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## *Evaluating Rust Preventive Options*

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**Sample Received:** -Two sets of snap rings wrapped in foil, one treated with VpCI-337, the other with Rust Veto RP, both packaged in Zerust film.

-Two sets of springs packaged in plain polyethylene film, one treated with BioCorr, the other with Rustilo 4135HF.

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**Method:** Modified ASTM D-1748 humidity (~120°F, >95% humidity)

**Materials:** Two sets of snap rings  
Two sets of springs

**Procedure:** The following procedure was used:

- 1) All samples were prepared by customer prior to shipment. No further preparation was performed prior to testing.
- 2) Springs and snap rings were placed in modified ASTM D-1748 humidity cabinet.
- 3) Springs and snap rings were visually inspected periodically.
- 4) After 936 hours, all parts were removed from modified ASTM D-1748 humidity cabinet.
- 5) All parts were unpackaged, visually inspected, and photographed.

**Results:** The following results were found:

Part ID/Treatment	Time to Corrosion (Hours)
Springs/Rustilo	600
Springs/BioCorr	DNF*
Snap rings/Rust Veto	DNF*
Snap Rings/VpCI-337	DNF*

DNF – Did not fail during 900 hours of ASTM D-1748 testing.

**Photos:**



**Interpretations:** After over 900 hours in accelerated corrosion testing, BioCorr provided superior protection to Rustilo 4135 HF on springs.

No visible corrosion was present on the edges of either set of snap rings.