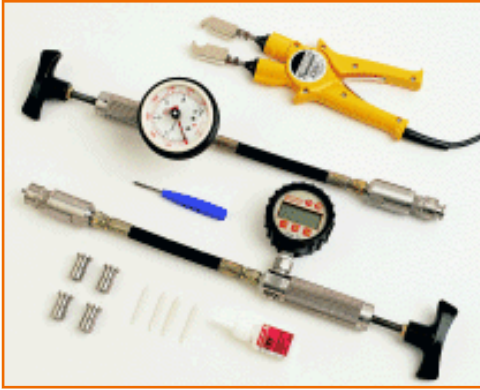


Elcometer 108 Hydraulic Adhesion Testers

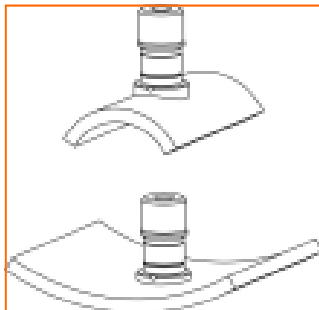


Elcometer 108 Hydraulic Adhesion Testers

At a glance

- Digital or analogue adhesion gauges.
- Measures adhesion on flat, curved or small surfaces.
- Re-usable dollies supplied as standard.

Can be used in accordance with:	
ASTM D 4541	ISO 16276-1
NF T30-606	



Elcometer 108 Hydraulic Adhesion Testers

The Elcometer 108 is an extremely versatile hydraulic adhesion tester which will cope with many test requirements. Test can be made on flat or curved (concave and convex) surfaces.

A reusable, stainless steel dolly is adhered to the coating's surface and the force required to push the dolly from the surface is applied using the handle. The value of the force applied is displayed either a digital display or with an analogue dial. For areas susceptible to explosion (e.g. inflammable areas), the analogue version should be chosen.

The Elcometer 108 is the ideal gauge for coatings on Tanks, Pipelines, etc.

- Hand-powered and portable
- Ideal for site work
- Reusable stainless steel dollies
- Complete kit and carrying case

Elcometer Digital Adhesion Gauge Features include:

- Maximum Hold – displays the highest value reached
- ±1% Reading Accuracy
- Backlight Display for dark areas
- Rubber protective casing
- Switchable Metric / Imperial Units

The Elcometer 108 can be used with curved dollies, making this the gauge for adhesion on pipelines, tanks, and other curved surfaces.

A wide range of curved dollies are available, each designed for a specific range of curvature. Convex (top illustration) and concave (bottom illustration) dollies are for use on external and internal curvatures respectively. For more information on curved dollies please contact Elcometer

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.

HOW TO SELECT THE CORRECT ADHESION GAUGE

Dial Adhesion Gauge Range	Operating: 0 – 18 MPa (0 –2600 PSI)
	Full Scale: 0 –25 MPa (0 – 3500 PSI)
Dial Pressure Gauge Accuracy	Metric Scale: ±0.5MPa
	Imperial Scale: ±50PSI
Digital Adhesion Gauge Range	Operating: 0 - 18 MPa (0 –2600 PSI)
	Full Scale: 0 –34 MPa (0 – 5000 PSI)
Digital Pressure Gauge Accuracy	±1%
Dolly Size	Outside Diameter: 19.39mm (0.763")
	Inside Diameter: 3.73mm (0.147")
	Area: 284mm ² (0.44 sq. inch)

Cross Hatch Cutters

Advantages:

A fast, low cost, comparison method – see table below

Possible Limitations:

A subjective test for flat surfaces for a limited thickness range.

Applications:

Paint and powder coating adhesion up to a thickness of 125µm (5 mils).

Pull Off Adhesion Testers

Advantages:

Simple to use, quantitative range – giving you a definitive adhesion value

Possible Limitations:

Time required for adhesive to cure

Applications:

Ideal gauge for the laboratory or field – flat or curved substrate applications

Push Off Adhesion Testers

Advantages:

Fast cure time adhesives can be used, ideal for curved surfaces

Possible Limitations:

High forces exerted by gauge may cause thin substrates to deform

Applications:

Pipelines and metal spray coatings.

Model	Description	Part Number		
		UK 240V	EUR 220V	US 110V
Elcometer 108/1	Elcometer 108 Hydraulic Adhesion Tester – Dial Gauge	F108---1A	F108---1B	F108---1C
Elcometer 108/2	Elcometer 108 Hydraulic Adhesion Tester – Digital Gauge	F108---2A	F108---2B	F108---2C
Accessories	Cyanoacrylate Adhesive, 50g	T99911135		
	Standard Flat Dolly 20mm	T1089646-		
	Curved dollies - by request, contact Elcometer for further information			
Packing List	Elcometer 108 Hydraulic Adhesion Tester, Dolly, Dolly tool, Dolly plug, Pipemaster heating tongs, Adhesive, Carrying Case & Operating Instructions			

Related products



Elcometer 1910

This lightweight, portable, hydraulic adhesion tester has built in hydraulic safety devices for smooth and drift proof accuracy. The special test head allows adhesion tests on both internal and external curved surfaces, making this an ideal gauge for pipelines and protective coatings applications.



Elcometer 1940

The most popular in the Elcometer PAT tester range, a manual hydraulic tensile adhesion tester for measuring the bond strength of all types of paints, thermal sprayed coatings, thin films, concrete coatings, ceramics, etc. A portable, precision gauge with both MPa and PSI readings which gives accurate and comparable test results both in the laboratory and on site.



Elcometer 1941

A 20 or 40kN manual hydraulic tensile adhesion tester for testing of coatings (including thermal sprayed coatings), on test panels, sprayed components. Designed for testing with 50mm (2") diameter test elements and with the square 50 x 50mm (2 x 2") test element for adhesion testing of tile adhesives and other cementitious materials.



Elcometer 106

Perhaps the best known adhesion gauge on the market today. The Elcometer 106 adhesion tester is easy to operate and fully portable, providing a numerical value for adhesion. Supplied in a rugged carry case for moving around the jobsite, the unit is hand operated so you don't have to worry about a power supply!



Elcometer 1970

For use with the Elcometer PAT™ Elcometer 106, and Elcometer 108 Adhesion Testers, this Portable Field Calibration Verification Unit is ideal for confirming your adhesion gauge calibration. Connect the appropriate pull stub to the unit, pull your adhesion tester and compare the adhesion tester reading to the reading on the Portable Calibration Unit's Display.

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