

D. R. Ferrier
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LGP-001-94
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surface. When remeasured, the remaining metal thicknesses varied from 0.064" to 0.068" indicating that very little metal has been lost on the interior of the containers due to corrosion.

Paint thicknesses were measured directly adjacent from where the paint was removed using a magnetic pull-off gauge and the total thickness of the paint and metal was remeasured using an ultrasonic thickness probe. The paint thickness was either in the range of 3.5-4.5 mils (1 mil = 0.001") on original paint from the factory or 5.0-6.0 mils in areas that appeared to have been repainted. Thickness measurements over the original paint areas added about three times the paint thickness to the total metal reading (about 10-15 mils). Measurements over the repainted areas showed thickness readings less than the actual metal thickness (0.042-0.053") indicating that the paint was not adequately bonded to the old paint/metal surface. The measured readings in this case are probably the result of multiple reflections of the ultrasonic signal through the paint due to the poor bond. This exercise illustrates that caution should be used when using thickness measurements made over exterior paint.

Results

The remaining metal thickness of the containers is at the nominal original wall thickness indicating that the interior rust is of a protective nature. MST recommends that the containers with water in them be drained and the interior dried as well as possible. A random sample of the containers should be inspected about every five years to monitor for corrosion. Based on the current condition of the containers, the containers should last a minimum of twenty years with routine monitoring and necessary exterior maintenance painting.

Response Requirements

No response is required. If you have questions, please contact L. G. Peppers at x4652 or pager D1992.

LGP:lgp

cc:

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