

DEEPWATER

DR-2™ Dual Reference Cell Polatrak® Cathodic Protection Monitoring



The DR-2 dual reference electrode is equipped with one Ag/AgCl and one Zn reference, for unparalleled accuracy.



DR-2 in fabrication at Deepwater's Houston facility



DR-2 mark 1 in situ; the casing has been replaced by black Delrin on the current version

Product Overview

The Polatrak DR-2 is a rugged dual element reference electrode designed to provide CP status for 20 years. Hundreds of these electrodes are in reliable service all over the world.

The current DR-2 has an improved machined black delrin body, which enhances the impact resistance of the assembled instrument.

The sintered Ag/AgCl reference electrode provides very accurate potential data to monitor polarization of the structure; the heavy-duty zinc electrode element provides a long term ultra reliable low resolution electrode.

Available remote control monitoring systems are standard on new structures; Polatrak systems give you the option to tie into communication lines, providing remote cathodic protection monitoring over existing infrastructure.

Applications

- Offshore platform jackets & drill rigs
- Seawater ballast tanks on SPAR, TLP, and FSU / FPSO structures
- SPAR center well areas
- Inshore structures, piers, jetties, wharves
- Subsea equipment wired to SunStation™ permanent readout
- As impressed current CP controller

Main Benefits

- Structures with permanent CP monitoring systems can be inspected subsea much less frequently.
- The rugged design allows the system to be pre-installed or retrofitted.
- The double steel wire armored cable can be free routed on offshore structures thus saving cost of conduit or duct systems.
- The dual elements combine high accuracy +/- 0.005 V with proven longevity.
- Available with integrated current density monitor (product ID: DR-2-CD).

Deepwater Corrosion Services Inc.
10851 Train Court, Houston, TX 77041 USA
Telephone +1 (713) 983-7117 Email sales@stoprust.com
www.stoprust.com

© 2006 Deepwater Corrosion Services Inc.
Specifications subject to change without notice.

POLATRAK®

Specifications

Description:

A rugged dual element (Ag/AgCl sw / Zinc) reference electrode designed for weld-on, bolt-on or clamp-on attachment to an offshore structure. The dual element configuration provides high accuracy and calibration capability of Silver Chloride and the long term reliability of Zinc. Designed for permanent monitoring of cathodic protection systems, the electrode has a 20 year design life. Added to the back of the instrument is a 10 sq ft current density monitoring array, such that polarization data may be logged directly from the instrument.

Electrode Elements:

Material:	Zinc (High Purity 99.95%)	Material:	Sintered Ag/AgCl w/ Silver Wire Core
Weight:	12 lb. (5.45 Kg.)	Weight:	0.09 oz (2.5 gm)
Dimensions:	6" x 5" x 1.5" (15.2 cm x 12.7 cm x 3.8 cm)	Dimensions:	0.47" Dia x 0.20" (1.2 cm Dia x 0.5 cm)
Accuracy:	+/- 0.02 Volts	Accuracy:	+/- 0.005 Volts
Anti-passivation:	embedded carbon steel rods		

Electrode Housing:

Material:	Black Delrin	Dimensions:	18" x 5" x 4" (45.7 cm x 12.7 cm x 10.2 cm)
-----------	--------------	-------------	---------------------------------------------

Cable Encapsulation:

Cold Mold Soft Polyurethane made inside embedded PVC conduit within electrode housing.

Electrode Frame:

Material:	ASTM A36 Carbon Steel	Coating:	0.015" Marine Epoxy
Conduit Interface:	2" Pipe Coupling or 2" 150# Blind Flange		

Cable:

2 x #12 AWG PVC Insulated, PU Bedded, DGSWA, HMWPE Sheathed

OD		0.560 in (1.4 cm)
Bend Radius		9 in (22.9 cm)
Weight / Foot	Air	0.366 lb. (0.1665Kg.)
Weight / Foot	Water	0.260 lb. (0.12 Kg.)