



Technical Note

Subject: **Results of Cathodic Disbondment of Coating Test/ Third Party**

The following tests were run as described below. The product tested was VersaFlex FSS 50DM(cat) spray polyurea. The testing was undertaken to establish performance baseline criteria in accordance with industry standards for resistance of coatings to cathodic disbondment and other physical properties when polyurea is applied to mild steel vessels.

Purpose: Establish resistance of FSS 50DM(cat) spray polyurea as indicated.

Sample Preparation: Per test method specification.

Testing Facility: Charter Coating Service Ltd.
#6 4604 13 Street N.E.
Calgary, Alberta T2E 6P1 Canada
(403) 250-3027

Coating: VersaFlex FSS/50DM

Work Order: 0266-98-04-T Cathodic Disbondment
CAN/CSA Z245.20-M92, Clause 12.8.
Date: August 24, 1998
Duration: 24 hours
Temperature: 65° C/140° F
Technician: D. Switzer

Sample Number	Film Thickness (mils)	Diameter of Disbondment (mm)	Average Radius Disbondment (mm)	Pass/Fail*
7779-13-1/1	65-70	7.4	3.7	Pass
7779-13-1/2	70-75	0	0	Pass
7779-13-1/3	65-78	8.3	4.1	Pass

*Pass/Fail criteria - Pass is 8mm maximum radius

Work Order:

0266-98-05-T Resistance to Impact

CAN/CSA Z245.20-M98, Clause 12.12.

Date: September 14, 1998

Technician: D. Switzer

Temperature °C/F	Film Thickness Range (mils)	Impact Energy (joules)	Cracks	Holidays*	Pass/Fail**
-30/-22	25-35	1.5	None	None	Pass
-30/-22	25-35	1.5	None	None	Pass
-30/-22	25-35	1.5	None	None	Pass
-30/-22	65-75	1.5	None	None	Pass
-30/-22	65-75	1.5	None	None	Pass
-30/-22	65-75	1.5	None	None	Pass
-30/-22	70-80	1.5	None	None	Pass
-30/-22	70-80	1.5	None	None	Pass
-30/-22	70-80	1.5	None	None	Pass

*Holiday detection was wet sponge at 67.5 VDC

**Pass/Fail criteria - No Holidays

Work Order:

0266-98-05-T Shor "D" Hardness

Date: September 15, 1998

Technician: Jennifer Morse

Temperature	Film Thickness (mils)	Shor "D" Hardness
25°C/77°F	70-80	51/creep 10 @ 15 seconds
25°C/77°F	70-80	50/creep 11 @ 15 seconds
25°C/77°F	65-75	51/creep 13 @ 15 seconds
25°C/77°F	70-75	51/creep 10 @ 15 seconds