PROTECTO 401

THE PROVEN CERAMIC EPOXY LINING

888-SPEC-401 | PROTECTO401.COM

THIRD PARTY TESTING

GEORGE MILLS & ASSOCIATES INTERNATIONAL, INC.

HOUSTON
P.O. Box 847 | Humbler, TX 77347
Tel: (713) 852-7600 | Fax: (713) 852-8777

NASHVILLE
3133 Knobview Drive
Nashville, TN 37214
Tel: (615) 391-4785 | Fax: (615) 885-9655

TEST METHOD: ASTM G-95:

Standard Test Method for Resistance to Cathodic Disbondment by the Attached Cell Method.

COATING SYSTEM:

Protecto 401™ CERAMIC EPOXY Lining: Plant applied Protecto 401™ Ceramic Epoxy lined ductile iron pipe (DIP) cut into 6 inch x 6 inch coupons.

PROCEDURE:

Following ASTM G-95, a five inch tall by four inch diameter section of PVC pipe, ground to the approximate curvature of the internal surface of the pipe coupon, was attached via RTC silicone caulk. A 0.25 inch holiday was drilled through the coating to metal in the center of each coupon. A 0.25 inch hole was drilled through one corner of each coupon and fitted with a bolt to provide attachment of the negative lead from the impressed current cathodic protection power supply. Triplicate coupons were subjected to simulated cathodic protection by impressing a 1.5 volt potential between the metal and an electrode within the CD cell for a period of thirty days. The electrolyte used was 3% sodium chloride in tap water.

An additional set of coupons were subjected to the same test regime with the exception that they were maintained at 60øC on a sand bath. The hot (60°C) cells were covered with plastic wrap to minimize evaporative losses. Evolved hydrogen was able to escape through the plastic and did not present a problem.

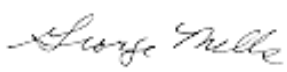
The values given are in mm of disbondment increase in diameter from original RADIUS of holiday.

PANEL NUMBER	INCREASE IN RADIUS
154 (Room Temp.)	0 mm
157 (Room Temp.)	0 mm
156 (Room Temp.)	0.5 mm

PANEL NUMBER	INCREASE IN RADIUS
*155 hot (60°C)	xx
* 158 hot (60°C)	xx
159 hot (60°C)	2 mm

* Over heated; suffered thermal damage after leaking dry over week end.

CERTIFIED:



Dr. George Mills

INDURON PROTECTIVE COATINGS