

Corrosion Technology
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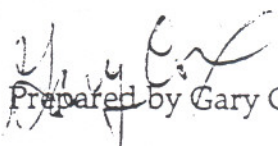
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Technical Report No. 94-157

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Resistivity of Polyguard "RD-6" Fabric

May 27, 1994


Prepared by Gary Cox

ITI Contract No. 1014

RESISTIVITY OF POLYGUARD "RD-6" FABRIC

Introduction

As requested by Mr. Bob Nee of Polyguard, I.T.I. Anti-Corrosion, Inc. has conducted laboratory testing to determine the resistance of Polyguard RD-6 fabric to current flow.

Apparatus

1. A glass test cell consisting of 2 halves, each being closed on one end and equipped with a grooved flange (to accept an o-ring) on the opposite end to facilitate clamping. Each half of the cell was also equipped with 3 inline ports. (See Diagram)
2. Global Specialties Model 1302 constant current/constant voltage power supply.
3. Fluke Model 21 Series II multimeter.
4. Standard Calomel reference electrodes.

Procedure

1. The test cell was assembled, using a sample of Polyguard "RD-6" fabric as a septum between the 2 halves. The cell was then filled with a solution of 3% salt water.
2. The Model 1302 power supply was then attached to a platinum anode and a carbon steel cathode in a vessel containing 3% NaCl solution and the potential adjusted to -3.00 VDC.

3. The leads were then transferred from the 3% NaCl solution to the test cell, placing the anode and cathode on opposite sides of the "RD-6" septum and the potentials were recorded.

Results

There was no change in potential across the Polyguard RD-6 septum:

Potential in 3% NaCl only:	-3.00 VDC
Potential in 3% NaCl across "RD-6"	-3.00 VDC

