

# StrayProbe<sup>®</sup>-Zn



*StrayProbe<sup>®</sup>* is designed for the cathodic protection monitoring of all types of buried structures (pipelines, distribution networks, tanks).

It consists of a reference electrode made of **pure Zinc** embedded in long lasting backfill and separated from a controlled shape steel coupon by an electrolytic membrane. All components are contained in a robust non-metallic case.

## ADVANTAGES

- *StrayProbe<sup>®</sup>* measures the *IR-free-potential*, or *true potential*, of buried structures also in the presence of stray current interference and alternating currents (AC)
- It is a full substitute of the on-off technique
- In accordance with EN 50162 it facilitates the continuous potential measurement, in particular for remote monitoring systems
- It provides long-term durability



*StrayProbe®* measures the *IR-free-potential*

# StrayProbe® -Zn



## INSTALLATION

*StrayProbe®* is buried in a bentonite backfill, close to the pipeline; the working side is orientated toward the soil.

The *steel coupon* (brown or black cable) is connected to the pipeline through a 10 Ohm shunt to measure the absorbed current. The voltmeter connected to the *pure Zn reference electrode* (blue cable) can have an impedance of 10 MΩ.

The potential of the steel coupon is in the range +0.3 to +0.6 V before electrical connection.

## OPERATING

Absorbed current usually ranges 0.1 to 5 mA (current density is about 0.1 to 6 A/m<sup>2</sup> on equivalent bare steel surface area).

To refer the potential to CSE scale (copper/copper sulphate) -1.1 V has to be added (for example, +0.25 V measured by the *StrayProbe®-Zn* corresponds to -0.85 V CSE).

## SIZE WEIGHT CABLES

**Size:** 130 mm in diameter and 48 mm thick.

**Probe weight:** 1.2 kg (2.4 lb).

**Bipolar Cable:** 2x2.5 mm<sup>2</sup>, double insulation according to the normative; 6 m long or as per request.

**Gross weight:** 2 kg.

## LIFE EXPECTANCY

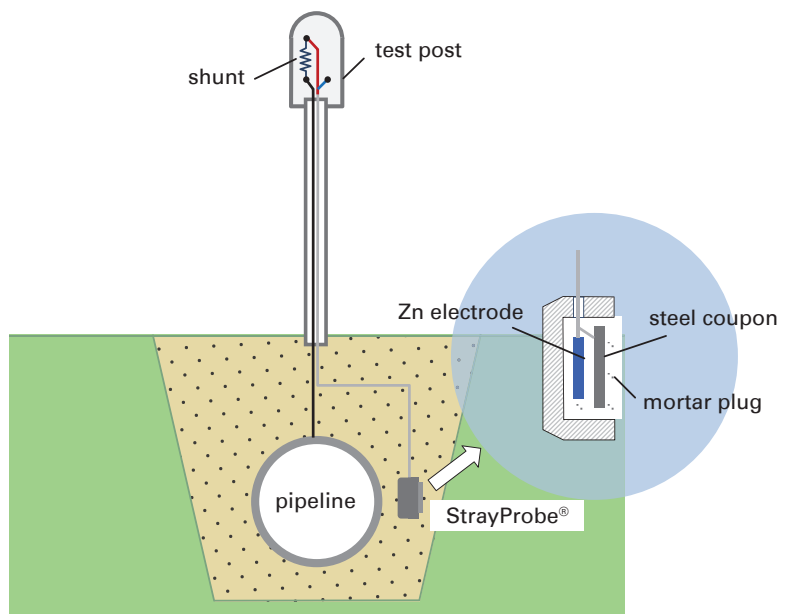
No limitation.



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*StrayProbe®* is patented by Cescor (Italian Patent Application No. MI2001A 001260)