

# Elcometer 1542 Cross Hatch Adhesion Tester



Elcometer 1542



Elcometer 1542 Kits

### At a glance

- Ideal for thin coatings on flat surfaces.
- Three versions available corresponding to the thickness of the layer to be tested.
- Supplied separately or combined in a kit.

Can be used in accordance with:	
ASTM D3359	BS 3900 E6
DIN EN ISO NF 2409	ECCA T-6

### Elcometer 1542 Cross Hatch Adhesion Tester

Simple but effective method for determining the adhesion of a large variety of coatings. The instrument is ideal for thin coatings on flat surfaces, available with three different spacings, corresponding to the thickness of layer to be tested:

- 1mm spacing - for coating thickness less than 60µm
- 2mm spacing - for coating thickness less than 120µm
- 3mm spacing - for coating thickness more than 120µm

Three instrument types are supplied separately or combined in a kit case with standardized brush and magnifier.

- Powerful cross cutter, with 8 cutting faces
- Anodized aluminium handle, with a wheel for stable operation, ideal for test panels and thin coatings.
- 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.

Model	Description	Cutting Teeth	Tooth Slot / Spacing	Part Number
Elcometer 1542/1	Elcometer 1542 Cross Hatch Cutter	6	1mm	K0001542M001
Elcometer 1542/2	Elcometer 1542 Cross Hatch Cutter	6	2mm	K0001542M002
Elcometer 1542/3	Elcometer 1542 Cross Hatch Cutter	6	3mm	K0001542M003
Elcometer 1542/1	Elcometer 1542 Cross Cutter Kit	6	1mm	K0001542M201
Elcometer 1542/2	Elcometer 1542 Cross Cutter Kit	6	2mm	K0001542M202
Elcometer 1542/3	Elcometer 1542 Cross Cutter Kit	6	3mm	K0001542M203
Elcometer 1542	Elcometer 1542 Complete Kit (includes one of each of the cross hatch cutters)	6	1, 2 & 3mm	K0001542M204
Accessories	Elcometer 1542 Cross Hatch Blade	6	1mm	KT001542P001
	Elcometer 1542 Cross Hatch Blade	6	2mm	KT001542P002
	Elcometer 1542 Cross Hatch Blade	6	3mm	KT001542P003
	Adjustment Gauge for Elcometer 1542			KT001542F006
	ASTM D 3359 Adhesive Tape (2 rolls)			T1078894-
	ASTM D 3359 Adhesive Tape (1 roll)			K0001542M001
	ISO 2409 Adhesive Tape (2 rolls)			T9999358-
	ISO 2409 Adhesive Tape (1 roll)			K0001542M002
	Cross Cut DIN Brush			KT001546N001
Cross Cut Magnifying Glass			KT001546N002	
Packing List	<b>Elcometer 1542:</b> Elcometer 1542 Cross Hatch Cutter, Thickness gauge for setting cutting blades, Hexagonal wrench & Operating instructions			
	<b>Elcometer 1542 M201, M202, M203 Kit:</b> Elcometer 1542 Cross Hatch Cutter, Thickness gauge for setting cutting blades, Hexagonal wrench, Brush, Magnifying glass, Carrying case & Operating instructions.			
	<b>Elcometer 1542 M204 Kit:</b> Elcometer 1542 Cross Hatch Cutter 6 x 1mm, 6 x 2mm & 6 x 3mm, Thickness gauge for setting cutting blades, Hexagonal wrench, Brush, Magnifying glass, Carrying case & Operating instructions			

## Related products



Elcometer 121

**Elcometer 121** Paint Inspection Gauge is easy to use and provides the user with a cutter, microscope and light all in a single housing.



Elcometer 121/3

**Elcometer 121/3 Universal Paint Inspection Gauge (P.I.G)** provides a quick, versatile method of coating examination and destructive measurement of coating thickness and cross hatch adhesion in a portable, easy-to-use gauge.



Elcometer 141

**Elcometer 141** Paint Inspection Gauge is 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 195

**Elcometer 195 Säberg Drill** works in a different way to paint inspection gauges. Whereas the PIG makes a linear cut along the coating, 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 107

**Elcometer 107** The coating may be continuous and look good, but how well is it connected to the substrate? 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 flat or curved surfaces. An ideal field or laboratory test.

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