# Permanent Zinc Reference Electrode

Model PZRE for permanent burial, available with our patented STABLE or Legacy backfill



Our Permanent Zinc Reference Electrodes (PZRE) are available with our moisture-wicking U.S. patented (US20210246561A1) and patent pending (CA3108476A1) engineered STABLE backfill that significantly improves accuracy, durability, and usability. Our PZRE is also available with our traditional legacy backfill mixture. The PZRE is ready to install off the shelf and does not require complicated mixing procedures in the field.

# Reliability

As regulatory oversight of the energy industry intensifies, delivering clear and dependable corrosion protection system data is crucial for evaluating the safety of critical infrastructure. Ensuring that these systems are protected from failure risks has become a key requirement. However, the task is complicated and costly due to interference from external structures, overhead power lines, and dense pipeline networks.

This is why Corrosion Service has applied the same stable backfill technologies used in our CPMP4 Coupons to our Permanent Zinc Reference Electrodes, which provides a true reliable picture of corrosion protection system operation. The PZRE is accepted by major pipeline, refinery and facility operators as a critical component of their asset integrity programs.

## **Features & Benefits**

- + Validates corrosion prevention system operation on buried/ immersed infrastructure.
- + Includes industry first engineered patented STABLE zinc backfill.
- + Moisture wicking materials that improve soil contact.
- + Easy hydro-vac or hand excavation for installation in native backfill.
- + Available with our traditional legacy backfill.
- + Also available in three sizes: 2" X 12", 2" x 24", 4" x 26"
- + Compatible with remote monitoring and data recording hardware.



## STABLE

Following years of research, we are proud to include the use of our patented engineered STABLE backfill that provides predictable potential measurements vs. legacy backfills.



#### **PURPOSE**

This Permanent Zinc Reference Electrode is used to measure Cathodic Protection (CP) potentials on buried pipelines, storage tanks and other buried metallic structures to which CP has been applied.

#### **OFFERINGS WITH STABLE BACKFILL**

OFFERIN	IGS WITH LEGACY BACKFILL
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Size	2" x 12" (5.08 cm x 30.48 cm)
Size	2" x 24" (5.08 cm x 60.96 cm)
Size	4" x 26" (10.16 cm x 66.04 cm)

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### INSTALLATION INSTRUCTIONS

Step 1	Install the PZRE in the pipe trench at pipe depth, 300 mm to 500 mm away from the e	xternal
	pipe wall or as per design drawing, normally parallel to the structure being protected.	
Step 2	Carefully backfill the coupon within a 200 mm layer of rock-free native soil and lightly co by hand.	mpact
Step 3	Cut the cable to the required length; cable may be coiled inside the test station to accommodily settling of the soil.	nodate
Step 4	Terminate the PZRE wire in the test station or junction box as per design drawings.	

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