



Laboratory Test Report

Date: 9-19-2022

Project #: 083122

Tests Performed For: Diverse Global

Distributor:

Customer:

ARMOR Rep: Kristin Moore

TEST OBJECTIVE

Determine the corrosion inhibiting performance of Armor VCI Foam vs non-VCI foam on steel parts in two plastic totes supplied by Diverse Global.

TEST PROCEDURES

Test performed in a HARSHAW humidity cabinet which provides an environment that promotes/accelerates the corrosion process. The sample parts, enclosed in a tote, were exposed to this harsh environment for 16 days. The temperature inside the humidity chamber was 98°F - 105°F, while the tower water was at 120°F, maintaining a relative humidity of 95 - 99%.

MATERIALS TESTED

The test was performed using the materials listed below.

1. Control - Parts as received enclosed in a tote lined with non-vci foam on bottom
2. Parts as received enclosed in a tote lined with Armor VCI foam on bottom

EVALUATION PROCEDURE

The parts will be evaluated and contrasted with each other for any changes to the surface condition and presence of visible corrosion.



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Tote with Armor VCI Foam Pad (116 in²)



Control Tote with black foam covering bottom and parts



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TEST CONCLUSIONS Project # 083022

Parts were received with an RP (oil) on them. Some parts arrived with darkened areas, some staining, and specks of debris. No corrosion was seen.



Results after 16 days in humidity chamber		
	Control – No VCI	Armor VCI Foam Pad
Parts with Visible Corrosion	10	0
Parts with No corrosion	7	18
Total # Parts Tested	17	18

Test results show the Armor VCI Foam Pad provided excellent corrosion protection.

Please feel free to contact me if you have any questions or comments.

Prepared by:

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CAUTION: Please note that accelerated lab tests are not a replacement for actual ship tests. Lab conditions may or may not replicate the field conditions that a package or shipment is likely to see. ARMOR always recommends conducting a “real life” shipment test for best results.



Laboratory Test Report TEST SAMPLES AND SUMMARY RESULTS

Control (Set 1) Before



Control (Set 1) After





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VCI (Set 1) Before



VCI (Set 1) After



Grease spots



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Control (Set 2) Before





Laboratory Test Report
Control (Set 2) After





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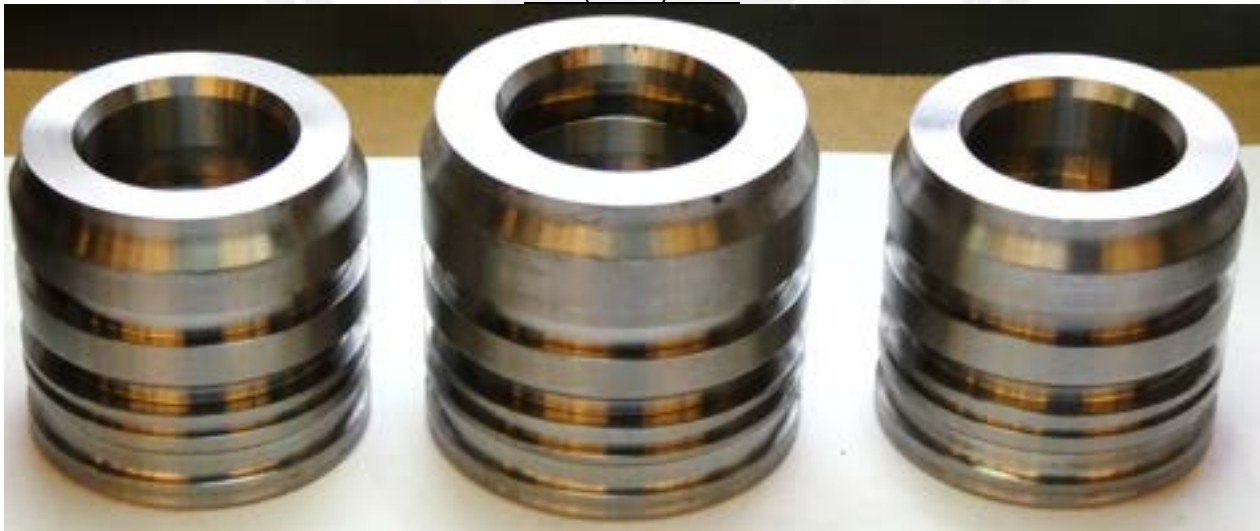




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VCI (Set 2) Before



VCI (Set 2) After





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Staining



Control (Set 3) Before





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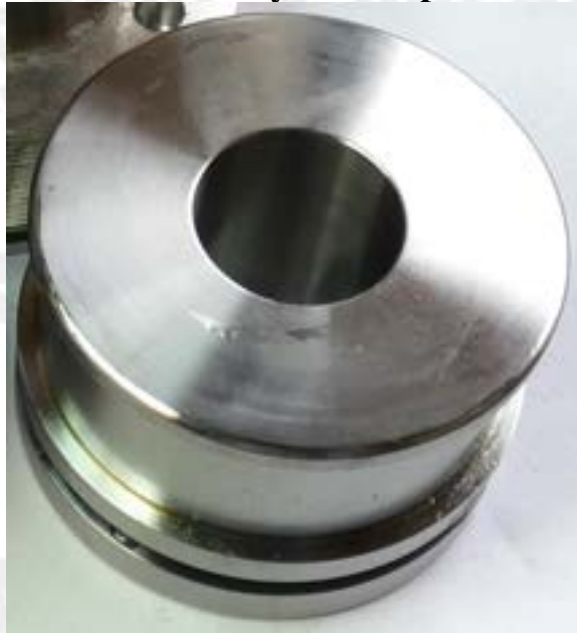


Control (Set 3) After





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VCI (Set 3) Before





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VCI (Set 3) After





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Control (Set 4) Before





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Control (Set 4) After





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VCI (Set 4) Before



VCI (Set 4) After





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