

Elcometer 1940 PAT™ GM01 Adhesion Tester 6.3kN



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The most popular model 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.

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.

At a glance

- Supplied complete with 6.3 kN testing head but other testing heads are available
- Ideal for testing bond strength of a wide range of substrates.

- Portable, precision gauge with both MPa and PSI readings
- Accurate and comparable test results both in the laboratory and on site.
- Testing of coatings on any shaped substrates, e.g. inside and outside pipe surfaces.

The Elcometer 1940 is supplied in an aluminium carry case, complete with a Calibration Certificate and:

- PAT™ GM01/6.3kN Hydraulic Pull-Force Pump
- PAT Testing Head 6.3kN
- 5 Test Elements – 20mm (0.79") Diameter
- HSS Cutting Tool for 20mm (0.79") Diameter Test Elements
- Hydraulic Cable

Can be used in accordance with:	
ASTM D 4541	ASTM C 633
EN 1542	ISO 4624

Maximum Certified Pull Force	6.3kN	Weight of Tester	1250g (45oz)
Accuracy	±1% of full scale	Case Dimensions	400 x 300 x 170mm (16 x 12 x 7")

Model	Description	Part Number
Elcometer 1940	Elcometer 1940 PAT™ GM01/6.3kN Adhesion Tester	K0001940M001



ELCOMETER PAT™ RANGE SELECTION GUIDE AND TEST ELEMENTS						
Test Element Diameter		Range		Range Values valid for the following models	Part Number	
mm	inches	MPa	PSI		Pack of 10	Pack of 100
2.8	0.11	160	23200	Elcometer 1930	KT001910P001	KT001910P201
4	0.16	80	11600	Elcometer 1930	KT001910P002	KT001910P202
5.7	0.22	40	5800	Elcometer 1930	KT001910P003	KT001910P203
8.2	0.32	120	17400	Elcometer 1910*, 1920/1*, 1940*	KT001910P004	KT001910P204
14.2	0.56	40	5800	Elcometer 1910, 1920/1, 1940	KT001910P005	KT001910P205
20	0.79	20	2900	Elcometer 1910, 1920/1, 1940	KT001910P006	KT001910P206
25	0.98	40	5800	Elcometer 1920/2, 1941/1	KT001910P007	KT001910P207
28.2	1.11	10	1450	Elcometer 1910, 1920/1, 1940	KT001910P010	KT001910P210
50	2.0	3.2	460	Elcometer 1910**, 1920/1**, 1940**	KT001910P012	KT001910P212
50 x 50	2.0 x 2.0	7.85	1140	Elcometer 1910***, 1920/1***,	KT001910P016	KT001910P216
50 x 50	2.0 x 2.0	7.85	1140	Elcometer 1920/2, 1941/1	KT001910P017	KT001910P217
70	2.76	5	725	Elcometer 1920/2, 1941/1	KT001910P018	KT001910P218

* Must be used with part number KT001910P401 **Must be used with part number KT001910P402 ***Must be used with part number KT001910P403

ELCOMETER PAT™ RANGE SUPPORT RINGS AND HAND CUTTING TOOLS						
Test Element Diameter		Range		Range Values valid for the following models	Support Ring	Hand Cutting Tool
mm	inches	MPa	PSI			
2.8	0.11	160	23200	Elcometer 1930	KT001910P105	KT001910P113
4	0.16	80	11600	Elcometer 1930	KT001910P106	KT001910P114
5.7	0.22	40	5800	Elcometer 1930	KT001910P107	KT001910P115
8.2	0.32	120	17400	Elcometer 1910*, 1920/1*, 1940*	KT001910P108	KT001910P116
14.2	0.56	40	5800	Elcometer 1910, 1920/1, 1940	KT001910P109	KT001910P117
20	0.79	20	2900	Elcometer 1910, 1920/1, 1940	KT001910P110	KT001910P118
25	0.98	40	5800	Elcometer 1920/2, 1941/1	-	KT001910P119
28.2	1.11	10	1450	Elcometer 1910, 1920/1, 1940	KT001910P111	KT001910P120
50	2.0	3.2	460	Elcometer 1910**, 1920/1**, 1940**	-	KT001910P122
50 x 50	2.0 x 2.0	7.85	1140	Elcometer 1910***, 1920/1***, 1940***	-	-
50 x 50	2.0 x 2.0	7.85	1140	Elcometer 1920/2, 1941/1	-	-
70	2.76	5	725	Elcometer 1920/2, 1941/1	-	-

* Must be used with part number KT001910P401 **Must be used with part number KT001910P402 ***Must be used with part number KT001910P403

ELCOMETER PAT™ RANGE MISCELLANEOUS ACCESSORIES	
Description	Part Number
8.2mm Adaptor for use with 6.3kN Testing Head	KT001910P401
Support Ring & Adaptor for 50mm Diameter Test Elements for use with 6.3kN Testing Head	KT001910P402
Support Ring & Adaptor for 50 x 50mm Diameter Test Elements for use with 6.3kN Testing Head	KT001910P403
Support Ring & Adaptor for use with 20kN Testing Head	KT001910P404
Support Ring & Adaptor for use with 40 & 80kN Testing Head	KT001910P405
E900S Single Part Epoxy 5ml	KT001910P600
M2000G Adhesive, 20g Bottle	T99911135