ACCURATE

As public scrutiny toward pipeline integrity grows, regulators are frequently requesting that operators validate corrosion prevention data to prove that their assets are protected from failure. This means that in many situations legacy measurement techniques, are no longer sufficient and there is a need for validation to avoid ambiguity.

This need for validation led to the development of Corrosion Service’s CPMP IR Free DC Coupon and the ZM3 Zero Resistance Ammeter. Used together, these tools provide a highly accurate indication of current flow to the pipeline that corresponds to corrosion protection levels, and validates the basic surface measurements typically gathered during pipeline surveys.

MEASUREMENT

The amount of current that is discharged off the validation coupon is typically very small and measurement tools require micro amp resolution. Conventional ammeters are inadequate for reading small currents since the loading effect of the meter adds an error value to the reading. The ZRA overcomes this loading effect and provides an extremely precise and accurate indication of protective current.

RANGE: 0 – 2 mA and 0 – 20 mA

RESOLUTION: 0.1 µA on 2mA scale
1.0 µA on 20mA scale

ACCURACY: Better than 0.5% over entire range

DIMENSIONS: 300 x 250 x 120 mm
(11.8 x 9.8 x 4.7 Inches)

WEIGHT: 1675 g
(3.7 lbs.)

FEATURES / BENEFITS

• Reduces ambiguity by providing validation corrosion protection data.
• Confirmation of actual parameters compared to design values.
• Automatic operation, with little specialized training required.
• Rugged light weight construction for field use.
• Stable over an external operating temperature range of -10ºC to +50ºC (14ºF to 122ºF).
• Extended measurement and temperature ranges available upon request.

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