

# Elcometer 106 Pull-Off Adhesion Tester

Can be used in accordance with:  
**AS 1580.408.5, ASTM D 4541, AS/NZS 1580.408.5\*, EN 13144, EN 24624\*,  
 ISO 4624, ISO 16276-1, JIS K 5600-5-7, NF T30-062\*, NF T30-606**



The Elcometer 106 Adhesion Tester is easy to operate and fully portable Type II adhesion gauge which provides a numerical value for adhesion strength.

Applications for the Elcometer 106 Adhesion Test include paint or plasma spray on bridge decking, coatings on steel, aluminium, concrete etc.

- Supplied in a carry case - ideal for site tests
- Hand operated - no need for a power supply
- Includes a cutter for EN13144 and ISO 4624 tests

## Adhesion Test Method

A test dolly is bonded to the coating using an adhesive. The Elcometer 106 adhesion tester houses a spring arrangement which applies a lift force to the dolly as the tension is increased.

When the coating is pulled off the surface, an indicator on the scale shows the numerical value of adhesion strength expressed in terms of the force per unit area required to remove the dolly.

Inspection of the dolly face is required to determine the failure mode.

To increase sensitivity at low values or for uneven surfaces, a 40mm dolly is available. When using the 40mm dolly, divide the scale reading by 4.

## Technical Specifications

Part Number	Description	Range		
		MPa (N/mm <sup>2</sup> )	kg/cm <sup>2</sup>	Certificate
F106----5	Elcometer 106 Adhesion Tester - Scale 5	0 - 0.2	0 - 2	o
F106----1	Elcometer 106 Adhesion Tester - Scale 1	0 - 3.5	0 - 35	o
F106----2	Elcometer 106 Adhesion Tester - Scale 2	0 - 7.0	0 - 70	o
F106----3	Elcometer 106 Adhesion Tester - Scale 3	0 - 15	0 - 150	o
F106----4	Elcometer 106 Adhesion Tester - Scale 4	0 - 22	0 - 220	o
Dimensions	Scales 1, 2, 5: 152 x 76mm   Scales 3 and 4: 185 x 76mm			
Dolly Diameter	20mm			
Dolly Area	314mm <sup>2</sup>			
Gross weight of Kit	Scale 1, 2 & 5: 2.8kg   Scale 3: 4.2kg   Scale 4: 4.5kg			

o Optional Calibration Certificate available.

\* Standards not in bold have been superseded but are still recognised in some industries.

## Packing List

Elcometer 106 Pull-Off Adhesion Tester
Pack of 20 Dollies
Araldite Adhesive
Base Support Ring
Magnetic Dolly Clamp
Dolly Cutter
Ratchet Spanner (Scale 3 & 4 only)
Carry Case
Operating Instructions



## Accessories

Part Number	Description
T1062895-	Spare Dollies 20mm Diameter (Pack of 100)
T1062914-	Large Dollies 40mm Diameter (Pack of 5)
T1062915-	Large Base Ring for 40mm Dollies
T99912906	Elcometer AVU Adhesion Verification Unit
T99914009	20mm Dolly Cutter
T99923924	20mm Dolly Cutter



## Video



**YouTube Video - An Introduction to Pull-Off Adhesion on Coated Surfaces**  
 (Click on the image to the left to view the video)

Adhesion testers are used to test how well a coating has adhered to a surface, as poor adhesion can lead to premature coating failures. The coating inspector has essentially three main methods to choose from - cross hatch, push off, and the most common, the pull-off adhesion test.