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Comparison of Different Rust Preventative on Steel Rods

To: Customer

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Project #: 14-009-1825.bis

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Date: March 7, 2014



Background: The customer is interested in comparing BioCorr or VpCI-329 D to their current Clark oil 608 rust preventative.

Samples Received: 1-27-14 received in good condition 8 steel rods and 1 bottle of RP

Method: ASTM D-1735 Water fog testing (40 °C and approx. 99% RH)

Materials: Metal test parts
Clark oil 608
BioCorr (Batch# 13013)
VpCI-329 D (Batch# 16132)
Methanol

Procedure:

1. Use methanol to clean 4 rods.
2. Allow the cleaned rods to dry.
3. Coat 3 of the rods as follows:
 - a. VpCI-329 D
 - b. BioCorr
 - c. Clark oil 608
4. Allow all rods to sit overnight.
5. Place all 4 rods in the ASTM D-1735 chamber.
6. Monitor parts for visual corrosion and remove after 168 hours of humidity testing.
7. Photograph parts to compare extent of corrosion.

Results:

Table 1: ASTM D-1735 Corrosion Test Result

Treatment	Time to Corrosion
Control	< 24 hours
BioCorr	168 hours
VpCI-329 D	120 hours
Clark Oil 608	72 hours

Results relate only to items tested

Interpretations: BioCorr provided the best corrosion of these 3 rust preventatives and after 168 hours had only corrosion on the base where it was contacting the support beam of the chamber. VpCI-329 D had the second best corrosion prevention and lasted almost twice as long as the Clark Oil product.

Photos: Taken after 168 hours of humidity testing

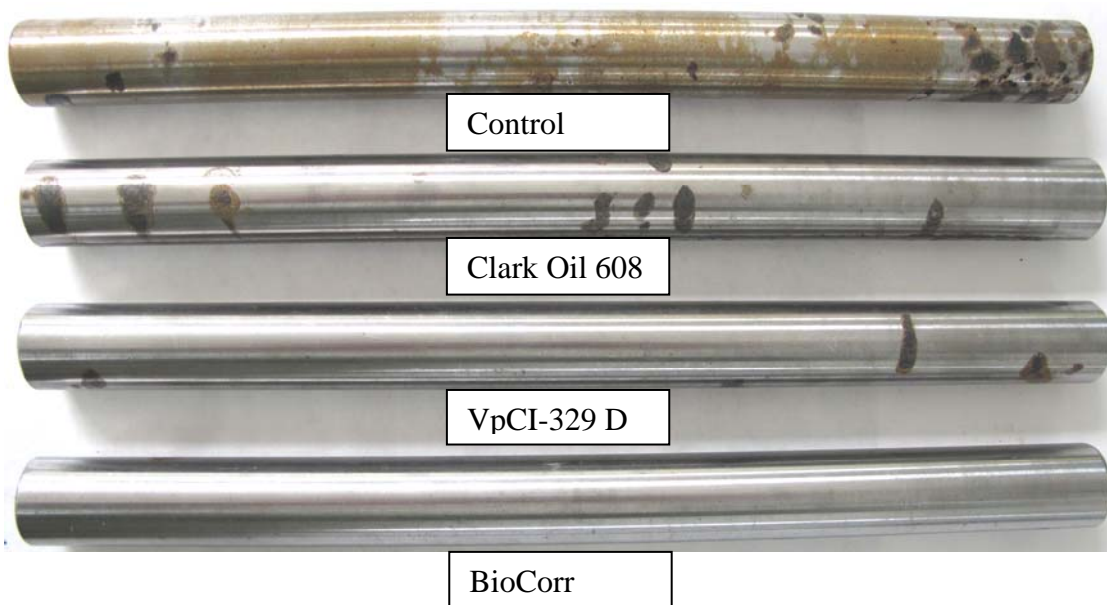


Figure 1: Corrosion on steel rods after 168 hours