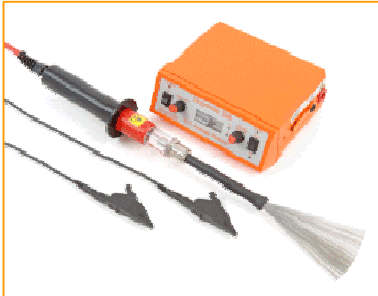


# Elcometer 236 DC Holiday Detector



Elcometer 236 DC Holiday Detector

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

The Elcometer 236's convenient carry case allows the probe handle and accessories to be attached to the front making the Elcometer 236 ideal for field, site or laboratory inspection.

An accessory pouch, which accommodates the additional rechargeable battery (optional) can also be attached to the soft carry case - thereby extending inspection time without the need for recharging the unit.

**At a glance:**

Ideal for field, site or laboratory inspection

Available in 0.5 - 15kV or 0.5 - 30kV versions

Wide range of accessories available for various applications

- Robust and fully portable
- Audio and visual alarms for noisy environments
- Supplied with a band brush probe
- Digital display of output voltage and current
- Adjustable sensitivity
- 15kV and 30kV options available with fully adjustable output voltage

**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 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 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.

Can be used in accordance with:	
AS 3894.1	ASTM D 4787
ASTM G 6	ASTM D 5162-B
ASTM G 62-B	BS 1344-11
EN 14430	ISO 2746
JIS G 3491	NACE RP0188
NACE RP0274	NACE RP0490
NACE SP0188	


<b>Part Number</b>	<b>D236--15<sup>†</sup></b>	<b>D236--30<sup>†</sup></b>
<b>Voltage Output</b>	0.5 - 15kV in 100V steps	0.5 - 30kV in 100V steps
<b>Display Resolution</b>	0.01kV	0.1kV
<b>Range of Coating Thickness</b>	0 - 3.75mm (approximate) 0 - 150mils (approximate)	0 - 7.5mm (approximate) 0 - 300mils (approximate)
<b>Alarms</b>	Audio & Visual	
<b>Power Supply</b>	NimH 12V internal rechargeable battery	
<b>Battery Life</b> (approximate)	10/12 hours continuous use, the optional external battery pack can increase this to 20/24 hours of continuous use	
<b>Dimensions</b>	200 x 170 x 70mm (6 x 7 x 3")	
<b>Weight</b>	2.8kg (6.3lb)	
<b>Packing List</b>	Elcometer 236 DC Holiday Detector, probe handle and lead, band brush probe, 2m (79") and 10m (394") signal return/earth leads, battery charger, carry case, transit case and operating instructions.	

<sup>†</sup> Add "A" for UK 240V, "B" for EUR 220V or "D" for US 110V

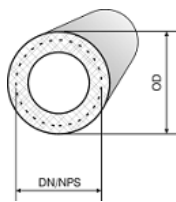
MISCELLANEOUS SPARES & ACCESSORIES		
Part Number	Description	
T236155971		Telescopic Probe Handle: 0.6 – 1.2m (2 – 4ft)
T236155972		Telescopic Probe Handle: 1.8 – 3.6m (6 – 12ft)
T2362669-		Band Brush Probe
T2362663A		Probe Extension Piece: 250mm (9.8")
T2362663B		Probe Extension Piece: 500mm (19.7")
T2362663C		Probe Extension Piece: 1000mm (39")
T2362666-		Coupling Piece – to link extension pieces together

<b>ELCOMETER 236 RIGHT ANGLE WIRE BRUSH PROBES</b> <i>(Phosphor bronze wire brush probes - ideal for testing large, flat surfaces)</i>					
Part Number		Description	Length		
Full Assembly	Brush Only		mm	inches	
T23638071	T99926621		Right Angle Wire Brush Probe	250	9.8
T23638072	T99926622			500	19.7
T23638073	T99926623			1000	39

<b>ELCOMETER 236 RIGHT ANGLE RUBBER PROBES</b> <i>(Carbon infused rubber probes - ideal for testing large, flat surfaces with thin or delicate coatings)</i>					
Part Number		Description	Length		
Full Assembly	Rubber Only		mm	inches	
T23638081	T99926731		Right Angle Rubber Probe	250	9.8
T23638082	T99926732			500	19.7
T23638083	T99926733			1000	39
T23638084	T99926734			1400	55

<b>ELCOMETER 236 CIRCULAR BRUSH PROBES</b> <i>(Designed specifically to measure the internal diameter of pipes)</i>					
Part Number		Description	Internal Pipe Diameter		
Full Assembly	Brush Only		mm	inches	
T2363907A	T9993766-		Circular Brush Probe	38	1.5
T2363907B	T9993767-			51	2
T2363907C	T9993768-			64	2.5
T2363907D	T9993769-			76	3
T2363907E	T9993770-			89	3.5
T2363907F	T9993771-			102	4
T2363907G	T9993772-			114	4.5
T2363907H	T9993773-			127	5
T2363907I	T9993774-			152	6
T2363907J	T9993775-			203	8
T2363907K	T9993776-			254	10
T2363907L	T9993777-			305	12

ELCOMETER 236 EXTERNAL PIPE ROLLING SPRINGS						
<i>(Designed specifically to measure the external diameter of pipes)</i>						
Part Number	Nominal Pipe Size		Pipe External Diameter			
	DN (mm)	NPS (inches)	Min (mm)	Max (mm)	Min (inches)	Max (inches)
T23620507	Elcometer 236 Rolling Spring Holder <i>(Select the appropriate spring diameter required from the list below)</i>					
T99920438-15A	40	1.5	48	54	1.9	2.1
T99920438-15B	40	1.5	54	60	2.1	2.4
T99920438-20A	50	2	60	66	2.4	2.6
T99920438-20B	50	2	66	73	2.6	2.9
T99920438-25A	65	2.5	73	80	2.9	3.1
T99920438-25B	65	2.5	80	88	3.1	3.5
T99920438-30A	80	3	88	95	3.5	3.7
T99920438-30B	80	3	95	100	3.7	3.9
T99920438-35A	90	3.5	100	108	3.9	4.3
T99920438-35B	90	3.5	108	114	4.3	4.5
T99920438-40A	100	4	114	125	4.5	4.9
T99920438-45A	114	4.5	125	136	4.9	5.4
T99920438-45B	114	4.5	136	141	5.4	5.6
T99920438-50A	125	5	141	155	5.6	6.1
T99920438-50B	125	5	155	168	6.1	6.6
T99920438-60A	152	6	168	180	6.6	7.1
T99920438-60B	152	6	180	193	7.1	7.6
T99920438-70A	178	7	193	213	7.6	8.4
T99920438-70B	178	7	213	219	8.4	8.6
T99920438-80A	203	8	219	240	8.6	9.4
T99920438-90A	229	9	240	264	9.4	10.4
T99920438-100A	254	10	264	290	10.4	11.4
T99920438-110A	279	11	290	320	11.4	12.6
T99920438-120A	305	12	320	350	12.6	13.8
T99920438-140A	356	14	350	375	13.8	14.8
T99920438-140B	356	14	375	400	14.8	15.7
T99920438-160A	406	16	400	435	15.7	17.1
T99920438-160B	406	16	435	450	17.1	17.7
T99920438-180A	457	18	450	500	17.7	19.7
T99920438-200A	508	20	500	550	19.7	21.7
T99920438-220A	559	22	550	600	21.7	23.6
T99920438-240A	610	24	600	650	23.6	25.6
T99920438-260A	660	26	650	700	25.6	27.6
T99920438-280A	711	28	700	750	27.6	29.5
T99920438-300A	762	30	750	810	29.5	31.9
T99920438-320A	813	32	810	860	31.9	33.9
T99920438-340A	864	34	860	910	33.9	35.8
T99920438-360A	914	36	910	960	35.8	37.8
T99920438-380A	965	38	960	1010	37.8	39.8
T99920438-400A	1016	40	1010	1060	39.8	41.7
T99920438-420A	1067	42	1060	1110	41.7	43.7
T99920438-440A	1118	44	1110	1160	43.7	45.7
T99920438-460A	1168	46	1160	1210	45.7	47.6
T99920438-480A	1219	48	1210	1270	47.6	50.0
T99920438-500A	1270	50	1270	1320	50.0	52.0
T99920438-520A	1321	52	1320	1370	52.0	53.9
T99920438-540A	1372	54	1370	1425	53.9	56.1



## Related Products



Elcometer 270

### Elcometer 270 Pinhole Detector:

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



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 260

### Elcometer 260 Surefire® Fluorescencator UV Pinhole Flashlight:

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

#### 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 Chécy  
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