STELTH® 7

STATIONARY REFERENCE ELECTRODES WITH AC + DC COUPONS

SOLID-SATE REFERENCE ELECTRODES

The **STELTH® 7** Solid-Sate Reference Electrodes are designed to provide all of your Cathodic Protection readings, both AC and DC, with one device by utilizing integral coupons of different sizes and combinations.

SOLUTIONS FOR DC READINGS

- The **STELTH® 7** provides ON-potential and IR-free OFF-potential readings of a structure without errors caused by any outside influences, such as nearby rectifiers, anode beds, electric transmission lines, electric trains, subways, etc.
- Eliminates the need for expensive GPS and interrupters for rectifiers. Instead, disconnect your DC coupon to take your OFF-potential readings.
- Produces on- and off-potential readings of pipelines with sacrificial anode systems. Retrieves current density readings of the **STELTH® 7** coupon representing the structure in your cathodic protection system.
- An all-in-one solution, combining a long-life Reference Electrode with coupons precisely sized to match the aged conditions of your structure. With the Reference Electrode and coupons integrated, this solution is far superior to using separate external coupons.

SOLUTIONS FOR AC READINGS

- Monitor AC interference to determine if you need an AC mitigation system to stop corrosion due to AC currents. After installation, monitor its efficiency to check that the AC mitigation system is working correctly and complies with the law to avoid dangerous levels of AC.
- Achieve valid potential readings at sites with AC current interference, like high-density utility corridors and urban areas with uncontrollable foreign influences.

READINGS

The STELTH® 7 with coupons (see coupon size options below) can give you readings for:

- Structure DC ON Potential DC & AC
- Structure DC Instant OFF Potential
- Structure DC Depolarized Potential
- Coupon ON Potential DC & AC
- Coupon DC Instant OFF Potential
- Coupon DC Depolarized Potential
- Coupon Current density AC & DC
- Coupon Native DC Potential

APPLICATIONS

- Instant Off - IR Free Readings
- AC and DC current densities
- AC mitigation monitoring
- Readings affected by AC interference
- Readings in cities with congested pipe-line distribution systems

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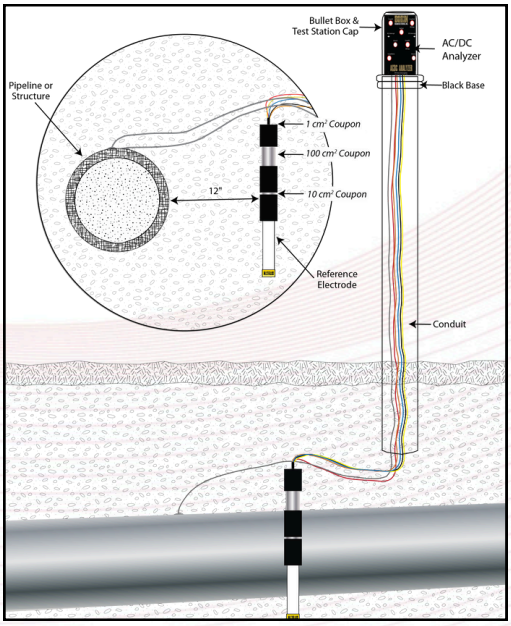

A TURN KEY SOLUTION TO FIT YOUR SPECIFIC COUPON NEEDS

- The **STELTH 7®** is integrated with coupons, specifically designed to optimize readings for the best accuracy. You can have as many coupons as you need and in any combination. Coupons are available in many sizes and geometries. The geometries of the coupons have been optimized to achieve the best readings.
- Coupon sizes: 1cm², 5cm², 10cm², 50cm², 100cm², 1in² and custom sizes.
- Combine with **BORIN's** explosion-proof **AC/DC Analyzer** (Coupon . Voltage and Current Interrupter), which mounts in above and below-ground test stations, to enable you to take all your readings; the terminals are color-coded to match the wires from the **STELTH 7®** for ease of installation. It easily fits in most 3" above-ground test heads.
- Compatible with **G-DART** for **Test Stations** Remote Datalogging Unit (or other RMU on the market).

CHOOSE YOUR ELECTROLYTE

STELTH® reference electrodes can thrive in ALL saturated environments for their corresponding chemistry:

★ **Cu-CuSO4** Copper-Copper Sulfate Chloride-Free Environments	★ **Ag-AgCl** Silver-Silver Chloride Environments with Chlorides
★ **Zn-ZnSO4** Zinc-Zinc Sulfate Chloride-Free Environments	★ **Pd-PdCl** Palladium-Palladium Chloride HCP-Hydro Carbon Proof

STELTH SOLID-STATE REFERENCE ELECTRODES TECHNOLOGY

- Our proprietary **Moisture Retention Membrane MRM®** traps moisture and keeps electrolytes from during out or getting contaminated.
- The technology **traps hydrogen sulfide or excess** chloride (for Cu-CuSO4 or Zn-ZnSO4) to maintain **stability** of the electrode.
- The solid-state electrodes **never need recharging or recalibrating**.
- **Each cell is individually tested** for internal resistance, wire continuity, and stability. The **STELTH®** reference electrodes are then certified with a **unique serial number**, allowing for **traceability of any cell throughout it's lifetime**.
- The reference electrodes can be **frozen**; they come back to life once thawed.
- A major breakthrough – **the hydrocarbon-proof (HCPTM) STELTH®** reference electrode that **can be used in all environments**.

REFERENCE ELECTRODE FEATURES:

Uses: Coupon and corrosion rate readings
Size: 5.50" (13.97 cm) x 1 1/2" ceramic x 18.11" (45.99 cm) length
Material: Ceramic with Moisture Retention Membrane (MRM™) and carbon steel Coupons and High-impact ABS
Coupon size and configuration: Coupons are available in multiple sizes, geometries and number of coupon/size mix. The most common sizes are: 1cm², 5cm², 10cm², 50cm², 100cm², 1in²

Service Life/Shelf Life/Stability: Minimum 20-year service life; Infinite shelf life, infinite stability
Long Term Stability Range: ±5 millivolts
Certified Potential Range: ±5 millivolts vs. standard
Maximum Continuous Current: 3.0 microamps
pH Range: 4–9 pH
Working Temperature Range: 32° F to +176° F (0° C to 80° C)
Material Temperature Range: -60° F to +185° F (-51° C to 85° C)