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POLYGUARD PRODUCTS, INC.
Date: September 9, 2013
DRAFT

Report No.: 101276703GRR-001a
Reference No.: 13-500469218
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Test Report For:

POLYGUARD PRODUCTS, INC.

**ASTM B117
Salt Spray Exposure**

**Cold Rolled Steel (CRS) Panels with RG-2400-LT and Isel 3146
Coatings Applied by POLYGUARD PRODUCTS, INC. at INTERTEK**

Note: Any reference using "CS" represents Isel 3146 (Isel 3146 has been referred to as Coldstar CS-3146). Any reference using "LT" represents RG-2400-LT. Both coatings were tested at a thickness of 25 - 27 mils.

Jim Mason
Project Manager

Gary Liu
Reviewer

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Attention: Chris Rogalski
POLYGUARD PRODUCTS, INC.
3801 S. Hwy. I-45
Ennis, TX 75119
Phone: 214-515-5019
Email: chris@polyguardproducts.com

DATE RECEIVED: 08/12/13
DATES TESTED: 08/12/13 – 09/02/13

DESCRIPTION OF SAMPLES:

Part Description: Cold rolled steel (CRS) panels with RG-2400-LT and Isel 3146 Coatings applied by POLYGUARD PRODUCTS, INC. at INTERTEK

Material Submitted: RG-2400-LT and Isel 3146 Coatings
Six (6) CRS panels 4" x 6" in size
The CRS panels were cleaned with isopropyl alcohol prior to applying the RG-2400-LT and Isel 3146 coatings.

Condition of Test Samples: Test Panels

Material Specification: None Stated

WORK REQUESTED / APPLICABLE DOCUMENTS:

Salt Spray Exposure: ASTM B117-11

CONCLUSION:

Refer to individual test section. Due to non-specified acceptance criteria, final evaluation shall be determined between POLYGUARD PRODUCTS, INC. and concerned parties.

Disposition of Test Samples:

After exposure, test panels were returned to POLYGUARD PRODUCTS, INC. for final evaluations.

SALT SPRAY EXPOSURE TEST PROCEDURE:

Date Received: 08/12/13
Dates Tested: 08/12/13 – 09/02/13

Description of Samples:

Part Description: Cold rolled steel (CRS) panels with RG-2400-LT and Isel 3146 Coatings applied by POLYGUARD PRODUCTS, INC. at INTERTEK

Material Submitted: RG-2400-LT and Isel 3146 Coatings
Six (6) CRS panels 4" x 6" in size
The CRS panels were cleaned with isopropyl alcohol prior to applying the RG-2400-LT and Isel 3146 coatings.

Condition of Test Samples: Test Panels
Material Specification: None Stated

Test Procedure:

Test Method: ASTM B117-11

Sample Preparation: A technician from POLYGUARD PRODUCTS, INC. was on site prior to testing to coat the CRS panels with the RG-2400-LT and Isel 3146 coatings and prepare the panels for exposure. The CRS panels were cleaned with isopropyl alcohol prior to applying the RG-2400-LT and Isel 3146 coatings. The RG-2400-LT and Isel 3146 coatings were applied at a thickness of 25 - 27 mils.

Exposure Duration: 168 hours and 504 hours

Number of Panels Tested: Six (6) 6" x 4" CRS panels. Each panel had a 3" x 2" x 25 - 27 mil coating of RG-2400-LT and Isel 3146.

Acceptance Criteria / Requirements:

None stated; results reported

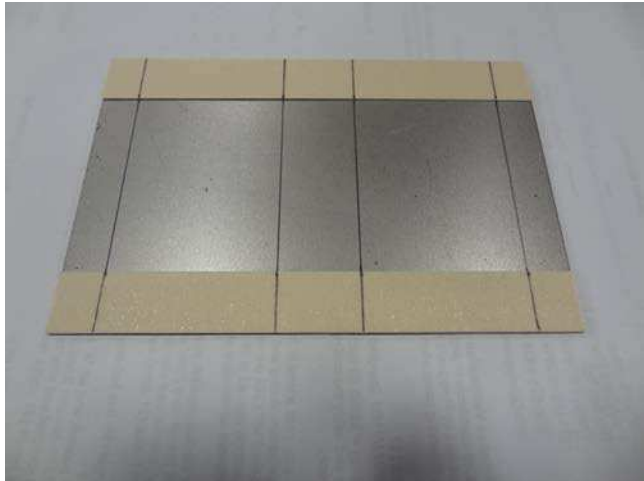
Salt Spray Exposure Test Results:

After 168 Hours of ASTM B117-11 Salt Spray Exposure		
Sample		Visual Observations
RG-2400-LT	1	No evidence of degradation. Red rust (run off) onto RG-2400-LT Coating. After removing the RG-2400-LT coating from the CRS panels, the CRS surface showed no corrosion in the area where the RG-2400-LT coating was applied.
	2	
	3	
Isel 3146	1	The gel property of the Isel 3146 Coating appeared to degrade and had loss of adhesion to the CRS panel. After removing the remaining Isel 3146 coating from the CRS panels, the CRS surface showed significant corrosion in the area where the Isel 3146 coating was applied.
	2	
	3	

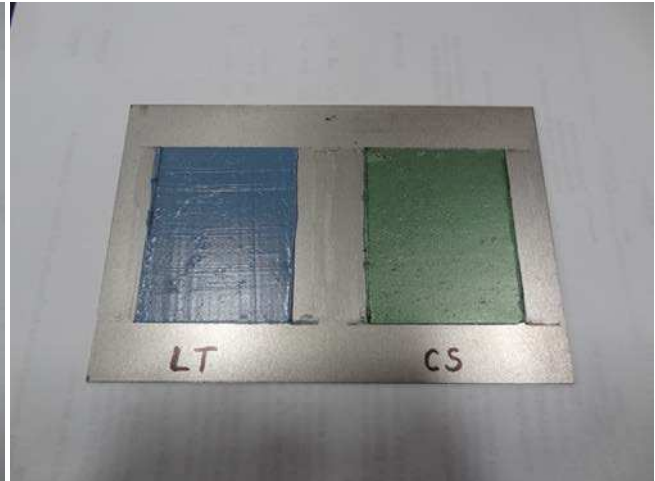
After 504 Hours of ASTM B117-11 Salt Spray Exposure		
Sample		Visual Observations
RG-2400-LT	1	No evidence of degradation. Red rust (run off) onto RG-2400-LT Coating. After removing the RG-2400-LT coating from the CRS panels, the CRS surface showed no corrosion in the area where the RG-2400-LT coating was applied.
	2	
	3	
Isel 3146	1	The gel property of the Isel 3146 Coating appeared to degrade and had loss of adhesion to the CRS panel. After removing the remaining Isel 3146 coating from the CRS panels, the CRS surface showed significant corrosion in the area where the Isel 3146 coating was applied.
	2	
	3	

Salt Spray Exposure Test Photos – Pre-Exposure:

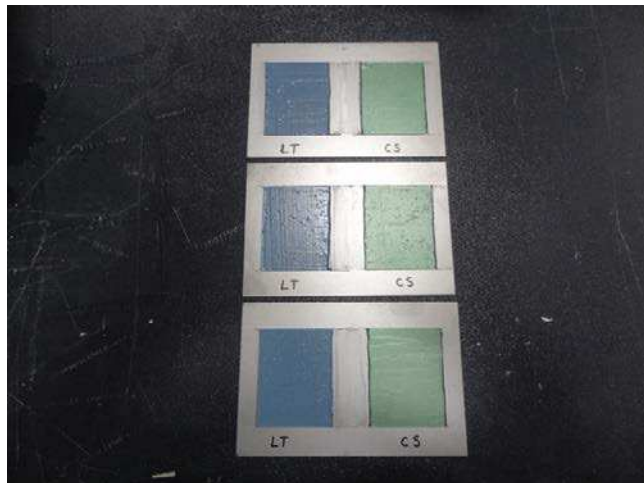
Note: LT = RG-2400-LT
CS = Isel 3146
Both coatings were applied at a thickness of 25 - 27 mils



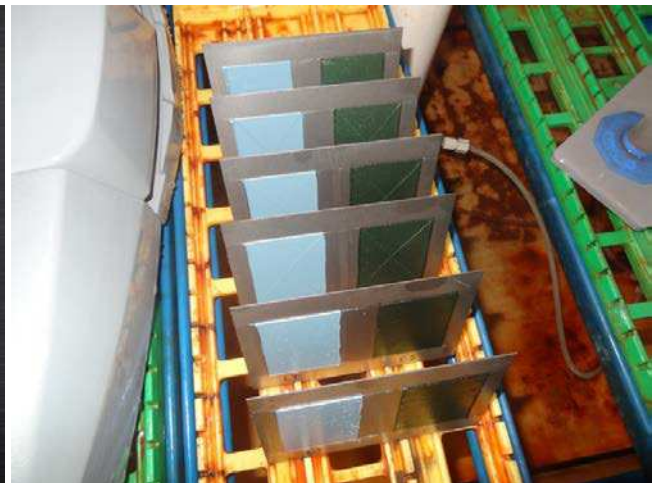
Typical Panel as Received



Typical Panel with RG-2400-LT and Isel 3146 Coatings Applied



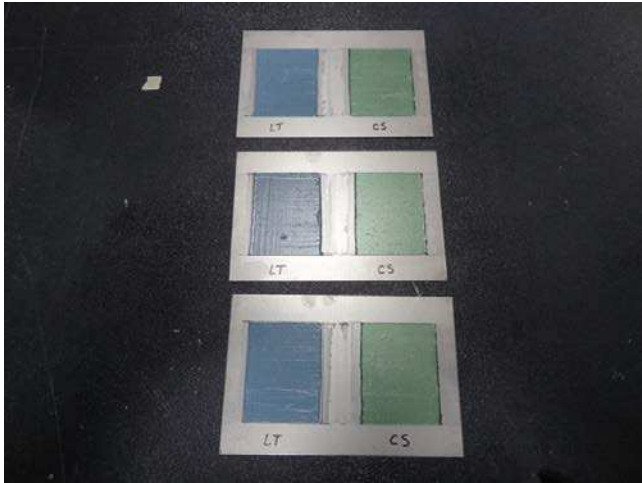
168 Hour Salt Spray Test Panels, Pre-Exposure



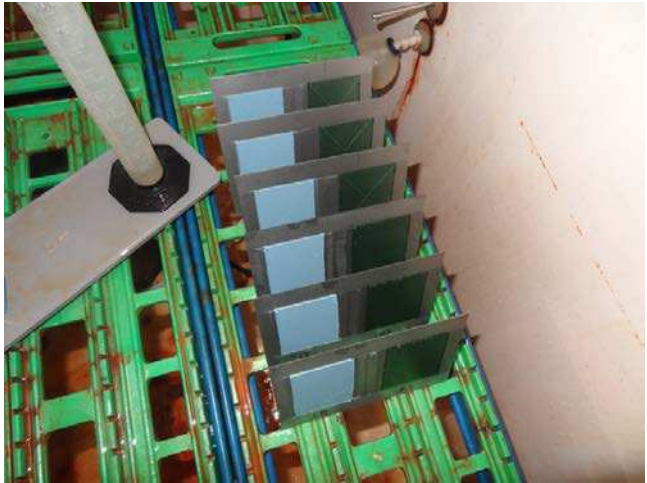
168 Hour Salt Spray Test Set-up
(Note: 3 panels have RG-2400-LT and Isel 3146 that were "X-Scribed". Results for these "X-Scribed" panels can be found on Intertek report number 101276703GRR-001b).

Salt Spray Exposure Test Photos – Pre-Exposure:

Note: LT = RG-2400-LT
CS = Isel 3146
Both coatings were applied at a thickness of 25 - 27 mils



504 Hour Salt Spray Test Panels, Pre-Exposure



504 Hour Salt Spray Test Set-up
(Note: 3 panels have RG-2400-LT and Isel 3146 that were "X-Scribed". Results for these "X-Scribed" panels can be found on Intertek report number 101276703GRR-001b).

168 Hour Salt Spray Exposure Test Photos – Post-Exposure:

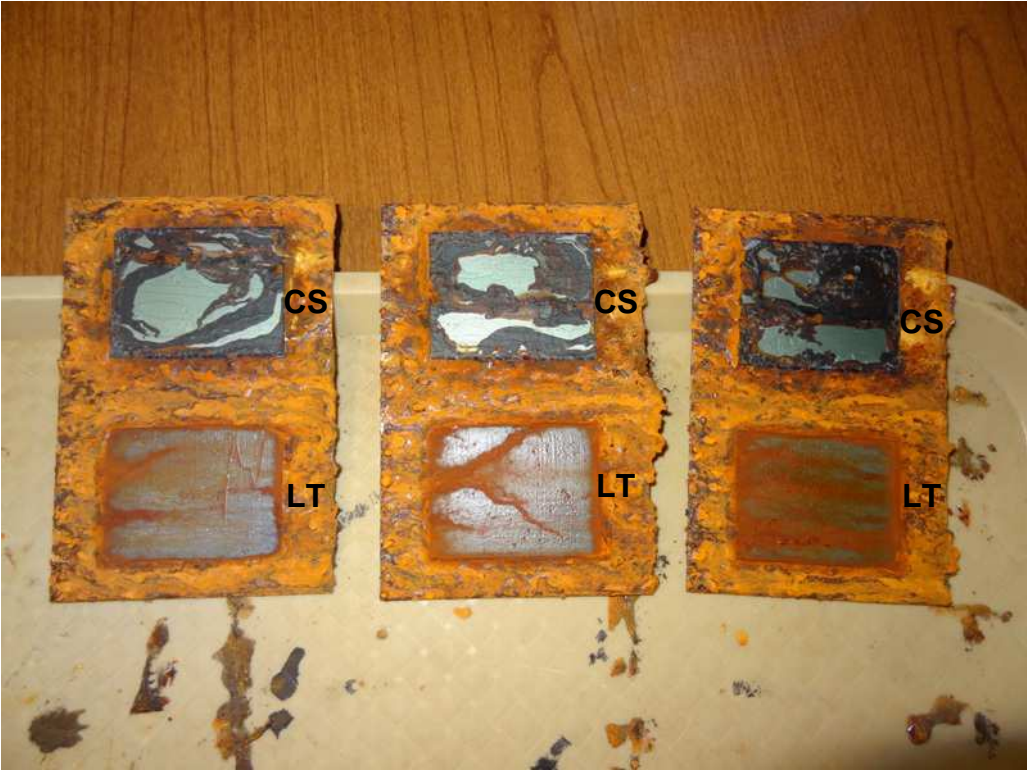


168 Hour Salt Spray Test Panels, Post Exposure



168 Hour Salt Spray Test Panels, Post Exposure - After Removing Coatings from the CRS Panels

504 Hour Salt Spray Exposure Test Photos – Post-Exposure:



504 Hour Salt Spray Test Panels, Post Exposure



504 Hour Salt Spray Test Panels, Post Exposure - After Removing Coatings from the CRS Panels