.106	-3.679	-157.074	169.651
624	2	-7.945	-160.101	-218.441	-25.184	-3.885	-164.161	170.842
624	3	-1.446	-228.605	-189.261	5.360	-1.319	-228.732	1.351
624	4	-10.934	-138.675	-378.920	-33.895	-2.497	-147.112	156.023
624	5	-4.435	-207.179	-349.740	-3.350	-4.380	-207.235	179.053
624	6	8.513	-370.233	-227.445	38.374	12.362	-374.082	5.727
624	7	8.700	-360.328	-138.264	33.625	11.739	-363.367	5.164
624	8	-19.886	-26.911	-599.035	-46.788	23.521	-70.319	137.146
624	9	-2.129	-220.629	-200.292	3.438	-2.075	-220.683	0.901
625	1	-1.101	-242.666	-254.881	17.959	0.227	-243.996	4.231
625	2	-1.111	-244.953	-238.676	17.786	0.178	-246.243	4.150
625	3	-4.985	-185.359	-199.427	-7.497	-4.674	-185.670	177.623
625	4	-0.317	-266.722	-392.086	28.461	2.689	-269.729	6.030
625	5	-4.191	-207.129	-352.836	3.177	-4.141	-207.178	0.897
625	6	-6.261	-234.535	-130.347	-7.144	-6.038	-234.758	178.209
625	7	-4.421	-250.540	-41.945	-0.498	-4.420	-250.541	179.884
625	8	-3.954	-155.447	-719.084	7.322	-3.611	-155.800	2.761
625	9	-4.975	-183.072	-215.632	-7.314	-4.675	-183.372	177.652
626	1	-1.607	-225.326	-253.111	-17.422	-0.264	-227.669	175.593
[illegible]	2	-1.250	-229.515	-237.839	-15.913	-0.145	-230.619	175.231
[illegible]	3	3.377	-192.370	-197.481	12.125	4.723	-193.116	3.520

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LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
4	-2.555	-243.827	-396.992	-25.119	-0.067	-246.416	174.116
5	2.572	-206.592	-355.534	2.918	2.613	-206.723	0.799
6	10.751	-256.[illegible]	-153.229	37.240	15.842	-261.710	7.783
7	9.453	-267.513	-63.676	31.999	13.[illegible]	-271.152	5.505
8	-5.494	-134.615	-701.773	-31.203	1.553	-141.751	157.102
9	3.620	-189.181	-212.752	10.615	4.203	-189.764	3.142
1	8.154	-224.131	-249.923	-20.757	9.395	-225.972	174.933
2	7.935	-227.454	-234.840	-19.083	9.472	-228.991	175.395
3	-0.287	-193.673	-197.970	8.930	0.124	-194.385	2.538
4	10.707	-240.550	-392.424	-27.633	13.710	-243.534	173.797
5	2.485	-206.770	-355.553	0.380	2.485	-206.771	0.104
6	-3.419	-259.990	-155.241	37.567	1.968	-265.377	8.161
7	-1.760	-270.181	-66.240	32.512	2.145	-274.087	6.829
8	7.452	-131.684	-696.420	-37.463	16.898	-141.130	165.848
9	-0.067	-190.351	-213.052	7.255	0.208	-190.627	2.180
1	-5.113	-202.166	-245.979	12.444	-4.330	-202.949	3.599
2	-5.182	-206.429	-230.282	12.521	-4.405	-207.205	3.546
3	1.289	-206.653	-201.151	-9.293	1.703	-207.067	177.446
4	-9.753	-206.102	-379.372	22.179	-7.279	-208.576	6.365
5	-3.282	-206.326	-350.241	0.364	-3.281	-206.326	0.103
6	-3.856	-285.146	-139.132	-4.571	-3.782	-285.221	179.069
7	-4.560	-287.951	-49.160	1.687	-4.550	-287.961	0.341
8	-1.739	-109.979	-704.986	-1.368	-1.721	-109.996	179.276
9	1.357	-202.389	-216.847	-9.370	1.787	-202.819	177.372
1	0.844	-203.604	-243.673	11.245	1.470	-201.230	3.185
2	0.566	-204.931	-228.084	11.304	1.186	-205.551	3.139
3	-4.564	-208.132	-201.978	-11.075	-4.063	-208.733	176.893
4	0.347	-203.389	-375.577	21.363	2.563	-205.605	5.922
5	-4.363	-206.589	-349.471	-1.016	-4.378	-206.594	179.711
6	-12.684	-287.387	-140.908	-6.345	-12.538	-287.534	178.677
7	-10.252	-289.470	-50.463	-0.033	-10.252	-289.470	180.000
8	1.399	-108.739	-701.797	-2.350	1.449	-108.839	178.778
9	-4.386	-203.804	-217.568	-11.134	-3.765	-204.424	176.814
1	-5.552	-182.965	-242.374	-23.258	-2.652	-185.965	172.650
2	-5.064	-188.196	-228.108	-21.588	-2.553	-190.707	173.367
3	1.740	-217.277	-201.006	8.242	2.050	-217.587	2.152
4	-7.801	-177.775	-381.101	-31.024	-2.315	-183.260	169.972
5	-0.996	-206.855	-353.999	-1.193	-0.989	-206.862	179.668
6	10.874	-311.184	-162.618	36.275	14.909	-315.220	6.347
7	10.317	-307.214	-70.800	30.962	13.308	-310.205	5.517
8	-14.288	-88.624	-687.724	-39.936	1.371	-105.284	156.834
9	1.152	-212.045	-215.772	6.572	1.354	-212.248	1.764
1	4.281	-180.305	-239.628	-22.636	7.015	-183.041	173.109
2	4.289	-185.599	-225.044	-21.186	5.623	-188.033	173.713
3	-2.542	-215.249	-201.441	7.445	-2.286	-218.504	1.974
4	5.820	-174.188	-375.481	-30.474	10.841	-179.129	170.543
5	-1.011	-206.657	-352.879	-1.842	-0.995	-206.673	179.486
6	-3.325	-314.798	-165.668	31.578	-0.156	-317.967	5.731
7	-0.892	-310.145	-73.404	25.395	1.294	-312.331	4.789
8	-1.190	-84.756	-682.244	-34.610	11.292	-97.229	160.132

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
631	9	-2.550	-212.354	-216.015	5.995	-2.379	-213.024	1.631
632	1	-4.585	-159.951	-235.124	11.415	-3.750	-160.795	4.180
[illegible]	2	-4.930	-166.296	-220.029	11.139	-4.157	-167.069	3.351
[illegible]	3	0.576	-229.648	-233.944	-11.136	1.119	-230.131	177.222
[illegible]	4	-10.647	-142.600	-353.272	20.556	-7.489	-145.758	3.532
632	5	-5.140	-205.952	-347.187	-1.739	-5.125	-205.367	179.533
632	6	-11.518	-338.997	-150.088	-12.002	-11.079	-339.437	177.304
632	7	-11.731	-327.836	-59.102	-6.032	-11.615	-327.951	178.307
632	8	2.656	-62.559	-587.872	3.153	2.818	-62.711	2.761
632	9	0.922	-223.303	-219.018	-10.979	1.458	-223.839	177.[illegible]
633	1	6.129	-216.499	-244.895	-9.443	6.529	-216.899	177.575
633	2	5.944	-220.835	-227.518	-8.610	6.270	-221.162	177.929
633	3	-0.470	-165.526	-196.690	14.051	0.717	-166.714	4.831
633	4	8.881	-245.622	-357.192	-17.185	10.036	-246.777	176.154
633	5	2.467	-190.313	-336.364	5.476	2.622	-190.469	1.525
633	6	-2.044	-254.996	-88.304	26.747	0.753	-257.793	5.970
633	7	-1.111	-272.984	-2.949	21.585	0.591	-274.687	4.511
633	8	6.658	-92.324	-729.095	-13.362	8.430	-94.097	172.445
633	9	-0.285	-161.190	-214.068	13.218	0.793	-162.269	4.665
634	1	-3.077	-208.263	-243.159	5.589	-2.919	-208.421	1.587
634	2	-3.162	-212.427	-224.945	6.486	-2.961	-212.628	1.774
634	3	2.885	-182.390	-199.931	-13.449	3.856	-183.361	175.869
634	4	-7.093	-225.257	-356.529	16.375	-5.871	-226.490	4.268
634	5	-1.045	-195.230	-331.515	-3.561	-0.980	-195.295	178.949
634	6	-1.643	-263.649	-67.573	4.832	-1.554	-263.739	1.056
634	7	-2.640	-274.761	17.944	11.578	-2.149	-275.252	2.432
[illegible]	8	0.369	-101.129	-743.152	-21.585	5.249	-105.509	168.539
[illegible]	9	2.970	-178.226	-218.145	-14.247	4.083	-179.339	175.531
635	1	-0.253	-207.395	-241.624	3.790	-0.184	-207.465	1.248
635	2	-0.053	-211.501	-223.402	5.010	0.054	-211.619	1.357
635	3	-4.296	-184.049	-201.037	-14.088	-3.189	-185.147	175.346
635	4	0.598	-223.136	-353.395	15.246	1.632	-224.140	3.981
635	5	-3.634	-195.655	-331.030	-3.352	-3.557	-195.732	178.851
635	6	-2.313	-263.777	-67.613	12.421	-1.725	-264.366	2.714
635	7	0.151	-274.377	18.573	19.393	1.515	-275.442	4.025
635	8	-8.148	-102.876	-742.853	-31.433	1.333	-112.357	163.114
635	9	-4.486	-179.944	-219.259	-15.303	-3.160	-181.270	175.050
36	1	-3.109	-196.916	-241.208	-13.936	-2.112	-197.913	175.908
36	2	-2.828	-201.116	-223.825	-12.839	-2.[illegible]	-201.944	175.[illegible]
36	3	2.718	-199.200	-201.458	12.259	3.459	-199.942	3.462
35	4	-4.906	-202.352	-353.388	-22.061	-2.471	-204.787	178.[illegible]
36	5	0.639	-200.436	-336.520	3.037	0.595	-200.482	0.855
36	6	7.244	-277.349	-90.924	29.473	10.259	-280.863	5.841
36	7	6.091	-280.841	-3.063	24.204	8.[illegible]	-282.868	4.738
36	8	-5.725	-105.528	-729.375	-21.758	-1.137	-110.065	168.221
35	9	2.435	-195.[illegible]	-219.840	11.162	3.255	-195.630	3.225
7	1	2.871	-195.256	-238.388	-15.[illegible]	4.231	-196.416	175.638
7	2	2.942	-199.521	-221.618	-14.119	3.922	-200.500	176.030
[illegible]	3	-3.199	-200.542	-202.245	12.546	-2.637	-201.104	3.050

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NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
37	4	5.199	-199.580	-355.138	-22.997	7.748	-202.129	173.673
37	5	-0.943	-200.601	-335.765	1.677	-0.929	-200.615	0.481
37	6	-1.584	-279.986	-90.308	27.799	1.154	-282.735	5.647
37	7	0.389	-282.261	-4.468	22.546	2.175	-284.048	4.532
37	8	-2.547	-104.233	-725.093	-22.763	2.317	-109.098	167.938
37	9	-3.270	-196.278	-219.516	9.464	-2.807	-196.741	2.800
38	1	-2.802	-182.930	-235.868	3.636	-2.729	-184.003	1.149
38	2	-3.302	-189.052	-217.910	4.822	-3.177	-188.186	1.494
38	3	1.947	-215.408	-204.727	-14.187	2.869	-216.331	176.281
38	4	-8.301	-175.924	-343.445	14.831	-6.999	-177.227	5.017
38	5	-3.050	-203.271	-330.261	-4.179	-2.963	-203.358	178.804
38	6	-11.989	-287.311	-73.795	11.418	-11.516	-287.784	2.370
38	7	-12.615	-282.556	14.211	18.422	-11.363	-283.807	3.886
38	8	8.261	-109.896	-736.108	-30.999	15.901	-117.535	166.156
38	9	2.448	-211.277	-222.684	-15.374	3.548	-212.377	175.906
39	1	0.021	-183.062	-234.361	5.328	0.175	-183.217	1.665
39	2	-0.196	-187.136	-216.395	6.144	0.005	-187.337	1.880
39	3	-5.265	-217.070	-205.832	-13.833	-4.365	-217.970	176.279
39	4	-0.586	-173.762	-340.354	16.234	0.922	-175.271	5.309
39	5	-5.655	-203.697	-329.790	-3.743	-5.584	-203.767	178.917
39	6	-12.708	-287.441	-73.763	5.070	-12.614	-287.535	1.057
39	7	-9.868	-281.887	14.813	11.760	-9.360	-282.395	2.471
39	8	-0.737	-111.637	-735.818	-22.194	3.539	-115.914	169.092
39	9	-5.048	-212.997	-223.797	-14.649	-4.021	-214.024	175.990
40	1	-5.924	-172.083	-234.666	-14.534	-5.655	-173.352	175.009
40	2	-6.376	-176.172	-217.379	-13.757	-5.268	-177.279	175.398
40	3	-0.263	-231.314	-206.477	10.548	0.225	-231.804	2.633
40	4	-9.213	-152.404	-346.295	-23.182	-5.554	-156.064	171.029
40	5	-3.101	-207.547	-335.394	1.223	-3.094	-207.554	0.343
40	6	7.634	-299.127	-94.202	21.794	9.175	-300.648	4.244
40	7	7.447	-286.201	-3.841	16.268	8.346	-287.099	3.161
540	8	-15.492	-115.138	-726.091	-16.350	-12.878	-117.753	170.915
540	9	-0.812	-227.225	-223.765	9.370	-0.382	-227.655	2.491
541	1	-2.315	-205.187	-238.631	-0.555	-2.313	-205.189	179.843
541	2	-1.488	-212.204	-218.365	1.738	-1.474	-212.219	0.472
541	3	-4.515	-163.038	-199.793	-15.479	-3.118	-164.536	174.471
541	4	-0.227	-237.266	-331.552	12.160	0.394	-237.888	2.929
541	5	-3.355	-188.099	-312.981	-5.056	-3.215	-188.238	179.433
541	6	9.951	-301.965	-5.081	31.151	13.032	-305.046	5.648
541	7	12.444	-322.165	75.932	38.767	15.875	-325.598	5.523
541	8	-22.032	-29.499	-771.004	-56.396	31.232	-82.784	136.877
541	9	-5.442	-156.020	-220.060	-17.771	-3.373	-158.089	173.359
542	1	-0.463	-200.166	-238.187	-8.270	-0.121	-200.508	177.632
542	2	-0.537	-206.029	-218.721	-8.401	-0.294	-206.372	177.661
542	3	3.352	-179.363	-200.622	13.052	4.281	-180.292	4.068
542	4	-2.121	-220.259	-336.679	-19.220	-0.609	-221.770	175.253
542	5	1.869	-193.593	-319.581	3.242	1.923	-193.646	0.950
542	6	0.286	-293.681	-27.991	7.071	0.456	-293.851	1.377
542	7	-1.427	-305.702	54.345	0.974	-1.425	-305.704	0.164
542	8	5.905	-61.090	-758.519	6.223	6.375	-61.661	5.253

NT	LOAD COMB	R-STRESS (RADIAL)	A-STRESS (AXIAL)	THETA-STRESS (HOOP)	AZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
42	9	3.527	-173.500	-220.088	13.193	4.504	-174.478	4.238
43	1	2.358	-199.298	-236.659	-10.169	2.869	-199.810	177.120
[illegible]	2	2.467	-205.104	-217.189	-9.877	2.936	-205.573	177.281
[illegible]	3	-3.818	-181.019	-201.722	12.423	-2.951	-181.886	3.991
[illegible]	4	5.557	-218.108	-333.599	-19.349	7.218	-219.770	175.092
43	5	-0.728	-194.023	-318.131	2.950	-0.683	-194.068	0.874
43	6	-0.418	-293.838	-28.074	14.659	0.311	-294.569	2.853
43	7	1.330	-305.051	55.446	8.689	1.577	-305.297	1.623
43	8	-3.192	-62.815	-758.157	-3.645	-2.970	-63.037	176.514
43	9	-3.927	-175.213	-221.192	12.131	-3.072	-176.068	4.031
44	1	-1.791	-194.763	-234.874	-2.391	-1.761	-194.793	179.290
44	2	-2.409	-199.000	-214.474	0.316	-2.409	-199.000	0.092
44	3	2.581	-197.883	-203.987	-15.942	3.841	-199.143	175.481
44	4	-6.829	-199.365	-323.120	10.586	-6.248	-199.945	3.138
44	5	-1.838	-198.248	-312.633	-5.672	-1.674	-198.412	178.347
44	6	-12.641	-276.126	-4.387	38.196	-7.216	-281.552	8.084
44	7	-13.656	-279.352	78.786	46.096	-5.885	-287.122	9.568
44	8	12.130	-102.512	-773.679	-66.879	42.892	-133.273	155.299
44	9	3.199	-193.647	-224.387	-18.650	4.950	-195.398	174.635
5	1	-1.698	-194.576	-234.048	-2.415	-1.667	-194.606	179.282
5	2	-1.375	-198.591	-213.484	0.317	-1.374	-198.592	0.092
5	3	-5.403	-199.736	-205.282	-16.011	-4.093	-201.046	175.321
5	4	-0.953	-197.673	-320.561	10.801	-0.362	-198.264	3.133
[illegible]	5	-4.982	-198.817	-312.359	-5.527	-4.824	-198.975	178.367
	6	-1.716	-273.394	-1.665	38.875	3.737	-278.847	7.985
	7	1.167	-275.705	82.188	46.728	8.841	-283.379	9.326
	[illegible]	-12.282	-108.073	-777.110	-67.308	22.432	-142.788	152.717
	[illegible]	-5.726	-195.720	-225.846	-18.744	-3.394	-197.552	174.419
	1	-3.791	-190.222	-234.520	-10.222	-3.232	-190.781	176.870
	2	-3.590	-192.875	-214.533	-9.958	-3.067	-193.398	176.996
	3	1.423	-216.359	-206.397	12.465	2.134	-217.070	3.265
	4	-5.901	-181.060	-326.311	-19.669	-3.719	-183.242	173.671
	5	-0.887	-204.544	-318.175	2.754	-0.850	-204.581	0.774
	6	3.804	-261.513	-20.628	13.899	4.530	-262.239	2.991
	7	3.008	-255.503	65.267	7.959	3.252	-255.748	1.762
	8	-5.432	-144.574	-769.899	-3.214	-5.357	-144.648	178.677
	9	1.222	-213.706	-226.385	12.201	1.913	-214.396	3.238
	1	-0.969	-189.354	-233.020	-8.530	-0.584	-189.739	177.412
	2	-0.487	-191.950	-213.029	-8.636	-0.098	-192.339	177.422
	3	-5.788	-218.018	-207.496	12.819	-5.017	-218.789	3.444
	4	1.800	-178.909	-323.272	-18.266	3.629	-180.737	174.285
	5	-3.501	-204.977	-317.739	3.189	-3.451	-205.027	0.906
	6	3.050	-261.680	-20.730	7.553	3.265	-261.895	1.633
	7	5.722	-254.961	65.741	1.298	5.728	-254.868	0.295
	8	-14.413	-146.295	-769.536	5.590	-14.177	-146.531	2.423
	9	-6.271	-215.421	-227.487	12.925	-5.475	-216.217	3.523
	1	-1.200	-184.013	-230.319	-0.604	-1.198	-184.015	179.810
	2	-2.317	-185.253	-209.624	1.652	-2.302	-185.267	0.517
	1.720	-234.453	-209.451	-15.409	2.721	-235.464	176.283	

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E654

!	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
8	4	-7.533	-159.640	-312.203	11.816	-6.620	-160.553	4.415
8	5	-3.494	-208.853	-312.027	-5.245	-3.360	-208.984	178.537
8	6	-24.273	-247.535	-1.028	30.254	-20.245	-251.562	7.582
8	7	-24.883	-232.882	84.971	37.880	-18.199	-239.566	10.006
8	8	21.756	-180.845	-779.743	-56.263	36.332	-195.421	165.476
8	9	2.837	-233.224	-238.146	-17.666	4.152	-234.539	175.743
9	1	2.398	-188.513	-231.743	-3.485	2.462	-188.577	178.954
9	2	2.515	-199.659	-210.395	-4.754	2.627	-199.770	178.653
9	3	-3.327	-157.380	-199.213	14.205	-2.028	-158.679	5.224
9	4	6.056	-225.332	-311.069	-14.789	6.994	-227.270	176.373
9	5	0.213	-184.054	-299.187	4.169	0.308	-184.148	1.295
9	6	1.037	-374.922	23.298	-12.899	1.480	-375.365	178.037
9	7	2.428	-397.249	100.937	-19.996	3.426	-398.247	177.143
9	8	-2.432	67.827	-770.340	32.837	80.784	-15.390	68.466
19	9	-3.444	-146.235	-219.861	15.473	-1.786	-147.893	6.114
50	1	-0.677	-191.390	-231.201	-7.224	-0.403	-191.363	177.830
50	2	-1.355	-198.902	-209.134	-3.239	-1.302	-198.955	179.060
50	3	3.301	-176.212	-201.217	-17.631	5.016	-177.927	174.443
50	4	-5.303	-212.668	-301.779	7.086	-5.062	-212.909	1.955
50	5	-0.646	-189.978	-293.863	-7.305	-0.365	-190.259	177.793
50	6	-12.253	-326.374	52.374	60.481	-1.000	-337.327	10.539
50	7	-13.621	-339.437	129.552	68.938	0.364	-353.423	11.468
50	8	14.685	-13.437	-792.583	-97.359	98.993	-97.746	139.109
50	9	3.979	-168.400	-223.234	-21.615	6.649	-171.069	172.960
51	1	-3.865	-191.729	-231.208	-9.636	-3.372	-192.222	177.071
51	2	-2.760	-199.109	-208.771	-4.982	-2.534	-199.236	178.547
51	3	-5.720	-178.329	-202.779	-18.488	-3.752	-180.287	173.954
51	4	-1.740	-211.570	-299.861	5.587	-1.592	-211.719	1.524
51	5	-4.700	-190.790	-293.870	-7.918	-4.354	-191.126	177.568
51	6	13.506	-319.670	58.623	72.499	28.594	-334.758	11.758
51	7	16.445	-332.006	136.720	81.170	34.425	-349.987	12.490
51	8	-29.578	-23.979	-800.945	-113.107	86.314	-139.972	134.278
51	9	-5.825	-170.949	-225.216	-23.143	-3.624	-174.149	172.125
52	1	-1.103	-194.159	-232.034	-5.312	-0.957	-194.305	178.425
52	2	-1.429	-198.587	-210.059	-6.123	-1.239	-198.697	178.222
52	3	2.641	-197.131	-204.432	13.581	3.574	-198.063	3.399
52	4	-3.396	-199.720	-305.600	-15.250	-2.058	-201.058	175.297
52	5	0.574	-198.344	-299.974	3.344	0.737	-198.407	1.020
52	6	-3.979	-278.540	41.341	-5.088	-3.395	-278.634	178.938
52	7	-5.515	-281.587	121.723	-11.336	-5.007	-282.095	177.545
52	8	8.022	-100.087	-796.537	21.875	12.280	-104.345	11.016
52	9	2.966	-192.783	-225.408	14.492	4.033	-193.850	4.211
53	1	-1.312	-193.979	-231.215	-5.336	-0.865	-194.126	178.417
53	2	-0.397	-198.107	-209.079	-6.122	-0.208	-198.296	179.228
53	3	-5.342	-198.988	-205.724	13.612	-4.390	-199.940	4.001
53	4	2.465	-198.046	-303.079	-15.045	3.741	-199.322	175.453
53	5	-2.479	-198.927	-299.724	3.689	-2.410	-198.997	1.075
53	6	6.911	-275.846	43.924	-4.409	6.979	-275.915	179.107
53	7	9.275	-277.980	125.109	-11.233	9.713	-278.418	177.756
53	9	-16.373	-105.640	-799.384	21.445	-11.488	-110.525	12.831

E655

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
653	9	-5.957	-194.860	-227.859	14.398	-4.866	-195.951	4.333
654	1	0.417	-196.013	-229.694	-9.539	0.879	-196.476	177.226
654	2	-0.937	-196.910	-206.603	-4.913	-0.814	-197.033	178.565
654	3	2.790	-217.737	-207.613	-18.340	4.305	-219.252	175.278
654	4	-5.522	-183.921	-293.138	5.435	-5.357	-184.086	1.744
654	5	-1.794	-204.748	-294.148	-7.390	-1.480	-205.062	177.749
654	6	-26.761	-228.801	68.316	71.838	-3.822	-251.740	17.709
654	7	-27.732	-222.229	148.927	80.556	1.322	-251.084	19.833
654	8	28.815	-184.475	-816.016	-112.547	77.218	-232.879	156.729
654	9	4.145	-216.340	-230.704	-22.966	6.506	-219.202	174.129
655	1	-2.737	-196.645	-229.701	-7.122	-2.476	-196.907	177.399
655	2	-2.306	-197.112	-206.245	-3.112	-2.256	-197.162	179.084
655	3	-6.205	-219.845	-209.155	-17.550	-4.773	-221.277	175.335
655	4	-1.911	-182.820	-291.245	7.408	-1.608	-183.123	2.341
655	5	-5.811	-205.552	-294.155	-7.028	-5.564	-205.800	177.987
655	6	-0.924	-222.400	74.478	61.280	14.900	-238.225	14.479
655	7	2.411	-214.606	155.895	69.684	22.860	-235.054	16.354
655	8	-15.557	-195.002	-824.271	-97.635	27.320	-237.879	156.291
655	9	-6.637	-219.378	-232.611	-21.559	-4.474	-221.541	174.271
656	1	-4.553	-199.555	-231.534	-3.384	-4.494	-199.614	179.006
656	2	-4.377	-196.892	-208.278	-4.672	-4.264	-197.005	178.610
656	3	0.559	-238.603	-211.113	14.284	1.409	-239.453	3.406
656	4	-6.987	-171.410	-297.695	-14.884	-5.651	-172.747	174.869
656	5	-2.051	-213.121	-300.529	4.072	-1.972	-213.200	1.105
656	6	1.910	-179.456	61.817	-13.447	2.902	-180.448	175.782
656	7	1.353	-152.347	145.630	-20.473	3.875	-154.869	172.978
656	8	-6.014	-273.308	-826.126	33.184	-1.956	-277.366	6.972
656	9	0.383	-241.266	-234.369	15.572	1.383	-242.266	3.572
657	1	-6.575	-170.666	-224.548	-15.559	-5.113	-172.128	174.531
657	2	-4.540	-186.130	-201.388	-9.355	-4.060	-186.661	177.059
657	3	-6.419	-150.848	-197.783	-20.394	-3.457	-153.810	171.931
657	4	-3.193	-212.280	-277.297	1.105	-3.183	-212.286	0.303
657	5	-5.072	-176.948	-273.693	-10.433	-4.441	-177.579	175.539
657	6	31.009	-449.494	99.729	99.249	50.701	-469.187	11.223
657	7	33.894	-473.913	170.923	108.349	56.045	-496.065	11.555
657	8	-51.353	173.676	-797.124	-150.622	249.228	-125.605	116.538
657	9	-8.454	-135.334	-220.944	-27.097	-2.909	-140.879	168.435
658	1	2.421	-180.937	-225.861	3.013	-2.471	-180.986	0.941
658	2	1.363	-191.436	-203.006	0.115	1.363	-191.436	0.034
658	3	4.333	-172.304	-199.968	16.236	5.813	-173.794	5.208
658	4	-0.272	-206.177	-283.110	-10.352	0.247	-206.596	177.129
658	5	2.697	-187.045	-280.072	5.768	2.873	-187.220	1.739
658	6	-15.300	-373.784	84.850	-41.691	-10.515	-378.569	173.453
658	7	-17.549	-389.045	158.628	-49.626	-11.017	-394.577	172.501
658	8	26.618	50.245	-796.601	71.248	110.653	-33.789	49.707
658	9	5.391	-161.805	-222.823	19.133	7.553	-163.967	5.446
659	1	-0.768	-181.583	-225.874	0.600	-0.756	-181.585	0.190
659	2	-0.044	-191.653	-202.654	-1.627	-0.030	-191.667	179.513
[illegible]	3	-4.688	-174.427	-201.530	15.379	-3.386	-175.809	5.135

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LOAD COMB	R-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	RZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
4	3.278	-205.098	-281.244	-11.850	3.950	-205.770	176.755
5	-1.365	-187.872	-290.120	5.155	-1.223	-188.014	1.582
6	10.428	-367.419	30.971	-29.686	12.746	-369.737	175.535
7	12.486	-380.656	165.561	-37.397	16.012	-384.182	174.614
8	-17.731	39.711	-394.910	55.500	73.492	-51.501	58.531
9	-5.413	-164.356	-224.750	17.606	-3.486	-166.283	6.246
1	1.261	-192.423	-225.847	-17.661	2.858	-194.020	174.832
2	-0.257	-196.937	-201.356	-10.728	0.314	-197.519	176.892
3	3.189	-196.171	-203.602	-21.364	5.452	-198.435	173.951
4	-4.394	-197.354	-272.738	-0.403	-4.393	-197.355	179.880
5	-0.937	-196.588	-274.984	-11.059	-0.314	-197.211	176.775
6	-28.875	-279.643	121.003	112.658	14.309	-322.828	20.971
7	-30.214	-283.018	195.073	122.098	19.126	-332.359	22.004
8	33.607	-94.566	-828.489	-158.193	149.509	-210.468	145.429
9	4.717	-191.657	-228.393	-28.317	8.719	-195.659	171.956
1	-5.711	-194.013	-225.819	-17.892	-4.026	-195.698	174.620
2	-4.412	-197.838	-201.706	-10.915	-3.798	-198.452	176.780
3	-7.210	-198.633	-205.505	-21.620	-4.798	-201.044	173.635
4	-3.478	-196.942	-271.581	-0.413	-3.477	-196.942	179.877
5	-6.276	-197.736	-275.380	-11.117	-5.633	-198.380	176.688
6	15.238	-268.711	131.569	113.132	54.801	-308.274	19.274
7	18.596	-270.961	206.569	122.503	63.469	-315.834	20.118
8	-35.646	-111.308	-842.923	-168.788	99.498	-246.453	141.316
9	-8.509	-194.808	-230.617	-28.596	-4.219	-199.099	171.467
1	-1.319	-205.180	-229.208	0.590	-1.317	-205.182	0.166
2	-1.769	-203.617	-204.056	-1.656	-1.756	-203.631	179.529
3	2.174	-220.417	-208.009	15.381	3.232	-221.475	3.934
4	-3.994	-191.309	-278.104	-12.070	-3.219	-192.084	175.328
5	-0.050	-208.109	-282.053	4.967	0.068	-208.228	1.367
6	-7.336	-195.278	122.914	-30.319	-2.339	-191.275	170.640
7	-8.638	-178.227	200.594	-37.966	-0.527	-186.338	167.940
8	10.127	-243.433	-850.495	55.759	21.847	-255.153	11.870
9	2.624	-221.980	-233.161	17.628	4.000	-223.355	4.460
1	-4.476	-205.819	-229.222	3.007	-4.431	-205.864	0.955
2	-3.142	-203.827	-203.709	0.143	-3.142	-203.827	0.041
3	-6.822	-222.530	-209.552	15.170	-5.516	-223.735	4.263
4	-0.395	-190.226	-276.265	-10.099	3.139	-190.762	176.963
5	-4.075	-208.929	-282.107	5.927	-3.904	-209.100	1.656
6	18.467	-179.913	128.956	-40.871	25.558	-188.004	168.803
7	21.475	-170.838	207.442	-48.340	33.158	-182.531	166.536
8	-34.230	-253.950	-858.696	70.570	-13.463	-274.718	16.376
9	-8.156	-224.522	-235.064	19.034	-6.494	-226.184	4.989
1	2.657	-215.118	-227.881	-14.469	3.514	-216.075	176.215
2	0.351	-207.969	-201.446	-8.144	0.669	-208.187	177.753
3	2.848	-243.211	-211.052	-19.672	4.411	-244.773	175.457
4	-4.170	-181.258	-286.334	2.205	-4.143	-181.295	0.713
5	-1.673	-216.609	-276.440	-9.322	-1.269	-217.013	177.521
6	-44.983	-96.737	152.949	102.537	34.891	-176.612	37.918
7	-45.859	-77.906	239.818	111.797	51.055	-174.822	40.921
8	50.441	-380.434	-873.889	-152.255	98.818	-428.811	162.374

E652

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
664	9	5.154	-250.459	-237.487	-25.997	7.771	-253.076	174.251
665	1	-0.466	-148.902	-215.763	10.249	0.238	-149.607	3.931
[illegible]	2	0.273	-170.559	-192.934	5.577	0.455	-170.741	1.868
[illegible]	3	-4.043	-142.417	-194.332	19.908	-1.506	-144.954	7.542
665	4	3.910	-193.268	-256.789	-4.733	4.022	-197.379	178.553
665	5	-0.406	-169.125	-258.137	8.598	0.030	-169.562	2.910
665	6	11.995	-557.961	113.123	-72.099	20.974	-566.941	172.901
665	7	13.743	-583.899	130.150	-90.820	24.480	-594.635	172.433
665	8	-17.122	320.332	-774.134	114.179	355.326	-52.126	72.956
665	9	-4.783	-120.760	-217.161	23.580	-0.172	-125.371	11.064
666	1	1.131	-169.313	-217.430	-23.558	4.323	-172.706	172.282
666	2	-1.402	-183.057	-193.172	-14.589	-0.238	-184.221	175.437
666	3	2.160	-167.372	-196.945	-23.621	5.381	-171.092	172.236
666	4	-5.852	-196.959	-250.272	-4.293	-5.756	-197.056	178.713
666	5	-2.289	-181.774	-254.046	-13.324	-1.305	-182.758	175.777
666	6	-48.435	-425.738	145.469	148.624	3.076	-477.250	19.116
666	7	-50.834	-441.147	211.716	158.511	5.428	-497.410	19.542
666	8	54.976	124.318	-802.290	-216.029	308.441	-129.147	130.441
666	9	4.694	-154.328	-221.203	-32.590	11.114	-160.748	168.856
667	1	-10.854	-172.361	-219.687	-24.956	-7.085	-176.129	171.413
667	2	-9.490	-184.947	-194.541	-15.509	-8.129	-186.308	174.987
667	3	-10.745	-170.963	-199.500	-23.477	-7.375	-174.332	171.833
667	4	-9.038	-197.586	-250.228	-5.440	-8.881	-197.743	178.348
667	5	-10.292	-183.602	-255.187	-13.407	-9.261	-184.633	175.602
667	6	13.389	-410.397	160.339	157.986	65.803	-462.811	18.354
[illegible]	7	15.825	-424.647	227.562	167.597	72.343	-481.165	18.635
[illegible]	8	-41.113	100.859	-823.478	-226.909	267.627	-207.881	126.314
667	9	-12.108	-158.376	-224.646	-32.923	-5.039	-165.445	167.881
668	1	2.281	-190.979	-222.187	7.699	2.597	-191.285	2.277
668	2	0.964	-195.604	-196.527	3.654	1.032	-195.672	1.064
668	3	3.828	-194.667	-201.905	17.384	5.427	-196.265	5.107
668	4	-0.933	-196.306	-255.984	-6.910	-0.690	-197.049	177.982
8	5	1.930	-195.268	-261.363	7.319	2.200	-196.138	2.116
3	6	-21.241	-281.298	160.829	-61.553	-7.409	-295.130	167.334
3	7	-23.275	-284.444	231.198	-70.066	-5.665	-302.054	165.892
3	8	31.695	-91.325	-841.287	98.713	96.498	-146.128	29.036
3	9	5.145	-190.041	-227.566	21.928	7.578	-192.474	6.331
569	1	-4.693	-192.569	-223.166	7.467	-4.397	-192.865	2.272
569	2	-3.183	-196.506	-196.888	3.447	-3.122	-196.567	1.021
569	3	-6.571	-197.127	-203.810	17.529	-4.954	-198.744	5.241
569	4	-0.030	-196.403	-254.878	-6.919	0.212	-196.647	177.984
569	5	-3.418	-197.024	-261.799	7.252	-3.146	-197.296	2.145
569	6	22.843	-270.392	171.279	-61.086	35.059	-282.608	168.690
69	7	25.508	-272.407	242.532	-69.554	40.989	-287.888	167.469
69	8	-37.548	-108.153	-855.661	98.115	31.455	-177.057	35.118
69	9	-8.081	-193.139	-230.388	21.649	-5.593	-195.689	6.582
70	1	-4.294	-213.409	-225.145	-26.115	-1.082	-216.621	172.388
70	2	-7.511	-209.299	-197.754	-16.249	-6.211	-210.600	175.425
[illegible]	3	-4.944	-223.253	-207.486	-24.306	-2.271	-225.927	173.723

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LOAD COMB	R-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	RZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
4	-11.971	-196.288	-248.942	-6.194	-11.769	-196.490	178.105
5	-9.404	-210.242	-258.574	-14.161	-8.411	-211.235	175.986
6	-69.392	-140.022	196.573	164.903	63.935	-273.350	38.956
7	-71.054	-131.518	257.079	174.874	76.182	-278.755	40.396
8	63.291	-303.122	-977.725	-237.131	179.744	-419.576	153.844
9	-1.728	-227.363	-234.877	-34.172	3.333	-232.425	171.574
1	-16.764	-216.381	-227.520	-25.148	-13.645	-219.501	172.929
2	-15.799	-211.246	-199.183	-16.319	-14.446	-212.599	175.259
3	-18.162	-226.429	-210.112	-25.245	-15.146	-229.441	173.186
4	-15.161	-196.927	-248.930	-6.002	-14.963	-197.125	178.110
5	-17.524	-212.106	-259.859	-14.928	-16.385	-213.244	175.638
6	-2.442	-123.456	212.494	144.578	93.779	-219.678	33.645
7	0.936	-113.734	284.011	154.221	108.135	-220.933	34.803
8	-39.330	-328.165	-900.294	-214.465	74.809	-442.305	151.978
9	-19.127	-231.560	-238.449	-34.074	-13.795	-236.892	171.107
1	-1.814	-235.604	-229.749	9.247	-1.449	-235.969	2.261
2	-2.357	-222.249	-200.607	4.444	-2.268	-222.339	1.157
3	1.385	-250.087	-211.485	17.842	2.645	-251.347	4.038
4	-4.698	-196.524	-254.211	-6.124	-4.502	-196.720	178.173
5	-0.954	-224.363	-265.089	7.274	-0.717	-224.599	1.863
6	-10.222	10.529	219.490	-75.916	76.776	-76.469	131.108
7	-11.326	31.441	294.143	-84.659	97.375	-77.260	127.912
8	11.327	-526.190	-923.704	115.820	35.221	-550.084	11.656
9	1.929	-263.442	-240.627	22.645	3.847	-265.361	4.842
1	-5.684	-142.437	-207.131	-13.220	-4.418	-143.703	174.528
2	-16.953	-174.503	-187.185	4.236	-16.836	-174.620	1.557
3	-12.112	-151.146	-192.649	-4.784	-11.948	-151.310	178.231
4	-26.146	-202.779	-231.573	18.343	-24.261	-204.664	5.867
5	-21.305	-179.422	-237.037	9.272	-20.763	-179.964	3.345
6	-229.649	-753.497	90.230	330.437	-71.794	-921.352	25.534
7	-237.321	-793.786	146.217	344.799	-72.496	-958.612	25.549
8	233.365	545.275	-687.838	-386.401	905.007	-27.366	124.310
9	-0.843	-119.080	-212.595	-22.291	3.219	-123.143	169.670
1	3.521	-163.437	-211.555	22.113	5.401	-166.315	7.418
2	0.670	-178.911	-186.953	15.754	2.042	-180.283	4.976
3	2.651	-168.305	-194.358	25.946	6.509	-171.863	8.456
4	-1.229	-191.901	-232.215	5.878	-1.048	-192.082	1.764
5	0.751	-180.395	-239.620	15.070	2.161	-182.405	5.014
6	-50.884	-463.107	170.595	-96.943	-29.223	-484.768	167.405
7	-53.873	-477.430	232.805	-105.715	-28.954	-502.350	166.736
8	65.192	168.729	-795.624	159.790	294.928	-51.007	53.975
9	5.503	-152.531	-218.960	32.306	11.952	-158.880	11.113
1	-8.456	-166.291	-213.826	20.715	-5.792	-168.955	7.354
2	-7.420	-180.309	-188.339	14.834	-6.153	-182.069	4.855
3	-10.255	-171.102	-196.922	26.091	-6.129	-175.228	8.987
4	-4.426	-192.544	-232.322	4.730	-4.307	-192.663	1.439
5	-7.261	-182.836	-240.804	15.987	-5.817	-184.280	5.160
6	10.915	-447.799	135.351	-87.532	27.359	-463.952	169.550
7	12.754	-460.957	248.562	-96.530	31.727	-479.910	168.903
8	-30.894	145.271	-816.805	148.911	230.300	-115.823	60.302

E659

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
675	9	-11.301	-156.584	-222.409	31.972	-4.576	-163.309	11.878
676	1	3.254	-187.479	-211.965	-18.653	10.015	-189.240	174.604
[illegible]	2	-2.883	-192.236	-185.729	-5.589	-2.713	-192.409	178.311
[illegible]	3	2.712	-191.908	-196.577	-11.254	3.360	-192.557	176.701
[illegible]	4	-12.511	-192.551	-225.371	4.138	-12.416	-192.646	1.316
676	5	-6.915	-192.224	-235.219	-1.527	-6.903	-192.236	179.523
676	6	-212.629	-280.013	188.436	238.695	-5.260	-487.382	40.983
676	7	-220.396	-283.314	249.377	248.866	-1.008	-502.702	41.397
676	8	244.798	-84.724	-805.559	-296.786	419.489	-259.415	149.518
675	9	13.849	-187.152	-221.813	-24.318	16.750	-190.052	173.198
677	1	-12.831	-192.604	-216.506	-18.453	-10.956	-194.478	174.199
677	2	-16.164	-195.432	-189.434	-7.843	-15.821	-195.775	177.499
677	3	-15.673	-196.372	-200.511	-12.445	-14.820	-197.225	176.078
677	4	-18.668	-193.945	-226.186	0.326	-18.668	-193.946	0.106
677	5	-18.178	-194.885	-237.263	-4.275	-18.075	-194.988	178.614
677	6	-81.383	-247.445	220.040	190.902	43.762	-372.592	33.247
677	7	-82.087	-249.029	282.518	199.092	50.323	-381.441	33.627
677	8	57.140	-130.955	-849.093	-244.080	224.665	-298.480	145.536
677	9	-12.340	-193.543	-227.584	-23.055	-9.453	-196.431	172.861
678	1	-4.280	-216.798	-221.680	21.493	-2.128	-218.950	5.717
678	2	-6.302	-208.547	-192.455	14.931	-5.205	-209.643	4.199
678	3	-3.375	-219.036	-203.849	26.491	-0.168	-222.242	6.901
678	4	-8.635	-196.215	-232.330	4.185	-8.542	-196.308	1.277
678	5	-5.708	-206.704	-243.724	15.746	-4.482	-207.930	4.452
678	6	-42.230	-58.363	250.723	-100.452	50.478	-151.073	137.295
678	7	-44.422	-48.545	317.272	-109.927	63.462	-156.430	135.537
[illegible]	8	39.983	-393.191	-904.213	164.059	95.104	-448.312	18.571
[illegible]	9	-1.353	-227.287	-233.074	33.054	3.382	-232.024	9.154
679	1	-16.753	-219.770	-224.069	22.461	-14.298	-222.226	6.238
679	2	-14.594	-210.494	-193.900	14.861	-13.473	-211.615	4.314
679	3	-16.594	-222.206	-206.484	25.553	-13.466	-225.335	6.979
679	4	-11.837	-196.863	-232.368	4.238	-11.737	-196.962	1.327
79	5	-13.837	-208.575	-244.952	14.979	-12.692	-209.721	4.373
79	6	24.694	-41.815	266.540	-120.777	116.711	-133.833	142.697
79	7	27.545	-30.782	334.122	-130.580	132.179	-135.416	141.295
79	8	-62.638	-418.227	-926.766	186.731	17.403	-498.269	23.202
79	9	-18.754	-231.483	-236.653	33.152	-13.707	-236.530	8.656
30	1	-15.165	-245.180	-226.111	-19.252	-13.565	-246.780	175.248
30	2	-19.413	-226.990	-195.224	-10.862	-18.847	-227.557	177.012
30	3	-17.106	-247.625	-209.786	-15.240	-16.103	-248.628	176.233
30	4	-23.693	-202.424	-227.498	-3.902	-23.608	-202.510	178.749
30	5	-21.385	-223.059	-242.061	-8.280	-21.046	-223.399	177.552
30	6	-100.865	105.372	284.659	145.619	180.687	-176.180	62.552
30	7	-102.804	125.514	350.809	152.517	201.864	-179.154	63.407
30	8	74.612	-634.145	-940.107	-197.892	126.122	-685.655	165.410
30	9	-12.859	-255.915	-240.673	-23.630	-10.669	-268.003	174.708
1	1	18.581	-48.791	-179.451	57.385	51.955	-82.155	29.923
1	2	11.613	-63.879	-154.974	48.704	35.486	-87.752	26.112
[illegible]	[illegible]	12.257	-55.986	-165.908	57.153	44.708	-88.426	29.579

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LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
4	8.424	-74.822	-186.677	37.949	23.127	-89.526	21.178
5	9.078	-65.929	-197.611	46.398	31.059	-88.901	25.340
6	-120.486	-343.196	215.740	-121.711	-66.876	-396.807	156.227
7	-124.516	**-356.007**	272.495	-131.445	-65.119	-415.405	155.683
8	166.538	**274.861**	-750.774	256.144	482.025	-41.425	50.927
9	19.235	**-48.897**	-190.384	66.434	62.089	-83.752	32.324
1	-6.511	-136.506	-200.013	-8.413	-5.969	-137.049	176.312
2	-12.560	-142.568	-173.630	-10.885	-11.655	-143.474	175.246
3	-12.086	-139.860	-186.049	-6.253	-11.781	-140.165	177.205
4	-16.183	-145.747	-201.270	-16.339	-14.154	-147.776	172.922
5	-15.709	-143.038	-213.689	-11.706	-14.641	-144.105	174.790
6	-129.857	-254.013	235.615	-55.406	-108.727	-275.143	159.125
7	-131.736	-259.143	292.982	-59.081	-108.556	-282.323	158.578
8	120.992	-6.039	-809.954	44.161	134.836	-19.882	17.405
9	-6.037	-133.798	-212.433	-3.781	-5.925	-133.910	178.306
1	-20.468	-139.868	-202.854	7.322	-20.021	-140.315	3.496
2	-21.389	-144.669	-175.293	2.774	-21.326	-144.731	1.288
3	-23.124	-142.504	-188.223	8.449	-22.529	-143.099	4.028
4	-20.840	-146.786	-201.802	-3.737	-20.729	-146.897	178.301
5	-22.575	-144.622	-214.732	1.936	-22.544	-144.653	0.909
6	-42.156	-232.314	256.403	-79.613	-13.225	-261.244	160.029
7	-40.283	-236.557	314.512	-85.209	-8.453	-268.387	159.516
8	-1.772	-36.119	-837.605	104.728	87.180	-125.073	40.343
9	-22.204	-137.703	-215.784	12.997	-20.759	-139.147	6.342
1	9.027	-187.743	-207.840	42.802	17.934	-196.650	11.755
2	-0.227	-185.179	-180.504	32.753	5.401	-190.809	9.751
3	4.254	-188.038	-192.737	42.270	13.136	-196.920	11.866
4	-7.034	-180.937	-209.698	20.900	-4.556	-183.315	6.761
5	-2.552	-183.696	-221.931	30.417	2.418	-188.667	9.282
6	-172.915	-137.125	244.142	-151.674	-2.294	-307.746	131.635
7	-179.923	-134.514	302.983	-162.145	6.507	-320.946	131.014
8	206.590	-241.621	-839.718	257.528	323.870	-358.901	24.485
9	13.508	-190.601	-220.072	52.318	26.137	-203.230	13.571
5 1	-12.061	-192.874	-212.395	43.002	-2.355	-202.580	12.713
5 2	-13.511	-188.383	-183.224	30.499	-8.344	-193.550	9.615
5 3	-14.133	-192.508	-196.682	41.079	-5.127	-201.514	12.365
5 4	-13.200	-182.245	-210.553	17.088	-11.490	-183.955	5.715
5 5	-13.823	-186.369	-224.011	27.653	-9.494	-190.697	8.891
5 6	**-41.682**	**-104.575**	275.681	-199.473	128.808	-275.066	139.479
5 7	**-41.621**	**-100.242**	336.068	-211.918	143.004	-284.867	139.937
5 8	18.932	**-207.867**	-883.279	310.234	211.620	-480.555	31.844
5 9	-12.684	**-196.999**	-225.853	53.581	1.760	-211.444	15.087
6 1	-15.260	-213.562	-215.236	27.132	-11.615	-217.207	7.652
6 2	-14.930	-200.822	-184.126	20.811	-12.628	-203.123	6.310
6 3	-16.387	-211.071	-199.392	26.899	-12.739	-214.719	7.723
6 4	-14.018	-186.434	-207.121	13.030	-13.039	-187.413	4.297
6 5	-15.476	-196.683	-222.367	19.117	-13.481	-198.678	5.957
6 6	-11.609	35.613	313.938	-95.495	110.376	-86.366	128.055
6 7	-9.182	47.520	374.884	-102.005	125.041	-86.703	127.233
6 8	-22.935	-484.518	-925.449	161.966	28.217	-535.771	17.527

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ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS AXIAL	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
686	9	-16.718	-223.811	-230.502	33.220	-11.519	-229.010	8.893
687	1	-13.422	-214.215	-215.340	21.500	-16.088	-216.548	5.193
[illegible]	2	-15.431	-200.830	-183.668	19.461	-13.410	-202.851	5.923
[illegible]	3	-17.826	-211.304	-199.122	22.011	-15.353	-213.777	5.409
[illegible]	4	-12.724	-185.977	-226.109	16.663	-11.136	-187.565	5.444
687	5	-15.119	-196.451	-221.563	19.213	-13.105	-198.464	5.982
687	6	37.777	47.754	325.129	-17.327	60.797	24.734	126.969
687	7	42.182	50.108	386.472	-19.847	72.922	29.368	122.848
687	8	-82.709	-498.947	-937.368	65.295	-72.707	-508.949	9.709
687	9	-20.817	-224.689	-230.794	24.050	-18.018	-227.488	5.637
688	1	-13.119	-240.305	-220.756	40.877	-5.988	-247.436	9.896
688	2	-15.083	-213.194	-187.371	28.494	-11.066	-217.211	8.024
688	3	-12.788	-232.616	-203.211	37.881	-6.444	-238.961	9.508
688	4	-17.055	-185.968	-210.770	15.859	-15.579	-187.444	5.317
688	5	-14.760	-205.390	-226.609	25.245	-11.474	-208.677	7.417
688	6	-50.868	299.536	350.486	-200.485	382.322	-143.655	114.835
688	7	-52.380	314.220	414.234	-212.058	411.219	-149.379	114.580
688	8	29.626	-819.099	-981.106	305.108	128.019	-916.491	17.873
688	9	-10.824	-259.727	-236.596	50.264	-1.057	-269.495	10.996
689	1	-134.291	-53.628	-203.736	-67.247	-15.545	-172.375	119.523
689	2	-99.089	-58.240	-169.036	-77.711	1.685	-159.015	127.637
689	3	-123.118	-56.157	-187.711	-69.967	-12.073	-167.203	122.214
689	4	-62.386	-61.354	-181.140	-89.493	27.624	-151.364	134.835
689	5	-86.415	-59.272	-199.815	-81.749	10.024	-155.711	130.287
689	6	556.679	-144.032	405.783	-273.018	650.494	-237.847	161.036
689	7	588.313	-147.632	466.317	-282.334	684.147	-243.466	161.251
[illegible]	8	-881.964	44.950	-984.029	154.720	70.094	-907.108	80.759
[illegible]	9	-158.320	-51.546	-222.411	-59.504	-24.990	-184.876	114.050
[illegible]	1	-13.605	-167.819	-204.166	18.471	-11.423	-170.001	6.736
[illegible]	2	-13.630	-169.681	-176.865	5.911	-13.399	-169.912	2.237
[illegible]	3	-19.861	-169.097	-190.686	14.893	-17.399	-170.559	5.507
[illegible]	4	-20.658	-170.683	-198.706	-8.010	-20.232	-171.109	176.952
[illegible]	5	-20.889	-170.098	-212.527	0.971	-20.883	-170.105	0.373
[illegible]	6	-115.857	-204.509	256.109	-228.956	73.024	-393.390	140.478
[illegible]	7	-117.301	-205.757	311.788	-239.822	82.336	-405.396	140.224
[illegible]	8	92.677	-128.017	-829.551	284.844	287.801	-323.141	34.412
[illegible]	9	-13.835	-167.234	-217.987	27.453	-9.071	-172.000	9.847
[illegible]	1	-27.565	-171.187	-207.027	34.209	-19.833	-178.919	12.736
[illegible]	2	-27.461	-171.788	-178.548	19.572	-24.854	-174.395	7.587
[illegible]	3	-29.901	-171.747	-192.877	29.596	-23.974	-177.674	11.325
[illegible]	4	-25.322	-171.733	-139.274	4.592	-25.178	-171.877	1.795
[illegible]	5	-27.761	-171.692	-213.504	14.615	-25.292	-173.161	5.740
[illegible]	6	-28.163	-182.824	276.865	-253.162	159.215	-370.203	143.493
[illegible]	7	-25.349	-183.172	333.284	-265.955	172.833	-381.855	143.338
	8	-30.096	-158.113	-857.243	345.412	257.188	-445.397	39.751
	9	-30.005	-171.146	-221.356	44.233	-17.288	-193.863	15.339
	1	-108.409	-210.541	-229.030	4.270	-108.231	-210.719	2.390
	2	-86.797	-207.001	-195.527	-7.222	-86.364	-207.434	176.574
[illegible]	[illegible]	-101.304	-209.743	-213.223	0.789	-101.299	-209.749	0.417

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MENT	LOAD COMB	Q-STRESS (RADIAL)	Q-STRESS AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
692	4	-54.797	-202.533	-208.854	-19.408	-62.115	-205.215	172.130
692	5	-79.305	-205.274	-226.549	-11.397	-78.282	-206.297	174.371
692	6	314.392	-140.397	357.227	-221.704	405.100	-230.495	157.881
[illegible]	7	334.943	-137.390	416.477	-231.633	429.615	-232.063	157.774
[illegible]	8	-567.751	-285.272	-993.445	249.331	-140.825	-712.198	59.814
692	9	-122.917	-213.283	-245.716	12.282	-121.277	-214.922	7.623
693	1	-88.902	-205.575	-223.701	35.279	-79.064	-215.414	15.332
693	2	-77.556	-204.614	-192.829	26.211	-72.362	-209.808	11.212
693	3	-84.988	-205.582	-208.736	32.344	-76.860	-213.709	14.125
693	4	-66.270	-202.802	-208.725	17.201	-64.136	-204.935	7.271
693	5	-73.701	-203.770	-224.632	23.334	-69.641	-207.830	9.359
693	6	132.714	-186.028	311.273	-142.475	187.115	-240.429	159.102
693	7	143.758	-185.293	368.154	-150.492	202.204	-243.739	158.775
693	8	-330.116	-225.517	-922.352	228.292	-43.610	-512.023	51.451
693	9	-96.334	-206.544	-239.608	41.413	-82.507	-220.371	18.463
694	1	-11.747	-202.215	-209.013	32.378	-6.393	-207.568	9.388
694	2	-13.562	-198.001	-180.105	20.899	-11.224	-200.340	6.384
694	3	-13.438	-201.204	-194.509	28.784	-9.124	-205.518	8.523
694	4	-14.080	-193.539	-200.301	9.409	-13.588	-194.031	2.993
694	5	-13.956	-196.742	-214.704	17.295	-12.334	-198.364	5.358
694	6	-48.698	-119.918	283.929	-192.569	111.525	-280.142	140.238
694	7	-48.776	-115.969	340.407	-202.725	123.117	-287.863	139.705
694	8	27.075	-291.962	-868.043	276.732	186.973	-451.860	30.019
694	9	-11.623	-205.418	-223.417	40.253	-3.590	-213.450	11.282
695	1	-14.911	-202.868	-209.131	26.745	-11.179	-206.599	7.943
695	2	-14.065	-198.009	-179.660	19.548	-12.011	-200.064	6.000
[illegible]	3	-14.873	-201.437	-194.249	23.896	-11.866	-204.449	7.184
[illegible]	4	-12.792	-193.085	-199.338	13.042	-11.954	-194.024	4.115
695	5	-13.604	-196.512	-213.927	17.390	-11.966	-198.151	5.333
95	6	0.682	-107.788	295.195	-114.392	73.044	-180.151	147.583
95	7	2.584	-103.379	351.976	-120.558	81.289	-182.083	146.862
95	8	-32.705	-306.308	-879.988	180.052	56.620	-395.634	26.386
95	9	-15.723	-206.295	-223.720	31.093	-10.778	-211.240	9.036
6	1	-60.038	-143.187	-204.361	71.319	-19.398	-194.177	29.388
6	2	-57.957	-134.580	-173.979	66.961	-19.122	-173.416	30.112
6	3	-59.329	-140.185	-189.515	69.755	-19.133	-180.381	29.352
6	4	-55.803	-123.994	-190.211	62.681	-19.069	-162.736	30.377
6	5	-57.174	-131.599	-205.748	65.475	-19.075	-169.697	30.134
6	6	-19.472	26.117	321.355	-14.317	30.240	-23.596	105.356
96	7	-16.331	33.398	377.633	-18.049	39.258	-22.191	107.987
96	8	-105.332	-326.122	-892.397	163.950	-18.073	-413.381	28.023
96	9	-61.460	-148.792	-219.897	74.113	-19.105	-191.146	29.747
97	1	-12.063	-56.415	-186.979	-31.316	4.131	-72.620	152.654
97	2	-36.739	-75.395	-166.662	-5.856	-35.972	-76.742	171.673
97	3	-26.837	-55.777	-175.763	-17.326	-20.244	-72.370	159.167
97	4	-56.580	-90.600	-200.563	13.952	-51.680	-95.519	19.713
97	5	-46.783	-80.512	-209.654	2.482	-46.606	-80.694	4.187
97	6	-503.394	-437.449	127.572	471.400	2.037	-943.081	47.206
97	7	-519.755	-453.413	190.720	490.522	5.058	-978.226	46.934
[illegible]	8	510.677	359.280	-968.828	-572.929	1,012.887	-142.929	138.763

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ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
697	9	-2.170	-46.313	-136.280	-42.795	23.900	-72.389	148.544
698	1	-21.758	7.640	-173.708	41.010	36.506	-60.523	54.859
698	2	-32.588	-1.897	-148.653	33.130	19.322	-53.808	57.406
698	3	-30.589	2.318	-151.232	40.104	29.212	-57.403	56.153
698	4	-39.182	-9.611	-174.427	21.663	1.331	-50.624	51.157
698	5	-37.183	-5.394	-187.006	28.577	-11.410	-53.389	53.541
698	6	-239.509	-181.427	239.011	-114.464	-92.377	-328.559	127.332
698	7	-244.909	-188.258	294.215	-121.436	-91.888	-341.279	128.435
698	8	207.583	210.192	-753.242	205.313	414.206	3.570	45.132
698	9	-19.759	11.857	-186.287	47.924	46.513	-54.415	54.128
699	1	-31.856	-12.704	-175.965	32.470	11.572	-56.132	53.215
699	2	-38.508	-11.088	-148.272	27.793	6.192	-55.789	58.128
699	3	-39.449	-13.130	-163.252	32.613	9.878	-61.458	55.987
699	4	-39.575	-7.311	-166.479	19.518	1.878	-48.765	54.787
699	5	-40.516	-9.353	-181.459	24.337	3.963	-53.833	51.314
699	6	-165.769	20.334	295.457	-61.210	38.662	-184.097	106.668
699	7	-168.107	21.716	350.403	-65.395	42.064	-188.455	107.283
699	8	109.815	-45.867	-807.318	130.021	183.515	-119.567	29.546
699	9	-32.797	-14.746	-190.945	37.289	14.594	-62.138	51.803
700	1	-76.006	-38.965	-188.708	11.360	-35.758	-79.213	74.238
700	2	-51.299	-46.209	-156.680	12.908	-35.597	-61.911	50.576
700	3	-70.601	-42.984	-174.367	14.139	-37.029	-76.556	67.161
700	4	-21.383	-50.804	-169.402	10.713	-17.895	-54.292	13.033
700	5	-40.685	-47.579	-187.088	11.945	-31.699	-56.564	36.951
700	6	410.329	-180.441	370.104	40.762	413.129	-183.240	3.928
700	7	432.974	-186.390	427.890	41.548	435.749	-189.165	3.820
700	8	-599.073	116.158	-910.915	-23.036	116.899	-599.814	91.843
700	9	-95.309	-35.739	-206.395	12.591	-33.187	-97.861	78.341
701	1	11.911	-2.128	-158.453	14.024	20.574	-10.791	31.704
701	2	-22.235	-7.413	-146.976	19.226	5.780	-35.430	55.539
701	3	-6.910	-5.558	-157.997	19.054	12.795	-25.363	45.945
701	4	-53.665	-11.020	-174.231	20.161	-2.997	-61.688	68.301
701	5	-38.349	-9.255	-185.252	19.999	0.910	-48.534	53.310
701	6	-670.965	-107.165	175.839	116.730	-83.952	-694.177	78.753
701	7	-693.333	-110.577	227.480	119.693	-86.951	-716.959	78.334
701	8	733.368	110.186	-670.748	-97.570	748.297	95.257	171.306
701	9	27.229	-0.373	-179.479	13.862	32.988	-6.133	22.563
702	1	-42.843	2.679	-177.437	-0.541	2.685	-42.350	90.681
702	2	-45.409	-4.793	-150.315	13.186	-0.389	-49.314	73.521
702	3	-49.112	-2.117	-154.893	7.779	-0.863	-50.367	80.940
702	4	-42.091	-9.416	-170.549	23.343	3.149	-54.657	52.209
702	5	-45.794	-6.740	-185.127	13.436	0.587	-53.123	58.322
702	6	-96.260	-144.519	280.297	272.427	153.103	-393.883	42.459
702	7	-95.044	-149.976	335.771	281.557	160.492	-405.513	42.215
702	8	12.182	162.148	-798.075	-291.811	389.457	-214.125	127.794
702	9	-46.547	5.355	-192.015	-5.947	5.229	-47.220	96.454
703	1	-52.849	-17.636	-179.638	-9.037	-15.452	-55.033	103.636
703	2	-51.258	-13.961	-149.388	7.809	-12.391	-52.827	79.638
703	3	-57.885	-17.540	-156.863	0.322	-13.537	-57.888	89.342

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?	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	ZEETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
3	4	-42.430	-7.090	-162.522	21.695	3.220	-52.741	64.580
3	5	-49.257	-10.559	-173.332	14.208	-5.382	-53.743	71.744
3	6	-22.845	57.159	336.573	325.333	344.846	-313.533	48.556
[illegible]	[illegible]	-18.604	59.905	391.852	337.249	360.177	-318.875	48.319
[illegible]	8	-35.006	-93.733	-851.356	-366.541	277.197	-455.937	135.341
3	9	-59.476	-21.215	-196.518	-16.524	-15.066	-65.623	110.412
4	1	-71.861	-1.559	-177.444	54.479	28.124	-101.545	61.415
4	2	-58.766	-5.873	-147.380	34.745	11.345	-75.985	63.538
4	3	-72.623	-4.245	-165.161	49.990	22.129	-98.998	62.134
4	4	-35.929	-9.690	-156.284	5.547	-8.565	-37.054	78.539
4	5	-49.786	-8.062	-174.065	20.793	0.530	-58.379	67.347
4	6	189.045	-88.313	349.518	-343.594	420.891	-320.159	145.990
4	7	201.354	-90.798	403.343	-357.951	441.888	-331.332	146.110
4	8	-345.721	89.410	-853.511	466.784	386.842	-643.153	57.435
4	9	-85.718	0.067	-195.224	59.724	39.036	-124.687	60.799
5	1	-28.404	-11.784	-176.423	-26.800	7.964	-48.154	126.386
5	2	-42.915	-12.157	-150.065	3.358	-11.805	-43.278	83.839
5	3	-39.737	-13.582	-164.795	-12.329	-8.687	-44.633	111.656
5	4	-53.707	-9.869	-158.434	34.779	9.321	-72.898	61.110
5	5	-52.529	-11.284	-183.163	19.891	-3.529	-58.284	67.893
5	6	-322.400	-18.753	269.304	577.407	426.457	-767.611	52.366
5	7	-329.074	-19.686	323.395	597.692	443.672	-791.353	52.279
5	8	277.418	-2.627	-778.855	-662.504	814.536	-539.744	140.967
5	9	-25.226	-13.199	-191.153	-42.488	23.698	-62.124	130.972
6	1	-21.828	3.769	-168.923	41.495	34.395	-52.454	53.571
[illegible]	2	-39.912	-5.711	-145.577	31.640	13.153	-58.777	59.195
[illegible]	3	-34.554	-1.178	-159.049	41.636	26.989	-62.722	55.920
6	4	-54.632	-15.553	-164.036	11.615	-12.370	-57.825	74.631
6	5	-49.274	-11.030	-177.508	22.611	-1.295	-59.009	65.751
06	6	-385.970	-197.127	221.020	-160.924	-97.643	-475.454	119.080
06	7	-396.392	-192.959	271.006	-167.747	-98.498	-490.353	119.334
06	8	359.434	203.255	-705.139	244.349	537.359	24.821	36.139
06	9	-15.470	9.302	-182.395	51.491	43.375	-57.044	51.763
07	1	-33.731	-9.348	-169.791	32.202	13.219	-55.299	54.977
07	2	-45.081	-10.045	-144.377	26.919	4.554	-59.681	51.527
07	3	-43.308	-11.243	-159.975	33.723	3.394	-65.046	57.922
07	4	-50.612	-7.527	-155.770	13.381	-3.709	-54.430	74.076
07	5	-49.439	-8.725	-171.369	20.166	-0.414	-57.750	67.622
07	6	-280.384	-21.516	257.554	-77.583	-0.045	-301.855	105.459
07	7	-286.449	-21.962	315.917	-81.357	1.059	-309.471	105.930
07	8	229.696	7.017	-745.749	139.572	296.398	-60.194	35.711
07	9	-31.557	-10.547	-185.390	39.006	19.343	-61.448	52.536
08	1	-86.194	-4.705	-178.847	15.222	-1.954	-88.945	79.736
08	2	-67.712	-7.762	-147.889	19.772	-1.829	-73.646	73.234
08	3	-86.758	-7.480	-167.201	20.118	-2.667	-91.580	75.346
08	4	-31.983	-7.913	-151.350	19.451	2.925	-42.821	60.873
08	5	-51.038	-7.631	-170.663	19.797	0.041	-58.711	68.315
08	6	289.409	-63.834	371.256	104.253	317.383	-92.369	15.275
08	7	303.798	-66.175	424.024	105.975	332.503	-94.380	15.222
[illegible]	8	-468.735	51.452	-870.316	-83.023	74.148	-461.432	33.695

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INT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
708	9	-105.249	-4.423	-198.159	15.568	-2.074	-107.599	81.419
709	1	-5.197	-5.117	-165.256	13.989	13.832	-24.147	45.061
709	2	-37.254	-9.218	-143.959	23.229	3.894	-50.367	50.554
709	3	-22.819	-8.193	-156.708	24.265	9.837	-40.849	53.395
709	4	-73.232	-11.787	-162.424	21.555	-4.979	-80.039	72.433
709	5	-58.797	-10.761	-175.172	22.591	-1.806	-67.752	68.375
709	6	-557.450	-87.057	186.515	101.331	-69.590	-674.917	80.220
709	7	-674.428	-89.410	234.002	103.796	-71.540	-692.298	80.231
709	8	665.675	81.922	-656.497	-73.217	674.718	72.879	172.959
709	9	9.236	-4.091	-178.005	20.025	23.677	-18.532	35.796
710	1	-52.020	-3.226	-173.708	3.284	-3.005	-52.240	86.166
710	2	-54.622	-8.941	-147.011	17.256	-3.149	-60.413	71.456
710	3	-60.341	-7.237	-163.553	11.528	-4.842	-62.736	78.265
710	4	-45.784	-12.347	-156.800	30.809	5.986	-64.119	59.243
710	5	-51.503	-10.644	-173.343	25.071	1.267	-63.415	64.587
710	6	-101.518	-116.418	289.103	285.408	176.537	-394.474	44.252
710	7	-101.307	-120.234	339.563	293.437	182.818	-404.361	44.076
710	8	7.283	119.514	-776.693	-290.909	359.077	-233.278	129.588
710	9	-57.740	-1.522	-190.250	-2.452	-1.415	-57.846	92.493
711	1	-62.722	-16.287	-174.493	-5.963	-15.533	-63.476	97.203
711	2	-59.677	-13.240	-145.756	12.560	-10.060	-62.856	75.794
711	3	-69.518	-17.253	-164.411	3.650	-16.999	-69.772	86.024
711	4	-41.767	-4.302	-148.486	32.552	14.522	-60.593	59.959
711	5	-51.609	-8.314	-167.140	23.642	2.093	-62.018	66.239
711	6	3.532	49.792	335.186	368.160	395.018	-342.692	46.758
711	7	7.033	50.345	384.977	379.243	408.550	-351.171	46.634
711	8	-120.447	-77.177	-816.584	-395.013	296.792	-494.418	133.432
711	9	-72.564	-20.300	-193.147	-14.874	-16.363	-76.501	104.824
712	1	-58.714	-4.234	-167.840	49.463	24.993	-87.942	59.421
712	2	-57.757	-8.190	-141.731	34.240	9.294	-75.242	62.948
712	3	-66.146	-5.798	-159.105	49.304	21.073	-94.018	60.521
712	4	-42.902	-12.334	-145.340	-3.405	-12.329	-42.908	90.760
712	5	-51.292	-10.942	-162.714	14.659	-6.179	-56.055	71.999
712	6	-34.920	-85.188	292.216	-279.562	211.673	-331.781	137.653
712	7	-32.785	-86.936	338.948	-278.229	219.681	-339.404	137.779
712	8	-72.932	78.479	-752.759	358.708	369.383	-363.836	50.958
712	9	-67.104	-2.841	-185.213	64.527	37.112	-107.057	58.235
713	1	-36.206	-12.309	-170.208	-15.031	-5.055	-43.460	115.759
713	2	-50.390	-12.046	-144.965	10.435	-9.390	-53.046	75.720
713	3	-47.906	-14.069	-151.004	-4.025	-13.597	-48.378	95.692
713	4	-61.488	-7.835	-154.407	45.358	18.044	-87.368	60.298
713	5	-59.004	-9.858	-170.445	33.307	5.354	-73.916	64.243
713	6	-326.063	-4.863	256.100	505.812	365.186	-697.112	53.791
713	7	-331.554	-4.740	314.505	520.211	377.121	-713.425	53.719
713	8	261.540	-15.783	-740.924	-544.536	694.908	-439.152	142.141
713	9	-33.723	-14.331	-186.245	-29.493	7.318	-55.073	125.901
714	1	-32.501	3.595	-163.486	35.140	22.951	-54.766	57.642
714	2	-48.463	-5.078	-140.839	29.779	9.279	-63.821	62.718
714	3	-44.701	-3.489	-155.539	38.517	20.413	-67.604	59.329

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
14	4	-62.242	-15.491	-151.415	8.303	-14.060	-63.673	80.221
14	5	-53.430	-11.901	-166.115	17.141	-6.273	-64.138	71.822
14	6	-358.358	-138.984	223.529	-84.979	-109.938	-387.604	108.870
[illegible]	7	-365.226	-142.119	258.395	-96.420	-112.550	-394.735	108.882
14	8	302.266	141.220	-677.928	139.309	381.735	61.702	29.896
14	9	-28.739	4.286	-178.186	43.979	34.752	-59.233	55.239
15	1	-39.196	-9.279	-162.299	29.613	9.217	-56.592	58.012
15	2	-50.754	-10.432	-139.020	27.250	3.304	-64.490	63.247
15	3	-50.321	-11.652	-155.134	33.515	7.858	-69.542	59.857
15	4	-56.330	-7.377	-143.562	11.965	-4.609	-59.399	76.573
15	5	-55.598	-8.597	-159.677	18.331	-2.293	-61.902	71.022
15	6	-291.054	-29.482	244.059	-27.364	-26.650	-293.886	95.309
15	7	-296.776	-30.550	287.703	-27.516	-27.736	-299.591	95.839
15	8	228.209	17.477	-685.758	71.745	250.316	-4.629	17.126
15	9	-37.464	-10.498	-178.413	35.979	14.441	-62.403	55.271
16	1	-76.541	-8.059	-169.131	14.524	-5.105	-79.495	78.507
16	2	-66.183	-9.839	-141.541	21.163	-2.775	-73.247	71.542
16	3	-83.474	-10.670	-161.131	20.437	-5.325	-88.819	75.344
16	4	-27.014	-7.527	-137.184	23.493	8.163	-42.705	56.252
16	5	-44.306	-8.358	-156.774	22.767	2.675	-55.339	64.145
16	6	150.958	-43.810	328.243	146.294	229.982	-119.835	28.378
16	7	155.432	-42.373	373.579	150.121	236.302	-123.243	28.311
16	8	-278.407	31.874	-780.323	-127.267	77.396	-323.929	109.681
16	9	-93.833	-8.890	-188.722	13.798	-6.704	-96.018	81.000
17	1	-16.421	-4.992	-159.194	19.116	9.245	-30.659	53.321
[illegible]	2	-39.300	-8.752	-137.909	23.337	3.864	-51.917	51.602
[illegible]	3	-29.355	-7.553	-151.755	24.680	8.827	-44.737	56.426
17	4	-72.845	-12.422	-149.485	20.411	-6.174	-79.094	72.978
17	5	-61.900	-11.224	-163.331	21.754	-3.156	-69.958	69.675
17	6	-494.073	-81.752	201.633	95.568	-53.924	-516.992	77.099
17	7	-502.195	-83.430	245.543	102.548	-59.666	-525.958	76.953
17	8	455.172	73.729	-644.365	-73.625	463.890	50.011	159.446
17	9	-5.476	-3.794	-173.040	20.459	15.841	-25.112	46.177
18	1	-50.238	-3.120	-154.833	5.651	-2.451	-50.906	83.255
18	2	-55.987	-7.509	-140.465	16.730	-2.295	-61.200	72.692
18	3	-60.980	-6.108	-157.357	11.630	-3.745	-63.343	78.513
18	4	-46.871	-10.322	-143.438	31.190	7.177	-64.870	60.011
18	5	-51.964	-9.422	-160.330	25.090	2.687	-64.274	54.562
18	6	-158.863	-91.032	263.580	234.336	111.829	-361.725	49.117
18	7	-161.948	-93.658	308.003	239.115	113.737	-369.344	49.063
18	8	78.065	89.765	-711.033	-224.294	308.296	-140.455	134.253
18	9	-55.231	-1.720	-181.724	0.551	-1.714	-55.236	89.409
19	1	-55.816	-13.358	-163.576	0.162	-13.057	-55.817	89.792
19	2	-58.222	-11.942	-139.603	14.219	-7.830	-62.234	74.242
19	3	-66.196	-15.139	-155.895	5.662	-14.332	-67.053	82.672
19	4	-41.020	-2.714	-135.554	34.929	17.891	-61.515	59.403
19	5	-49.994	-6.111	-153.845	27.273	7.139	-62.245	64.037
19	6	-92.509	19.151	283.685	291.571	259.596	-333.353	50.372
19	7	-94.673	17.882	326.263	297.633	264.330	-341.428	50.340
[illegible]	8	5.373	-33.583	-713.243	-291.415	275.363	-305.173	135.919

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NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
19	9	-63.790	-16.455	-191.958	-7.394	-15.327	-64.919	98.674
20	1	-54.568	-6.393	-158.124	36.079	14.553	-75.635	51.185
20	2	-57.672	-9.366	-135.211	32.757	7.187	-74.225	63.197
20	3	-65.223	-8.567	-132.435	44.035	15.515	-89.305	61.359
20	4	-41.403	-12.635	-133.223	1.130	-12.590	-41.448	87.753
20	5	-48.954	-11.836	-150.417	12.458	-9.042	-52.748	73.263
20	6	-103.635	-58.097	249.340	-92.600	8.435	-130.138	129.573
20	7	-106.167	-63.015	290.072	-90.834	5.122	-180.305	129.221
20	8	18.931	55.347	-668.260	132.484	170.869	-96.590	48.912
20	9	-62.219	-5.534	-175.318	49.406	23.036	-90.850	59.907
21	1	-40.888	-10.397	-151.756	-3.591	-9.957	-41.328	96.306
21	2	-50.681	-11.081	-138.178	11.692	-7.886	-53.876	74.719
21	3	-51.163	-12.733	-154.852	1.254	-12.693	-51.204	88.133
21	4	-54.594	-5.336	-140.307	42.623	18.057	-79.597	59.604
21	5	-55.075	-8.588	-156.981	32.135	7.368	-71.533	52.919
21	6	-239.946	-20.596	253.284	324.460	212.223	-472.766	54.338
21	7	-243.400	-21.550	296.152	328.655	214.394	-479.345	54.325
21	8	166.273	6.855	-689.858	-315.497	411.975	-238.846	142.089
21	9	-41.370	-12.050	-178.431	-14.129	-6.349	-47.071	111.973
22	1	-33.573	-4.203	-154.624	26.667	11.555	-49.331	59.420
22	2	-47.020	-8.893	-133.852	27.059	5.150	-61.064	62.578
22	3	-43.729	-6.366	-148.694	33.442	13.258	-63.354	59.594
22	4	-61.717	-17.424	-139.013	7.979	-15.030	-63.111	80.093
22	5	-58.425	-14.897	-153.860	14.353	-10.590	-62.733	73.298
22	6	-313.339	-104.331	204.936	17.008	-102.926	-314.713	85.378
22	7	-317.341	-105.290	245.249	21.019	-103.227	-319.404	84.393
22	8	245.477	91.039	-623.320	5.291	245.659	90.917	1.360
22	9	-39.293	-1.675	-169.465	33.041	20.024	-51.984	56.703
23	1	-36.455	-3.264	-151.145	23.423	4.381	-49.702	60.517
23	2	-49.152	-10.749	-131.005	25.464	2.141	-61.052	63.150
23	3	-47.367	-11.179	-146.555	29.845	5.623	-54.175	60.613
23	4	-54.375	-9.523	-131.233	12.600	-5.319	-57.680	75.307
23	5	-53.581	-10.055	-146.782	16.991	-4.112	-59.422	71.218
23	6	-273.651	-55.337	202.929	51.573	-44.243	-285.255	77.330
23	7	-278.639	-57.600	240.369	55.364	-44.508	-291.731	75.595
23	8	210.973	46.125	-601.936	-29.031	215.941	41.142	170.299
23	9	-35.551	-9.693	-166.695	27.809	8.728	-53.293	57.333
24	1	-60.061	-6.923	-155.381	15.330	-2.817	-64.167	75.007
24	2	-60.806	-9.576	-133.129	21.230	-1.621	-68.460	70.173
24	3	-73.232	-9.942	-151.277	23.819	-3.553	-79.522	73.255
24	4	-26.747	-8.115	-125.285	22.730	7.179	-42.043	56.121
24	5	-39.174	-9.492	-143.432	22.492	3.380	-51.237	62.155
24	6	-45.000	-57.035	247.540	132.352	80.948	-183.986	43.806
24	7	-51.322	-59.149	284.652	135.707	80.170	-191.343	44.227
24	8	-22.352	51.475	-645.337	-110.875	131.421	-102.297	125.793
24	9	-72.488	-7.299	-173.529	15.019	-3.996	-75.781	[illegible]
25	1	-31.150	-6.804	-150.618	17.385	2.245	-40.201	61.499
25	2	-46.859	-10.143	-131.344	22.157	0.271	-57.283	64.325
25	3	-39.549	-9.807	-145.322	23.475	3.353	-52.316	61.550

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	Z-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
725	4	-76.347	-15.574	-137.129	18.223	-13.529	-81.392	74.523
725	5	-69.127	-14.238	-151.307	19.542	-7.392	-75.373	72.273
[illegible]	6	-371.263	-78.079	182.397	126.877	-43.254	-406.088	71.352
[illegible]	7	-372.686	-78.600	220.877	110.811	-41.521	-409.765	71.499
[illegible]	8	286.119	61.210	-539.046	-38.299	316.543	30.537	150.930
725	9	-23.930	-5.468	-154.535	13.703	6.158	-35.557	58.134
726	1	-43.590	-5.803	-152.511	13.079	-1.717	-47.676	72.552
726	2	-51.414	-9.357	-131.779	20.657	-0.901	-59.870	67.748
726	3	-55.610	-8.644	-148.201	17.595	-2.723	-61.531	71.500
726	4	-41.527	-11.432	-129.247	31.895	3.735	-61.665	57.660
726	5	-45.723	-10.718	-145.569	28.833	5.508	-61.951	60.529
726	6	-189.390	-76.978	217.636	173.135	48.845	-315.214	53.992
726	7	-195.426	-78.970	254.909	175.051	47.283	-321.680	54.199
726	8	131.114	69.599	-615.459	-142.642	246.278	-45.564	141.084
726	9	-47.785	-5.089	-169.032	10.107	-2.817	-50.058	77.331
727	1	-46.409	-9.839	-149.069	9.854	-7.352	-48.896	75.838
727	2	-52.523	-11.198	-128.892	19.070	-3.742	-59.979	68.647
727	3	-59.181	-13.431	-146.009	14.113	-9.428	-63.184	74.163
727	4	-34.252	-3.639	-121.434	36.410	20.550	-58.443	56.401
727	5	-40.910	-5.872	-138.551	31.453	12.611	-59.394	59.558
727	6	-150.317	-28.703	215.257	207.564	126.777	-305.798	53.164
727	7	-157.344	-31.491	249.667	209.258	124.102	-312.929	53.369
727	8	97.266	24.838	-594.554	-176.825	241.548	-119.442	140.787
727	9	-53.067	-12.072	-166.186	4.897	-11.495	-53.644	83.280
728	1	-43.945	-9.101	-143.666	20.152	0.133	-53.079	65.381
[illegible]	2	-51.493	-11.415	-125.409	21.959	-1.726	-61.182	66.190
[illegible]	3	-55.928	-11.323	-141.215	28.573	2.620	-69.873	63.386
728	4	-40.871	-13.205	-120.158	-2.054	-13.053	-41.023	94.223
728	5	-45.305	-13.113	-135.364	4.559	-12.480	-45.940	82.091
728	6	-185.509	-57.140	192.524	29.931	-50.504	-192.145	77.499
728	7	-191.686	-57.657	215.180	37.592	-47.942	-201.510	75.354
728	8	127.549	39.193	-548.590	-35.272	140.532	26.210	160.306
728	9	-48.280	-9.309	-159.472	26.757	4.551	-51.841	53.131
729	1	-41.391	-6.449	-148.006	13.574	-3.544	-46.796	70.506
729	2	-50.899	-10.383	-128.508	21.934	-0.775	-60.416	65.337
729	3	-53.533	-11.457	-144.697	16.422	-5.926	-59.134	71.011
729	4	-46.128	-6.935	-124.155	44.038	21.669	-74.733	55.994
729	5	-48.852	-8.010	-140.343	38.536	15.181	-72.044	58.950
729	6	-212.583	-42.812	199.984	201.371	90.833	-346.229	55.429
729	7	-217.986	-44.905	234.643	200.293	86.734	-349.627	56.584
729	8	150.422	35.678	-531.015	-150.174	233.811	-67.709	145.454
729	9	-44.715	-9.524	-154.195	8.072	-7.751	-45.479	77.677
730	1	-40.479	-8.656	-142.243	14.581	-2.935	-46.149	68.749
730	2	-51.253	-11.173	-124.330	19.937	-3.645	-58.920	69.324
730	3	-50.135	-10.229	-139.443	22.229	-0.311	-60.053	65.955
730	4	-61.781	-16.399	-124.070	5.351	-15.775	-62.403	83.355
730	5	-60.622	-15.455	-139.533	8.543	-13.857	-62.220	79.528
730	6	-266.841	-64.527	191.174	94.036	-34.173	-297.194	70.141
[illegible]	7	-269.210	-64.155	194.082	91.120	-39.524	-303.851	69.135
[illegible]	8	183.792	41.431	-529.347	-89.832	227.195	-1.981	154.139

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NT	LOAD COMB	X-STRESS RADIAL	Y-STRESS AXIAL	THETA-STRESS HOOP	XY-STRESS SHEAR	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
30	9	-39.320	-7.712	-156.756	17.373	0.342	-47.375	65.741
31	1	-38.514	-7.529	-136.541	14.958	-1.500	-44.543	68.049
31	2	-49.491	-9.950	-120.765	19.597	-1.332	-57.558	67.625
31	3	-49.271	-10.062	-135.149	22.038	-1.170	-59.153	65.323
31	4	-54.955	-10.066	-117.289	9.783	-8.037	-55.934	73.224
31	5	-54.735	-10.178	-131.414	12.223	-7.245	-57.358	75.503
31	6	-259.769	-55.235	142.247	94.399	-18.327	-295.577	68.545
31	7	-264.115	-55.503	171.913	100.473	-15.929	-304.790	67.960
31	8	191.092	44.534	-487.961	-92.624	235.919	-0.292	154.174
31	9	-38.394	-7.641	-150.925	17.398	0.201	-46.237	65.735
32	1	-37.235	-6.346	-136.499	15.857	0.344	-43.926	67.121
32	2	-45.811	-9.235	-120.186	21.391	3.619	-55.667	65.263
32	3	-51.676	-9.396	-135.927	21.160	-0.525	-60.447	67.486
32	4	-25.270	-8.304	-111.251	23.207	7.921	-41.496	65.039
32	5	-31.135	-8.465	-126.891	22.975	5.819	-45.420	68.130
32	6	-183.273	-61.475	158.713	126.396	17.928	-262.577	57.862
32	7	-194.316	-63.796	187.177	129.302	15.781	-273.894	58.390
32	8	162.704	56.825	-495.579	-102.093	224.767	-5.237	148.704
32	9	-43.100	-6.507	-152.140	15.626	-0.742	-48.864	69.750
33	1	-44.568	-8.298	-136.590	13.909	-3.578	-49.288	71.256
33	2	-54.639	-10.407	-121.062	19.299	-3.170	-61.876	69.445
33	3	-52.791	-10.202	-134.998	20.069	-2.234	-60.758	68.348
33	4	-70.760	-12.529	-119.173	15.962	-8.440	-74.849	75.633
33	5	-68.912	-12.323	-133.109	16.732	-7.746	-73.489	74.700
33	6	-264.533	-52.627	135.251	115.151	-2.100	-315.060	66.309
33	7	-263.959	-52.982	165.158	119.842	1.185	-318.127	65.677
33	8	158.693	35.339	-484.032	-105.087	213.356	-24.834	150.304
33	9	-42.720	-8.093	-150.526	14.679	-2.707	-48.106	69.333
34	1	-35.304	-5.118	-134.722	18.510	2.859	-44.282	64.126
34	2	-45.639	-8.903	-119.229	23.639	2.664	-57.207	63.924
34	3	-48.398	-8.822	-134.127	22.327	1.225	-58.443	65.776
34	4	-36.814	-9.030	-112.188	31.861	11.835	-57.581	56.779
34	5	-39.573	-9.947	-127.086	30.550	9.913	-58.433	58.311
34	6	-228.369	-60.462	143.032	129.615	10.013	-298.845	61.465
34	7	-237.294	-62.391	171.045	129.728	6.609	-306.294	61.992
34	8	194.004	53.995	-477.232	-85.334	234.374	13.625	154.331
34	9	-38.053	-6.335	-149.620	17.139	1.451	-45.549	65.478
5	1	-33.434	-4.975	-128.951	18.888	4.443	-42.854	63.495
5	2	-43.843	-7.671	-115.017	24.298	4.532	-55.043	63.331
5	3	-47.520	-8.637	-129.774	22.139	1.384	-57.542	65.644
5	4	-30.077	-2.708	-103.111	35.277	13.330	-55.166	55.333
5	5	-33.754	-3.674	-119.868	34.113	10.572	-55.221	56.394
5	6	-221.604	-51.305	123.743	139.931	27.347	-300.257	50.660
5	7	-232.484	-54.965	148.474	139.029	21.330	-308.671	51.277
5	8	201.487	57.249	-434.774	-88.123	243.241	15.496	154.848
5	9	-37.111	-5.941	-143.728	15.729	1.337	-44.390	65.495
6	1	-37.717	-9.255	-135.090	5.951	-3.041	-39.910	73.550
6	2	-47.915	-11.055	-112.672	12.453	-7.252	-51.729	72.973
6	3	-49.554	-11.083	-135.241	15.146	-5.836	-54.311	72.394

E670

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
736	4	-45.347	-12.933	-105.460	-3.868	-12.478	-45.802	96.713
736	5	-46.396	-12.951	-119.329	-1.175	-12.910	-47.036	91.975
736	6	-236.259	-48.239	96.391	111.229	3.224	-287.733	65.129
[illegible]	7	-242.832	-48.307	119.815	121.398	13.377	-301.515	64.293
[illegible]	8	183.494	28.416	-399.584	-148.121	273.144	-61.234	148.815
736	9	-39.366	-9.252	-138.659	9.644	-6.347	-41.671	75.069
737	1	-37.971	-5.400	-123.594	24.758	7.948	-51.320	61.668
737	2	-48.081	-7.910	-115.134	28.451	6.830	-62.822	62.610
737	3	-49.703	-8.449	-129.321	26.391	4.419	-62.572	64.005
737	4	-45.848	-5.139	-107.380	44.046	22.993	-74.030	57.388
737	5	-47.471	-5.727	-121.567	41.386	20.288	-73.487	58.216
737	6	-235.323	-50.361	114.368	118.365	7.277	-293.562	63.897
737	7	-241.597	-53.680	139.317	114.585	0.543	-295.821	64.675
737	8	181.020	51.005	-428.022	-41.477	193.125	38.900	163.730
737	9	-39.594	-5.939	-142.881	22.698	5.488	-51.022	63.275
738	1	-44.124	-10.497	-125.423	5.335	-9.514	-45.108	80.430
738	2	-53.280	-11.860	-113.173	12.777	-8.235	-56.904	74.163
738	3	-53.514	-11.645	-126.321	14.054	-7.365	-57.794	73.062
738	4	-60.819	-15.698	-107.875	2.440	-15.567	-60.951	86.913
738	5	-61.053	-15.483	-121.023	3.717	-15.182	-61.354	85.366
738	6	-236.449	-43.227	90.393	126.410	19.263	-298.940	63.694
738	7	-238.016	-42.102	114.289	135.685	27.290	-307.409	62.913
738	8	145.872	15.302	-397.870	-153.176	247.096	-85.920	146.542
738	9	-44.359	-10.283	-138.571	7.112	-8.858	-45.784	78.671
739	1	-39.703	-6.358	-118.666	8.302	-4.594	-41.666	76.694
[illegible]	2	-49.869	-8.836	-108.376	14.775	-4.069	-54.635	72.120
[illegible]	3	-50.331	-8.961	-121.031	15.736	-3.656	-55.636	71.369
739	4	-53.664	-9.698	-101.031	7.353	-7.526	-54.836	80.944
739	5	-54.126	-8.824	-113.697	8.314	-7.346	-55.604	79.921
739	6	-245.769	-51.068	63.719	124.006	9.234	-306.073	64.066
739	7	-250.002	-52.501	84.140	131.661	13.327	-315.831	63.435
739	8	175.629	42.659	-346.248	-137.956	262.285	-43.996	147.865
739	9	-40.165	-6.683	-131.322	9.263	-4.291	-42.557	75.521
740	1	-22.390	-4.173	-115.104	16.634	5.683	-32.247	59.352
740	2	-35.745	-7.186	-105.445	21.608	4.350	-47.282	61.790
740	3	-38.729	-7.399	-118.656	21.314	3.387	-49.515	63.157
740	4	-17.968	-5.071	-93.526	24.240	13.564	-36.603	52.448
740	5	-20.952	-5.284	-106.738	24.047	12.172	-38.410	54.022
740	6	-259.320	-59.797	61.552	115.982	-6.574	-312.543	65.350
740	7	-275.397	-62.874	79.547	117.924	-10.339	-327.873	66.011
740	8	280.852	62.817	-325.029	-86.089	312.746	32.924	160.851
740	9	-25.375	-4.386	-128.315	16.441	4.624	-34.386	61.275
741	1	-50.910	-8.211	-120.152	10.953	-5.565	-53.556	76.419
741	2	-58.294	-9.850	-109.620	16.842	-4.569	-63.575	72.593
741	3	-59.510	-9.908	-122.130	17.130	-4.477	-63.941	72.409
741	4	-70.523	-11.255	-103.791	14.145	-8.052	-73.727	77.240
741	5	-70.739	-11.314	-116.302	14.433	-7.994	-74.059	77.045
741	6	-215.800	-42.758	94.630	121.865	19.958	-279.527	62.754
741	7	-214.522	-42.953	85.838	127.119	24.613	-282.095	62.006
[illegible]	8	96.151	25.713	-354.341	-113.678	184.726	-62.861	143.254

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E671

NT	LOAD COMB	X-STRESS (RADIAL)	Z-STRESS (AXIAL)	TRIM-STRESS (HOOP)	XZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
41	9	-51.125	-8.270	-132.663	11.240	-5.501	-53.895	76.160
42	1	-28.999	-5.507	-115.590	21.613	7.346	-41.853	59.261
42	2	-41.340	-8.054	-106.084	25.032	5.362	-54.758	61.309
42	3	-42.746	-7.994	-118.834	24.792	4.904	-55.645	62.512
42	4	-34.456	-8.118	-96.333	31.443	12.802	-55.377	56.362
42	5	-35.861	-8.058	-109.083	31.203	12.200	-56.119	57.007
42	6	-261.238	-55.173	55.458	98.873	-15.406	-301.005	68.090
42	7	-272.048	-56.978	73.945	97.749	-19.190	-309.836	68.864
42	8	243.048	49.527	-323.922	-46.055	253.450	39.125	167.273
42	9	-30.405	-5.446	-123.340	21.373	6.823	-42.675	60.139
43	1	-24.615	-1.562	-108.777	24.074	13.603	-39.780	57.792
43	2	-37.961	-5.029	-101.251	27.025	10.151	-53.141	60.677
43	3	-39.586	-5.305	-113.498	26.459	9.089	-53.981	61.462
43	4	-27.393	-1.130	-89.462	36.340	24.378	-52.901	54.933
43	5	-29.017	-1.406	-101.709	35.785	23.143	-53.568	55.548
43	6	-270.587	-63.084	28.461	96.478	-25.159	-308.512	68.540
43	7	-284.039	-67.446	43.444	93.735	-32.513	-318.971	69.561
43	8	272.613	76.942	-271.805	-30.890	277.374	72.181	171.238
43	9	-26.239	-1.838	-121.024	23.519	12.456	-40.535	58.709
44	1	-33.261	-9.123	-106.624	-2.837	-8.794	-33.590	96.616
44	2	-44.599	-10.500	-99.998	6.430	-9.328	-45.772	79.668
44	3	-45.761	-10.716	-111.484	6.917	-9.400	-47.077	79.227
44	4	-41.645	-11.927	-90.269	-6.010	-10.757	-42.814	101.011
44	5	-42.806	-12.143	-101.755	-5.522	-11.178	-43.770	99.904
44	6	-252.179	-39.004	11.374	157.497	44.582	-335.766	52.044
44	7	-260.439	-38.828	25.645	170.501	53.709	-352.977	61.509
44	8	213.449	18.975	-251.514	-214.977	352.158	-119.733	147.169
44	9	-34.422	-9.339	-119.111	-2.350	-9.121	-34.640	95.306
45	1	-35.461	-3.142	-110.249	30.651	15.357	-53.961	58.895
45	2	-46.197	-5.339	-102.509	31.471	11.235	-63.442	61.278
45	3	-47.345	-6.160	-114.550	31.417	10.811	-64.317	61.621
45	4	-44.790	-3.847	-92.477	43.300	23.576	-72.214	57.652
745	5	-45.938	-3.998	-104.518	43.245	23.093	-73.030	57.934
745	6	-245.283	-55.680	28.618	66.933	-34.432	-266.531	72.388
745	7	-252.161	-58.771	44.393	63.723	-41.285	-269.647	73.935
745	8	196.685	60.798	-279.446	24.939	201.118	56.366	10.078
745	9	-36.609	-3.293	-122.290	30.607	14.895	-54.798	59.278
46	1	-44.501	-11.086	-108.354	0.555	-11.077	-44.510	89.047
46	2	-52.949	-11.686	-101.402	9.039	-9.793	-54.342	79.170
46	3	-53.981	-11.920	-112.776	9.970	-10.085	-55.814	78.449
46	4	-58.017	-14.531	-93.217	1.283	-14.493	-58.055	88.311
46	5	-59.049	-14.765	-104.590	1.215	-14.731	-59.082	88.429
46	6	-220.686	-28.323	13.577	152.375	55.687	-304.697	61.130
46	7	-222.455	-26.784	33.693	152.738	65.262	-314.503	60.506
46	8	131.877	-1.207	-261.638	-190.604	267.126	-136.456	144.627
46	9	-45.533	-11.322	-119.727	0.487	-11.313	-45.540	89.184
47	1	-38.961	-5.499	-101.156	4.062	-5.013	-39.447	83.176
47	2	-48.941	-7.662	-96.461	11.620	-4.615	-51.988	75.309
47	3	-49.746	-7.743	-107.120	11.399	-4.753	-52.735	75.543

E672

MEMT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
747	4	-51.368	-7.465	-86.919	5.000	-6.660	-52.174	82.355
747	5	-52.173	-7.546	-97.579	5.979	-6.759	-52.960	82.499
747	6	-239.877	-47.558	-17.242	141.679	27.512	-314.948	62.382
[illegible]	7	-244.533	-49.022	-5.602	150.154	32.492	-325.957	61.532
[illegible]	8	173.383	41.342	-205.949	-164.849	294.941	-70.215	145.912
747	9	-39.766	-5.580	-111.915	4.041	-5.109	-40.237	83.349
748	1	-12.923	-2.989	-95.791	16.784	9.611	-25.425	53.320
748	2	-29.629	-5.987	-92.401	21.005	6.295	-41.911	59.684
748	3	-30.206	-5.911	-103.012	21.121	6.306	-42.424	59.952
748	4	-15.957	-4.636	-79.500	23.167	13.551	-34.145	51.865
748	5	-16.535	-4.560	-90.112	23.282	13.492	-34.587	52.211
748	6	-316.445	-60.775	-33.215	103.177	-24.332	-352.889	70.546
748	7	-335.211	-63.809	-24.482	104.734	-28.092	-370.928	71.169
748	8	361.024	65.446	-166.731	-72.112	377.679	48.791	166.995
748	9	-13.501	-2.814	-106.403	16.900	9.567	-25.882	53.773
749	1	-52.747	-8.900	-103.909	8.864	-7.176	-54.471	78.992
749	2	-58.461	-10.130	-98.449	15.180	-5.758	-62.833	73.931
749	3	-59.989	-10.378	-109.213	15.097	-6.145	-64.223	74.337
749	4	-67.404	-11.406	-90.160	13.024	-8.525	-70.285	77.526
749	5	-68.933	-11.654	-100.924	12.941	-8.865	-71.721	77.841
749	6	-183.574	-35.734	-9.354	128.115	38.256	-257.565	59.992
749	7	-180.705	-35.526	3.441	133.813	44.118	-260.350	59.239
749	8	60.197	16.144	-224.329	-129.797	169.824	-93.482	139.815
749	9	-54.275	-9.148	-114.673	8.781	-7.499	-55.924	79.367
750	1	-25.027	-5.094	-97.868	22.799	9.822	-39.944	56.806
[illegible]	2	-38.681	-7.368	-94.079	25.121	6.576	-52.626	60.966
[illegible]	3	-39.125	-7.311	-104.588	25.610	6.929	-53.366	60.923
750	4	-33.551	-7.571	-82.884	29.910	12.047	-53.170	56.737
750	5	-33.995	-7.514	-93.393	30.398	12.401	-53.911	56.768
750	6	-283.569	-49.563	-30.231	77.644	-26.235	-306.996	73.210
750	7	-295.431	-51.218	-20.502	75.957	-29.521	-317.128	74.058
750	8	274.596	43.870	-179.022	-22.074	275.689	41.777	174.583
750	9	-25.471	-5.037	-108.377	23.288	10.176	-40.685	56.844
751	1	-19.547	0.491	-90.715	26.294	18.610	-37.666	55.429
751	2	-34.719	-3.346	-89.100	27.594	12.796	-50.861	59.754
751	3	-34.935	-3.134	-98.885	28.230	13.365	-51.435	59.695
751	4	-26.992	-0.517	-76.558	34.610	23.299	-50.810	55.465
751	5	-27.208	-0.306	-86.343	35.145	23.874	-51.388	55.471
751	6	-302.610	-68.921	-61.341	66.995	-51.082	-320.449	75.087
751	7	-317.320	-73.475	-55.106	53.426	-57.954	-332.831	76.258
751	8	315.679	86.427	-122.827	3.492	315.732	86.374	0.872
751	9	-19.763	0.703	-100.499	26.829	19.195	-38.244	55.438
752	1	-29.038	-8.342	-89.458	-7.638	-6.278	-31.602	108.551
752	2	-41.563	-9.990	-38.432	2.938	-9.720	-41.933	84.743
752	3	-42.240	-10.332	-97.731	1.955	-10.212	-42.361	86.488
752	4	-38.684	-11.003	-77.379	-5.972	-9.769	-39.918	101.571
752	5	-39.261	-11.345	-86.677	-6.946	-9.712	-40.894	103.229
752	6	-271.553	-33.852	-72.939	180.784	63.649	-369.055	61.661
[illegible]	7	-281.450	-33.631	-67.243	194.330	72.932	-388.014	61.261
[illegible]	8	246.042	14.502	-109.861	-246.002	402.133	-141.538	147.596

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ENT	LOAD CASE	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
752	9	-29.516	-9.184	-98.756	-8.611	-6.039	-32.761	110.365
753	1	-32.274	-2.564	-92.701	34.178	19.847	-54.686	56.745
753	2	-44.820	-5.905	-90.952	33.305	13.729	-64.455	59.925
753	3	-45.516	-5.787	-100.727	35.171	14.741	-66.045	59.729
753	4	-42.692	-4.327	-73.474	42.359	22.990	-70.010	57.132
753	5	-43.388	-4.209	-89.240	43.624	24.022	-71.620	57.231
753	6	-275.067	-64.697	-62.573	46.713	-54.789	-284.975	78.025
753	7	-284.151	-68.097	-55.947	40.235	-60.330	-291.428	79.774
753	8	240.171	71.291	-128.542	49.782	253.754	57.708	15.251
753	9	-32.970	-2.446	-102.465	35.443	20.881	-56.298	56.548
754	1	-47.940	-12.341	-92.531	-3.640	-11.973	-48.308	95.779
754	2	-56.327	-12.743	-91.156	6.100	-11.905	-57.164	82.130
754	3	-57.919	-13.300	-100.537	5.043	-12.737	-58.483	83.630
754	4	-60.584	-14.866	-81.509	0.045	-14.866	-60.584	89.942
754	5	-62.177	-15.423	-90.891	-1.010	-15.401	-62.199	91.238
754	6	-222.922	-25.261	-69.980	173.240	75.355	-323.540	59.352
754	7	-224.540	-23.644	-63.276	184.685	86.142	-334.326	59.270
754	8	127.369	-6.339	-124.238	-221.161	291.560	-170.530	143.409
754	9	-49.533	-12.898	-102.013	-4.697	-12.306	-50.125	97.191
755	1	-41.614	-5.464	-85.916	0.599	-5.454	-41.624	89.051
755	2	-51.919	-7.508	-86.461	9.045	-5.736	-53.691	78.918
755	3	-52.992	-7.583	-95.068	9.287	-6.118	-54.458	79.973
755	4	-54.169	-7.487	-75.989	4.534	-7.031	-54.625	84.385
755	5	-55.243	-7.562	-84.597	3.375	-7.249	-55.556	85.382
755	6	-249.229	-45.497	-99.312	155.825	38.804	-333.532	61.586
755	7	-253.973	-46.809	-95.724	165.124	44.532	-345.314	61.050
755	8	177.651	38.541	-72.289	-187.021	307.666	-91.373	145.193
755	9	-42.638	-5.539	-94.524	-0.159	-5.538	-42.688	90.245
756	1	-8.647	-2.706	-79.173	17.154	11.732	-23.086	49.912
756	2	-27.561	-5.777	-81.473	21.221	7.184	-40.522	58.584
756	3	-25.509	-5.569	-89.652	21.550	7.919	-39.998	57.356
756	4	-17.693	-5.029	-68.504	22.840	12.340	-35.063	52.747
756	5	-16.642	-4.821	-76.683	23.169	13.179	-34.643	52.155
756	6	-357.839	-60.901	-121.407	100.135	-30.197	-388.443	73.005
756	7	-377.854	-63.640	-120.889	101.706	-33.592	-407.901	73.541
756	8	410.798	64.585	-24.703	-69.752	423.951	51.432	169.169
756	9	-7.596	-2.498	-87.352	17.482	12.522	-22.715	49.147
757	1	-60.025	-7.747	-88.590	5.585	-6.905	-60.867	82.326
757	2	-66.893	-9.141	-88.902	13.774	-6.024	-70.010	77.249
757	3	-69.406	-9.405	-97.653	13.309	-6.585	-72.226	78.037
757	4	-73.453	-9.762	-79.154	11.841	-7.632	-75.583	79.801
757	5	-75.966	-10.026	-87.905	11.377	-8.113	-77.874	80.480
757	6	-211.650	-36.693	-99.044	140.464	41.305	-289.649	60.957
757	7	-209.773	-36.377	-94.925	147.080	47.204	-293.954	62.215
757	8	79.233	21.494	-80.858	-148.828	201.967	-101.239	140.489
757	9	-62.539	-8.010	-97.341	5.221	-7.313	-63.239	83.572
758	1	-23.056	-5.354	-81.293	25.617	14.042	-42.153	54.342
758	2	-38.978	-7.699	-83.286	23.741	9.382	-56.050	59.276
758	3	-38.645	-7.627	-91.451	29.830	10.484	-56.758	58.735

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E674

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
758	4	-34.666	-7.645	-71.324	32.651	14.180	-56.492	56.239
758	5	-34.334	-7.574	-79.488	33.740	15.341	-57.250	55.816
758	6	-325.349	-56.377	-123.134	77.569	-35.610	-346.116	75.012
[illegible]	7	-339.267	-58.378	-122.218	75.579	-39.333	-358.312	75.855
[illegible]	8	325.496	52.194	-29.595	-14.271	326.239	51.451	177.319
758	9	-22.724	-4.983	-89.247	27.735	15.237	-42.945	53.877
759	1	-17.103	1.741	-74.395	30.791	24.511	-39.872	53.510
759	2	-34.820	-2.518	-78.608	31.527	15.842	-54.181	58.526
759	3	-33.995	-1.970	-85.997	33.009	18.706	-54.671	57.938
759	4	-28.653	-0.358	-65.858	37.152	25.249	-54.261	55.423
759	5	-27.828	0.190	-73.248	38.535	27.183	-54.822	54.989
759	6	-349.972	-76.251	-152.334	60.315	-63.549	-362.674	78.108
759	7	-366.820	-81.132	-154.515	56.208	-70.471	-377.481	79.260
759	8	372.575	96.471	21.943	19.437	373.937	95.109	4.007
759	9	-16.278	2.290	-81.785	32.164	26.483	-40.472	53.050
760	1	-30.491	-9.258	-74.972	-11.748	-4.040	-35.709	113.948
760	2	-44.708	-10.222	-79.262	0.090	-10.222	-44.708	89.849
760	3	-44.939	-10.689	-86.451	-1.962	-10.577	-45.051	93.269
760	4	-42.621	-11.043	-67.926	-6.653	-9.698	-43.966	101.425
760	5	-42.852	-11.510	-75.115	-8.707	-9.254	-45.109	104.530
760	6	-304.784	-30.653	-156.377	202.405	76.729	-412.167	62.052
760	7	-315.677	-30.242	-158.429	217.308	86.772	-432.692	61.665
760	8	278.447	10.273	21.834	-276.283	451.463	-162.741	147.944
760	9	-30.722	-9.725	-82.161	-13.802	-2.882	-37.565	116.371
761	1	-34.295	-0.310	-77.131	37.281	23.668	-58.275	57.251
[illegible]	2	-47.424	-3.610	-80.707	36.079	16.692	-67.726	60.633
[illegible]	3	-47.991	-3.247	-88.273	38.289	18.726	-69.966	60.148
[illegible]	4	-46.383	-2.302	-68.921	42.459	23.496	-72.182	58.715
761	5	-46.951	-1.940	-76.487	44.670	25.573	-74.464	58.369
761	6	-290.029	-61.512	-144.756	30.406	-57.536	-294.006	32.549
761	7	-299.003	-65.024	-145.918	23.312	-62.724	-301.303	84.365
761	8	249.753	72.630	4.324	71.350	275.234	47.149	19.526
761	9	-34.863	0.051	-84.697	39.492	25.773	-60.584	56.924
762	1	-46.765	-11.483	-77.722	-4.984	-10.792	-47.455	97.889
762	2	-56.573	-11.592	-81.394	5.107	-11.019	-57.146	83.602
762	3	-58.243	-12.297	-88.793	3.459	-12.038	-58.502	85.718
762	4	-56.341	-12.996	-70.857	0.389	-12.974	-58.853	88.764
762	5	-60.512	-13.701	-78.256	-0.658	-13.692	-60.521	90.305
762	6	-246.213	-17.802	-148.974	180.665	81.727	-345.743	61.149
762	7	-249.689	-16.162	-150.070	182.172	91.937	-357.790	60.541
762	8	161.157	-11.239	4.735	-228.751	319.412	-169.494	145.323
762	9	-48.435	-12.188	-85.120	-6.632	-11.013	-49.611	100.051
763	1	-40.757	-4.663	-71.527	-0.567	-4.654	-40.766	90.900
763	2	-52.254	-6.739	-77.135	8.325	-5.254	-53.739	79.955
763	3	-53.306	-6.762	-83.727	7.100	-5.703	-54.365	81.516
763	4	-53.379	-5.636	-66.241	5.250	-6.053	-53.962	93.669
763	5	-54.421	-6.659	-72.834	4.026	-6.322	-54.758	85.215
763	6	-269.771	-45.046	-177.897	164.541	41.637	-356.655	62.154
763	7	-275.942	-46.519	-181.879	174.099	47.262	-369.723	61.699
[illegible]	8	205.634	40.260	53.898	-195.949	336.550	-90.655	146.397

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E675

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
53	9	-41.799	-4.686	-78.120	-1.791	-4.600	-41.885	92.757
54	1	-5.027	-1.993	-64.115	18.949	15.499	-22.521	47.288
54	2	-26.158	-5.000	-71.732	22.549	9.328	-40.487	57.567
54	3	-23.857	-4.702	-77.599	23.162	10.783	-39.344	56.232
54	4	-18.666	-4.477	-59.053	24.149	13.597	-36.742	53.185
54	5	-16.365	-4.180	-64.950	24.761	15.227	-35.772	51.911
54	6	-398.552	-58.999	-204.339	93.485	-34.962	-422.589	75.580
54	7	-420.456	-51.809	-211.495	94.411	-38.474	-443.791	76.117
54	8	461.210	63.765	106.525	-56.595	469.112	55.863	172.051
54	9	-2.726	-1.696	-70.012	19.562	17.357	-21.780	45.754
65	1	-56.894	-5.604	-74.263	5.802	-5.943	-57.555	83.503
65	2	-63.586	-7.900	-79.173	12.819	-5.090	-66.396	77.638
65	3	-66.411	-8.151	-86.051	12.164	-5.713	-68.849	78.667
65	4	-67.778	-8.238	-68.785	11.575	-6.067	-69.949	79.376
65	5	-70.603	-8.489	-75.663	10.919	-6.625	-72.466	80.314
65	6	-201.767	-33.094	-168.600	138.917	45.082	-279.945	60.631
65	7	-200.278	-33.483	-171.593	145.478	50.806	-284.568	59.912
65	8	80.644	20.791	35.301	-147.674	201.394	-99.957	140.728
65	9	-59.719	-6.855	-81.141	5.146	-6.359	-60.215	84.490
766	1	-22.482	-4.538	-67.279	24.890	12.948	-39.969	54.911
766	2	-38.938	-6.617	-74.153	26.450	8.227	-53.783	60.707
766	3	-38.170	-5.583	-80.295	27.806	9.601	-54.356	59.797
766	4	-36.113	-5.757	-62.394	29.384	11.142	-54.014	58.389
766	5	-35.345	-6.724	-68.536	30.431	12.593	-54.663	57.593
756	6	-336.728	-45.256	-195.727	63.420	-32.055	-349.930	78.241
766	7	-350.792	-46.722	-201.780	61.316	-34.823	-362.691	79.018
766	8	336.568	40.256	86.809	-5.037	336.654	40.170	179.026
766	9	-21.714	-4.504	-73.421	26.237	14.502	-40.722	54.078
767	1	-16.539	2.277	-61.049	29.293	23.635	-37.898	53.903
757	2	-34.577	-1.758	-69.872	29.666	15.701	-52.147	59.507
757	3	-33.286	-1.052	-75.202	31.435	18.156	-52.495	58.572
767	4	-30.717	-0.407	-57.763	33.331	21.052	-52.177	57.225
767	5	-29.327	0.308	-63.093	35.100	23.590	-52.609	56.443
767	6	-360.079	-72.500	-224.899	47.350	-64.904	-367.675	80.986
767	7	-376.793	-77.076	-233.845	43.326	-70.944	-382.925	81.941
767	8	380.587	91.735	136.320	26.655	383.027	89.296	5.228
767	9	-15.148	2.592	-66.378	31.062	26.231	-38.437	53.139
768	1	-27.538	-8.291	-61.627	-10.972	-3.319	-32.509	114.374
768	2	-42.513	-9.062	-70.459	0.333	-9.035	-42.539	88.404
768	3	-42.277	-9.555	-75.693	-1.580	-9.479	-42.353	92.759
768	4	-40.852	-9.570	-59.353	-3.299	-9.226	-41.196	95.955
768	5	-40.515	-10.053	-64.585	-5.812	-8.995	-41.684	100.415
768	6	-316.239	-25.438	-227.139	207.708	82.704	-424.381	62.496
768	7	-327.924	-24.933	-235.949	221.990	92.324	-445.187	62.155
768	8	297.832	7.354	135.222	-274.377	463.482	-158.295	148.925
768	9	-27.301	-8.784	-66.861	-13.495	-1.534	-34.401	117.765
769	1	-33.308	0.155	-64.047	34.315	21.601	-54.754	57.996
769	2	-46.419	-3.351	-72.097	32.595	14.489	-63.960	61.780
769	3	-46.337	-2.571	-77.729	35.234	16.904	-66.313	61.067

E676

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
'69	4	-45.861	-2.216	-60.591	36.733	18.687	-66.765	60.357
'69	5	-46.279	-1.736	-66.223	39.281	21.147	-69.163	59.776
'69	6	-289.191	-59.777	-214.589	15.399	-58.680	-290.288	86.054
[illegible]	7	-297.841	-63.160	-222.423	8.944	-62.820	-298.182	87.820
[illegible]	8	250.033	70.751	115.715	76.399	237.378	42.906	20.164
'69	9	-33.726	0.635	-69.679	36.863	24.125	-57.215	57.494
'70	1	-43.157	-10.789	-64.622	-4.154	-10.252	-43.694	97.213
'70	2	-53.363	-10.835	-72.713	5.873	-10.039	-54.159	82.279
'70	3	-54.885	-11.609	-78.263	3.988	-11.244	-55.249	84.778
'70	4	-54.608	-11.704	-52.105	3.401	-11.436	-54.876	85.495
'70	5	-56.130	-12.477	-67.656	1.516	-12.424	-56.182	88.013
'70	6	-248.043	-15.126	-217.311	182.714	85.087	-348.257	61.256
'70	7	-252.066	-13.478	-225.037	194.075	95.035	-360.579	60.789
'70	8	174.294	-11.431	115.205	-225.355	325.170	-162.306	146.197
'70	9	-44.689	-11.562	-70.172	-6.049	-10.492	-45.759	100.032
'71	1	-38.162	-4.199	-59.127	-0.513	-4.192	-38.170	90.866
'71	2	-50.090	-5.992	-68.991	8.185	-4.521	-51.560	79.816
'71	3	-50.960	-6.024	-73.762	6.768	-5.027	-51.958	81.617
'71	4	-50.702	-5.960	-58.373	6.347	-5.077	-51.585	82.079
'71	5	-51.572	-5.992	-63.144	4.930	-5.465	-52.100	83.896
'71	6	-274.116	-39.200	-244.439	162.499	43.847	-357.164	62.930
'71	7	-280.749	-40.448	-254.780	171.849	49.086	-370.285	62.480
'71	8	218.000	34.519	159.789	-191.671	338.755	-86.235	147.788
'71	9	-39.032	-4.232	-63.898	-1.930	-4.125	-39.139	93.166
'72	1	-5.837	-2.107	-52.406	17.703	13.829	-21.773	48.006
[illegible]	2	-27.384	-4.798	-64.268	20.942	7.702	-39.884	59.167
[illegible]	3	-24.514	-4.515	-68.251	21.642	9.325	-38.355	57.399
'72	4	-22.748	-4.601	-52.611	22.047	10.166	-37.516	56.184
'72	5	-19.878	-4.318	-56.595	22.746	11.941	-36.139	54.441
'72	6	-411.057	-53.563	-272.945	84.566	-34.568	-430.052	77.340
'72	7	-432.908	-56.017	-286.365	85.291	-37.614	-451.311	77.824
'72	8	467.091	56.499	211.488	-50.457	473.201	50.389	173.095
'72	9	-2.967	-1.823	-56.390	18.402	16.015	-20.807	45.889
'73	1	-55.809	-7.795	-62.456	5.487	-7.189	-57.416	83.589
'73	2	-54.243	-8.907	-71.802	13.029	-5.993	-67.157	77.391
'73	3	-67.243	-9.308	-76.908	12.171	-6.855	-69.696	78.604
'73	4	-56.919	-9.234	-61.547	12.249	-6.741	-69.412	78.494
'73	5	-69.919	-9.635	-66.653	11.392	-7.554	-72.000	79.548
'73	6	-213.969	-31.059	-239.111	149.156	52.447	-297.477	60.757
'73	7	-212.430	-31.017	-248.460	156.432	59.103	-302.552	60.053
'73	8	98.069	15.496	144.567	-159.067	221.121	-107.555	142.275
'73	9	-59.810	-8.196	-67.562	4.629	-7.784	-60.222	84.915
'74	1	-23.002	-4.970	-55.691	23.948	11.602	-39.576	55.315
'74	2	-40.358	-7.390	-66.989	26.039	7.174	-54.623	61.285
'74	3	-39.266	-7.388	-71.280	27.425	8.619	-54.974	60.198
'74	4	-38.648	-7.252	-55.854	27.621	8.812	-54.723	59.801
'74	5	-37.556	-7.250	-60.145	29.007	10.316	-55.133	58.787
'74	6	-355.952	-46.623	-256.884	70.946	-31.128	-371.448	77.679
'74	7	-370.631	-48.061	-279.382	69.332	-33.790	-384.902	79.359
[illegible]	8	354.680	40.645	295.201	-18.245	355.737	39.588	176.585

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
74	9	-21.910	-4.369	-59.982	25.335	13.273	-40.153	54.243
75	1	-17.801	1.679	-50.097	27.642	21.246	-37.369	54.705
75	2	-36.966	-2.210	-63.205	28.383	13.692	-52.869	60.738
75	3	-35.195	-1.459	-66.701	30.242	15.301	-52.955	59.575
75	4	-34.593	-1.475	-52.057	30.607	15.764	-52.834	59.207
75	5	-32.823	-0.724	-55.553	32.465	19.442	-52.990	58.152
75	6	-383.225	-71.049	-294.592	53.603	-63.052	-391.222	81.018
75	7	-400.623	-75.419	-309.757	46.960	-68.773	-407.268	81.945
75	8	400.314	87.154	240.693	15.705	401.099	86.378	2.364
75	9	-16.030	3.429	-53.592	29.501	24.110	-37.711	53.686
76	1	-29.937	-8.549	-51.377	-12.231	-2.996	-35.491	114.419
76	2	-45.761	-9.273	-64.327	-8.622	-9.262	-45.772	90.976
76	3	-45.426	-9.832	-67.862	-3.494	-9.492	-45.766	95.554
76	4	-44.943	-9.618	-53.984	-3.160	-9.337	-45.224	95.072
76	5	-44.608	-10.177	-57.519	-6.032	-9.150	-45.634	99.655
76	6	-336.449	-24.657	-294.274	202.736	75.191	-436.298	63.779
76	7	-348.179	-23.871	-308.917	217.482	85.254	-457.305	63.354
76	8	313.028	6.171	235.159	-268.419	468.775	-149.575	149.876
76	9	-29.602	-9.109	-54.912	-15.104	-1.103	-37.607	117.923
77	1	-33.657	-1.591	-49.454	37.877	23.506	-58.755	56.471
77	2	-51.222	-5.575	-62.311	37.947	15.883	-72.680	60.512
77	3	-50.856	-5.028	-65.656	40.773	18.828	-74.713	59.667
77	4	-50.425	-5.108	-52.152	40.465	18.610	-74.144	59.623
77	5	-50.060	-4.562	-55.498	43.291	21.593	-76.215	58.860
77	6	-374.104	-77.148	-290.424	50.668	-59.741	-382.511	80.579
77	7	-386.905	-81.106	-304.912	44.197	-74.846	-393.165	81.938
77	8	346.907	85.470	235.080	41.703	353.398	78.979	8.847
77	9	-33.292	-1.044	-52.799	40.702	26.611	-60.948	55.805
78	1	-53.095	-11.712	-52.487	-7.267	-10.473	-54.334	99.676
78	2	-65.865	-12.176	-64.694	3.512	-11.948	-66.094	86.272
78	3	-67.790	-13.015	-68.315	1.065	-12.996	-67.811	88.886
78	4	-66.954	-12.682	-55.389	1.954	-12.612	-67.024	87.940
78	5	-68.879	-13.522	-59.010	-0.493	-13.517	-68.883	90.510
78	6	-308.972	-23.747	-282.921	194.264	74.631	-407.351	63.141
78	7	-312.935	-22.057	-295.977	207.782	86.128	-421.122	62.495
78	8	219.724	-3.027	216.869	-244.120	375.675	-159.978	147.262
78	9	-55.020	-12.552	-56.108	-9.714	-10.435	-57.137	102.292
79	1	-47.797	-4.907	-48.176	-3.299	-4.684	-48.020	94.111
79	2	-62.095	-6.757	-61.652	6.447	-6.015	-62.836	83.441
79	3	-63.331	-6.832	-64.663	4.537	-5.470	-63.693	85.437
79	4	-62.834	-6.784	-52.465	5.262	-6.234	-63.324	84.682
79	5	-64.071	-6.859	-55.475	3.352	-5.664	-64.267	86.558
79	6	-331.145	-41.240	-302.061	176.372	42.131	-414.487	64.707
79	7	-337.801	-42.413	-317.138	187.686	48.713	-428.938	64.099
79	8	259.038	34.950	249.097	-212.424	337.155	-93.167	148.904
79	9	-49.034	-4.992	-51.186	-5.009	-4.420	-49.596	96.407
80	1	-8.852	-2.619	-40.345	20.992	15.486	-26.958	49.221
80	2	-32.271	-5.659	-55.725	24.838	9.205	-47.146	59.084
80	3	-28.952	-5.346	-57.835	25.757	11.183	-45.482	57.309

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ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
780	4	-29.541	-5.579	-45.845	25.726	10.799	-46.011	57.531
790	5	-26.332	-5.356	-47.925	26.545	12.351	-44.441	55.735
7[illegible]	6	-452.991	-51.156	-327.356	99.375	-37.175	-476.381	76.493
[illegible]	7	-476.945	-63.998	-345.434	100.430	-40.368	-500.074	77.030
[illegible]	8	502.964	63.671	299.569	-60.234	511.097	55.548	172.326
780	9	-5.532	-2.296	-42.425	21.911	18.056	-25.885	47.112
781	1	-65.959	-6.573	-50.665	3.075	-6.414	-66.117	87.043
781	2	-78.279	-8.078	-54.201	11.456	-6.256	-80.102	80.962
781	3	-81.333	-8.334	-67.404	10.177	-5.942	-82.725	82.210
781	4	-79.753	-8.201	-55.159	11.308	-6.545	-81.408	81.448
781	5	-82.806	-8.457	-58.363	9.729	-7.204	-84.059	82.566
781	6	-316.589	-36.802	-306.424	162.657	37.844	-391.235	65.348
781	7	-316.583	-37.285	-320.986	171.938	44.571	-398.440	64.541
781	8	195.652	25.567	247.554	-179.693	309.411	-88.191	147.663
781	9	-69.012	-6.829	-53.868	1.795	-6.777	-69.064	88.347
782	1	-25.604	-4.235	-42.590	30.124	17.043	-46.883	54.764
782	2	-46.468	-6.942	-57.920	32.740	11.536	-64.948	60.558
782	3	-44.810	-6.790	-60.161	34.626	13.701	-65.302	59.383
782	4	-45.463	-6.982	-48.381	33.949	12.799	-65.245	59.770
782	5	-43.804	-6.830	-50.622	35.836	15.006	-65.641	58.644
782	6	-426.849	-56.756	-330.088	87.976	-36.907	-446.698	77.286
782	7	-445.066	-58.956	-348.335	85.006	-41.069	-462.952	78.117
782	8	427.718	54.361	295.824	-23.274	429.163	52.916	176.446
782	9	-23.946	-4.082	-44.832	32.011	19.501	-47.531	53.618
783	1	-23.667	2.486	-38.337	34.211	27.026	-45.207	54.348
[illegible]	2	-42.941	-1.579	-54.919	35.608	18.917	-63.438	60.073
[illegible]	3	-40.543	-0.674	-56.556	38.022	22.296	-63.613	59.863
783	4	-41.622	-1.150	-45.511	37.183	20.946	-63.719	59.277
783	5	-39.323	-0.244	-47.148	39.598	24.372	-63.940	58.131
783	6	-447.292	-73.350	-348.981	70.241	-61.075	-460.067	79.692
783	7	-468.007	-78.872	-369.219	65.097	-68.271	-478.608	80.750
793	8	464.075	91.654	327.606	8.023	464.248	91.482	1.233
793	9	-18.368	3.392	-39.974	36.625	30.719	-45.695	53.272
784	1	-36.347	-8.836	-41.647	-12.043	-4.399	-40.874	110.602
794	2	-55.058	-9.849	-57.702	-0.329	-9.846	-55.070	90.415
784	3	-54.646	-10.411	-59.654	-3.433	-10.145	-54.911	94.412
784	4	-54.737	-9.985	-48.901	-1.482	-9.936	-54.787	91.395
784	5	-54.315	-10.548	-50.853	-4.587	-10.072	-54.792	95.920
784	6	-400.036	-30.251	-343.855	206.802	62.258	-492.547	65.899
784	7	-413.234	-29.295	-362.485	223.447	73.320	-515.850	65.333
784	8	368.772	12.350	312.007	-269.365	513.542	-132.419	151.744
784	9	-35.925	-9.398	-43.598	-15.148	-2.527	-42.795	114.398
785	1	-37.784	1.024	-40.848	37.886	24.136	-60.945	59.560
785	2	-55.160	-2.197	-55.911	38.196	17.585	-75.944	62.618
795	3	-55.894	-1.534	-58.839	41.181	20.628	-78.056	61.712
785	4	-55.967	-1.959	-47.734	39.495	18.391	-76.808	62.180
785	5	-55.701	-1.295	-49.662	42.480	21.945	-78.942	61.317
785	6	-395.399	-59.777	-342.484	53.678	-51.401	-403.775	81.131
[illegible]	7	-407.720	-63.643	-361.633	45.470	-57.735	-413.628	82.597
[illegible]	8	359.635	71.516	313.373	35.455	363.305	67.216	6.914

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N°	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
85	9	-37.517	1.587	-42.776	40.871	27.414	-63.243	57.812
86	1	-51.615	-10.105	-43.933	-5.279	-9.445	-52.277	87.136
86	2	-66.862	-10.591	-53.681	4.553	-10.174	-67.279	85.295
86	3	-68.295	-11.347	-61.739	2.512	-11.236	-69.406	87.479
86	4	-67.284	-10.752	-50.913	4.466	-10.401	-67.635	85.510
86	5	-68.717	-11.508	-53.132	2.115	-11.430	-69.795	87.334
86	6	-353.466	-21.746	-339.068	136.077	51.561	-436.874	65.356
86	7	-358.534	-19.726	-356.595	200.445	73.312	-451.572	65.101
86	8	275.840	-0.544	300.522	-227.124	403.510	-128.213	150.659
86	9	-53.050	-10.862	-46.151	-7.630	-9.524	-54.387	89.943
87	1	-47.290	-4.310	-40.563	-1.525	-4.256	-47.345	92.030
87	2	-63.601	-6.216	-57.288	7.763	-5.134	-64.633	82.429
87	3	-64.467	-6.232	-58.987	5.885	-5.643	-65.056	84.286
87	4	-63.982	-6.226	-48.911	7.481	-5.273	-64.935	82.737
87	5	-64.848	-6.243	-50.609	5.603	-5.712	-65.379	84.587
87	6	-368.421	-41.567	-355.921	174.540	54.114	-444.102	66.553
87	7	-375.941	-42.913	-375.252	186.758	40.784	-459.638	65.860
87	8	303.767	36.843	327.393	-204.324	414.355	-73.745	151.576
87	9	-48.157	-4.326	-42.261	-3.403	-4.063	-48.420	94.414
88	1	-11.421	-2.169	-33.242	22.899	16.566	-30.158	50.710
88	2	-35.925	-4.807	-51.634	26.589	10.441	-51.174	60.167
88	3	-32.334	-4.501	-52.416	27.750	12.625	-49.462	58.316
88	4	-35.002	-4.860	-43.009	27.191	11.157	-51.019	59.499
88	5	-31.411	-4.554	-43.791	28.351	13.387	-49.353	57.672
88	6	-479.017	-52.956	-378.393	98.851	-31.138	-500.835	77.553
88	7	-505.643	-55.600	-401.594	98.043	-35.168	-526.074	78.228
88	8	522.384	55.044	371.863	-55.040	523.779	48.649	173.373
88	9	-7.830	-1.354	-34.024	24.060	19.396	-29.091	48.533
89	1	-60.590	-5.355	-42.472	3.947	-5.085	-60.871	85.932
89	2	-73.623	-6.792	-58.826	11.794	-4.772	-75.644	80.279
89	3	-76.249	-6.973	-60.775	10.594	-5.339	-77.833	81.495
89	4	-74.104	-6.333	-50.440	11.910	-4.795	-76.151	80.250
89	5	-76.730	-7.013	-52.390	10.710	-5.425	-78.338	81.460
89	6	-322.369	-33.738	-351.173	154.288	33.208	-389.316	65.543
89	7	-320.482	-34.218	-369.162	164.217	40.438	-395.189	65.537
89	8	217.809	25.236	317.205	-166.537	313.377	-70.931	150.010
89	9	-63.215	-5.546	-44.423	2.747	-5.415	-63.346	87.278
90	1	-28.157	-3.831	-36.015	26.420	13.091	-45.080	57.359
90	2	-48.878	-5.858	-53.936	28.924	8.677	-63.414	63.313
90	3	-47.298	-5.788	-55.001	30.540	10.464	-63.551	62.256
90	4	-48.865	-5.974	-45.440	29.381	8.354	-63.795	63.353
90	5	-47.285	-5.905	-46.546	31.097	10.756	-63.945	61.313
90	6	-428.556	-43.410	-372.294	80.384	-27.305	-444.660	78.671
90	7	-446.956	-44.927	-394.275	76.317	-30.933	-460.859	79.602
90	8	421.004	39.899	357.579	-25.481	422.700	38.203	176.191
90	9	-26.577	-3.761	-37.120	28.137	15.132	-45.531	56.234
91	1	-23.893	1.954	-32.536	30.161	21.844	-43.782	55.557
91	2	-45.665	-1.492	-51.522	31.913	15.149	-62.307	52.395
91	3	-43.525	-0.684	-52.134	34.000	18.080	-62.289	51.155

ELEMENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
791	4	-45.615	-1.460	-43.443	32.384	15.656	-62.731	62.142
791	5	-43.475	-0.551	-44.025	34.571	18.601	-62.729	60.886
791	6	-443.357	-63.225	-389.281	58.891	-51.125	-455.457	80.038
[illegible]	7	-464.064	-68.100	-413.066	62.687	-58.413	-473.751	81.215
[illegible]	8	448.588	77.246	384.607	-2.771	448.609	77.225	179.572
791	9	-21.752	2.762	-33.218	32.347	25.097	-44.087	55.377
792	1	-35.329	-7.462	-35.351	-7.929	-5.364	-37.427	104.821
792	2	-54.377	-8.409	-53.945	2.820	-8.236	-54.550	86.502
792	3	-53.728	-8.897	-54.807	0.033	-8.897	-53.728	89.957
792	4	-54.508	-8.371	-46.151	2.937	-8.185	-54.695	86.372
792	5	-53.859	-8.859	-47.013	0.150	-8.858	-53.860	89.808
792	6	-405.666	-27.096	-385.875	195.075	55.432	-488.196	67.068
792	7	-419.263	-26.371	-407.866	212.692	66.715	-512.349	66.363
792	8	376.618	12.539	372.994	-242.786	498.032	-108.874	153.431
792	9	-34.680	-7.950	-36.223	-10.716	-4.184	-38.446	109.361
793	1	-38.506	0.546	-34.993	32.335	18.793	-56.754	60.563
793	2	-56.727	-2.347	-53.494	33.012	13.230	-72.306	64.738
793	3	-56.482	-1.740	-54.378	35.640	15.826	-74.049	63.761
793	4	-56.947	-2.386	-45.365	33.209	13.310	-72.645	64.701
793	5	-56.702	-1.780	-46.249	35.837	15.907	-74.390	63.731
793	6	-393.900	-54.483	-383.356	52.491	-46.550	-401.832	81.406
793	7	-405.342	-58.515	-405.790	42.293	-53.432	-410.425	83.147
793	8	355.094	63.627	371.883	20.532	356.534	62.188	4.010
793	9	-38.261	1.153	-35.877	34.963	21.581	-58.689	59.704
794	1	-48.068	-8.288	-37.379	-2.261	-8.160	-48.196	93.243
[illegible]	2	-63.926	-8.773	-55.556	7.011	-7.895	-64.803	82.867
[illegible]	3	-64.976	-9.414	-56.692	4.931	-8.980	-65.410	84.967
[illegible]	4	-54.127	-8.699	-47.732	7.485	-7.706	-65.120	82.442
794	5	-65.176	-9.341	-48.868	5.405	-8.822	-65.695	84.521
794	6	-360.569	-19.225	-380.557	174.332	54.070	-433.865	67.196
794	7	-365.533	-17.142	-401.115	187.201	64.374	-447.050	66.469
794	8	293.230	1.607	361.933	-204.166	398.306	-103.469	152.767
794	9	-49.117	-8.930	-38.515	-4.341	-8.466	-49.581	96.096
795	1	-44.854	-3.592	-34.931	0.606	-3.583	-44.863	89.158
795	2	-61.593	-5.354	-54.018	9.162	-3.900	-63.048	80.976
795	3	-62.175	-5.333	-54.728	7.481	-4.365	-63.144	82.626
795	4	-61.931	-5.384	-46.589	9.585	-3.803	-63.512	80.636
795	5	-62.514	-5.362	-47.299	7.904	-4.289	-63.587	82.268
795	6	-373.616	-37.980	-395.468	164.113	28.926	-440.524	67.819
795	7	-380.691	-39.080	-417.408	175.050	34.689	-454.461	67.148
795	8	315.808	34.462	384.050	-185.456	407.908	-57.636	153.590
795	9	-45.436	-3.571	-35.642	-1.074	-3.543	-45.463	91.469
796	1	-16.686	-2.514	-29.265	20.533	12.120	-31.322	54.519
796	2	-40.459	-4.789	-49.763	24.097	7.355	-52.604	63.252
796	3	-37.184	-4.564	-49.687	25.147	9.098	-50.847	61.483
796	4	-41.106	-4.948	-42.436	24.303	7.263	-53.318	63.323
796	5	-37.832	-4.723	-42.360	25.352	9.001	-51.556	61.571
796	6	-473.585	-46.622	-415.534	93.096	-27.206	-493.001	78.219
796	7	-499.835	-49.213	-441.500	90.446	-31.737	-517.313	79.864
[illegible]	8	499.440	46.687	420.915	-55.205	536.074	40.053	173.147

3667

885

F681

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	TEETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
357	4	-75.038	-2.715	-51.835	18.005	1.517	-79.273	76.765
357	5	-74.732	-2.635	-53.319	18.192	1.694	-79.260	76.610
357	6	-400.190	-25.339	-534.696	54.293	-13.515	-407.314	81.324
357	7	-405.882	-26.792	-556.573	54.381	-13.172	-413.521	82.209
357	8	317.492	26.286	545.877	-23.553	313.335	24.393	175.405
357	9	-52.767	-1.218	-27.717	15.038	3.373	-56.363	74.619
358	1	-51.768	-3.306	-29.149	4.244	-2.639	-52.135	85.062
358	2	-69.367	-3.217	-55.462	8.977	-2.020	-70.564	82.407
358	3	-69.031	-3.246	-54.599	8.799	-2.092	-70.185	82.519
358	4	-73.829	-3.527	-52.345	9.005	-2.391	-74.964	82.315
358	5	-73.493	-3.556	-51.482	8.818	-2.461	-74.588	82.923
358	6	-403.196	-7.906	-533.723	95.842	14.105	-425.208	77.365
358	7	-409.061	-7.829	-555.162	98.217	14.923	-431.813	76.957
358	8	324.230	1.210	543.191	-98.143	351.711	-26.270	164.357
358	9	-51.432	-3.035	-28.286	4.057	-2.597	-51.770	85.241
359	1	-51.170	-0.862	-29.520	4.363	-0.377	-51.555	84.419
359	2	-68.986	-1.753	-55.943	9.511	-0.433	-70.306	82.100
359	3	-68.643	-1.726	-55.132	9.345	-0.445	-69.923	82.197
359	4	-73.384	-1.744	-52.981	9.637	-0.471	-74.658	82.471
359	5	-73.041	-1.717	-52.169	9.470	-0.481	-74.277	82.564
359	6	-406.652	-18.125	-536.619	93.247	3.094	-427.873	77.179
359	7	-412.578	-18.622	-557.517	95.455	3.288	-434.489	77.072
359	8	329.615	18.428	544.989	-93.321	355.456	-7.411	164.523
359	9	-50.826	-0.834	-29.709	4.796	-0.378	-51.282	84.568
360	1	-42.736	-2.030	-28.429	12.559	1.486	-46.303	74.146
360	2	-62.595	-2.841	-55.126	15.272	0.835	-66.272	76.453
360	3	-61.994	-2.853	-54.284	15.337	0.887	-65.735	76.232
360	4	-65.382	-2.991	-52.113	15.335	0.338	-69.962	76.299
360	5	-65.381	-3.003	-51.271	15.392	1.041	-69.427	76.137
360	6	-434.878	-17.260	-540.601	67.947	-5.483	-445.655	80.987
360	7	-442.571	-17.479	-561.525	68.515	-6.708	-453.341	81.356
360	8	383.435	14.187	552.078	-44.922	388.822	8.801	173.152
360	9	-42.135	-2.092	-27.587	12.524	1.555	-45.783	73.883
361	1	-57.130	-0.920	-29.429	5.633	-0.351	-57.689	84.333
361	2	-72.879	-1.720	-55.807	9.930	-0.360	-74.239	82.302
361	3	-72.622	-1.709	-54.969	9.834	-0.373	-73.961	82.249
361	4	-78.471	-1.679	-52.669	10.009	-0.396	-79.754	82.694
361	5	-78.214	-1.667	-51.831	9.922	-0.404	-79.476	82.739
361	6	-375.241	-16.390	-535.299	89.176	4.549	-396.180	76.795
361	7	-379.270	-16.854	-555.724	91.281	4.329	-400.953	76.534
361	8	277.722	16.417	544.303	-87.203	304.151	-10.011	163.139
361	9	-56.873	-0.908	-28.591	5.537	-0.366	-57.415	84.403
362	1	-48.938	-2.319	-29.544	13.175	1.146	-52.404	75.251
362	2	-67.240	-2.743	-55.215	15.127	0.628	-70.612	77.434
362	3	-66.826	-2.759	-54.368	15.137	0.654	-70.240	77.324
362	4	-71.433	-2.978	-51.958	15.511	0.735	-75.209	77.123
362	5	-71.019	-2.995	-51.151	15.561	0.922	-74.837	77.019
362	6	-413.156	-11.129	-539.877	54.405	-3.896	-420.339	82.427
362	7	-419.404	-11.231	-561.334	54.396	-4.209	-425.519	82.633
362	8	342.608	6.572	551.623	-27.558	344.354	4.327	175.342

E682

ELEMT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
862	9	-48.524	-2.336	-27.697	13.225	1.182	-52.043	75.100
863	1	-48.354	-0.183	-28.340	13.888	3.534	-52.071	75.015
[illegible]	2	-66.872	-1.286	-55.720	15.658	2.260	-70.418	77.238
[illegible]	3	-66.451	-1.246	-54.926	15.728	2.349	-70.046	77.122
863	4	-71.003	-1.205	-52.653	17.137	2.775	-74.384	76.923
863	5	-70.582	-1.165	-51.869	17.208	2.855	-74.613	76.813
863	6	-416.585	-21.341	-542.771	51.837	-14.656	-423.271	82.551
863	7	-422.883	-21.914	-563.673	51.661	-15.365	-429.432	82.775
863	8	347.922	23.759	553.340	-22.778	349.514	22.167	176.000
863	9	-47.932	-0.143	-28.146	13.959	3.634	-51.711	74.853
864	1	-47.111	-2.740	-29.821	3.098	-2.524	-47.326	85.024
864	2	-56.036	-2.917	-56.524	8.262	-1.853	-67.100	82.564
864	3	-65.598	-2.911	-55.786	8.135	-1.872	-66.636	82.724
864	4	-69.962	-3.323	-53.642	7.853	-2.410	-70.875	83.368
864	5	-69.523	-3.317	-52.904	7.726	-2.427	-70.413	83.430
864	6	-422.762	-7.065	-542.673	102.339	16.763	-446.591	76.892
864	7	-429.354	-6.916	-563.076	105.145	17.807	-454.078	76.768
864	8	358.200	0.682	550.604	-108.979	388.800	-29.917	164.316
864	9	-46.672	-2.733	-29.083	2.971	-2.533	-46.872	86.148
865	1	-54.462	-0.256	-28.777	14.611	3.431	-58.150	75.835
865	2	-70.724	-1.229	-55.506	15.625	2.121	-74.076	77.894
865	3	-70.360	-1.198	-54.676	15.645	2.176	-73.734	77.828
865	4	-76.217	-1.151	-52.292	17.561	2.753	-80.122	77.463
865	5	-75.852	-1.119	-51.452	17.581	2.809	-79.782	77.401
865	6	-381.910	-18.918	-541.273	38.545	-14.849	-385.979	83.990
[illegible]	7	-386.111	-19.419	-562.709	37.807	-15.561	-389.968	84.174
[illegible]	8	291.680	20.873	552.630	-5.317	291.784	20.769	178.875
[illegible]	9	-54.097	-0.234	-27.947	14.532	3.492	-57.815	75.744
866	1	-53.054	-2.841	-29.654	3.763	-2.561	-53.335	85.737
866	2	-69.865	-2.817	-56.320	8.704	-1.705	-70.977	82.722
866	3	-69.502	-2.808	-55.548	8.644	-1.706	-70.604	82.734
866	4	-75.035	-3.283	-53.259	8.237	-2.349	-75.968	83.534
866	5	-74.671	-3.274	-52.488	8.177	-2.350	-75.595	83.549
866	6	-390.475	-3.354	-541.376	98.772	20.390	-414.220	76.482
866	7	-395.103	-3.057	-562.329	101.500	21.662	-419.822	76.312
866	8	305.264	-3.834	550.149	-103.478	336.708	-35.278	163.098
866	9	-52.690	-2.833	-28.883	3.703	-2.559	-52.964	85.775
867	1	-52.536	-0.631	-30.361	4.456	-0.251	-52.915	85.123
867	2	-69.626	-1.536	-57.103	9.145	-0.329	-70.833	82.482
867	3	-69.276	-1.524	-56.406	9.088	-0.326	-70.473	82.491
867	4	-74.664	-1.442	-54.205	8.843	-0.389	-75.717	83.213
867	5	-74.314	-1.430	-53.507	8.796	-0.386	-75.358	83.222
867	6	-395.130	-18.018	-544.046	94.920	4.525	-417.674	76.639
867	7	-399.881	-18.570	-564.405	97.403	4.870	-423.324	76.469
867	8	311.928	19.008	550.858	-97.172	341.232	-10.295	163.218
867	9	-52.185	-0.620	-29.664	4.399	-0.247	-52.558	85.138
868	1	-44.388	-2.127	-29.479	12.084	1.084	-47.599	75.113
868	2	-64.495	-2.624	-56.604	13.964	0.381	-67.501	77.852
[illegible]	3	-64.097	-2.537	-55.917	13.956	0.383	-67.113	77.787

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
68	4	-67.678	-2.846	-53.542	15.408	0.628	-71.154	77.288
68	5	-67.280	-2.859	-52.356	15.400	0.632	-70.773	77.223
68	6	-441.533	-12.336	-550.258	51.829	-6.166	-447.738	83.211
68	7	-449.020	-12.381	-570.738	51.716	-6.340	-455.062	83.335
68	8	387.153	8.384	560.154	-27.105	389.083	6.454	175.927
68	9	-43.990	-2.139	-28.792	12.075	1.094	-47.324	75.005
69	1	-58.729	-0.624	-29.967	4.994	-0.198	-59.155	85.113
69	2	-73.884	-1.432	-56.657	9.374	-0.225	-74.290	82.668
69	3	-72.690	-1.431	-55.901	9.354	-0.224	-73.898	82.644
69	4	-79.954	-1.306	-53.609	9.194	-0.256	-80.994	83.482
69	5	-79.560	-1.305	-52.853	9.084	-0.254	-80.600	83.464
69	6	-351.841	-16.097	-542.245	89.668	6.349	-374.289	75.945
69	7	-353.940	-16.623	-563.176	91.995	6.834	-377.398	75.695
69	8	244.871	16.950	550.343	-89.914	276.071	-14.249	150.863
69	9	-58.335	-0.623	-29.210	4.973	-0.198	-58.760	85.119
70	1	-50.457	-2.237	-29.229	12.906	0.999	-53.694	75.920
70	2	-68.236	-2.487	-56.302	14.033	0.382	-71.106	78.441
70	3	-67.877	-2.488	-55.571	13.985	0.377	-70.743	78.420
70	4	-72.845	-2.808	-53.076	15.931	0.644	-76.299	77.768
70	5	-72.486	-2.809	-52.345	15.883	0.640	-75.936	77.745
70	6	-405.473	-7.802	-548.616	38.814	-4.049	-409.226	84.477
70	7	-410.790	-7.659	-569.661	38.015	-4.105	-414.344	84.659
70	8	329.320	2.848	559.512	-9.598	329.602	2.566	178.317
70	9	-50.098	-2.238	-28.498	12.858	0.997	-53.334	75.875
71	1	-49.955	-0.037	-29.972	13.593	3.424	-53.418	75.713
71	2	-68.010	-1.215	-57.116	14.471	1.785	-71.010	78.286
71	3	-67.665	-1.213	-56.461	14.426	1.783	-70.662	78.265
71	4	-72.492	-0.979	-54.051	16.532	2.658	-76.129	77.592
71	5	-72.147	-0.975	-53.406	16.487	2.657	-75.781	77.570
71	6	-410.076	-22.447	-551.247	34.996	-19.313	-413.210	84.382
71	7	-415.503	-23.145	-571.564	33.956	-20.229	-418.420	85.090
71	8	335.871	25.638	560.057	-3.342	335.907	25.602	179.383
71	9	-49.611	-0.035	-29.317	13.549	3.425	-53.072	75.670
72	1	-48.381	-2.592	-31.029	2.562	-2.449	-48.524	86.807
72	2	-67.113	-2.527	-58.019	8.026	-1.544	-68.095	83.021
72	3	-66.784	-2.496	-57.418	8.032	-1.507	-67.772	82.985
72	4	-71.162	-3.067	-55.202	7.037	-2.348	-71.882	84.160
72	5	-70.833	-3.036	-54.602	7.043	-2.312	-71.557	84.130
72	6	-420.795	-2.397	-549.894	105.873	23.321	-446.514	76.469
72	7	-426.796	-2.017	-569.723	110.130	24.355	-453.679	76.299
72	8	352.494	-4.503	555.359	-115.448	387.120	-39.128	163.440
72	9	-48.052	-2.561	-30.429	2.568	-2.415	-48.197	86.779
73	1	-56.322	-0.044	-29.474	14.322	3.390	-59.757	76.512
73	2	-71.384	-1.073	-55.553	14.340	1.738	-74.197	79.904
73	3	-70.968	-1.075	-55.941	14.237	1.713	-73.757	78.915
73	4	-77.392	-0.343	-53.357	16.940	2.716	-81.452	78.132
73	5	-77.476	-0.345	-52.635	15.837	2.690	-81.012	78.138
73	6	-362.281	-19.587	-549.259	19.934	-13.431	-363.436	86.532
73	7	-364.769	-20.208	-570.358	19.077	-19.262	-365.713	87.005
73	8	262.933	22.412	559.599	16.435	264.049	21.296	3.899

E-84

MEMB	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
873	9	-55.906	-0.046	-28.752	14.219	3.364	-59.317	76.509
874	1	-54.513	-2.590	-30.523	3.142	-2.530	-54.703	86.542
[illegible]	2	-70.467	-2.411	-57.484	8.326	-1.407	-71.471	83.125
[illegible]	3	-70.087	-2.375	-56.818	8.365	-1.357	-71.105	83.060
874	4	-76.377	-3.024	-54.499	7.369	-2.291	-77.110	84.319
874	5	-75.997	-2.988	-53.833	7.407	-2.244	-76.741	84.254
874	6	-376.647	1.534	-548.379	102.195	27.383	-402.496	75.805
874	7	-379.939	2.090	-568.817	105.383	29.223	-407.082	75.557
874	8	284.546	-9.288	555.473	-109.748	321.012	-45.753	161.620
874	9	-54.133	-2.654	-29.858	3.181	-2.458	-54.329	86.477
875	1	-54.072	-0.360	-31.615	3.818	-0.090	-54.343	85.953
875	2	-70.355	-1.286	-58.573	8.692	-0.209	-71.432	82.936
875	3	-70.004	-1.290	-57.996	8.721	-0.200	-71.093	82.878
875	4	-76.083	-1.094	-55.803	7.957	-0.259	-76.919	84.008
875	5	-75.732	-1.098	-55.226	7.987	-0.252	-76.577	83.959
875	6	-382.297	-18.017	-550.059	97.271	6.329	-406.644	75.948
875	7	-385.776	-18.650	-569.796	100.141	6.888	-411.315	75.693
875	8	292.251	19.838	554.037	-102.150	326.300	-14.210	161.565
875	9	-53.721	-0.363	-31.038	3.848	-0.087	-53.997	85.896
876	1	-45.802	-2.044	-30.872	11.909	0.986	-48.833	75.719
876	2	-65.975	-2.356	-58.299	13.011	0.202	-68.533	78.877
876	3	-65.740	-2.356	-57.764	12.935	0.181	-68.278	78.898
876	4	-69.024	-2.654	-55.274	14.892	0.533	-72.213	77.915
876	5	-68.789	-2.655	-54.738	14.816	0.512	-71.957	77.932
876	6	-444.448	-8.748	-557.996	37.155	-5.602	-447.594	85.150
[illegible]	7	-451.713	-8.645	-577.949	36.291	-5.692	-454.666	85.348
[illegible]	8	387.141	4.380	565.133	-10.081	387.405	4.115	178.492
876	9	-45.566	-2.045	-30.336	11.833	0.964	-48.576	75.731
877	1	-60.556	-0.339	-30.840	4.309	-0.032	-60.863	85.927
877	2	-73.348	-1.177	-57.784	8.823	-0.113	-74.411	83.129
877	3	-72.851	-1.187	-57.124	8.865	-0.106	-73.931	83.051
877	4	-81.539	-0.956	-54.843	8.196	-0.131	-82.364	84.250
877	5	-81.042	-0.967	-54.183	8.239	-0.128	-81.881	84.186
877	6	-325.565	-16.233	-548.465	91.059	8.581	-350.380	74.756
877	7	-325.479	-16.848	-568.858	93.709	9.375	-351.703	74.365
877	8	208.069	17.962	554.731	-93.790	246.551	-20.519	157.691
877	9	-60.058	-0.349	-30.180	4.350	-0.034	-60.374	85.854
878	1	-52.106	-2.157	-30.263	12.715	0.893	-55.157	76.508
878	2	-69.234	-2.199	-57.654	12.958	0.218	-71.652	79.431
878	3	-68.915	-2.186	-57.044	12.832	0.196	-71.298	79.481
878	4	-74.357	-2.614	-54.467	15.374	0.541	-77.513	78.400
878	5	-74.038	-2.601	-53.857	15.248	0.517	-77.156	78.440
878	6	-395.593	-3.820	-556.201	22.189	-2.567	-396.846	86.758
878	7	-399.854	-3.495	-576.795	20.491	-2.438	-400.911	87.048
878	8	313.054	-1.544	565.186	9.767	313.357	-1.947	1.775
878	9	-51.787	-2.144	-29.653	12.590	0.866	-54.798	76.552
879	1	-51.683	0.159	-31.404	13.388	3.412	-54.936	75.342
879	2	-69.136	-1.085	-58.784	13.322	1.430	-71.651	79.309
[illegible]	3	-68.845	-1.111	-58.264	13.137	1.365	-71.322	79.362

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F 685

	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
9	4	-74.081	-0.698	-55.823	15.959	2.622	-77.402	78.246
9	5	-73.791	-0.725	-55.303	15.824	2.554	-77.071	78.289
9	6	-401.177	-23.337	-557.787	17.296	-22.547	-401.968	87.384
9	7	-405.616	-24.186	-577.632	15.281	-23.574	-406.227	87.709
9	8	320.640	27.404	563.478	17.315	321.659	26.385	3.367
9	9	-51.393	0.132	-30.884	13.253	3.341	-54.602	76.388
0	1	-49.756	-2.500	-32.695	1.947	-2.420	-49.836	87.644
0	2	-68.245	-2.203	-59.827	7.742	-1.308	-69.141	83.402
0	3	-68.008	-2.153	-59.359	7.847	-1.231	-68.930	83.297
0	4	-72.474	-2.873	-57.186	6.208	-2.323	-73.024	84.942
0	5	-72.236	-2.823	-56.719	6.313	-2.253	-72.806	84.845
0	6	-418.081	2.009	-555.019	111.892	29.953	-446.025	75.977
0	7	-423.483	2.629	-574.143	115.803	32.067	-452.921	75.737
10	8	345.620	-9.526	556.460	-124.640	384.997	-48.904	162.467
0	9	-49.518	-2.450	-32.227	2.052	-2.361	-49.607	87.507
31	1	-58.388	0.161	-30.504	14.179	3.414	-61.641	77.078
31	2	-72.093	-0.947	-57.890	13.188	1.418	-74.459	79.829
31	3	-71.631	-0.975	-57.281	12.993	1.338	-73.945	79.903
81	4	-79.709	-0.571	-54.743	16.427	2.703	-82.983	78.726
81	5	-79.247	-0.598	-54.134	16.232	2.619	-82.466	78.785
81	6	-339.996	-20.712	-556.430	1.134	-20.708	-340.000	89.796
81	7	-340.563	-21.487	-576.971	-1.824	-21.477	-340.573	90.327
81	8	230.485	24.455	564.778	38.623	237.487	17.453	10.276
81	9	-57.926	0.133	-29.895	13.984	3.326	-61.119	77.139
82	1	-56.168	-2.588	-31.783	2.414	-2.479	-56.276	87.425
82	2	-71.150	-2.080	-58.947	7.846	-1.200	-72.040	83.600
82	3	-70.773	-2.025	-58.393	7.959	-1.115	-71.682	83.481
82	4	-77.860	-2.926	-56.101	6.420	-2.291	-78.405	85.144
82	5	-77.472	-2.770	-55.547	6.533	-2.203	-78.039	85.039
82	6	-361.134	5.891	-554.152	105.576	34.093	-389.337	75.044
82	7	-362.959	6.683	-574.001	109.288	36.578	-392.854	74.701
82	8	261.352	-14.240	558.373	-116.224	303.823	-56.710	159.927
82	9	-55.780	-2.532	-31.229	2.527	-2.412	-55.900	87.288
83	1	-55.794	-0.073	-33.327	3.093	0.097	-55.965	86.831
83	2	-71.149	-1.051	-60.347	8.165	-0.113	-72.088	83.443
83	3	-70.801	-1.068	-59.888	8.261	-0.102	-71.756	83.335
83	4	-77.632	-0.749	-57.823	7.010	-0.115	-78.266	84.832
83	5	-77.283	-0.765	-57.364	7.106	-0.110	-77.937	84.738
83	6	-367.487	-18.550	-553.757	99.752	7.953	-393.990	75.120
83	7	-369.545	-19.303	-572.719	103.076	8.780	-397.629	74.759
83	8	269.759	21.340	553.294	-107.506	309.823	-18.723	159.561
83	9	-55.445	-0.089	-32.868	3.139	0.093	-55.628	86.712
84	1	-47.206	-1.994	-32.714	11.834	0.315	-50.117	76.194
84	2	-67.322	-2.105	-60.261	12.118	0.073	-69.499	79.806
84	3	-67.205	-2.094	-59.862	11.986	0.042	-69.343	79.893
84	4	-70.352	-2.495	-57.418	14.453	0.455	-73.302	78.463
84	5	-70.238	-2.484	-57.020	14.322	0.428	-73.141	78.541
84	6	-445.010	-4.946	-562.871	21.301	-3.859	-446.097	87.157
84	7	-451.993	-4.668	-582.126	20.201	-3.758	-452.903	87.419
84	8	384.318	0.026	565.526	7.894	384.481	-0.135	1.176

E686

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
384	9	-47.093	-1.983	-32.315	11.702	0.871	-49.948	76.299
385	1	-52.727	-0.050	-32.082	3.508	0.145	-52.922	86.806
[illegible]	2	-73.871	-0.926	-59.205	8.153	-0.025	-74.772	83.695
[illegible]	3	-73.298	-0.946	-58.647	8.249	-0.017	-74.225	83.577
385	4	-83.425	-0.607	-55.426	7.172	0.038	-84.042	85.087
385	5	-82.852	-0.627	-55.868	7.262	0.008	-83.488	84.990
385	6	-298.132	-16.520	-553.774	92.321	11.046	-325.700	73.374
385	7	-295.700	-17.244	-573.564	95.355	12.279	-325.224	72.796
385	8	169.021	19.170	557.115	-97.831	217.323	-29.131	153.723
385	9	-52.153	-0.070	-31.524	3.599	0.137	-52.361	86.693
386	1	-53.865	-2.107	-31.579	12.693	0.837	-56.811	76.936
386	2	-70.182	-1.949	-59.270	12.048	0.115	-72.247	80.274
386	3	-69.889	-1.925	-58.777	11.862	0.085	-71.900	80.378
386	4	-75.925	-2.462	-56.214	14.984	0.476	-78.864	78.903
386	5	-75.632	-2.437	-55.721	14.798	0.441	-78.510	78.991
386	6	-382.871	-0.036	-562.047	5.738	0.049	-382.957	89.141
386	7	-385.919	0.479	-582.062	3.080	0.503	-385.944	89.543
386	8	293.122	-5.998	567.812	29.369	295.978	-8.854	5.555
386	9	-53.572	-2.082	-31.186	12.507	0.794	-56.449	77.044
387	1	-53.520	0.388	-33.292	13.363	3.518	-56.650	76.814
387	2	-70.190	-0.934	-60.720	12.362	1.206	-72.331	80.176
387	3	-69.935	-0.982	-60.325	12.160	1.099	-72.017	80.286
387	4	-75.724	-0.404	-58.007	15.565	2.686	-78.814	78.771
387	5	-75.469	-0.451	-57.611	15.363	2.572	-78.494	78.863
387	6	-389.085	-24.404	-561.431	-0.006	-24.404	-389.085	90.001
387	7	-392.348	-25.421	-580.509	-3.051	-25.396	-392.373	90.476
[illegible]	8	301.283	29.440	562.268	37.971	306.487	24.236	7.804
387	9	-53.265	0.340	-32.896	13.160	3.396	-56.322	76.924
388	1	-51.151	-2.487	-34.867	1.159	-2.459	-51.179	88.635
388	2	-69.276	-1.985	-61.929	7.235	-1.215	-70.045	83.932
388	3	-69.111	-1.921	-61.582	7.411	-1.113	-69.919	83.779
388	4	-73.758	-2.779	-59.638	5.197	-2.399	-74.137	85.834
388	5	-73.593	-2.715	-59.292	5.373	-2.310	-73.998	85.589
388	6	-413.104	5.821	-556.854	115.787	35.693	-442.976	75.533
388	7	-417.843	6.676	-575.050	120.311	38.402	-449.569	75.227
388	8	336.039	-14.061	552.310	-131.931	390.137	-58.211	151.497
388	9	-50.986	-2.423	-34.521	1.335	-2.387	-51.022	88.425
389	1	-60.715	0.390	-31.890	14.293	3.568	-63.893	77.464
389	2	-72.956	-0.799	-59.484	12.359	1.259	-75.015	80.545
389	3	-72.456	-0.845	-58.985	12.398	1.143	-74.445	80.665
389	4	-81.760	-0.284	-56.472	15.211	2.922	-84.867	79.150
389	5	-81.260	-0.330	-55.974	15.949	2.599	-84.290	79.244
389	6	-316.076	-21.834	-562.399	-16.099	-20.955	-316.955	93.122
389	7	-314.547	-22.773	-582.395	-20.157	-21.391	-315.934	93.935
389	8	195.390	26.547	567.632	59.640	214.332	7.505	17.520
389	9	-60.215	0.343	-31.392	14.031	3.436	-63.303	77.569
390	1	-58.009	-2.406	-33.422	1.609	-2.360	-58.056	88.343
390	2	-71.927	-1.620	-60.550	7.359	-0.877	-72.670	84.159
390	[illegible]	-71.535	-1.551	-60.204	7.436	-0.759	-72.316	84.001

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ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
390	4	-79.477	-2.484	-53.045	5.412	-2.106	-79.855	85.998
390	5	-79.085	-2.415	-57.599	5.579	-2.011	-79.489	85.859
390	6	-343.722	11.303	-557.788	108.513	41.843	-374.261	74.281
[illegible]	7	-343.966	12.363	-576.912	112.752	45.044	-376.547	73.836
[illegible]	8	235.443	-20.173	557.769	-122.330	234.552	-69.232	159.127
390	9	-57.617	-2.336	-32.975	1.776	-2.279	-57.675	88.161
391	1	-57.793	0.344	-35.543	2.068	0.417	-57.866	87.965
391	2	-72.108	-0.613	-62.405	7.251	0.109	-72.336	84.266
391	3	-71.760	-0.644	-62.053	7.396	0.116	-72.521	84.124
391	4	-79.435	-0.205	-60.304	5.681	0.200	-79.840	85.919
391	5	-79.087	-0.231	-59.952	5.826	0.196	-79.515	85.797
391	6	-350.917	-17.640	-554.011	100.213	10.172	-378.729	74.489
391	7	-351.424	-18.491	-571.965	103.990	11.320	-381.236	74.003
391	8	244.450	21.530	547.124	-111.307	290.510	-24.530	157.519
391	9	-57.445	0.318	-35.191	2.213	0.402	-57.529	87.808
392	1	-48.452	-1.985	-35.059	11.916	0.892	-51.329	76.423
392	2	-68.258	-1.887	-62.459	11.391	0.013	-70.159	80.527
392	3	-68.230	-1.864	-62.179	11.215	-0.020	-70.074	80.563
392	4	-71.403	-2.381	-60.010	14.190	0.421	-74.207	78.824
392	5	-71.375	-2.359	-59.731	14.014	0.377	-74.112	78.948
392	6	-440.778	-1.037	-563.474	7.001	-0.925	-440.889	89.088
392	7	-447.319	-0.558	-581.748	4.419	-0.514	-447.363	89.433
392	8	376.249	-4.579	559.508	25.887	378.001	-6.331	3.871
392	9	-48.423	-1.963	-34.779	11.740	0.835	-51.222	76.594
393	1	-65.804	0.202	-33.802	2.806	0.321	-65.923	87.570
[illegible]	2	-75.356	-0.776	-61.042	7.833	0.037	-76.170	84.068
[illegible]	3	-74.723	-0.805	-60.583	7.967	0.043	-75.572	83.917
393	4	-96.392	-0.343	-58.517	6.438	0.135	-86.871	85.744
393	5	-85.758	-0.373	-58.059	6.573	0.129	-86.261	85.623
393	6	-272.989	-18.058	-558.538	98.257	15.414	-306.472	71.134
393	7	-268.066	-18.948	-577.645	101.865	17.401	-304.416	70.361
393	8	130.134	21.748	557.576	-107.037	195.916	-44.033	148.426
393	9	-65.170	0.172	-33.343	2.940	0.305	-65.302	87.428
394	1	-56.758	-2.213	-33.707	12.680	0.590	-59.562	77.531
394	2	-72.411	-1.869	-61.407	11.168	-0.142	-74.137	81.215
394	3	-72.128	-1.833	-61.022	10.939	-0.170	-73.792	81.356
394	4	-78.987	-2.504	-58.635	14.583	0.131	-81.673	79.562
394	5	-78.704	-2.458	-58.249	14.354	0.144	-81.317	79.582
394	6	-374.572	3.281	-567.058	-10.348	3.564	-374.855	91.567
394	7	-376.293	4.011	-586.355	-13.960	4.523	-376.805	92.399
394	8	275.067	-10.249	567.762	48.522	283.093	-18.276	9.392
394	9	-56.475	-2.177	-33.322	12.451	0.541	-59.194	77.581
395	1	-56.570	0.512	-35.922	13.128	3.387	-59.444	77.649
395	2	-72.606	-0.882	-63.226	11.145	0.809	-74.299	81.367
395	3	-72.367	-0.943	-62.937	10.895	0.681	-73.993	81.517
395	4	-78.970	-0.248	-60.986	14.342	2.456	-81.676	79.669
395	5	-78.731	-0.309	-60.697	14.592	2.318	-81.359	79.793
395	6	-381.525	-25.534	-562.877	-19.550	-24.570	-382.489	92.975
395	7	-383.493	-26.698	-580.935	-22.625	-25.269	-384.922	93.614
[illegible]	8	283.707	31.230	556.369	59.403	296.986	17.952	12.500

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F688

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
895	9	-56.331	0.452	-35.634	12.878	3.236	-59.115	77.800
896	1	-53.722	-2.389	-37.691	0.583	-2.383	-53.729	89.349
896	2	-71.816	-1.620	-64.513	7.152	-0.897	-72.540	84.233
896	3	-71.705	-1.546	-64.253	7.393	-0.776	-72.475	84.049
896	4	-76.712	-2.532	-62.785	4.632	-2.244	-77.000	86.440
896	5	-76.600	-2.459	-62.540	4.863	-2.141	-76.913	86.252
896	6	-416.076	10.924	-556.418	124.203	44.423	-449.576	74.905
896	7	-420.194	12.047	-573.460	129.472	47.861	-456.008	74.537
896	8	332.326	-19.848	543.650	-143.819	383.595	-71.117	160.380
896	9	-53.611	-2.316	-37.446	0.814	-2.303	-53.624	89.091
897	1	-63.884	0.608	-33.693	14.195	3.594	-66.870	78.120
897	2	-74.728	-0.728	-61.429	11.104	0.902	-76.358	81.647
897	3	-74.192	-0.789	-61.034	10.792	0.764	-75.745	81.807
897	4	-84.859	-0.063	-58.650	15.552	2.698	-87.621	79.928
897	5	-84.322	-0.125	-58.255	15.239	2.548	-86.996	80.049
897	6	-294.584	-24.226	-567.728	-37.715	-19.063	-299.747	97.794
897	7	-290.840	-25.393	-587.095	-43.018	-18.596	-297.637	98.979
897	8	160.750	30.074	568.599	85.085	202.690	-11.865	26.239
897	9	-63.348	0.546	-33.298	13.882	3.432	-66.234	78.256
898	1	-60.832	-2.606	-35.638	1.084	-2.585	-60.852	88.933
898	2	-73.931	-1.725	-62.869	6.969	-1.059	-74.597	84.537
898	3	-73.536	-1.647	-62.521	7.169	-0.939	-74.245	84.359
898	4	-82.431	-2.707	-60.639	4.781	-2.421	-82.717	86.579
898	5	-82.037	-2.629	-60.291	4.982	-2.318	-82.348	86.423
898	6	-332.500	12.744	-561.060	111.819	45.796	-365.553	73.533
898	7	-331.182	13.992	-579.345	116.534	49.651	-366.841	72.986
898	8	213.991	-22.530	555.133	-128.013	270.009	-78.548	156.366
898	9	-60.438	-2.528	-35.290	1.284	-2.499	-60.466	88.729
899	1	-60.617	0.245	-38.465	1.974	0.309	-60.681	88.144
899	2	-74.047	-0.909	-64.981	7.521	-0.143	-74.812	84.189
899	3	-73.698	-0.943	-64.720	7.698	-0.137	-74.503	84.025
899	4	-82.332	-0.421	-63.528	5.674	-0.030	-82.723	86.055
899	5	-81.983	-0.455	-63.267	5.851	-0.037	-82.401	85.915
899	6	-338.421	-21.358	-551.745	106.769	11.243	-371.022	73.020
899	7	-337.331	-22.378	-568.410	111.012	12.817	-372.527	72.409
899	8	221.535	25.649	535.991	-119.514	278.114	-30.927	154.667
899	9	-60.268	0.211	-38.204	2.151	0.287	-60.344	87.965
900	1	-51.465	-2.032	-38.163	12.020	0.734	-54.233	77.032
900	2	-71.426	-1.688	-65.244	10.495	-0.142	-72.971	81.623
900	3	-71.452	-1.653	-65.058	10.279	-0.171	-72.934	81.793
900	4	-74.959	-2.313	-63.441	13.313	0.224	-77.497	79.589
900	5	-74.985	-2.279	-63.256	13.596	0.190	-77.444	79.745
900	6	-447.769	3.484	-561.922	-11.433	3.774	-448.059	91.450
900	7	-453.379	4.212	-578.960	-15.058	4.705	-454.373	91.881
900	8	376.120	-10.066	548.768	48.038	382.006	-15.951	6.385
900	9	-51.491	-1.998	-37.978	11.303	0.672	-54.162	77.250
901	1	-67.584	0.533	-35.517	1.736	0.547	-67.628	88.540
901	2	-75.343	-0.480	-62.713	6.581	0.093	-75.918	85.013
901	3	-74.579	-0.515	-62.354	6.735	0.091	-75.285	84.852

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	ZZZ-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
901	4	-87.601	0.036	-60.490	4.937	0.314	-87.878	85.785
901	5	-86.936	0.001	-60.126	5.091	0.298	-87.233	85.660
901	6	-242.162	-17.710	-560.313	93.210	15.949	-275.822	70.144
[illegible]	7	-234.857	-18.681	-579.655	97.002	13.463	-272.002	69.147
[illegible]	8	88.419	22.236	554.608	-104.405	154.853	-54.197	141.793
901	9	-66.919	0.468	-35.153	1.890	3.521	-56.972	88.334
902	1	-57.916	-2.025	-35.651	12.740	0.741	-60.683	77.746
902	2	-72.076	-1.404	-63.119	10.398	0.093	-73.574	81.301
902	3	-71.794	-1.360	-62.827	10.137	0.069	-73.224	81.970
902	4	-79.440	-2.129	-60.740	14.263	0.417	-81.938	79.373
902	5	-79.159	-2.085	-60.449	14.002	0.379	-81.624	80.215
902	6	-348.232	8.705	-565.526	-25.668	10.541	-350.068	94.292
902	7	-348.277	9.667	-583.883	-30.213	12.200	-350.809	94.791
902	8	240.854	-16.118	560.331	66.936	257.245	-32.508	13.759
902	9	-57.634	-1.981	-35.359	12.479	0.688	-60.305	77.922
903	1	-57.749	0.789	-38.611	13.618	3.803	-60.762	77.524
903	2	-72.224	-0.612	-65.318	10.945	1.023	-73.860	81.501
903	3	-71.987	-0.680	-65.115	10.662	0.879	-73.548	81.675
903	4	-79.389	0.120	-63.758	15.146	2.908	-82.177	79.571
903	5	-79.153	0.052	-63.556	14.863	2.749	-81.850	79.714
903	6	-353.915	-25.218	-555.547	-30.607	-22.392	-356.741	95.275
903	7	-354.164	-26.503	-572.196	-35.610	-22.677	-357.989	96.131
903	8	247.988	31.746	540.025	75.270	271.609	8.126	17.422
903	9	-57.512	0.721	-38.408	13.335	3.630	-60.421	77.696
904	1	-54.203	-2.339	-40.908	-0.378	-2.337	-54.206	90.417
[illegible]	2	-71.061	-1.497	-66.891	5.919	-0.997	-71.561	85.170
[illegible]	3	-70.980	-1.422	-66.729	6.167	-0.879	-71.523	84.972
[illegible]	4	-76.402	-2.451	-66.048	3.168	-2.315	-76.538	87.551
904	5	-76.322	-2.376	-65.886	3.415	-2.218	-76.479	87.351
904	6	-393.470	12.331	-545.308	117.389	43.843	-424.981	74.974
904	7	-396.402	13.562	-560.597	122.825	47.544	-430.384	74.535
904	8	304.653	-21.423	521.339	-138.910	355.805	-72.575	159.784
904	9	-54.123	-2.265	-40.746	-0.130	-2.264	-54.123	90.144
905	1	-65.613	0.899	-35.506	14.180	3.796	-68.510	78.453
905	2	-74.548	-0.410	-63.162	10.592	1.073	-76.032	82.025
905	3	-73.984	-0.478	-62.859	10.263	0.928	-75.390	82.199
905	4	-85.872	0.340	-60.700	15.352	2.992	-88.524	80.198
905	5	-85.308	0.272	-60.397	15.024	2.834	-87.869	80.326
905	6	-261.451	-23.273	-568.842	-46.880	-14.378	-270.347	100.744
905	7	-255.351	-24.536	-587.436	-52.865	-13.004	-266.884	102.306
905	8	116.641	29.882	564.618	96.119	178.717	-32.193	32.855
905	9	-65.049	0.832	-35.203	13.852	3.626	-67.843	78.596
906	1	-61.885	-2.164	-37.810	0.087	-2.164	-61.885	89.916
906	2	-73.386	-1.080	-64.733	5.834	-0.513	-73.853	85.415
906	3	-72.988	-1.004	-64.471	6.051	-0.498	-73.493	85.223
906	4	-82.741	-2.066	-62.987	3.392	-1.924	-82.884	87.595
906	5	-82.343	-1.989	-62.726	3.609	-1.828	-82.505	87.433
906	6	-304.133	17.138	-558.430	107.672	49.886	-336.881	73.083
906	7	-300.974	18.528	-575.664	112.627	54.239	-336.695	72.403
[illegible]	8	177.580	-26.474	545.731	-126.254	237.879	-86.773	154.471

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ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
906	9	-61.487	-2.087	-37.548	0.304	-2.085	-61.488	89.706
907	1	-61.878	1.096	-41.534	0.647	1.103	-61.885	89.411
907	2	-73.732	-0.364	-67.348	6.021	0.126	-74.223	85.339
907	3	-73.381	-0.424	-67.163	6.217	0.101	-73.907	85.163
907	4	-82.896	0.466	-66.720	3.866	0.645	-83.075	87.350
907	5	-82.545	0.406	-66.535	4.063	0.605	-82.743	87.202
907	6	-310.742	-25.851	-543.029	101.496	6.610	-343.203	72.264
907	7	-307.802	-27.337	-558.103	106.009	8.222	-343.362	71.456
907	8	185.364	33.435	516.883	-117.372	249.210	-30.410	151.455
907	9	-61.527	1.037	-41.349	0.844	1.048	-61.538	89.227
908	1	-52.079	-2.076	-41.715	12.000	0.654	-54.810	77.179
908	2	-70.492	-1.559	-67.770	9.881	-0.170	-71.880	82.001
908	3	-70.531	-1.517	-67.655	9.648	-0.194	-71.854	82.189
908	4	-74.605	-2.292	-67.003	13.512	0.159	-77.047	79.755
908	5	-74.644	-2.241	-66.888	13.278	0.117	-77.003	79.928
908	6	-419.472	6.631	-547.801	-22.482	7.813	-420.655	93.012
908	7	-424.190	7.549	-562.874	-26.798	9.206	-425.847	93.538
908	8	341.483	-13.931	521.972	61.166	351.715	-24.163	9.496
908	9	-52.118	-2.034	-41.600	11.767	0.592	-54.745	77.415
909	1	-69.687	0.607	-37.090	1.774	0.652	-69.732	88.554
909	2	-74.006	-0.616	-64.126	7.066	0.057	-74.680	84.550
909	3	-73.248	-0.663	-63.827	7.242	0.051	-73.964	84.357
909	4	-88.227	0.037	-62.235	5.189	0.341	-88.531	86.647
909	5	-87.470	-0.009	-61.937	5.365	0.318	-87.798	86.502
909	6	-180.916	-22.055	-559.514	101.555	27.442	-230.414	64.015
909	7	-169.804	-23.273	-577.124	105.809	32.160	-225.238	62.350
909	8	10.125	27.657	549.063	-114.217	133.451	-95.657	132.804
909	9	-68.930	0.560	-36.792	1.950	0.615	-68.985	88.393
910	1	-60.622	-1.967	-38.092	12.095	0.428	-63.019	78.793
910	2	-73.077	-1.123	-65.279	8.414	-0.157	-74.048	83.418
910	3	-72.764	-1.076	-65.058	8.119	-0.168	-73.672	83.618
910	4	-81.693	-1.947	-63.443	12.763	0.045	-83.686	81.125
910	5	-81.379	-1.895	-63.222	12.468	0.014	-83.289	81.290
910	6	-320.177	12.861	-563.794	-51.555	20.659	-327.975	98.601
910	7	-318.022	14.033	-581.111	-57.301	23.643	-327.632	99.520
910	8	200.109	-20.973	551.222	95.571	235.773	-56.537	20.444
910	9	-60.309	-1.915	-37.871	11.801	0.378	-62.604	78.996
11	1	-60.695	1.242	-41.991	12.592	3.704	-63.158	78.936
11	2	-73.463	-0.440	-68.000	8.580	0.554	-74.457	83.387
11	3	-73.195	-0.525	-67.857	8.255	0.403	-74.123	83.591
11	4	-81.920	0.537	-67.344	13.184	2.594	-83.977	81.133
11	5	-81.653	0.452	-67.200	12.971	2.423	-83.623	81.296
11	6	-326.129	-29.784	-547.327	-57.023	-19.190	-336.723	100.524
11	7	-324.128	-31.455	-562.372	-63.158	-18.407	-337.175	101.672
11	8	206.885	39.484	520.613	103.543	256.142	-10.772	25.441
11	9	-60.428	1.137	-41.848	12.278	3.515	-62.785	79.130
12	1	-54.721	-2.392	-44.155	-0.041	-2.392	-54.721	90.045
12	2	-73.309	-0.923	-69.672	6.385	-0.252	-73.579	84.516
12	3	-73.049	-0.828	-69.576	7.260	-0.125	-73.772	84.315

E781

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
12	4	-77.692	-2.167	-69.511	3.926	-1.963	-77.895	87.032
12	5	-77.732	-2.072	-69.515	4.201	-1.839	-77.965	86.831
12	6	-420.859	23.954	-541.041	131.414	59.878	-456.783	74.711
[illegible]	7	-424.889	25.788	-554.959	137.553	64.453	-463.554	74.299
[illegible]	8	335.568	-35.270	505.935	-154.632	391.366	-91.259	153.089
12	9	-54.762	-2.297	-44.069	0.234	-2.296	-54.763	89.744
13	1	-67.715	1.010	-37.054	13.868	3.411	-70.116	79.588
13	2	-73.533	-0.625	-64.646	7.988	0.239	-74.398	83.829
13	3	-72.887	-0.706	-64.403	7.627	0.091	-73.685	84.033
13	4	-86.642	0.307	-62.471	13.189	2.264	-88.599	81.561
13	5	-85.996	0.227	-62.228	12.829	2.095	-87.865	81.714
13	6	-206.187	-29.186	-569.894	-76.284	-0.846	-234.527	110.380
13	7	-196.657	-30.800	-587.899	-83.521	3.969	-231.427	112.602
13	8	45.502	37.204	561.356	127.638	169.059	-86.352	44.069
13	9	-67.069	0.929	-36.811	12.708	3.227	-69.366	79.752
14	1	-63.793	-2.606	-40.184	0.467	-2.603	-63.796	89.562
14	2	-73.594	-1.171	-66.754	6.849	-0.528	-74.236	84.644
14	3	-73.171	-1.076	-66.544	7.086	-0.386	-73.860	84.439
14	4	-84.045	-2.423	-65.591	4.180	-2.209	-84.259	87.075
14	5	-83.622	-2.328	-65.381	4.417	-2.089	-83.861	86.899
14	6	-275.071	23.072	-555.231	120.058	65.407	-317.405	70.576
14	7	-269.827	24.902	-571.416	125.583	71.154	-316.080	69.781
14	8	137.887	-34.772	535.083	-139.812	215.875	-112.760	150.847
14	9	-63.369	-2.511	-39.974	0.704	-2.503	-63.377	89.337
15	1	-63.825	1.039	-44.854	1.268	1.064	-63.850	88.880
[illegible]	2	-74.025	-0.540	-69.740	7.048	0.129	-74.695	84.570
[illegible]	3	-73.652	-0.602	-69.590	7.255	0.111	-74.366	84.382
15	4	-84.255	0.335	-70.133	4.822	0.609	-84.539	86.748
15	5	-83.892	0.273	-69.982	5.028	0.572	-84.191	86.592
15	6	-282.577	-28.146	-530.426	109.953	12.785	-323.509	69.581
15	7	-277.601	-29.753	-543.721	114.776	15.232	-322.588	68.597
15	8	146.534	35.991	492.451	-125.605	228.561	-45.936	146.885
15	9	-63.452	0.978	-44.703	1.474	1.011	-63.486	88.589
916	1	-53.631	-2.392	-45.252	10.914	-0.153	-55.859	78.462
916	2	-73.359	-1.190	-70.655	7.889	-0.337	-74.211	83.833
916	3	-73.486	-1.117	-70.584	7.645	-0.318	-74.285	84.034
916	4	-77.110	-2.293	-70.825	11.591	-0.509	-78.894	81.322
16	5	-77.237	-2.221	-70.754	11.447	-0.513	-78.945	81.514
16	6	-446.176	18.967	-540.639	-40.925	22.540	-449.749	94.990
16	7	-451.732	20.574	-554.163	-45.926	24.398	-456.157	95.502
16	8	368.600	-29.379	503.343	79.805	384.007	-44.786	10.926
16	9	-53.759	-2.319	-45.181	10.670	-0.193	-55.885	78.734
17	1	-73.402	1.155	-39.938	0.561	1.159	-73.407	89.568
17	2	-76.402	-0.189	-66.752	5.491	0.204	-76.796	85.999
17	3	-75.616	-0.247	-66.517	5.669	0.176	-76.040	85.722
17	4	-92.010	0.647	-65.484	3.467	0.776	-92.140	87.869
17	5	-91.224	0.588	-65.249	3.645	0.733	-91.369	87.730
17	6	-151.637	-23.508	-559.467	93.010	23.275	-208.421	63.298
17	7	-148.249	-24.967	-575.998	97.294	28.550	-201.777	61.179
[illegible]	8	-23.431	30.980	540.730	-107.770	114.926	-137.377	127.916

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E692

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
917	9	-72.616	1.097	-39.704	0.739	1.104	-72.624	89.425
918	1	-61.895	-2.359	-40.899	12.784	0.259	-64.524	78.377
918	2	-73.281	-1.278	-67.606	8.959	-0.180	-74.380	83.012
918	3	-72.969	-1.214	-67.439	8.661	-0.183	-74.000	83.213
918	4	-82.564	-2.305	-66.487	13.556	-0.377	-84.792	80.667
918	5	-82.251	-2.241	-66.319	13.258	-0.101	-84.391	80.832
918	6	-301.992	16.972	-558.836	-53.173	25.603	-310.623	99.219
918	7	-298.497	18.478	-574.883	-59.326	29.218	-309.237	100.261
918	8	175.100	-26.398	537.255	99.687	216.010	-67.809	22.312
918	9	-61.582	-2.305	-40.732	12.486	0.217	-64.105	78.577
919	1	-62.031	1.212	-45.788	13.515	3.979	-64.799	78.429
919	2	-73.754	-0.680	-70.712	9.138	0.445	-74.879	82.978
919	3	-73.489	-0.771	-70.603	8.812	0.280	-74.542	83.187
919	4	-82.873	0.393	-71.233	14.142	2.730	-85.210	80.619
919	5	-82.609	0.302	-71.124	13.816	2.543	-84.850	80.784
919	6	-308.461	-33.727	-532.464	-62.442	-20.201	-321.988	102.222
919	7	-305.150	-35.611	-545.478	-69.251	-18.860	-321.902	103.598
919	8	182.321	43.067	492.153	112.720	245.185	-19.796	29.148
919	9	-61.767	1.120	-45.680	13.189	3.774	-64.421	78.622
920	1	-55.729	-2.537	-48.850	-1.591	-2.489	-55.777	91.712
920	2	-72.131	-1.195	-72.568	4.942	-0.853	-72.474	86.033
920	3	-72.144	-1.107	-72.487	5.217	-0.725	-72.526	85.821
920	4	-77.729	-2.420	-74.165	1.705	-2.382	-77.768	88.703
920	5	-77.742	-2.332	-74.084	1.981	-2.280	-77.794	88.496
920	6	-386.923	21.351	-514.296	119.906	53.962	-419.533	74.785
920	7	-389.083	23.138	-525.345	126.044	58.623	-424.569	74.276
920	8	292.937	-32.650	461.953	-145.677	348.601	-88.314	159.088
920	9	-55.742	-2.448	-48.759	-1.315	-2.416	-55.775	91.413
921	1	-71.229	1.598	-39.895	13.684	4.155	-73.786	79.564
921	2	-75.481	-0.091	-67.181	8.801	0.922	-76.495	83.428
921	3	-74.794	-0.179	-66.996	8.444	0.764	-75.738	83.633
921	4	-90.018	1.010	-65.660	14.213	3.178	-92.186	81.328
921	5	-89.331	0.922	-65.475	13.855	3.001	-91.410	81.465
921	6	-181.958	-29.326	-568.245	-75.104	1.431	-212.716	112.271
921	7	-178.050	-31.152	-585.120	-82.665	7.364	-208.568	114.982
921	8	6.775	39.110	551.178	128.723	152.678	-106.791	48.579
921	9	-70.541	1.510	-39.710	13.527	3.966	-72.997	79.710
922	1	-64.996	-2.550	-43.097	-0.912	-2.537	-65.009	90.837
922	2	-74.099	-1.070	-69.210	4.952	-0.735	-74.433	86.138
922	3	-73.690	-0.978	-69.051	5.184	-0.610	-74.058	85.942
922	4	-85.052	-2.331	-68.783	2.173	-2.274	-85.109	88.436
922	5	-84.643	-2.239	-68.624	2.405	-2.169	-84.713	88.329
922	6	-263.706	23.985	-550.890	108.375	60.241	-299.962	71.502
922	7	-257.443	25.876	-565.803	113.818	65.935	-297.503	70.509
922	8	121.077	-35.699	521.529	-130.139	194.613	-109.235	150.531
922	9	-64.588	-2.458	-42.939	-0.680	-2.451	-64.595	90.627
923	1	-65.323	1.360	-49.121	-0.273	1.361	-65.324	90.235
923	2	-74.581	-0.169	-72.690	5.170	0.188	-74.939	86.244
923	3	-74.213	-0.232	-72.560	5.381	0.156	-74.603	85.361

ENT	LOAD COMB	X-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	XZ-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
923	4	-85.488	0.761	-74.475	2.721	0.847	-85.574	88.194
923	5	-85.120	0.593	-74.345	2.932	0.798	-85.220	88.045
[illegible]	6	-267.080	-26.730	-511.915	101.430	10.352	-304.163	69.917
[illegible]	7	-260.806	-28.380	-522.853	106.356	12.940	-302.129	66.768
[illegible]	8	124.116	35.269	458.313	-120.109	207.754	-48.367	145.143
923	9	-64.955	1.297	-48.991	-0.052	1.297	-64.955	90.254
924	1	-54.292	-2.497	-50.179	11.757	0.359	-56.750	77.772
924	2	-71.943	-1.346	-73.607	8.301	-0.382	-72.812	83.374
924	3	-71.941	-1.277	-73.541	8.041	-0.373	-72.944	83.589
924	4	-75.514	-2.459	-75.576	12.496	-0.409	-78.565	80.675
924	5	-76.607	-2.390	-75.510	12.236	-0.424	-78.572	80.374
924	6	-407.975	17.845	-510.772	-47.751	23.134	-413.264	96.320
924	7	-411.599	19.461	-521.199	-53.421	25.983	-418.121	96.360
924	8	322.198	-28.394	453.973	90.346	344.111	-50.306	13.633
924	9	-54.294	-2.427	-50.112	11.498	0.006	-56.729	78.044
925	1	-74.131	1.124	-42.023	0.417	1.127	-74.134	89.682
925	2	-75.914	-0.206	-68.771	5.131	0.139	-76.260	86.140
925	3	-75.137	-0.263	-68.591	5.302	0.110	-75.511	85.969
925	4	-92.142	0.615	-67.912	3.165	0.723	-92.250	88.047
925	5	-91.365	0.558	-67.732	3.336	0.679	-91.486	87.924
925	6	-139.906	-23.304	-561.260	88.768	24.596	-187.807	61.648
925	7	-125.047	-24.752	-577.081	92.907	30.677	-180.477	59.179
925	8	-51.080	30.645	536.772	-103.196	100.775	-121.210	124.199
925	9	-73.355	1.068	-41.843	0.588	1.072	-73.359	89.547
926	1	-63.636	-2.427	-43.843	12.140	-0.107	-65.956	79.130
[illegible]	2	-73.611	-1.126	-69.979	7.915	-0.272	-74.466	83.839
[illegible]	3	-73.279	-1.054	-69.845	7.622	-0.258	-74.075	84.040
926	4	-83.320	-2.261	-69.667	12.542	-0.376	-85.706	81.452
926	5	-83.488	-2.190	-69.534	12.249	-0.384	-85.293	81.615
926	6	-278.053	20.914	-552.391	-61.558	33.001	-290.240	101.196
926	7	-272.825	22.540	-567.100	-68.039	37.460	-287.744	102.368
926	8	141.366	-31.599	521.142	107.731	193.521	-83.153	25.572
926	9	-63.303	-2.356	-43.710	11.848	-0.133	-65.525	79.377
927	1	-64.240	1.410	-50.154	12.769	3.813	-66.443	79.342
927	2	-74.134	-0.263	-73.610	8.130	0.620	-75.018	83.792
927	3	-73.341	-0.347	-73.506	7.816	0.474	-74.663	83.996
927	4	-84.323	3.763	-75.624	13.082	2.729	-86.294	81.454
927	5	-84.036	0.680	-75.520	12.767	2.562	-85.918	81.613
927	6	-280.838	-29.357	-511.293	-68.392	-11.961	-298.234	104.271
927	7	-275.546	-31.120	-521.821	-75.373	-9.744	-296.922	105.832
927	8	144.085	38.520	454.595	117.600	220.205	-37.599	32.914
927	9	-63.747	1.327	-50.050	12.454	3.629	-66.050	79.527
928	1	-58.159	-2.245	-54.146	-1.173	-2.221	-58.184	91.201
928	2	-73.020	-0.879	-75.955	4.870	-0.551	-73.347	86.155
928	3	-72.399	-0.796	-75.863	5.120	-0.435	-73.361	85.983
928	4	-79.742	-2.040	-79.436	1.938	-1.992	-79.790	88.572
928	5	-79.721	-1.958	-79.343	2.188	-1.896	-79.783	88.333
928	6	-361.528	22.249	-486.205	111.341	52.212	-391.491	74.938
928	7	-361.757	24.012	-494.157	117.005	56.726	-394.471	74.379
[illegible]	8	256.124	-32.845	413.564	-134.396	308.967	-85.588	156.536

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
928	9	-58.139	-2.163	-54.053	-0.922	-2.148	-58.154	90.944
929	1	-71.749	1.500	-42.027	12.709	3.739	-73.389	80.443
929	2	-74.715	-0.064	-69.256	7.504	0.582	-75.462	84.316
929	3	-74.032	-0.148	-69.121	7.170	0.541	-74.721	84.538
929	4	-89.837	1.027	-68.153	12.590	2.756	-91.577	82.197
929	5	-89.154	0.943	-68.018	12.355	2.607	-90.818	82.331
929	6	-158.573	-28.841	-570.253	-79.076	8.570	-195.984	115.319
929	7	-145.250	-30.669	-586.456	-86.578	15.857	-191.776	118.253
929	8	-22.128	38.552	547.349	129.984	141.690	-125.266	51.569
929	9	-71.066	1.515	-41.892	12.374	3.567	-73.118	80.585
930	1	-65.979	-1.774	-46.009	-0.446	-1.771	-65.982	90.398
930	2	-73.906	-0.344	-71.623	5.002	-0.005	-74.245	86.127
930	3	-73.495	-0.266	-71.498	5.211	0.102	-73.864	85.949
930	4	-85.511	-1.399	-71.974	2.527	-1.323	-85.586	88.280
930	5	-85.099	-1.320	-71.849	2.735	-1.231	-85.188	88.131
930	6	-243.109	24.170	-545.766	101.290	58.218	-277.157	71.420
930	7	-235.477	25.859	-559.422	106.287	63.628	-273.246	70.437
930	8	94.078	-33.647	507.042	-120.400	166.504	-106.073	148.971
930	9	-65.567	-1.696	-45.884	-0.237	-1.695	-65.568	90.213
931	1	-66.865	1.511	-53.884	-0.117	1.511	-66.866	90.098
931	2	-74.711	-0.065	-75.899	5.013	0.269	-75.047	86.174
931	3	-74.329	-0.130	-75.765	5.207	0.232	-74.692	86.004
931	4	-86.498	0.914	-79.316	2.752	1.001	-86.585	88.198
931	5	-86.115	0.849	-79.182	2.946	0.949	-86.215	88.061
931	6	-242.844	-27.408	-489.695	95.820	9.042	-279.295	69.172
931	7	-234.867	-29.140	-497.973	100.447	11.768	-275.776	67.840
931	8	91.208	36.488	418.345	-113.003	180.117	-52.419	141.805
931	9	-65.483	1.445	-53.750	0.077	1.446	-66.483	89.935
932	1	-57.139	-2.393	-55.904	11.072	-0.238	-59.294	78.988
932	2	-73.060	-1.144	-77.241	7.192	-0.432	-73.772	84.344
932	3	-73.098	-1.074	-77.150	6.937	-0.412	-73.760	84.543
932	4	-79.083	-2.278	-81.282	11.404	-0.620	-80.741	81.729
932	5	-79.122	-2.208	-81.191	11.149	-0.624	-80.705	81.916
932	6	-379.914	19.828	-479.903	-56.669	27.707	-387.792	97.914
932	7	-381.325	21.532	-486.964	-62.629	31.044	-390.838	98.636
932	8	290.687	-30.435	401.035	98.842	309.433	-59.181	16.215
932	9	-57.178	-2.323	-55.812	10.817	-0.267	-59.234	79.237
933	1	-71.597	1.400	-43.195	3.527	1.486	-71.683	88.035
933	2	-72.372	0.644	-70.151	5.390	1.307	-73.036	84.580
933	3	-71.643	0.610	-70.031	7.130	1.307	-72.340	84.417
933	4	-88.338	1.264	-69.413	5.635	1.515	-88.690	86.421
933	5	-87.609	1.230	-69.293	5.765	1.603	-87.982	86.302
933	6	-117.318	-12.173	-567.024	87.508	37.340	-166.832	60.498
933	7	-102.002	-13.171	-582.665	90.970	43.547	-158.820	53.012
933	8	-70.080	18.325	540.126	-95.550	79.403	-131.156	122.587
933	9	-70.858	1.367	-43.066	2.647	1.464	-70.865	87.903
934	1	-65.799	-1.923	-46.932	10.361	-0.284	-67.438	81.012
934	2	-74.070	-0.563	-72.559	5.737	-0.109	-74.525	85.519
934	3	-73.702	-0.456	-72.448	5.524	-0.092	-74.117	85.708

ELT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
934	4	-85.431	-1.604	-73.086	10.140	-0.395	-86.641	83.200
934	5	-85.063	-1.538	-72.976	9.866	-0.388	-86.213	83.353
934	6	-249.230	22.637	-547.322	-70.494	39.829	-266.422	103.705
[illegible]	7	-241.904	24.315	-560.731	-76.923	44.944	-262.532	105.011
[illegible]	8	101.852	-32.265	505.184	113.014	156.206	-96.618	29.658
934	9	-65.431	-1.856	-46.822	10.088	-0.293	-66.994	81.196
935	1	-66.795	1.260	-55.210	10.650	2.888	-68.423	81.310
935	2	-74.923	-0.334	-77.034	5.798	0.113	-75.371	85.581
935	3	-74.583	-0.410	-76.912	5.511	-0.003	-74.990	85.773
935	4	-86.515	0.615	-80.793	10.333	1.825	-87.724	83.328
935	5	-86.174	0.540	-80.672	10.045	1.689	-87.323	83.477
935	6	-247.996	-28.102	-488.033	-75.462	-4.697	-271.402	107.232
935	7	-240.233	-29.773	-495.779	-82.219	-1.461	-268.545	109.000
935	8	97.530	36.590	412.539	119.704	190.581	-56.461	37.859
935	9	-66.454	1.184	-55.089	10.363	2.736	-68.006	81.481
936	1	-61.776	-2.005	-60.041	-0.435	-2.002	-61.779	90.418
936	2	-75.073	-0.522	-79.818	4.993	-0.189	-75.406	86.185
936	3	-75.006	-0.443	-79.691	5.210	-0.080	-75.368	86.021
936	4	-83.238	-1.657	-85.400	2.532	-1.578	-83.317	88.224
936	5	-83.171	-1.578	-85.273	2.749	-1.485	-83.264	88.072
936	6	-337.493	24.818	-456.677	100.976	51.060	-363.735	75.432
936	7	-335.450	26.535	-461.287	105.931	55.349	-364.165	74.833
936	8	217.340	-35.108	361.698	-119.943	265.239	-83.007	158.231
936	9	-61.709	-1.927	-59.914	-0.218	-1.925	-61.710	90.209
937	1	-77.840	-0.525	-47.079	14.827	2.124	-80.589	79.495
[illegible]	2	-82.096	-2.113	-74.222	9.542	-0.990	-83.219	83.289
[illegible]	3	-81.456	-2.170	-74.121	9.196	-1.117	-82.509	83.469
937	4	-97.909	-1.607	-74.197	15.193	0.732	-100.249	81.244
937	5	-97.269	-1.664	-74.095	14.847	0.588	-99.522	81.373
937	6	-191.339	-28.765	-575.949	-77.615	2.338	-222.443	111.838
937	7	-177.721	-29.938	-590.764	-85.687	9.317	-216.977	114.613
937	8	-1.382	31.374	539.353	134.284	150.744	-119.852	48.508
937	9	-77.200	-0.681	-46.977	14.481	1.967	-79.849	79.634
938	1	-74.833	-2.415	-53.359	-2.174	-2.349	-74.898	91.718
938	2	-80.980	-1.114	-77.090	3.971	-0.917	-81.177	87.160
938	3	-80.467	-1.033	-76.946	4.218	-0.810	-80.590	86.968
938	4	-95.270	-2.245	-79.772	0.867	-2.237	-95.278	89.466
938	5	-94.757	-2.164	-79.628	1.115	-2.150	-94.771	89.310
938	6	-222.438	20.857	-521.118	111.989	64.557	-266.138	68.683
938	7	-211.138	22.564	-531.188	117.969	71.758	-260.332	67.363
938	8	44.167	-31.559	456.706	-137.773	149.185	-136.577	142.683
938	9	-74.320	-2.334	-53.215	-1.927	-2.282	-74.371	91.532
939	1	-75.708	2.808	-61.163	-2.878	2.913	-75.813	92.096
939	2	-81.784	1.417	-80.854	2.461	1.489	-81.857	88.306
939	3	-81.298	1.350	-80.674	2.689	1.437	-81.385	88.138
939	4	-96.261	2.592	-86.797	-0.458	2.594	-96.263	90.265
939	5	-95.775	2.525	-86.617	-0.230	2.525	-95.775	90.134
939	6	-222.395	-22.095	-456.712	95.990	16.409	-260.399	68.122
939	7	-210.754	-23.953	-461.251	101.304	20.436	-255.144	66.337
[illegible]	8	41.551	33.962	358.399	-120.911	158.727	-83.213	135.898

MENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	Q-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
939	9	-75.221	2.741	-60.983	-2.650	2.831	-75.311	91.945
940	1	-62.890	-2.747	-62.631	11.174	-0.738	-64.900	79.807
940	2	-77.653	-1.446	-81.856	7.192	-0.775	-78.324	84.662
940	3	-77.623	-1.372	-81.717	6.935	-0.747	-78.249	84.845
940	4	-85.500	-2.678	-88.240	11.425	-1.131	-87.047	82.288
940	5	-85.470	-2.604	-88.101	11.178	-1.123	-86.952	82.451
940	6	-366.645	20.298	-450.110	-58.669	28.998	-375.345	98.435
940	7	-365.639	22.137	-453.570	-64.788	32.675	-376.177	99.238
940	8	248.159	-32.003	346.387	101.399	281.007	-64.851	17.949
940	9	-62.861	-2.673	-62.492	10.927	-0.750	-64.783	80.021
941	1	-95.444	1.758	-54.370	-4.031	1.925	-95.611	92.371
941	2	-97.442	0.866	-79.224	0.351	0.868	-97.443	89.795
941	3	-96.579	0.817	-79.074	0.558	0.820	-96.582	89.671
941	4	-118.111	1.626	-81.708	-2.402	1.674	-118.159	91.149
941	5	-117.248	1.576	-81.557	-2.195	1.617	-117.288	91.058
941	6	-174.219	-14.220	-543.601	76.363	16.374	-204.815	68.166
941	7	-154.603	-15.399	-554.522	81.150	21.909	-191.912	65.309
941	8	-72.083	21.739	480.165	-101.245	86.413	-136.757	122.570
941	9	-94.581	1.709	-54.219	-3.824	1.861	-94.732	92.271
942	1	-79.402	-4.029	-56.859	18.521	0.276	-83.708	76.914
942	2	-87.897	-3.121	-80.209	13.702	-0.962	-90.056	81.043
942	3	-87.452	-3.056	-80.073	13.347	-0.995	-89.513	81.223
942	4	-102.171	-4.427	-83.783	19.932	-0.519	-106.079	78.906
942	5	-101.727	-4.361	-83.646	19.578	-0.572	-105.516	79.046
942	6	-272.930	11.176	-519.027	-63.586	24.799	-286.553	102.074
942	7	-262.653	12.925	-527.865	-72.164	30.678	-280.416	103.821
942	8	90.246	-24.869	444.079	128.494	173.485	-108.108	32.935
942	9	-78.958	-3.953	-56.722	18.157	0.205	-83.127	77.075
943	1	-80.180	1.129	-65.084	17.602	4.776	-83.827	78.294
943	2	-88.420	-0.561	-84.113	12.086	1.070	-90.053	82.308
943	3	-87.999	-0.642	-83.935	11.715	0.901	-89.543	82.492
943	4	-102.935	0.387	-91.151	18.406	3.568	-106.116	80.194
943	5	-102.514	0.306	-90.974	18.035	3.379	-105.586	80.333
943	6	-269.314	-30.131	-449.969	-78.045	-6.917	-292.528	106.564
943	7	-258.558	-31.344	-452.702	-86.940	-2.343	-288.059	108.743
943	8	83.719	38.533	339.082	142.591	205.595	-83.343	40.501
943	9	-79.759	1.049	-64.907	17.232	4.570	-83.280	78.451
944	1	-71.347	-3.291	-69.944	-5.907	-2.799	-71.839	94.842
944	2	-83.209	-2.077	-86.220	-0.973	-2.055	-83.221	90.687
944	3	-83.037	-1.997	-86.011	-0.717	-1.991	-83.044	90.507
944	4	-94.161	-3.363	-95.394	-4.339	-3.155	-94.368	92.730
944	5	-93.990	-3.284	-95.185	-4.084	-3.100	-94.173	92.573
944	6	-324.515	17.970	-405.430	82.267	36.706	-343.252	77.170
944	7	-318.919	19.822	-404.392	87.831	41.241	-340.338	76.295
944	8	174.108	-30.719	272.545	-113.327	224.442	-81.053	156.052
944	9	-71.175	-3.221	-69.735	-5.551	-2.761	-71.626	94.539
945	1	-90.611	2.952	-53.236	17.731	5.213	-93.876	79.594
945	2	-94.914	1.470	-79.736	12.545	3.101	-96.545	82.548
945	3	-94.179	1.385	-78.636	12.234	2.939	-95.733	82.790

E697

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
945	4	-113.497	2.754	-80.677	18.810	5.722	-116.465	81.034
945	5	-112.762	2.669	-80.573	18.449	5.546	-115.639	81.136
945	6	-210.424	-23.558	-554.088	-70.759	0.212	-234.194	108.569
[illegible]	7	-193.966	-25.528	-565.800	-79.317	5.942	-225.436	111.541
[illegible]	8	-15.500	36.168	495.727	134.515	147.308	-126.543	50.436
945	9	-89.875	2.867	-53.136	17.420	5.031	-93.040	79.705
946	1	-82.333	-2.893	-58.634	-4.867	-2.596	-82.630	93.493
946	2	-90.024	-1.388	-81.353	-0.440	-1.886	-90.025	90.286
946	3	-89.520	-1.815	-81.217	-0.222	-1.816	-89.521	90.145
946	4	-105.308	-2.980	-85.569	-3.374	-2.868	-105.419	91.886
946	5	-104.804	-2.908	-85.432	-3.156	-2.810	-104.902	91.772
946	6	-262.107	14.674	-509.824	76.051	34.194	-281.627	75.604
946	7	-250.453	16.218	-517.602	81.048	38.918	-273.154	74.353
946	8	69.025	-25.625	428.029	-103.201	135.235	-91.835	147.317
946	9	-81.829	-2.821	-58.497	-4.649	-2.549	-82.102	93.356
947	1	-83.430	2.164	-69.458	-4.281	2.378	-83.644	92.856
947	2	-90.441	0.997	-86.514	-0.065	0.997	-90.441	90.041
947	3	-89.945	0.941	-86.284	0.138	0.941	-89.946	89.912
947	4	-106.221	1.925	-95.331	-2.779	1.997	-106.292	91.471
947	5	-105.725	1.870	-95.101	-2.574	1.931	-105.787	91.370
947	6	-250.976	-18.848	-419.380	72.943	2.169	-271.994	73.926
947	7	-238.381	-20.346	-419.232	77.611	4.458	-263.186	72.276
947	8	52.729	28.245	290.378	-97.853	139.103	-58.128	138.565
947	9	-82.934	2.108	-69.228	-4.077	2.303	-83.129	92.738
948	1	-69.078	-3.262	-72.069	16.213	0.515	-72.855	75.885
[illegible]	2	-82.151	-2.121	-87.498	11.616	-0.469	-83.803	81.906
[illegible]	3	-82.033	-2.049	-87.273	11.304	-0.482	-83.601	82.138
948	4	-92.163	-3.384	-97.497	17.178	-0.176	-95.371	79.422
948	5	-92.046	-3.313	-97.273	15.866	-0.215	-95.144	79.592
948	6	-344.086	16.602	-392.705	-62.910	27.259	-354.743	99.615
948	7	-340.049	18.406	-390.330	-70.668	31.835	-353.478	100.759
948	8	203.408	-29.102	251.433	120.755	254.775	-80.469	23.044
948	9	-68.961	-3.190	-71.844	15.901	0.452	-72.603	77.097
949	1	-92.979	1.282	-54.979	-2.582	1.352	-93.049	91.558
949	2	-96.154	0.793	-79.937	0.367	0.794	-96.155	89.782
949	3	-95.374	0.758	-79.835	0.519	0.761	-95.377	89.690
949	4	-115.683	1.277	-82.483	-1.437	1.294	-115.700	90.704
949	5	-114.903	1.242	-82.381	-1.285	1.256	-114.917	90.634
949	6	-192.595	-7.357	-546.481	51.671	6.081	-206.034	75.421
949	7	-174.595	-8.058	-557.236	54.813	8.363	-191.017	73.322
949	8	-43.144	12.290	481.559	-67.955	57.963	-88.817	123.905
949	9	-92.199	1.247	-54.877	-2.430	1.310	-92.262	91.489
950	1	-81.305	-2.877	-59.584	15.231	-0.023	-84.159	79.386
950	2	-88.974	-1.788	-81.304	11.066	-3.405	-90.357	82.878
950	3	-88.508	-1.724	-81.772	10.769	-3.408	-89.825	83.030
950	4	-103.998	-2.900	-85.482	16.211	-0.364	-106.534	81.109
950	5	-103.532	-2.836	-86.351	15.915	-0.381	-105.987	81.229
950	6	-260.221	16.270	-503.724	-56.287	27.290	-271.240	101.077
950	7	-248.730	17.910	-510.872	-63.398	32.216	-263.037	102.716
[illegible]	8	69.796	-27.462	418.072	110.045	141.478	-99.144	33.079

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902

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ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
950	9	-80.839	-2.814	-59.453	14.935	-2.153	-83.600	79.526
951	1	-82.590	1.990	-71.159	15.794	4.844	-85.443	79.760
951	2	-89.480	1.005	-87.429	11.428	2.426	-90.902	82.911
951	3	-89.020	0.942	-87.196	11.119	2.296	-90.374	83.057
951	4	-105.082	1.833	-96.927	16.785	4.405	-107.655	81.284
951	5	-104.621	1.770	-96.694	15.475	4.263	-107.114	81.395
951	6	-247.518	-15.710	-407.134	-59.243	-1.446	-261.782	103.537
951	7	-234.939	-16.976	-405.813	-66.658	1.792	-253.708	105.726
951	8	51.102	24.046	271.012	115.140	153.506	-78.357	41.649
951	9	-82.129	1.928	-70.926	15.485	4.690	-84.891	79.887
952	1	-75.791	-2.563	-78.312	-3.215	-2.422	-75.932	92.509
952	2	-85.029	-1.585	-90.930	-0.367	-1.583	-85.031	90.252
952	3	-84.764	-1.522	-90.630	-0.193	-1.521	-84.765	90.133
952	4	-98.094	-2.594	-103.440	-2.297	-2.539	-98.149	91.377
952	5	-97.829	-2.531	-103.140	-2.124	-2.483	-97.876	91.276
952	6	-281.852	14.620	-349.047	48.865	22.466	-289.699	80.877
952	7	-272.785	16.089	-342.584	52.023	25.172	-281.868	80.096
952	8	110.943	-24.632	182.026	-66.502	138.117	-51.806	157.774
952	9	-75.526	-2.500	-78.012	-3.042	-2.373	-75.652	92.381
953	1	-88.034	2.482	-53.922	14.399	4.717	-90.270	81.175
953	2	-93.950	1.287	-79.668	10.652	2.464	-95.126	83.695
953	3	-93.296	1.218	-79.514	10.369	2.343	-94.420	83.811
953	4	-111.256	2.327	-81.659	15.422	4.384	-113.313	82.403
953	5	-110.602	2.258	-81.604	15.139	4.253	-112.598	82.491
953	6	-236.887	-19.878	-559.792	-49.700	-8.282	-247.683	102.255
953	7	-222.464	-20.476	-571.455	-56.217	-5.883	-237.057	104.551
953	8	23.083	29.256	500.252	99.817	126.035	-73.694	45.895
953	9	-87.380	2.413	-53.958	14.116	4.580	-89.547	81.272
954	1	-82.152	-2.027	-61.449	-2.550	-1.946	-92.233	91.921
954	2	-90.094	-1.450	-83.433	0.127	-1.450	-90.094	89.917
954	3	-89.512	-1.400	-83.306	0.273	-1.399	-89.613	89.822
954	4	-105.234	-2.152	-88.569	-1.543	-2.139	-105.257	90.957
954	5	-104.753	-2.111	-88.441	-1.397	-2.092	-104.772	90.780
954	6	-266.573	7.911	-500.203	46.557	15.625	-274.288	90.512
954	7	-255.158	8.868	-506.534	49.528	17.353	-264.143	79.717
954	8	74.730	-15.153	408.396	-61.914	106.294	-46.717	152.987
954	9	-81.571	-1.977	-61.322	-2.404	-1.904	-81.743	91.726
955	1	-84.395	1.666	-75.479	-2.178	1.721	-84.450	91.449
955	2	-91.093	0.823	-90.809	0.413	0.825	-91.095	89.742
955	3	-90.597	0.781	-90.517	0.551	0.795	-90.601	89.654
955	4	-107.215	1.501	-102.283	-1.136	1.513	-107.227	90.599
955	5	-106.719	1.459	-101.990	-0.998	1.468	-106.729	90.529
955	6	-246.525	-13.491	-378.520	45.571	-4.897	-255.119	79.319
955	7	-233.376	-14.579	-374.125	48.283	-4.399	-243.557	78.093
955	8	44.637	20.497	221.398	-59.563	93.341	-28.207	140.727
955	9	-83.900	1.624	-75.186	-2.040	1.672	-83.948	91.365
956	1	-74.277	-2.851	-81.253	13.735	-0.301	-76.828	79.481
956	2	-84.886	-1.949	-92.893	9.919	-0.779	-86.056	83.273
956	3	-84.663	-1.899	-92.565	9.659	-0.777	-85.775	83.431

IENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	TEETA-STRESS (HOOP)	Q-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
956	4	-97.135	-3.010	-106.474	14.544	-0.813	-99.331	81.413
956	5	-96.912	-2.949	-106.147	14.284	-0.825	-99.036	81.544
[illegible]	5	-305.513	12.725	-334.852	-51.939	20.988	-313.775	99.038
[illegible]	7	-297.992	14.214	-326.753	-58.399	24.780	-308.558	100.255
[illegible]	8	142.834	-23.322	155.634	100.517	192.151	-70.650	25.213
956	9	-74.055	-2.790	-80.935	13.475	-0.327	-76.518	79.542
957	1	-88.749	0.486	-55.459	-0.229	0.487	-88.750	90.147
957	2	-94.290	0.551	-80.958	0.817	0.558	-94.297	89.506
957	3	-93.625	0.536	-80.905	0.898	0.545	-93.634	89.453
957	4	-111.880	0.637	-83.399	0.316	0.638	-111.881	89.339
957	5	-111.216	0.623	-83.346	0.397	0.624	-111.217	89.796
957	6	-230.849	1.872	-557.447	19.378	3.475	-232.451	95.272
957	7	-215.932	1.854	-558.471	20.255	3.722	-217.800	84.731
957	8	14.005	-0.825	492.937	-23.248	30.992	-17.812	143.845
957	9	-88.085	0.472	-55.406	-0.148	0.472	-88.085	90.096
958	1	-82.097	-2.292	-62.831	11.814	-0.579	-83.809	81.753
958	2	-89.391	-1.482	-84.299	9.037	-0.563	-90.311	84.190
958	3	-88.918	-1.432	-84.167	8.815	-0.553	-89.798	84.303
958	4	-104.747	-2.339	-89.948	12.811	-0.761	-106.325	82.976
958	5	-104.274	-2.290	-89.816	12.588	-0.759	-105.805	83.066
958	6	-254.367	11.879	-492.574	-35.238	16.464	-258.952	97.413
958	7	-242.327	13.127	-498.070	-40.304	19.336	-248.535	98.756
958	8	60.582	-20.585	395.374	75.337	105.571	-65.574	30.844
958	9	-81.624	-2.242	-62.699	11.591	-0.584	-83.282	81.859
959	1	-84.638	1.100	-79.062	12.165	2.793	-86.331	82.078
[illegible]	2	-90.538	0.641	-92.276	9.311	1.582	-91.479	84.228
[illegible]	3	-90.048	0.602	-91.965	9.081	1.502	-90.949	84.335
959	4	-107.003	1.047	-104.765	13.137	2.636	-108.591	83.136
959	5	-106.512	1.009	-104.454	12.966	2.550	-108.054	83.219
959	6	-231.926	-7.139	-361.355	-36.173	-1.461	-237.603	98.920
959	7	-217.946	-7.724	-355.282	-41.383	0.128	-225.799	100.745
959	8	25.817	11.392	194.182	77.446	96.934	-58.724	42.155
959	9	-84.148	1.061	-78.751	11.935	2.701	-85.788	82.175
960	1	-81.083	-1.568	-88.881	0.047	-1.568	-81.083	89.955
960	2	-87.359	-0.906	-97.194	0.369	-0.905	-87.360	89.755
960	3	-86.985	-0.861	-96.772	0.445	-0.859	-86.987	89.703
960	4	-102.826	-1.554	-113.787	0.193	-1.553	-102.827	89.890
960	5	-102.452	-1.509	-113.365	0.269	-1.508	-102.453	89.847
960	6	-234.001	10.144	-283.696	6.179	10.300	-234.157	88.551
960	7	-220.989	11.098	-270.720	5.311	11.259	-221.160	88.443
960	8	39.378	-16.470	74.539	-7.000	40.242	-17.334	172.953
960	9	-80.709	-1.523	-88.460	0.123	-1.523	-80.709	89.910
961	1	-83.236	1.834	-54.233	9.852	2.961	-84.362	83.479
961	2	-92.134	1.010	-80.915	8.007	1.693	-92.818	85.1[illegible]
961	3	-91.603	0.959	-80.812	7.820	1.615	-92.259	85.204
961	4	-107.186	1.742	-82.568	10.964	2.834	-108.279	84.309
961	5	-106.655	1.691	-82.565	10.776	2.752	-107.717	84.374
961	6	-285.396	-12.885	-576.091	-20.606	-11.339	-237.542	94.290
[illegible]	7	-275.347	-13.999	-588.329	-24.365	-11.746	-277.599	95.281
[illegible]	8	94.464	20.319	513.211	52.467	121.635	-6.851	27.377

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904

NT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
961	9	-82.705	1.783	-54.230	9.665	2.875	-83.796	83.556
962	1	-81.201	-0.919	-64.546	0.797	-0.911	-81.209	89.431
962	2	-90.115	-0.883	-86.136	1.302	-0.864	-90.134	89.164
962	3	-89.675	-0.857	-86.016	1.362	-0.836	-89.696	89.121
962	4	-104.681	-1.126	-92.145	1.257	-1.111	-104.696	89.304
962	5	-104.240	-1.100	-92.025	1.317	-1.083	-104.257	89.268
962	6	-283.538	-0.646	-497.433	10.714	-0.241	-283.943	87.834
962	7	-273.180	-0.431	-502.568	10.855	-0.000	-273.611	87.724
962	8	97.236	-1.904	395.911	-10.080	98.251	-2.919	174.253
962	9	-80.760	-0.893	-64.426	0.857	-0.883	-80.769	89.384
963	1	-84.944	0.879	-85.083	0.929	0.890	-84.954	89.379
963	2	-91.899	0.474	-96.484	1.502	0.498	-91.923	89.068
963	3	-91.418	0.450	-96.113	1.561	0.476	-91.444	89.026
963	4	-108.067	0.800	-111.063	1.463	0.820	-108.087	89.230
963	5	-107.586	0.776	-110.691	1.521	0.798	-107.607	89.195
963	6	-252.234	-6.433	-336.142	12.186	-5.830	-252.836	97.168
963	7	-239.145	-6.947	-326.943	12.363	-6.290	-239.801	86.960
963	8	49.597	9.947	146.980	-11.421	52.652	6.893	165.026
963	9	-84.463	0.856	-84.711	0.988	0.867	-84.474	89.336
964	1	-80.555	-2.246	-92.791	10.107	-0.963	-81.839	82.762
964	2	-88.681	-1.752	-100.092	7.582	-1.095	-89.337	85.052
964	3	-88.349	-1.708	-99.635	7.391	-1.082	-88.975	85.158
964	4	-103.386	-2.507	-117.988	10.842	-1.355	-104.538	83.934
964	5	-103.054	-2.464	-117.531	10.650	-1.348	-104.169	84.021
964	6	-268.105	5.972	-270.445	-33.002	9.890	-272.023	96.770
964	7	-256.851	6.952	-255.585	-37.460	12.168	-262.068	97.927
964	8	80.578	-13.639	47.470	67.712	115.957	-49.017	27.586
964	9	-80.223	-2.203	-92.334	9.916	-0.962	-81.464	82.868
965	1	-82.222	-0.522	-55.323	3.235	-0.394	-82.350	87.736
965	2	-91.383	0.255	-82.175	1.870	0.293	-91.421	88.831
965	3	-90.870	0.266	-82.183	1.863	0.304	-90.908	88.829
965	4	-106.093	-0.158	-84.086	3.090	-0.068	-106.183	88.330
965	5	-105.579	-0.147	-84.094	3.084	-0.057	-105.670	88.326
965	6	-289.459	13.821	-582.789	-20.900	15.254	-290.892	93.923
965	7	-279.272	14.676	-594.971	-22.992	16.464	-281.060	94.445
965	8	101.477	-17.721	522.771	33.936	110.461	-26.705	14.829
965	9	-81.709	-0.511	-55.331	3.228	-0.383	-81.837	87.727
966	1	-81.999	-1.425	-66.279	7.170	-0.792	-82.633	84.953
966	2	-89.571	-1.013	-87.330	5.320	-0.564	-90.020	85.938
966	3	-89.112	-0.981	-87.199	6.138	-0.549	-89.544	86.003
966	4	-104.817	-1.514	-93.946	8.271	-0.836	-105.475	85.450
966	5	-104.358	-1.482	-93.815	8.140	-0.842	-104.998	85.503
966	6	-259.492	5.675	-489.864	-5.799	5.802	-259.618	91.252
966	7	-247.696	6.354	-494.253	-8.064	6.620	-247.951	91.816
966	8	66.769	-10.793	381.936	27.360	75.448	-19.473	17.601
966	9	-81.540	-1.393	-66.148	7.039	-0.780	-82.154	85.018
967	1	-86.243	-0.126	-88.819	7.296	0.487	-86.856	85.191
967	2	-91.610	0.089	-98.701	6.517	0.550	-92.071	85.955
967	3	-91.105	0.077	-98.293	6.383	0.522	-91.549	86.014

E701

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
967	4	-108.667	-0.049	-114.715	8.471	0.607	-109.323	85.567
967	5	-108.161	-0.060	-114.307	8.337	0.578	-108.800	85.615
[illegible]	6	-224.334	3.756	-313.092	-4.282	3.837	-224.414	91.075
[illegible]	7	-209.460	4.061	-301.585	-6.536	4.259	-209.658	91.743
[illegible]	8	13.151	-4.929	109.039	25.944	31.585	-23.363	35.394
967	9	-85.737	-0.137	-98.411	7.153	0.457	-86.332	85.249
968	1	-87.437	-0.203	-102.444	4.017	-0.019	-87.622	87.368
968	2	-90.449	0.014	-105.715	1.381	0.036	-90.470	89.125
968	3	-89.955	0.038	-105.140	1.348	0.059	-89.975	89.141
968	4	-108.649	-0.142	-127.357	3.245	-0.045	-108.746	88.288
968	5	-108.155	-0.118	-126.782	3.213	-0.023	-108.250	88.298
968	6	-181.970	3.810	-208.848	-43.562	13.560	-191.720	102.587
968	7	-164.512	4.042	-187.980	-47.093	16.307	-176.777	104.598
968	8	-40.084	-5.061	-52.866	62.796	42.619	-87.765	52.790
968	9	-86.942	-0.179	-101.869	3.984	0.002	-87.125	87.376
969	1	-76.555	0.841	-54.174	4.402	1.091	-76.805	86.755
969	2	-89.937	0.482	-82.489	5.001	0.758	-90.213	86.843
969	3	-89.573	0.452	-82.550	4.922	0.721	-89.841	86.880
969	4	-101.788	0.800	-83.599	5.766	1.123	-102.112	86.792
969	5	-101.424	0.770	-83.660	5.687	1.086	-101.740	86.824
969	6	-360.663	-5.597	-608.680	17.415	-4.745	-361.515	87.198
969	7	-355.542	-6.063	-622.401	17.105	-5.227	-356.377	87.204
969	8	201.026	8.887	556.265	-7.849	201.346	8.567	177.664
969	9	-76.191	0.811	-54.235	4.323	1.053	-76.433	86.796
970	1	-80.076	0.391	-68.515	5.176	0.723	-80.408	86.334
[illegible]	2	-90.574	-0.240	-90.099	2.971	-0.142	-90.672	88.118
[illegible]	3	-90.191	-0.241	-89.985	2.933	-0.146	-90.286	88.134
970	4	-104.320	0.071	-97.049	4.965	0.307	-104.556	87.282
970	5	-103.936	0.070	-96.936	4.927	0.303	-104.169	87.293
970	6	-311.789	-11.296	-503.228	-33.945	-7.531	-315.554	96.347
970	7	-303.056	-11.983	-507.304	-37.160	-7.314	-307.725	97.162
970	8	133.346	14.359	390.848	54.770	154.718	-7.013	21.316
970	9	-79.692	0.390	-68.402	5.138	0.718	-80.020	86.343
971	1	-85.847	-0.216	-96.701	5.072	0.092	-86.146	86.522
971	2	-93.442	-0.045	-104.672	3.133	0.059	-93.547	88.080
971	3	-92.985	-0.047	-104.196	3.100	0.056	-93.089	88.091
971	4	-109.613	-0.188	-123.243	5.003	0.039	-109.842	87.387
971	5	-109.157	-0.190	-122.768	4.969	0.036	-109.383	87.394
971	6	-265.710	2.812	-288.746	-28.986	5.905	-268.803	96.091
971	7	-252.909	3.069	-273.558	-32.030	7.016	-256.856	97.025
971	8	62.500	-4.046	57.375	48.779	88.273	-29.819	27.850
971	9	-85.390	-0.217	-96.226	5.038	0.079	-85.687	86.626
972	1	-88.451	-1.538	-108.104	5.152	-1.234	-88.755	86.619
972	2	-93.885	-1.571	-110.209	4.545	-1.347	-94.109	87.138
972	3	-93.442	-1.548	-109.589	4.441	-1.334	-93.656	87.239
972	4	-111.481	-1.961	-133.620	5.923	-1.641	-111.801	86.913
972	5	-111.037	-1.938	-133.000	5.819	-1.628	-111.347	86.955
972	6	-229.132	-2.906	-195.276	-4.166	-2.829	-229.209	91.054
[illegible]	7	-213.540	-2.557	-171.948	-5.746	-2.401	-213.697	91.559
[illegible]	8	11.771	-1.202	-85.424	19.535	25.869	-15.300	35.815

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IT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
72	9	-88.007	-1.515	-107.484	5.049	-1.222	-88.301	86.670
73	1	-73.333	-1.748	-53.966	7.917	-0.883	-74.198	83.763
73	2	-87.371	0.392	-83.609	3.468	0.529	-87.508	87.740
73	3	-87.048	0.435	-83.706	3.357	0.554	-87.176	87.805
73	4	-98.238	-0.817	-84.183	5.922	-0.328	-98.728	85.955
73	5	-97.915	-0.774	-84.280	5.811	-0.298	-98.390	86.208
73	6	-368.329	37.642	-633.369	-72.075	50.059	-380.745	99.774
73	7	-364.543	40.029	-648.310	-78.030	54.557	-379.072	100.547
73	8	219.358	-49.161	585.654	107.365	257.008	-86.811	19.324
73	9	-73.009	-1.705	-54.063	7.306	-0.860	-73.854	83.325
74	1	-81.236	-0.203	-70.326	1.111	-0.188	-81.251	89.214
74	2	-89.590	-0.344	-91.600	2.889	-0.251	-89.683	88.147
74	3	-89.162	-0.335	-91.476	2.868	-0.242	-89.255	88.152
74	4	-104.402	-0.352	-99.088	2.458	-0.294	-104.460	88.647
74	5	-103.974	-0.343	-98.965	2.437	-0.286	-104.032	88.653
74	6	-273.197	-2.950	-500.084	34.831	1.466	-277.614	82.772
74	7	-262.231	-3.044	-503.426	36.330	1.951	-267.227	82.169
74	8	84.837	2.855	381.837	-37.751	99.573	-11.880	158.678
74	9	-80.808	-0.193	-70.202	1.090	-0.178	-80.823	89.225
75	1	-87.916	-1.723	-102.159	0.994	-1.711	-87.928	89.339
75	2	-92.935	-0.525	-108.077	3.044	-0.526	-93.035	88.113
75	3	-92.423	-0.605	-107.544	3.027	-0.505	-92.523	88.113
75	4	-110.544	-1.463	-128.583	2.484	-1.407	-110.601	88.696
75	5	-110.033	-1.442	-128.151	2.467	-1.386	-110.089	88.699
75	6	-220.314	18.004	-258.176	39.765	24.464	-226.775	80.772
75	7	-204.674	19.472	-239.782	41.544	26.924	-212.126	79.830
75	8	3.388	-26.228	5.585	-43.868	34.880	-57.720	144.326
75	9	-87.405	-1.701	-101.627	0.977	-1.690	-87.416	89.346
76	1	-95.437	3.084	-121.104	8.718	3.849	-96.203	84.982
76	2	-94.270	2.516	-118.091	2.461	2.579	-94.333	88.544
76	3	-93.636	2.507	-117.317	2.305	2.563	-93.691	88.527
76	4	-115.911	3.409	-146.424	6.752	3.790	-116.292	86.771
76	5	-115.277	3.400	-145.650	6.595	3.756	-115.642	86.328
76	6	-115.137	-6.176	-118.133	-104.944	57.586	-178.900	121.282
76	7	-91.994	-7.444	-87.302	-112.688	70.637	-170.076	124.718
76	8	-141.651	15.227	-213.727	148.005	105.329	-230.453	59.036
76	9	-94.802	3.075	-120.330	8.562	3.818	-95.546	85.038
77	1	-64.770	-0.971	-48.384	-3.365	-0.794	-64.947	93.011
77	2	-85.987	-1.264	-78.314	3.560	-1.261	-85.991	89.621
77	3	-85.871	-1.274	-78.470	3.611	-1.270	-85.875	89.396
77	4	-92.263	-1.385	-77.565	-1.699	-1.353	-92.295	91.071
77	5	-92.147	-1.395	-77.721	-1.649	-1.365	-92.177	91.240
77	6	-490.939	-6.967	-630.846	68.686	2.591	-500.498	82.077
77	7	-495.597	-6.965	-647.270	73.176	3.756	-506.321	81.553
77	8	387.360	5.234	598.694	-90.365	407.652	-15.057	167.344
77	9	-64.654	-0.981	-48.540	-3.313	-0.909	-64.826	92.971
78	1	-79.826	2.809	-66.793	12.242	4.585	-81.601	81.748
78	2	-92.257	1.155	-87.922	6.535	1.624	-92.726	95.357
78	3	-91.941	1.119	-87.740	5.481	1.568	-92.390	86.235

MEMT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
978	4	-105.291	2.407	-94.668	11.532	3.628	-106.512	83.956
978	5	-104.975	2.370	-94.586	11.377	3.563	-106.167	84.015
[illegible]	6	-347.961	-26.990	-490.579	-87.438	-4.692	-370.259	104.298
[illegible]	7	-340.905	-29.175	-494.418	-95.543	-2.222	-367.858	105.754
[illegible]	8	175.976	39.764	380.672	138.088	261.841	-46.100	31.873
978	9	-79.509	2.773	-66.711	12.087	4.512	-81.249	81.313
979	1	-88.138	-2.756	-102.687	11.748	-1.169	-89.725	82.306
979	2	-96.582	-1.339	-106.931	5.568	-0.888	-97.033	86.073
979	3	-96.158	-1.301	-106.386	5.423	-0.868	-96.591	86.143
979	4	-113.034	-2.530	-128.370	11.191	-1.408	-114.156	84.275
979	5	-112.609	-2.492	-127.825	11.046	-1.394	-113.705	84.327
979	6	-285.221	22.542	-227.753	-80.208	42.192	-304.870	103.765
979	7	-272.513	24.528	-207.595	-87.752	48.515	-296.499	105.288
979	8	78.229	-34.516	-31.900	128.129	161.839	-118.126	33.126
979	9	-87.714	-2.718	-102.142	11.604	-1.162	-89.270	82.364
980	1	-103.861	-2.449	-120.277	-2.819	-2.371	-103.939	91.591
980	2	-104.612	-3.113	-116.435	-0.498	-3.110	-104.615	90.281
980	3	-104.015	-3.106	-115.671	-0.486	-3.104	-104.018	90.276
980	4	-127.583	-3.469	-144.973	-2.053	-3.435	-127.617	90.947
980	5	-126.986	-3.462	-144.209	-2.042	-3.429	-127.019	90.947
980	6	-163.816	-16.104	-101.585	39.273	-6.312	-173.609	75.999
980	7	-140.189	-16.092	-69.781	42.212	-3.094	-153.186	72.886
980	8	-110.000	11.541	-231.038	-54.497	32.398	-130.856	110.942
980	9	-103.264	-2.442	-119.514	-2.807	-2.364	-103.342	91.593
[illegible]	1	-59.611	-4.439	-44.223	15.122	-0.566	-63.484	75.634
[illegible]	2	-82.262	-1.523	-76.368	7.315	-0.866	-82.920	84.864
[illegible]	3	-82.210	-1.445	-76.593	7.093	-0.826	-82.829	85.019
981	4	-86.816	-3.635	-73.838	13.684	-1.442	-89.010	80.893
981	5	-86.764	-3.557	-74.063	13.462	-1.433	-88.888	81.034
981	6	-510.400	48.309	-666.493	-124.690	74.874	-536.965	102.027
981	7	-517.565	52.022	-685.915	-135.391	82.566	-548.110	102.713
981	8	425.149	-69.449	652.494	189.893	489.645	-133.945	18.759
981	9	-59.560	-4.360	-44.445	14.899	-0.595	-63.325	75.819
982	1	-82.361	2.299	-66.811	-7.582	2.973	-83.034	95.078
982	2	-92.608	1.027	-88.112	-2.537	1.096	-92.677	91.551
982	3	-92.235	1.001	-88.037	-2.432	1.054	-92.298	91.493
982	4	-107.028	2.020	-94.865	-6.181	2.369	-107.377	93.234
982	5	-106.655	1.994	-94.790	-6.076	2.333	-106.994	93.191
982	6	-310.592	-20.548	-495.743	83.619	1.831	-332.972	75.016
982	7	-300.970	-22.266	-499.815	90.107	4.327	-327.565	73.555
982	8	124.946	30.749	386.528	-120.094	206.847	-51.151	145.707
982	9	-81.987	2.273	-66.736	-7.477	2.932	-82.646	95.032
983	1	-91.986	-4.581	-107.965	-3.075	-3.841	-92.725	95.234
983	2	-97.636	-2.172	-110.040	-2.604	-2.121	-97.707	91.551
983	3	-97.138	-2.136	-109.435	-2.489	-2.041	-97.203	91.499
983	4	-116.007	-4.154	-133.518	-6.522	-3.775	-116.386	93.326
983	5	-115.509	-4.089	-132.912	-6.407	-3.721	-115.876	93.280
983	6	-238.314	38.526	-194.741	90.907	65.739	-255.496	73.352
[illegible]	7	-222.157	41.954	-171.325	97.299	74.195	-254.498	71.719
[illegible]	8	12.189	-58.544	-86.001	-130.059	111.604	-157.959	142.606

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ENT	LOAD COMB	X-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
983	9	-91.488	-4.516	-107.359	-7.960	-3.793	-92.210	95.187
984	1	-113.006	5.693	-131.479	15.232	7.617	-114.930	82.802
984	2	-105.536	4.300	-122.372	5.501	4.575	-105.811	87.140
984	3	-104.699	4.266	-121.457	5.229	4.515	-104.950	87.258
984	4	-133.618	6.127	-155.477	12.581	7.251	-134.742	84.896
984	5	-132.781	6.092	-154.563	12.309	7.175	-133.864	84.973
984	6	-22.412	-17.810	-19.064	-160.810	140.715	-180.938	134.590
984	7	10.713	-20.480	20.239	-173.223	169.040	-178.907	137.572
984	8	-301.612	37.561	-360.364	232.248	155.549	-419.600	63.068
984	9	-112.169	5.658	-130.564	14.960	7.528	-114.039	82.875
985	1	-55.822	-3.345	-42.543	-12.331	-0.592	-58.576	102.586
985	2	-83.775	-1.875	-76.614	-4.961	-1.575	-84.075	93.454
985	3	-83.878	-1.839	-76.897	-4.781	-1.561	-84.156	93.324
985	4	-85.530	-3.210	-72.995	-10.568	-1.875	-86.865	97.200
985	5	-85.633	-3.174	-73.277	-10.387	-1.885	-86.922	97.070
985	6	-604.710	22.695	-700.256	120.404	45.008	-627.024	79.501
985	7	-617.458	24.871	-721.775	130.117	50.229	-642.815	78.972
985	8	546.103	-36.409	696.696	-176.951	595.643	-85.949	164.359
985	9	-55.926	-3.309	-42.825	-12.150	-0.639	-58.596	102.395
986	1	-84.395	5.353	-68.287	20.693	9.894	-88.937	77.622
986	2	-98.522	2.720	-90.577	11.896	4.099	-99.901	83.387
986	3	-98.247	2.650	-90.530	11.637	3.975	-99.571	83.505
986	4	-112.047	4.929	-97.330	19.956	8.240	-115.358	80.580
986	5	-111.772	4.860	-97.283	19.697	8.097	-115.008	80.668
986	6	-386.724	-41.569	-516.566	-135.065	4.911	-433.305	109.028
986	7	-379.958	-45.354	-521.112	-148.061	10.753	-436.066	110.754
986	8	207.493	64.379	406.464	218.507	365.862	-93.990	35.633
986	9	-84.120	5.284	-68.240	20.434	9.733	-88.569	77.717
987	1	-96.222	-5.204	-116.694	20.011	-0.999	-100.427	78.131
987	2	-104.944	-2.927	-117.022	11.893	-1.559	-106.312	83.437
987	3	-104.517	-2.858	-116.359	11.650	-1.540	-105.835	83.545
987	4	-123.234	-5.007	-143.219	19.542	-1.861	-126.381	80.853
987	5	-122.807	-4.938	-142.556	19.299	-1.859	-125.887	80.933
987	6	-302.503	35.128	-174.821	-123.327	75.379	-342.753	108.075
987	7	-287.946	38.482	-147.620	-135.546	87.428	-336.892	109.854
987	8	74.323	-56.397	-135.124	202.793	222.029	-204.103	36.068
987	9	-95.795	-5.135	-116.031	19.769	-1.012	-99.918	78.218
988	1	-127.208	1.025	-140.618	-12.041	2.146	-128.329	95.318
988	2	-122.832	-0.782	-130.497	-6.541	-0.433	-123.182	93.133
988	3	-122.044	-0.818	-129.541	-6.410	-0.480	-122.392	93.013
988	4	-153.209	0.074	-166.155	-11.415	0.920	-154.055	94.236
988	5	-152.421	0.038	-165.199	-11.284	0.869	-153.251	94.211
988	6	-101.825	-32.590	-13.550	95.583	25.111	-159.526	56.011
988	7	-67.782	-34.429	29.986	93.591	43.958	-146.171	50.031
988	8	-251.296	40.917	-393.895	-135.575	94.129	-304.608	111.429
988	9	-126.419	0.989	-139.661	-11.909	2.093	-127.523	95.294
989	1	-47.053	-8.561	-31.751	24.453	3.309	-58.934	54.106
989	2	-77.915	-3.971	-71.031	12.554	-1.898	-79.938	80.622
989	3	-78.109	-3.845	-71.462	12.215	-1.887	-80.057	80.395

ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
989	4	-76.531	-7.676	-62.966	22.643	-0.895	-83.310	73.333
989	5	-76.725	-7.550	-63.396	22.304	-0.981	-83.293	73.591
99[illegible]	6	-646.312	73.695	-782.320	-187.857	119.763	-692.379	103.778
[illegible]	7	-663.845	79.950	-811.199	-204.567	132.500	-716.395	104.407
[illegible]	8	620.529	-111.271	824.286	291.203	722.253	-213.006	19.257
989	9	-47.257	-8.435	-32.181	24.114	3.110	-58.802	64.416
990	1	-86.722	5.356	-65.947	-17.607	8.608	-89.974	100.464
990	2	-98.220	3.021	-89.374	-8.727	3.768	-98.967	94.891
990	3	-97.876	2.959	-89.359	-8.491	3.669	-98.586	94.780
990	4	-113.243	5.124	-95.162	-16.128	7.282	-115.402	97.622
990	5	-112.900	5.062	-95.148	-15.892	7.156	-115.003	97.540
990	6	-340.663	-36.045	-534.509	141.059	19.240	-395.949	68.598
990	7	-330.999	-39.468	-540.652	153.422	26.392	-396.861	66.767
990	8	146.958	57.838	434.285	-216.584	323.519	-118.722	140.813
990	9	-86.378	5.294	-65.933	-17.371	8.476	-89.559	100.378
991	1	-101.576	-8.244	-126.541	-18.295	-4.786	-105.034	100.703
991	2	-106.306	-4.293	-122.489	-8.735	-3.550	-107.049	94.859
991	3	-105.773	-4.178	-121.703	-8.482	-3.474	-106.476	94.740
991	4	-127.307	-7.700	-152.611	-16.548	-5.452	-129.555	97.733
991	5	-126.774	-7.585	-151.825	-16.296	-5.397	-128.962	97.647
991	6	-235.258	62.148	-106.949	152.825	126.677	-299.787	67.108
991	7	-215.815	67.754	-73.364	165.977	144.262	-292.322	65.252
991	8	-19.863	-96.884	-243.385	-232.355	177.151	-293.899	139.705
991	9	-101.042	-8.129	-125.756	-18.042	-4.748	-104.423	100.612
992	1	-138.187	10.731	-161.756	23.061	14.220	-141.677	81.395
[illegible]	2	-123.122	7.364	-141.703	9.788	8.094	-123.853	85.733
[illegible]	3	-122.045	7.271	-140.469	9.415	7.953	-122.727	85.357
992	4	-159.961	11.107	-185.979	20.031	13.421	-162.276	83.409
992	5	-158.884	11.015	-184.745	19.658	13.260	-161.129	83.485
992	6	83.223	-47.511	142.130	-215.839	243.376	-207.664	143.424
992	7	129.474	-53.209	198.832	-233.387	288.758	-212.493	145.687
992	8	-499.330	87.104	-637.924	319.625	227.534	-639.861	66.266
992	9	-137.109	10.638	-160.522	22.688	14.244	-140.515	81.463
993	1	-37.918	-5.414	-25.159	-25.313	3.415	-51.747	118.648
993	2	-76.580	-3.182	-68.420	-13.006	-0.945	-78.817	99.757
993	3	-76.984	-3.120	-68.961	-12.659	-1.007	-79.096	99.467
993	4	-70.196	-5.286	-57.352	-23.479	2.316	-77.799	107.942
993	5	-70.600	-5.224	-57.893	-23.142	2.138	-77.963	107.648
993	6	-779.780	33.965	-847.506	194.156	77.916	-823.731	77.245
993	7	-806.522	37.334	-881.507	211.539	87.380	-856.568	76.688
993	8	803.130	-55.659	919.742	-301.267	998.275	-150.804	162.473
993	9	-38.322	-5.352	-25.700	-24.575	8.088	-51.762	118.286
994	1	-92.097	7.101	-64.277	36.992	19.377	-104.372	71.641
994	2	-106.545	4.079	-89.731	21.603	8.148	-110.614	79.333
994	3	-106.270	3.996	-89.772	21.154	7.919	-110.192	79.499
994	4	-121.799	6.849	-94.400	35.959	16.217	-131.168	75.396
994	5	-121.524	6.765	-94.442	35.519	15.942	-130.702	75.512
994	6	-404.259	-46.381	-570.229	-234.912	69.981	-520.621	116.351
[illegible]	7	-395.791	-50.854	-579.571	-257.938	86.363	-533.609	118.115
[illegible]	8	205.028	75.051	480.796	383.197	528.807	-248.728	40.188

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IT	LOAD COMB	Y-STRESS (RADIAL)	Z-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
94	9	-91.821	7.018	-64.319	36.553	19.067	-103.870	71.756
95	1	-109.916	-7.979	-138.291	37.134	4.113	-122.009	71.962
95	2	-116.613	-5.165	-130.876	22.509	-0.790	-120.988	79.002
95	3	-116.118	-5.079	-129.992	22.084	-0.848	-120.350	79.154
95	4	-138.909	-8.109	-165.022	36.611	1.441	-148.459	75.380
95	5	-138.414	-8.023	-164.138	36.186	1.346	-147.734	75.484
95	6	-284.727	41.101	-61.094	-220.346	152.218	-395.845	116.761
95	7	-264.863	45.644	-21.526	-242.710	178.508	-397.727	118.697
95	8	12.955	-71.618	-331.685	366.685	339.784	-398.447	41.710
95	9	-109.421	-7.893	-137.407	36.709	3.988	-121.304	72.064
996	1	-167.527	1.684	-177.652	-26.455	5.723	-171.567	98.582
996	2	-151.084	-0.696	-154.044	-15.476	0.879	-152.660	95.815
996	3	-149.930	-0.751	-152.699	-15.172	0.776	-151.457	95.749
996	4	-195.447	0.525	-203.404	-25.754	3.853	-198.775	97.363
996	5	-194.294	0.470	-202.059	-25.450	3.741	-197.564	97.323
996	6	65.549	-42.385	185.435	167.431	197.496	-164.332	36.067
996	7	120.560	-44.887	249.353	183.924	239.508	-163.835	32.891
996	8	-565.890	54.268	-735.549	-273.575	157.701	-669.323	110.710
996	9	-166.373	1.628	-176.307	-26.151	5.605	-170.350	98.546
997	1	8.960	-12.318	117.388	53.228	52.602	-55.960	39.348
997	2	-46.249	-7.390	10.666	30.820	9.613	-63.253	61.114
997	3	-47.152	-7.247	8.351	30.171	8.971	-63.371	61.738
997	4	-22.787	-12.100	78.590	51.525	34.358	-69.245	47.960
997	5	-23.690	-11.957	76.275	50.876	33.389	-69.037	48.289
997	6	-1,022.012	74.526	-1,831.037	-343.142	173.053	-1,120.539	106.020
997	7	-1,075.286	82.017	-1,957.558	-376.444	193.690	-1,186.959	106.523
997	8	1,224.018	-123.315	2,488.136	557.264	1,424.634	-323.931	19.799
997	9	8.057	-12.175	115.073	52.579	51.494	-55.602	39.554
998	1	-84.388	15.856	-28.216	-29.566	23.926	-92.459	105.268
998	2	-100.163	9.633	-68.347	-18.580	12.692	-103.222	99.349
998	3	-99.940	9.456	-68.808	-18.262	12.424	-102.908	99.231
998	4	-113.127	15.635	-59.143	-29.590	22.109	-119.601	102.342
998	5	-112.904	15.457	-59.603	-29.272	21.817	-119.264	102.258
998	6	-417.860	-93.675	-793.121	162.994	-25.395	-485.640	67.420
998	7	-412.498	-103.201	-823.539	180.248	-20.351	-495.349	65.314
998	8	243.512	156.075	847.332	-277.570	480.944	-81.155	139.480
998	9	-84.166	15.678	-28.677	-29.248	23.615	-92.103	105.182
999	1	-120.965	-17.986	-177.277	-29.432	-10.167	-128.783	104.876
999	2	-120.612	-9.988	-150.992	-17.677	-7.232	-123.368	98.861
999	3	-119.935	-9.760	-149.583	-17.344	-7.094	-122.601	98.738
999	4	-148.104	-17.188	-201.227	-28.945	-11.074	-154.219	101.927
999	5	-147.427	-16.960	-199.818	-28.612	-10.961	-153.426	101.941
999	6	-168.440	123.859	236.415	177.556	207.756	-252.337	64.721
999	7	-139.497	135.541	302.597	195.576	237.105	-241.063	62.555
999	8	-155.371	-197.708	-793.819	-294.312	118.532	-471.612	137.057
999	9	-120.287	-17.758	-175.369	-29.099	-10.075	-127.971	104.790
1000	1	-213.527	12.817	-322.437	52.828	24.540	-225.250	77.488
1000	2	-175.657	9.138	-224.812	34.992	15.542	-182.061	79.629
1000	3	-173.923	9.037	-221.398	34.489	15.323	-180.238	79.671

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ENT	LOAD COMB	X-STRESS (RADIAL)	Y-STRESS (AXIAL)	THETA-STRESS (HOOP)	XY-STRESS (SHEAR)	MAXIMUM PRIN-STRESS	MINIMUM PRIN-STRESS	PRIN-STRESS ANGLE
000	4	-238.759	13.508	-335.249	54.361	24.606	-249.857	78.400
000	5	-237.025	13.408	-331.836	53.559	24.381	-247.998	78.421
[illegible]	6	400.595	-50.238	1,364.726	-257.306	517.259	-166.902	155.610
[illegible]	7	486.354	-56.760	1,530.815	-296.639	609.645	-180.051	156.726
[illegible]	8	-1,092.812	96.572	-2,538.003	456.510	251.648	-1,247.887	71.241
000	9	-211.793	12.716	-319.023	52.325	24.313	-223.389	77.604

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PPORT REACTIONS *
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DE	LD COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
1	1	0.000	48.406
1	2	0.000	48.406
1	3	0.000	1,144.503
1	4	0.000	48.503
1	5	0.000	1,144.701
1	6	0.000	1,144.687
1	7	0.000	1,144.692
1	8	0.000	1,144.711
1	9	0.000	1,144.504
4	1	0.000	173.078
4	2	0.000	173.090
4	3	0.000	7,113.998
4	4	0.000	167.922
4	5	0.000	7,109.830
4	6	0.000	7,109.189
4	7	0.000	7,109.054
4	8	0.000	7,108.566
4	9	0.000	7,113.986
7	1	0.000	324.938
7	2	0.000	324.918
7	3	0.000	12,877.516
7	4	0.000	334.059
7	5	0.000	12,886.657
7	6	0.000	12,886.022
7	7	0.000	12,886.261
7	8	0.000	12,887.125
7	9	0.000	12,877.536
10	1	0.000	446.644
10	2	0.000	446.653
10	3	0.000	18,510.151
10	4	0.000	442.525
10	5	0.000	18,606.023
10	6	0.000	18,606.310
10	7	0.000	18,606.232

ODE	ID COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
10	8	0.000	18,605.812
10	9	0.000	18,510.142
[illegible]			
[illegible]	1	0.000	597.229
13	2	0.000	597.229
13	3	0.000	24,338.239
13	4	0.000	597.044
13	5	0.000	24,338.054
13	6	0.000	24,338.067
13	7	0.000	24,338.062
13	8	0.000	24,338.044
13	9	0.000	24,338.239
16	1	0.000	728.114
16	2	0.000	728.114
16	3	0.000	30,048.245
16	4	0.000	728.255
16	5	0.000	30,048.386
16	6	0.000	30,048.376
16	7	0.000	30,048.380
16	8	0.000	30,048.393
16	9	0.000	30,048.245
19	1	0.000	878.552
19	2	0.000	878.552
19	3	0.000	35,788.187
19	4	0.000	878.550
[illegible]	5	0.000	35,788.185
[illegible]	6	0.000	35,788.185
19	7	0.000	35,788.185
19	8	0.000	35,788.185
19	9	0.000	35,798.187
22	1	0.000	1,005.297
22	2	0.000	1,005.297
22	3	0.000	41,495.312
22	4	0.000	1,005.305
22	5	0.000	41,495.319
22	6	0.000	41,495.318
22	7	0.000	41,495.319
22	8	0.000	41,495.319
22	9	0.000	41,495.312
25	1	0.000	1,159.700
25	2	0.000	1,159.700
25	3	0.000	47,230.034
25	4	0.000	1,159.694
25	5	0.000	47,230.028
25	6	0.000	47,230.029
25	7	0.000	47,230.028
25	8	0.000	47,230.028
25	9	0.000	47,230.034
[illegible]	1	0.000	1,282.612

E	LD COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
8	2	0.000	1,282.512
8	3	0.000	52,942.165
8	4	0.000	1,282.616
8	5	0.000	52,942.169
8	6	0.000	52,942.169
8	7	0.000	52,942.169
8	8	0.000	52,942.169
8	9	0.000	52,942.165
1	1	0.000	1,440.855
1	2	0.000	1,440.855
1	3	0.000	58,681.199
1	4	0.000	1,440.852
1	5	0.000	58,681.196
1	6	0.000	58,681.197
1	7	0.000	58,681.196
1	8	0.000	58,681.196
1	9	0.000	58,681.199
14	1	0.000	1,559.930
14	2	0.000	1,559.930
14	3	0.000	64,389.901
14	4	0.000	1,559.933
14	5	0.000	64,389.904
14	6	0.000	64,389.904
14	7	0.000	64,389.904
14	8	0.000	64,389.904
14	9	0.000	64,389.901
37	1	0.000	1,721.994
37	2	0.000	1,721.994
37	3	0.000	70,141.538
37	4	0.000	1,721.981
37	5	0.000	70,141.525
37	6	0.000	70,141.526
37	7	0.000	70,141.525
37	8	0.000	70,141.524
37	9	0.000	70,141.538
40	1	0.000	1,837.160
40	2	0.000	1,837.160
40	3	0.000	75,837.392
40	4	0.000	1,837.071
40	5	0.000	75,837.303
40	6	0.000	75,837.310
40	7	0.000	75,837.307
40	8	0.000	75,837.299
40	9	0.000	75,837.392
43	1	0.000	2,003.000
43	2	0.000	2,003.000
43	3	0.000	81,595.577
43	4	0.000	2,003.005
43	5	0.000	81,595.582

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DE	ID COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
43	6	0.000	81,595.582
[illegible]	7	0.000	81,595.582
[illegible]	8	0.000	81,595.582
[illegible]	9	0.000	81,595.577
46	1	0.000	2,113.397
46	2	0.000	2,113.397
46	3	0.000	87,308.486
46	4	0.000	2,113.596
46	5	0.000	87,308.685
46	6	0.000	87,308.671
46	7	0.000	87,308.677
46	8	0.000	87,308.696
46	9	0.000	87,308.486
49	1	0.000	2,283.554
49	2	0.000	2,283.554
49	3	0.000	93,014.703
49	4	0.000	2,283.560
49	5	0.000	93,014.709
49	6	0.000	93,014.708
49	7	0.000	93,014.708
49	8	0.000	93,014.709
49	9	0.000	93,014.703
52	1	0.000	2,392.664
52	2	0.000	2,392.664
[illegible]	3	0.000	98,737.699
[illegible]	4	0.000	2,392.450
52	5	0.000	98,737.485
52	6	0.000	98,737.500
52	7	0.000	98,737.494
52	8	0.000	98,737.474
52	9	0.000	98,737.699
55	1	0.000	2,564.660
55	2	0.000	2,564.660
55	3	0.000	104,508.890
55	4	0.000	2,564.763
55	5	0.000	104,508.993
55	6	0.000	104,508.986
55	7	0.000	104,508.989
55	8	0.000	104,508.998
55	9	0.000	104,508.890
58	1	0.000	2,668.409
58	2	0.000	2,668.408
58	3	0.000	110,138.399
58	4	0.000	2,668.520
58	5	0.000	110,138.511
58	6	0.000	110,138.504
58	7	0.000	110,138.507
[illegible]	8	0.000	110,138.517
[illegible]	9	0.000	110,138.400

E	LD COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
1	1	0.000	2,847.512
1	2	0.000	2,847.512
1	3	0.000	115,932.967
1	4	0.000	2,847.281
1	5	0.000	115,932.736
1	6	0.000	115,932.752
61	7	0.000	115,932.746
61	8	0.000	115,932.724
61	9	0.000	115,932.966
64	1	0.000	2,945.600
64	2	0.000	2,945.600
64	3	0.000	121,632.979
64	4	0.000	2,945.727
64	5	0.000	121,633.106
64	6	0.000	121,633.097
64	7	0.000	121,633.100
64	8	0.000	121,633.112
64	9	0.000	121,632.979
67	1	0.000	3,126.827
67	2	0.000	3,126.827
67	3	0.000	127,420.791
67	4	0.000	3,126.953
67	5	0.000	127,420.916
67	6	0.000	127,420.908
67	7	0.000	127,420.911
67	8	0.000	127,420.923
67	9	0.000	127,420.791
70	1	0.000	3,224.906
70	2	0.000	3,224.907
70	3	0.000	133,064.532
70	4	0.000	3,224.634
70	5	0.000	133,064.259
70	6	0.000	133,064.278
70	7	0.000	133,064.271
70	8	0.000	133,064.245
70	9	0.000	133,064.531
73	1	0.000	3,407.848
73	2	0.000	3,407.848
73	3	0.000	138,834.571
73	4	0.000	3,407.986
73	5	0.000	138,834.710
73	6	0.000	138,834.700
73	7	0.000	138,834.704
73	8	0.000	138,834.717
73	9	0.000	138,834.571
76	1	0.000	3,500.109
76	2	0.000	3,500.109
76	3	0.000	144,533.259
76	4	0.000	3,500.255

DE	LD COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
76	5	0.000	144,533.406
76	6	0.000	144,533.396
[illegible]	7	0.000	144,533.399
[illegible]	8	0.000	144,533.413
76	9	0.000	144,533.260
79	1	0.000	3,691.222
79	2	0.000	3,691.223
79	3	0.000	150,271.981
79	4	0.000	3,690.923
79	5	0.000	150,271.682
79	6	0.000	150,271.703
79	7	0.000	150,271.695
79	8	0.000	150,271.667
79	9	0.000	150,271.980
82	1	0.000	3,777.302
82	2	0.000	3,777.301
82	3	0.000	155,953.280
82	4	0.000	3,777.463
82	5	0.000	155,953.442
82	6	0.000	155,953.431
82	7	0.000	155,953.435
82	8	0.000	155,953.450
82	9	0.000	155,953.281
85	1	0.000	3,970.014
[illegible]	2	0.000	3,970.013
[illegible]	3	0.000	161,752.529
85	4	0.000	3,970.174
85	5	0.000	161,752.690
85	6	0.000	161,752.679
85	7	0.000	161,752.683
85	8	0.000	161,752.698
85	9	0.000	161,752.530
88	1	0.000	4,057.139
88	2	0.000	4,057.140
88	3	0.000	167,379.169
88	4	0.000	4,056.797
88	5	0.000	167,378.827
88	6	0.000	167,378.851
88	7	0.000	167,378.842
88	8	0.000	167,378.809
88	9	0.000	167,379.168
91	1	0.000	4,251.035
91	2	0.000	4,251.034
91	3	0.000	173,166.113
91	4	0.000	4,251.207
91	5	0.000	173,166.287
91	6	0.000	173,166.274
[illegible]	7	0.000	173,166.279
[illegible]	8	0.000	173,166.295

E	LD COMB	Y-FORCE REACTION (RADIAL)	Z-FORCE REACTION (AXIAL)
91	9	0.000	173,166.114
94	1	0.000	4,331.813
94	2	0.000	4,331.812
94	3	0.000	178,856.201
94	4	0.000	4,331.994
94	5	0.000	178,856.383
94	6	0.000	178,856.371
94	7	0.000	178,856.375
94	8	0.000	178,856.393
94	9	0.000	178,856.201
97	1	0.000	4,534.933
97	2	0.000	4,534.934
97	3	0.000	184,654.131
97	4	0.000	4,534.567
97	5	0.000	184,653.764
97	6	0.000	184,653.789
97	7	0.000	184,653.780
97	8	0.000	184,653.745
97	9	0.000	184,654.130
00	1	0.000	4,609.004
00	2	0.000	4,609.003
00	3	0.000	190,275.110
00	4	0.000	4,609.199
00	5	0.000	190,275.306
00	6	0.000	190,275.293
00	7	0.000	190,275.298
00	8	0.000	190,275.316
00	9	0.000	190,275.111
03	1	0.000	4,813.200
03	2	0.000	4,813.200
03	3	0.000	196,077.770
.03	4	0.000	4,813.394
03	5	0.000	196,077.964
03	6	0.000	196,077.951
03	7	0.000	196,077.956
03	8	0.000	196,077.974
03	9	0.000	196,077.770
06	1	0.000	4,889.369
06	2	0.000	4,889.370
.06	3	0.000	201,780.117
.06	4	0.000	4,888.955
.06	5	0.000	201,779.702
.06	6	0.000	201,779.731
.06	7	0.000	201,779.720
.06	8	0.000	201,779.681
.06	9	0.000	201,780.116
.09	1	0.000	5,094.220
.09	2	0.000	5,094.220

DE	LD COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
19	3	0.000	207,579.469
19	4	0.000	5,094.427
[illegible]	5	0.000	207,579.676
[illegible]	6	0.000	207,579.662
19	7	0.000	207,579.667
19	8	0.000	207,579.687
19	9	0.000	207,579.469
.2	1	0.000	5,163.515
.2	2	0.000	5,163.515
.2	3	0.000	213,255.167
.2	4	0.000	5,163.732
.2	5	0.000	213,255.384
.2	6	0.000	213,255.369
.2	7	0.000	213,255.375
.2	8	0.000	213,255.395
.2	9	0.000	213,255.167
.5	1	0.000	5,378.642
.5	2	0.000	5,378.643
5	3	0.000	219,023.443
.5	4	0.000	5,378.208
5	5	0.000	219,023.008
5	6	0.000	219,023.038
5	7	0.000	219,023.026
5	8	0.000	219,022.985
5	9	0.000	219,023.442
[illegible]	1	0.000	5,440.707
8	2	0.000	5,440.707
8	3	0.000	224,672.364
8	4	0.000	5,440.939
8	5	0.000	224,672.597
8	6	0.000	224,672.581
.8	7	0.000	224,672.587
18	8	0.000	224,672.609
18	9	0.000	224,672.365
21	1	0.000	5,656.385
21	2	0.000	5,656.384
1	3	0.000	230,441.092
1	4	0.000	5,656.613
1	5	0.000	230,441.320
1	6	0.000	230,441.305
1	7	0.000	230,441.310
1	8	0.000	230,441.332
1	9	0.000	230,441.093
.4	1	0.000	5,721.604
4	2	0.000	5,721.605
.4	3	0.000	235,104.853
4	4	0.000	5,721.122
4	5	0.000	235,104.371
[illegible]	6	0.000	236,104.404

DE	LD-COMB	1-PIPE REACTION (RADIAL)	1-PIPE REACTION (AXIAL)
24	7	0.000	235,104.392
24	8	0.000	235,104.346
24	9	0.000	236,104.852
27	1	0.000	5,937.407
27	2	0.000	5,937.407
27	3	0.000	241,911.501
27	4	0.000	5,937.649
27	5	0.000	241,911.743
27	6	0.000	241,911.727
27	7	0.000	241,911.733
27	8	0.000	241,911.756
27	9	0.000	241,911.501
30	1	0.000	5,995.217
30	2	0.000	5,995.217
30	3	0.000	247,575.458
30	4	0.000	5,995.469
30	5	0.000	247,575.710
30	6	0.000	247,575.692
30	7	0.000	247,575.699
30	8	0.000	247,575.723
30	9	0.000	247,575.458
33	1	0.000	6,222.352
33	2	0.000	6,222.353
33	3	0.000	253,348.392
33	4	0.000	6,221.849
33	5	0.000	253,348.388
33	6	0.000	253,348.423
33	7	0.000	253,348.410
33	8	0.000	253,348.362
33	9	0.000	253,348.891
36	1	0.000	6,272.411
36	2	0.000	6,272.411
36	3	0.000	258,985.475
36	4	0.000	6,272.679
36	5	0.000	258,985.744
36	6	0.000	258,985.726
36	7	0.000	258,985.732
36	8	0.000	258,985.758
36	9	0.000	258,985.476
39	1	0.000	6,499.572
39	2	0.000	6,499.571
39	3	0.000	264,819.582
39	4	0.000	6,499.835
39	5	0.000	264,819.946
39	6	0.000	264,819.927
39	7	0.000	264,819.934
39	8	0.000	264,819.959
39	9	0.000	264,819.693

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NODE	ID COMB	X-FORCE REACTION (RADIAL)	Z-FORCE REACTION (AXIAL)
142	1	0.000	6,553.798
142	2	0.000	6,553.799
[illegible]	3	0.000	270,431.199
[illegible]	4	0.000	6,553.209
142	5	0.000	270,430.608
142	6	0.000	270,430.549
142	7	0.000	270,430.534
142	8	0.000	270,430.578
142	9	0.000	270,431.197
145	1	0.000	6,780.301
145	2	0.000	6,780.301
145	3	0.000	276,243.010
145	4	0.000	6,780.285
145	5	0.000	276,242.994
145	6	0.000	276,242.996
145	7	0.000	276,242.996
145	8	0.000	276,242.993
145	9	0.000	276,243.010
148	1	0.000	6,827.061
148	2	0.000	6,827.060
148	3	0.000	281,887.000
148	4	0.000	6,827.484
148	5	0.000	281,887.425
148	6	0.000	281,887.397
148	7	0.000	281,887.408
[illegible]	8	0.000	281,887.444
[illegible]	9	0.000	281,887.001
151	1	0.000	7,094.575
151	2	0.000	7,094.510
151	3	0.000	287,688.331
151	4	0.000	7,122.515
151	5	0.000	287,715.336
151	6	0.000	287,714.357
151	7	0.000	297,715.088
151	8	0.000	287,717.809
151	9	0.000	287,688.336
154	1	0.000	7,238.641
154	2	0.000	7,238.321
154	3	0.000	293,319.290
154	4	0.000	7,373.619
154	5	0.000	293,454.588
154	6	0.000	293.444.934
154	7	0.000	293.448.462
154	8	0.000	293,461.316
154	9	0.000	293,319.610
157	1	0.000	5,460.599
157	2	0.000	5,464.939
157	3	0.000	298,864.136
[illegible]	4	0.000	3.578.422

	LD COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
7	5	0.000	296,977.513
7	6	0.000	297,110.040
7	7	0.000	297,060.771
7	8	0.000	296,879.524
7	9	0.000	298,859.795
0	1	0.000	-6,397.965
0	2	0.000	-6,365.789
0	3	0.000	302,596.536
0	4	0.000	-20,178.217
0	5	0.000	288,784.108
0	6	0.000	289,761.030
0	7	0.000	289,400.547
0	8	0.000	288,056.896
0	9	0.000	302,564.359
3	1	0.000	-67,168.161
3	2	0.000	-66,988.200
3	3	0.000	293,434.023
3	4	0.000	-142,362.542
3	5	0.000	218,059.681
3	6	0.000	223,471.625
3	7	0.000	221,507.230
3	8	0.000	213,992.571
3	9	0.000	293,254.062
6	1	0.000	-19,898.374
6	2	0.000	-19,838.000
6	3	0.000	241,321.102
6	4	0.000	-48,601.302
6	5	0.000	212,557.799
6	6	0.000	214,469.357
6	7	0.000	213,714.489
6	8	0.000	211,193.328
6	9	0.000	241,250.727
0	1	0.000	4,000.530
0	2	0.000	3,851.835
0	3	0.000	250,541.438
0	4	0.000	-2,769.132
0	5	0.000	243,920.470
70	6	0.000	241,348.002
70	7	0.000	241,071.470
70	8	0.000	247,283.224
70	9	0.000	250,690.233
75	1	0.000	28,137.357
75	2	0.000	27,548.032
75	3	0.000	252,565.359
75	4	0.000	45,456.239
75	5	0.000	270,473.536
75	6	0.000	259,067.178
75	7	0.000	259,188.639
75	8	0.000	283,792.288

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NODE	LD COMB	X-FORCE REACTION (RADIAL)	Z-FORCE REACTION (AXIAL)
175	9	0.000	253,154.684
[illegible]	1	0.000	77,018.171
[illegible]	2	0.000	76,080.609
181	3	0.000	217,760.270
181	4	0.000	144,922.573
181	5	0.000	286,602.234
181	6	0.000	267,342.420
181	7	0.000	268,648.153
181	8	0.000	307,791.115
181	9	0.000	218,697.832
188	1	0.000	64,851.016
188	2	0.000	63,881.111
188	3	0.000	251,918.747
188	4	0.000	118,600.740
188	5	0.000	306,638.377
188	6	0.000	287,169.326
188	7	0.000	288,065.274
188	8	0.000	328,558.230
188	9	0.000	252,888.653
195	1	0.000	106,992.724
195	2	0.000	108,652.152
195	3	0.000	243,316.388
195	4	0.000	182,913.306
195	5	0.000	317,577.542
[illegible]	6	0.000	346,255.331
[illegible]	7	0.000	349,350.948
[illegible]	8	0.000	290,074.492
195	9	0.000	241,556.960
202	1	0.000	201,264.131
202	2	0.000	209,737.510
202	3	0.000	250,233.964
202	4	0.000	318,677.984
202	5	0.000	359,174.437
202	6	0.000	513,065.839
202	7	0.000	521,421.829
202	8	0.000	167,576.147
202	9	0.000	241,760.585
209	1	0.000	273,450.472
209	2	0.000	292,145.184
209	3	0.000	247,952.007
209	4	0.000	386,049.144
209	5	0.000	341,855.967
209	6	0.000	685,425.474
209	7	0.000	699,823.559
209	8	0.000	-80,544.355
209	9	0.000	229,257.295
216	1	0.000	179,084.256
[illegible]	2	0.000	194,141.089

DE	LD COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
16	3	0.000	178,004.660
16	4	0.000	231,202.847
16	5	0.000	215,066.418
16	6	0.000	492,843.540
16	7	0.000	503,376.493
16	8	0.000	-125,217.871
16	9	0.000	162,947.827
23	1	0.000	143,949.920
23	2	0.000	158,936.494
23	3	0.000	168,471.022
23	4	0.000	162,347.057
23	5	0.000	171,881.585
23	6	0.000	449,286.246
23	7	0.000	458,847.052
23	8	0.000	-166,814.845
23	9	0.000	153,484.449
30	1	0.000	97,660.394
30	2	0.000	110,006.992
30	3	0.000	137,311.145
30	4	0.000	91,876.933
30	5	0.000	119,181.086
30	6	0.000	348,297.009
30	7	0.000	355,596.310
30	8	0.000	-159,851.928
30	9	0.000	124,964.547
37	1	0.000	141,964.129
37	2	0.000	166,221.141
37	3	0.000	271,204.443
37	4	0.000	79,282.700
37	5	0.000	184,266.002
37	6	0.000	635,819.541
37	7	0.000	648,745.409
37	8	0.000	-363,942.261
237	9	0.000	246,947.430
44	1	0.000	-28,399.014
44	2	0.000	-17,878.840
44	3	0.000	136,391.380
44	4	0.000	-158,667.322
44	5	0.000	-4,397.101
44	6	0.000	194,284.203
44	7	0.000	197,048.084
44	8	0.000	-242,152.945
44	9	0.000	125,871.206
51	1	0.000	-96,694.132
51	2	0.000	-98,968.097
51	3	0.000	-10,928.786
51	4	0.000	-183,722.025
51	5	0.000	-95,682.714
51	6	0.000	-135,450.077

NODE	LD COMB	X-FORCE REACTION (RADIAL)	Y-FORCE REACTION (AXIAL)
251	7	0.000	-139,223.174
251	8	0.000	-44,291.112
	9	0.000	-8,654.821