

EICCT TECHNOLOGY

FINAL COAT MODULE

TEST SUMMARY



Underwriters Laboratories of Canada



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An Affiliate of Underwriters Laboratories Inc.

June 18, 2001

CLIENT: Canadian Auto Preservation Inc
390 Bradwick Dr
Concord, ON L4K 2W4

Attention: Mr Sam Cavalcante
Mr Randy Peek

SUBJECT: The above company submitted six (6) prepainted metal test panels along with two (2) Final Coat Rust Control Modules. All steel panels were supplied by Gatsteel Ind. Inc per the attached certified document & sent to Hwy 7 Auto Collision Ltd. for painting per the attached certified document.

TEST OBJECTIVE:

To determine the performance of the Final Coat Rust Module CM-2000 with regard to the prevention of corrosion by producing a protective field throughout the test panels while being exposed to a controlled temperature and salt spray. A comparison will then be made to a test panel exposed to the same conditions but not protected with the Final Coat Rust Control Module.

SAMPLE PREPERATION:

The analysis involved the testing of six (6) square painted metal panels each measuring four (4) feet by four (4) feet. Each panel was made from double sided galvanized automotive sheet metal (Dry Passive Galvanneal per Chrysler MS-6000 Specifications) supplied by Gatsteel Industries Inc. per the attached document. Samples were then sent to Hwy 7 Auto Collision Ltd. for paint preparation using the following materials and methods:

- Step 1 - All panels washed, sanded and degreased
- Step 2 - E-coat etch primer was applied to both sides of panels
- Step 3 - Each panel received a coating of Dupont Premier auto primer (base coat) WA5111
- Step 4 - Dupont Clear Coat 72400 was applied to one side of each panel
- Step 5 - Each panel was then baked for thirty (30) minutes at 180°F.

TEST METHOD:

In accordance with ASTM D1654-92 (Test Method for Evaluation of Painted or Coated Specimens subject to Corrosive Environments) each panel was scribed making sure to cut through the painted surface and exposing the bare metal.

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TEST PROCEDURE # 1

All panels were suspended to supports in the salt spray chamber.

One Final Coat CM-2000 module was attached to panel one (1) per the manufacturer's installation instructions and connected to a 12.8 Volt DC power supply. Another final Coat CM-2000 module was connected to panel two (2) per manufacturer's installation instructions and a grounding strap was attached between panels two (2) and three (3), three (3) and four (4) & four (4) and five (5). Panel two (2) was then connected to a 12.8 Volt DC power supply.

The chamber was then sealed and monitored daily (except weekends) to insure that conditions stayed within the specified range.

Temperature:	38°C (100°F) ± 2°C
Voltage:	12.8 Volts ± .5 volts
Salt Spray	5% solution

The salt spray chamber was reopened after each four (4) day period (approx 100 hours) and each panel was inspected for an increase in corrosion. All test panels were removed and observed through an Olympus optical microscope and photographed after five hundred (500) hours. The test was stopped after one thousand (1000) hours and the samples were removed for observation & photographs.

TEST SUMMARY # 1

Each panel was subjectively evaluated to determine the amount of corrosion at the scribe area after exposure to a 5% salt solution for one thousand (1000) hours. Each panel was observed through an Olympus optical microscope for signs of corrosion and photographs taken.

The following was noted: Scribe marks on all the panels showed no corrosion or rust.

** Special Note - This is a subjective test.*

-The test results apply only to the actual samples tested.

TEST PROCEDURE # 2

A single unprotected panel (no Final Coat CM -2000 module attached) was suspended in the salt spray chamber at the same time as those in test # 1 above.

The chamber was sealed and monitored daily to insure that test conditions stayed within the specified range.

Temperature:	38°C (100°F) ± 2°C
Salt Spray	5% solution

The salt spray chamber was reopened after each four (4) day period (aprox 100 hours) and the panel was inspected for an increase in corrosion. The test panel was removed and observed through an Olympus optical microscope and photographed after five hundred (500) hours. At that point (after completing 500 hours of salt spray) the panel was sectioned into a 2 X 2 panel and the portion with the scribe mark was returned to salt spray chamber by itself.

Once again the test chamber was monitored daily in order to maintain the required test parameters and to observe for any corrosion or rust. The test was stopped after one thousand (1000) hours and the sample was removed for observation & photographs.

TEST SUMMARY # 2

The test panel was examined for corrosion, rust or pitting at the scribe mark after exposure to a 5% salt solution for one thousand (1000) hours using an Olympus optical microscope. The following was noted: the scribe mark showed rust along its entire length. There was a noticeable difference in the appearance of the scribe mark on this sample as compared to the scribe marks on the samples in Test # 1.

SUMMATION

Scribe marks on all panels in test # 1 connected to the Final Coat CM-2000 rust control module showed no signs of rust while the unprotected panel in test # 2 showed corrosion & rust damage. All test panels where exposed to a 5% salt solution for one thousand (1000) hours.

** Special Note - This is a subjective test.*

-The test results apply only to the actual samples tested.

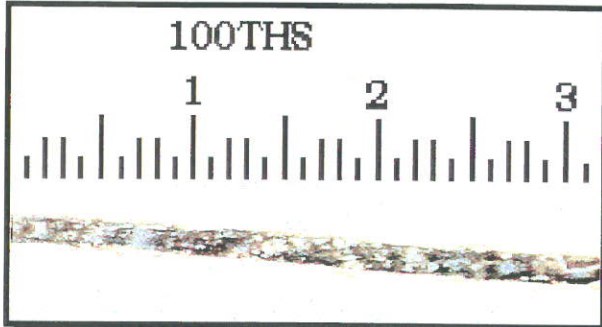
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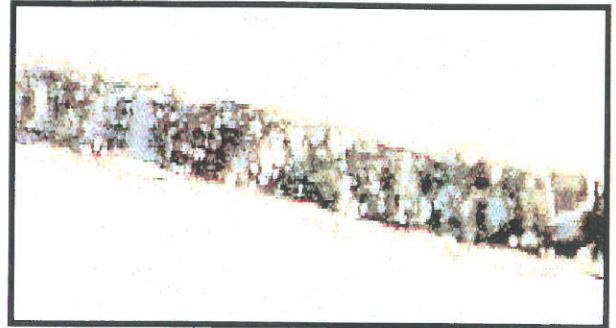
Robert Clement
Coordinator
Commercial Testing & Inspection Services

U.L.C. (UNDERWRITERS' LABORATORIES OF CANADA) TEST RESULT PHOTOS

FINAL COAT® CORROSION MODULE PROTECTED PANEL



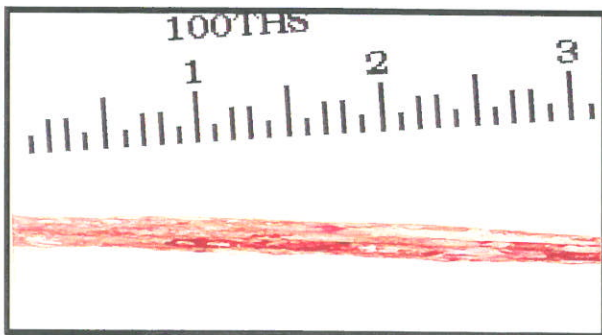
GALVANIZED BODY PANEL SCRATCHED TO BARE METAL WHEN **PROTECTED** BY THE FINAL COAT CM-2000 MODULE (1000 HRS SALT SPRAY EXPOSURE)



CLOSE UP (25X) OF AREA **PROTECTED** BY THE FINAL COAT MODULE (1000 HRS SALT SPRAY EXPOSURE)

THESE PHOTOS WERE TAKEN WITH AN OLYMPUS OPTICAL ELECTRON MICROSCOPE FOR SUBJECTIVE EVALUATION AFTER **1000 HOURS** OF SALT SPRAY EXPOSURE

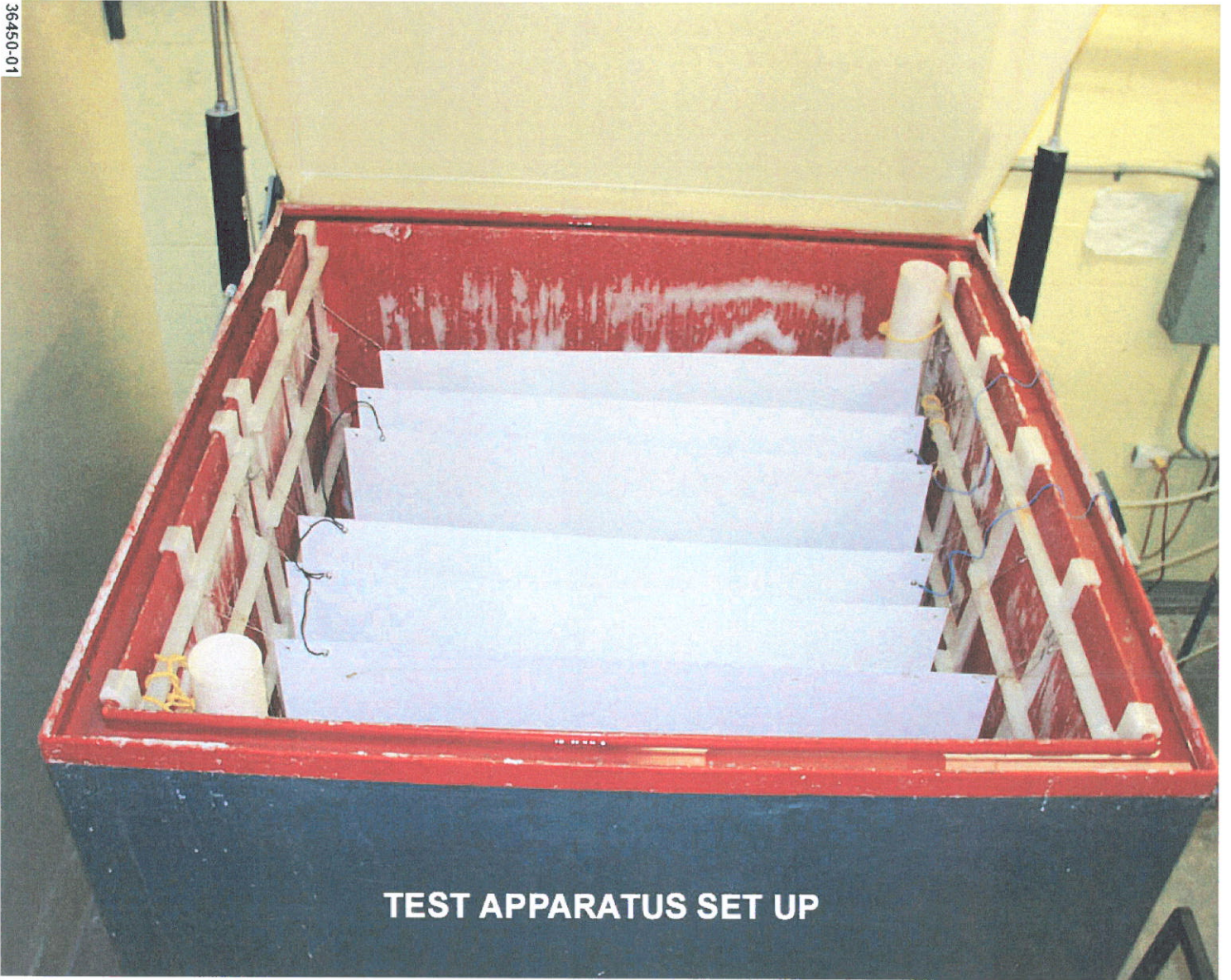
UNPROTECTED PANEL



GALVANIZED BODY PANEL SCRATCHED TO BARE METAL WITHOUT MODULE PROTECTION (1000 HRS SALT SPRAY EXPOSURE)



CLOSE UP (25X) OF **UNPROTECTED** AREA SHOWING PITTING, METAL LOSS AND SEVERE CORROSION (1000 HRS SALT SPRAY EXPOSURE)



TEST APPARATUS SET UP

CERTIFICATE
OF ACCREDITATION



CERTIFICAT
D'ACCRÉDITATION

Underwriters' Laboratories of Canada

7 Crouse Road, Scarborough, Ontario

*having been assessed under the authority of
the STANDARDS COUNCIL OF CANADA (SCC) Act
and found to comply with the criteria established
by the Council is hereby recognized as an*

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*ayant été soumis à une évaluation selon la
Loi sur le CONSEIL CANADIEN DES NORMES (CCN)
et ayant été trouvé conforme aux
critères établis par le Conseil est de fait reconnu*

ORGANISME DE CERTIFICATION
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*dans les domaines d'activité particuliers spécifiés dans
le document du Conseil Répertoire des organismes de
certification accrédités CAN-P-1505*



Issued on: 1980-10-07
Émis ce :

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President / Président

*Assessment performed according to the Criteria and Procedures for Accreditation
of Certification Organizations (CAN-P-3)*

*Évaluation effectuée conformément aux Critères et méthodes d'accréditation
des organismes de certification (CAN-P-3)*

