

# Elcometer 109 Tensile Adhesion Tester



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**At a glance**

- Non-destructive adhesion gauge\*
- Certified tensile dollies designed to fail at specified adhesion values.

**Elcometer 109 Tensile Adhesion Tester**

The Elcometer 109 Push off Tensile Adhesion Tester provides the operator with a means of carrying out a simple pass/fail test of the adhesion of the coating against a specification limit.

- Non-destructive\*
- Easy to use
- No calibration required
- Colour coded certified tensile dollies
- Robust and lightweight
- Adapter available to allow use with the P.A.T. tester to fulfil the requirements of (Norwegian) NORSOK Standard M-501

*\* Non-destructive if coating is within specification and the tensile dolly breaks. Only a small button remains on the surface which can be sheared off.*

**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.

<b>Can be used in accordance with:</b>	
ASTM D 4541	BS EN 24624
NORSOK M-501	

Assembled Pull-Off Unit Dimensions	Metric	Imperial
Height	150mm	6"
Width (including handle)	80mm	3"
Kit Weight	1.7kg	3.75lb

Description	Test Element Value	Accuracy	Colour Code	Part Number
Elcometer 109/1 Adhesion Tester	5MPa (725psi)	±5%	Red	F109----1
Elcometer 109/2 Adhesion Tester	7MPa (1015psi)	±5%	Blue	F109----2
Elcometer 109/3 Adhesion Tester	9MPa (1304psi)	±5%	Yellow	F109---3
<b>Accessories</b>	5MPa Tensile Dollies (Pack of 25)			T10913952
	7MPa Tensile Dollies (Pack of 25)			T10913953
	9MPa Tensile Dollies (Pack of 25)			T10913954
	Araldite Epoxy Adhesive			T99912906

## Related products



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 110

The Elcometer 110 Patti® is a portable pneumatic adhesion tester which uses compressed gas from either a canister or the compressed air feed. Due to the controlled force being applied, the resultant adhesion value is highly repeatable. This, together with the gauge's suitability on thin substrates provides the User with an ideal testing instrument in the laboratory or the field.



Elcometer 1542

Simple but effective method for determining the adhesion of a large variety of coatings. The instrument is ideal for testing the adhesion of thin coatings on flat surfaces using the cross cut method, available with three different spacings 1, 2, and 3mm, corresponding to the thickness of layer to be tested.



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 1930

This automatic tester has been designed specifically for testing in confined areas, particularly on small components of irregular and awkward shape, and with very low pull force.

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