

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.

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

- 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

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----2	D270----4
Voltage	9V and 90V	67.5V	9V, 67.5V & 90V
Maximum Measurement Range	500µm (20mils)	500µm (20mils)	500µm (20mils)
Sensitivity	9V: 90kΩ ±5% 90V: 400kΩ ±5%	67.5V: 125kΩ ±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	67.5V: Up to 100 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

ENGLAND

Elcometer Ltd
Edge Lane
Manchester M43 6BU

Tel: +44 (0)161 371 6000
Fax: +44 (0)161 371 6010
e-mail: sales@elcometer.com
www.elcometer.com

USA

Elcometer Inc
1893 Rochester Industrial Drive
Rochester Hills Michigan 48309

Tel: +1 248 650 0500
Toll Free: 800 521 0635
Fax: +1 248 650 0501
e-mail: inc@elcometer.com
www.elcometer.com

CANADA

Elcometer Ltd
PO Box 622, 401 Ouelette Avenue
Windsor, Ontario N9A 6N4

Tel: +1 248 650 0500
Toll Free: 800 521 0635
Fax: +1 248 650 0501
e-mail: ca_info@elcometer.com
www.elcometer.com

ASIA & THE FAR EAST

Elcometer (Asia) Pte Ltd
896 Dunearn Rd
Sime Darby Centre #3-09
Singapore 589472,
Republic of Singapore

Tel: +65 6462 2822
Fax: +65 6462 2860
e-mail: asia@elcometer.com
www.elcometer.com

BELGIUM

Elcometer SA
Rue Vallée 13
B-4681 Hermalle /s Argenteau

Tel: +32 (0)4 379 96 10
Fax: +32 (0)4 374 06 03
e-mail: be_info@elcometer.be
www.elcometer.be

FRANCE

Elcometer Sarl
97 Route de Chécý
45430 BOU

Tel: +33 (0)2 38 86 33 44
Fax: +33 (0)2 38 91 37 66
e-mail: fr_info@elcometer.fr
www.elcometer.fr

GERMANY

Elcometer Instruments GmbH
Ulmer Strasse 68
D-73431 Aalen

Tel: +49 (0)7361 52806 0
Fax: +49 (0)7361 52806 77
e-mail: de_info@elcometer.de
www.elcometer.de

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® Fluorescentor UV Pinhole Flashlight:

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

Local: Syntech Surface Finishing Specialists
PO Box 19341, 12B Saunders Place,
Phone: +64 9 820 2121
Fax: +64 9 820 0101
Email: sales@syntechnz.com
www.syntechnz.com