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LABORATORY ACCREDITATION BUREAU
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Certificate # L2267 Testing

Evaluating Packaging Systems for Customer

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Project #: 11-244-1125(bis)

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Date: February 17, 2012

Background: Customer sent two packs of transmission parts to Cortec for testing. Parts will be protected with either Cortec VpCI packaging products or Zerust packaging products.

Sample Received: 100 transmission parts
VpCI-126 Blue Film gusseted bags and sheeting
VpCI-131 foam pads
Zerust ICT 510-C Ferrous Film
Zerust VC-1 emitters

Method: ASTM D-1748 Humidity (modified)

Materials: As listed in 'Samples Received'

Procedure: The following procedure was used:

1) All parts were packaged by customer prior to being shipped to Cortec.
2) Prior to testing, all outer film was inspected for tears.
3) After inspection, plastic skids were placed in modified ASTM D-1748 humidity cabinet.
4) After 240 hours, skids were removed from modified ASTM D-1748 humidity cabinet.
5) Skids were unwrapped and all parts were visually inspected.

Results: The following results were found:

Packaging System Used	Corroded Parts After 240 Hours
None (control)	20/20
Zerust bag and sheet	20/20
Zerust bag, sheet, and emitter	19/20
VpCI-126 bag and sheet	17/20
VpCI-126 bag, sheet, and VpCI-131	0/20

Interpretations: After 240 hours of testing, the system of VpCI-126 bag, VpCI-126 sheets, and VpCI-131 foam pads was the only system to provide complete corrosion protection. In all the other systems, corrosion was present in most, if not every, part. Corrosion was most prevalent on the bottom edge of the parts, where they were in contact with the plastic dunnage. The ingress of water into the packaging most likely contributed to this corrosion.

All parts will be sent back to customer for further inspection.