# data sheet

# elcometer

# Elcometer 266 DC Holiday Detector



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### At a glance:

Safer, easier & more reliable testing than ever before

Avoids coating damage by limiting current

Ideal for field, site or laboratory testing

Can be used in accordance with:	
ANSI/AWWA C 213	AS3894.1
ASTM D4787	ASTM G 6
ASTM D5162	ASTM G 62
BS1344-11	EN14430
JIS G3491	JIS G3492
ISO 2746	NACE RP0274
NACE RP 04901	NACE RP0188

The Elcometer 266 DC Holiday Detector provides accurate detection of pinholes, flaws, inclusions, thin spots and bubbles in a coating.

The gauge has been specifically designed to revolutionise high voltage DC testing of coatings, making it safer, easier and more reliable than previously possible.

## Current limiting to avoid coating damage:

When the Elcometer 266 detects a flaw, and sparks, the current flow reduces to a low level, minimising risk to both the user & the coating.

### Automatic voltage calculator:

No need for lookup tables, simply enter the coating thickness value and select the standard & the gauge will automatically set the voltage.

- Safety hand grip: Ensures that high voltage can only be generated when the handle is being held.
- Internal jeep tester:

Removing the need for 2 gauges. The closed loop system with internal voltmeter guarantees the voltage output at all times.

Specialised handle design:

Extended ribbing on the handle provides an effective barrier between the high voltage and the user.

- Rugged and waterproof to IP65: Rugged, waterproof IP65 case is sealed against the elements.
- Accurate sensitivity adjustment: Allows use on metallised or slightly damp

coatings.

- Rechargeable & replaceable battery packs: Battery packs can be charged inside or outside the gauge.
- Interchangeable handles:
  0.1–5kV, 0.1–15kV or 0.1–30kV adjustable in
  0.1kV steps.

#### Pinhole & Porosity Detection

Premature corrosion of a substrate is usually due to the failure of the coating. A major cause of failure is the presence of flaws in the finished coating. Collectively referred to as a coating's porosity the main types of flaw are described below:

Runs & Sags The wet coating moves under gravity leaving a thin dry film.

#### Cissing

Occurs when a coating does not re-flow to cover the voids generated by air bubbles being released from the surface of the coating.

Cratering Occurs when the substrate is wet or if the coating has poor flow characteristics, thus creating voids in the

#### Pinholes

coating.

Caused either by air entrapment which is then released from the surface, or by the entrapment of particulates (dust, sand etc) which do not stay in place.

Over Coating If too much coating is applied to a substrate, as the coating cures it can crack from internal stresses of the coating.

Under Coating Areas not coated, or the coating flows away from the particular edges, corners or a substrate and welds. Furthermore over a rough surface profile, insufficient coating may leave the profile's peaks exposed.