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Rust Removal and Cleaning with VpCI-422 and VpCI-415

To: Jim Holden
Cortec Corporation

For: Customer

From: Cortec Laboratories, Inc.
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Project #: 16-164-1825.bis

Results reported by:

A handwritten signature in blue ink that reads "John Wulterkens".

John Wulterkens
Technical Service Engineer

Approved by:

A handwritten signature in black ink that reads "Eric Uutala".

Eric Uutala
Technical Service Manager



Background:

A request was made to clean carbon steel panels that were already severely rusted. VpCI-422 and VpCI-415 will be evaluated, to display the efficacy of Cortec's cleaning products.

Materials:

1. VpCI-422 (Batch # 045516)
2. VpCI-415 (Batch # 19705)
3. 1010 cold rolled Carbon Steel Panels
4. Plastic Bristle Scrub Brush

Procedure:

Panels were placed in a salt spray chamber for approximately 48 hours to promote severe surface rust. Panels were removed and allowed to dry before being half submerged in VpCI-422 for 4 hours. Panels were lightly brushed after 1 and 2 hours to remove loosened corrosion from the surface. After 4 hours, panels were removed from the VpCI-422 solution and rinsed with VpCI-415 at a 10% concentration in water.

Photos:

Picture 1: Fully rusted panel compared to 2 panels half cleaned with VpCI-422 and VpCI-415.

Interpretations:

VpCI-422 was able to successfully clean a severely corroded carbon steel surface in 4 hours. The use of VpCI-415 provides a clean, neutral steel surface, ready for further treatment. Both Cortec products used in this test are biobased and/or biodegradable, allowing for easy disposal.