

Elcometer 1542 Cross Hatch Adhesion Tester



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This is a simple but effective method for determining the adhesion of coatings. The instrument is ideal for coatings on flat surfaces and is available with one of three different spacings;

- 1mm spacing - for coating thickness 60µm (2.4mils)
- 2mm spacing - for coating thickness 125µm (5.0mils)
- 3mm spacing - for coating thickness 250µm (9.8mils)

Can be used in accordance with

- AS 1580.408.4
- AS 3894.9
- ASTM D 3359-B
- BS 3900-E6
- ECCA T6
- EN 13523-6
- ISO 2409
- ISO 16276-2
- JIS K 5600-5-6
- NF T30-038

Standards in grey have been superceded but are still recognised in some industries.

Each gauge can be supplied separately or combined in a kit with a standardised brush and x10 magnifier.

- Efficient cross hatch cutter with 8 cutting faces
- Anodised aluminium handle with a wheel for stable operation, ideal for test panels
- Supplied with an adjustment gauge for accurate positioning of the cutter face

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.

TECHNICAL SPECIFICATION

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Weight	200g (0.44lb)		
Dimensions	150 x 25 x 35mm (6 x 1 x 1.25")		
Part Number	Part Number	Description	Coating Thickness
	K0001542M001	Elcometer 1542 Cross Hatch Adhesion Tester (6 x 1mm) ¹	0 - 60µm (0 - 2.4mils)
	K0001542M002	Elcometer 1542 Cross Hatch Adhesion Tester (6 x 2mm) ²	50 - 125µm (2.0 - 5.0mils)
	K0001542M003	Elcometer 1542 Cross Hatch Adhesion Tester (6 x 3mm) ³	121 - 250µm (4.8 - 9.8mils)
	K0001542M201	Elcometer 1542 Cross Hatch Adhesive Kit (6 x 1mm) ¹	0 - 60µm (0 - 2.4mils)
	K0001542M202	Elcometer 1542 Cross Hatch Adhesive Kit (6 x 2mm) ²	50 - 125µm (2.0 - 5.0mils)
	K0001542M203	Elcometer 1542 Cross Hatch Adhesive Kit (6 x 3mm) ³	61 - 120µm (2.4 - 4.7mils)
Packing List	Cross Hatch Cutter, adjustment gauge for setting cutting blades, hexagonal wrench, brush, magnifying glass, carry case and operating instructions		

¹ ASTM, ISO Test Methods ² AS, ASTM, ISO Test Methods ³ ISO Test Methods

ACCESSORIES	
6 x 1mm Cross Hatch Blade ¹	KT001542P001
6 x 2mm Cross Hatch Blade ²	KT001542P002
6 x 3mm Cross Hatch Blade ³	KT001542P003
Adjustment Gauge	KT001542F006
ASTM D3359 Adhesive Tape (1 roll)	K0001539M001
ASTM D3359 Adhesive Tape (2 rolls)	T9998894-
ISO 2409 Adhesive Tape (1 roll)	K0001539M002
ISO 2409 Adhesive Tape (2 rolls)	T9999358-
Cross Cut DIN Brush	T10713357
Magnifier (x10)	KT001546N002

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Related Products



Elcometer 195

Elcometer 195 Säberg Drill

Works differently to a Paint Inspection Gauge, the Elcometer 195 Säberg Drill makes a small hole in order to measure the coating thickness layer, minimising damage to the coating being tested.



Elcometer 141

Elcometer 141 Paint Inspection Gauge

A quick, versatile method of examination and measurement of coatings in a portable, easy to use instrument. Ergonomically designed to give a balanced weight distribution for a more consistent cut – even on thick and hard coatings.



Elcometer 107

Elcometer 107 Cross Hatch Cutter

The Elcometer 107 Cross Hatch Cutter provides an instant assessment of the quality of the bond to the substrate. Due to its rugged construction this gauge is ideal for thin, thick or tough coatings on all surfaces. An ideal field or laboratory test.



Elcometer 121

Elcometer 121/4 Standard & Top Paint Inspection Gauges

Available in two models, the Elcometer 121 is designed to measure the thickness of single or multiple layers of coatings on virtually all substrate types including wood, plastic and metal.