

Elcometer 270 Pinhole Detectors



Elcometer 270 Pinhole Detector

The Elcometer 270 range utilises the wet sponge technique and has been designed to set a new standard for wet sponge detectors - namely, a high quality, low voltage detector with similar accessories to a high voltage spark tester.

- Supplied ready to use
- Automatic voltage calibration & sensitivity checks
- Low Battery indicator
- Visual and audio alarms
- Integral and separate wand functionality
- A wide range of fully interchangeable wand accessories
- Three model variants - single, dual or triple voltages
- Easy release snag proof cables
- Large standard sponge
- Optional Inspector's Kit available containing a range of accessories

At a glance:

Simple, accurate and very versatile pinhole detector

Wide range of accessories available to meet all your pinhole detection requirements

Automatic gauge calibration check and low battery indicator

Can be used in accordance with:	
ASTM 3894.2	ASTM D 5162-A
ASTM G6	ASTM G62-A
BS 7793-2	ISO 8289 A
ISO 14654	NACE RP 0188
NACE SP 0188	NACE TM0384

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 a coating.

Cratering:

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

Pinholes:

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

TECHNICAL SPECIFICATION		
Part Number	D270----3	D270----4
Voltage	9V and 90V	9V, 67.5V & 90V
Maximum Measurement Range	500µm (20mils)	500µm (20mils)
Sensitivity	9V: 90kΩ ±5% 90V: 400kΩ ±5%	9V: 90kΩ ±5% 67.5V: 125 kΩ ±5% 90V: 400 kΩ ±5%
Battery Life (continuous use)	9V: Up to 200 hours 90V: Up to 80 hours	9V: Up to 200 hours 67.5V: Up to 100 hours 90V: Up to 80 hours
Battery Type	3 x AA (LR 1600) 1.5V Alkaline (NiMH rechargeable batteries can also be used, battery life will be reduced by up to 75%)	
Accuracy of Setting	±5%	
Dimensions	Without Wand:	210 x 42 x 37mm (8.3 x 1.7 x 1.5")
	Standard Wand:	175mm (6.9") Long – including sponge
	Flat Sponge:	150 x 60 x 25mm (6 x 2.4 x 1") approximately
Weight	610g (21oz) – including wand, cable and batteries	
Packing List	Elcometer 270 Pinhole Detector, standard wand and sponge, 4m (13' 2") return lead with crocodile clip, 3 x AA batteries and operating instructions	

SPARES & ACCESSORIES		
Part Number	Description	
T27016960		Roller Wand & Sponge
T27018051		Spare Roller Sponge Set with Washer & Clip
T27016867		Standard Wand with Flat Sponge
T27018050		Pack of 3 Rectangular Sponges, 150 x 60 x 25mm (6 x 2.3 x 1")
T27018024		Wetting Agent, 50ml (1.7fl oz)
T27016999		Separate Wand Adaptor with Belt Clip
T27016998		Telescopic Handle with Belt Clip – Extends to 1m (39")

T27016965		Extension Piece, 420mm (16.5")
T99916996		Signal Return Cable and Storage Drum 10m (394")
T27018191		Inspector's Kit complete with: Separate wand handle & lead, roller wand, 10m (394") signal return cable, extension piece (x2), telescopic extension, belt clip, wetting agent, flat sponge, roller sponge and AA batteries (x3) Please note that the kit does not include the main instrument, simply add the model required to your order.
T27018025		Inspector's Kit - Empty

Related Products



Elcometer 266

Elcometer 266 DC Holiday Detector:

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



Elcometer 236

Elcometer 236 DC Holiday Detector:

This instrument performs high voltage testing to detect pits, holes, flaws etc in coatings.



Elcometer 260

Elcometer 260 Surefire[®] Fluorescator UV Pinhole Flashlight:

Designed to provide a quick, low cost method of testing coatings for pinholes.