

Elcometer 110 PATTI[®] Adhesion Tester



Elcometer 110 PATTI[®] Adhesion Tester

The Elcometer 110 PATTI[®] is a portable pneumatic adhesion tester which uses compressed air from either a canister or the compressed air feed.

Due to the controlled force being applied, the resultant adhesion value is highly repeatable. This provides the User with an ideal testing instrument that is simple to use and has a $\pm 1\%$ accuracy^a.

A wide range of interchangeable pistons is available, providing the user with a maximum adhesion tester of 70MPa / 10,000psi with a link to an external air supply or CO₂ canister.

At a glance:

Repeatable results

Range of interchangeable pistons for different adhesion tests

Can be used in accordance with:	
ASTM D 4541	AS/NZS 1580.408.5
ISO 16276-1	

TECHNICAL SPECIFICATION	
Gas Supply	Internal reservoir rechargeable from external gas cylinder or external air line
Power Supply	9V (PP3, 6F22) or 110 – 240V AC powered with optional adaptor
Dimensions	100 x 255 x 255mm (4 x 10.5 x 10.5")
Pull Stub Diameter	12.7mm (0.5")
Weight	2.7kg (5.9lb) without carry case
Rate of Increase	Adjustable up to 150psi/second
Part Number	F110----A Elcometer 110 PATTI [®] Adhesion Tester
Packing List	Elcometer 110 PATTI [®] Adhesion Tester, pull stubs (x25), cut-off ring (x25), talcum powder, epoxy adhesive, carry case and operating instructions. <i>Pistons are not supplied as standard and must be ordered separately.</i>

Adhesion

From the largest man-made structures to the smallest household appliances, most manufactured products have a protective or cosmetic coating. Premature failure of this coating can, at the very least, result in costly penalties or rework.

Adhesion testing during the coating process will quantify the strength of the bond between substrate and coating, or between different coating layers or the cohesive strength of some substrates. Routine testing is also used as part of inspection and maintenance procedures to help detect potential coating failures.

Elcometer offer a highly comprehensive range of Adhesion Gauges designed specifically to meet your requirements. These gauges can be split into three categories:

Cross Hatch / Cross Cut Method
The coating is cut into small squares, thereby reducing lateral bonding, and the adhesion assessed against ISO, ASTM or Corporate Standards

Pull Off Adhesion Method
Tensile Dollies (or stubs) are glued to the coating and, once the adhesive has cured, the force required to pull the dolly off the surface is measured.

Push Off Adhesion Method
Similar to the Pull Off Adhesion Test, a dolly is glued to the coating, once the adhesive has cured, however, the dolly is pushed off the surface by the adhesion gauge.

^a Accuracy depends on the positioning of the dolly. $\pm 1\%$ when tested under factory conditions.

ELCOMETER 110 PISTONS					
Part Number	Piston	Load Range		Piston Diameter	
		MPa	psi	mm	Inches
T11013400	F-1	0 – 3.4	0 – 500	44.5	1.75
T11013401	F-2	0 – 6.9	0 – 1000	57.0	2.25
T11013402	F-4	0 – 13.8	0 – 2000	76.0	3.0
T11013403	F-8	0 – 27.6	0 – 4000	98.0	3.875
T11013404	F-16	0 – 55.2	0 – 8000	127.0	5.0
T11013405	F-20	0 – 70	0 – 10000	146.0	5.75

Spares & Accessories

Part Number	Description
T11013388	Pack of 25 Pull Stubs, 12.7mm (0.5") Diameter
T11013389	Pack of 25 Cut-Off Rings, 12.7mm (0.5") Diameter
T11014019	Pull Stub Cutter, 12.7mm (0.5") Diameter
T11013261	Connecting Hose Extension, 2m (78")
T11013455	Compressed Air Supply Hose Assembly
T99912906	Araldite Epoxy Adhesive
T1109987-	Power Adaptor, UK 240V
T1109988-	Power Adaptor, EUR 220V
T1109989-	Power Adaptor, US 110V
T11019559	CO ₂ Cartridge Holder

Related Products



Elcometer 106

Elcometer 106 Pull-Off Adhesion Tester:
Easy to operate and fully portable instrument which provides a numerical value for adhesion. Applications include paint or plasma spray on bridge decking, coatings on steel, aluminium, concrete, etc.



Elcometer 108

Elcometer 108 Hydraulic Adhesion Tester:
Available with an analogue dial or as a digital gauge, the Elcometer 108 is an extremely versatile gauge which can be used for many adhesion requirements. Tests can be undertaken on flat or curved – concave or convex – surfaces.

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