

AT101/80kN Adhesion tester

The most powerful of all the adhesion testers in the PAT range, model AT101E/80kN is designed particularly for tensile adhesion testing of the strongest thermal sprayed coatings (e.g. arc, plasma and HVOF sprayed). With the Ø25mm (1 inch) test cylinders the certified testing range is 136 MPa/19700 psi which is higher than the tensile strength of the strongest heat-curing adhesive (used for gluing the test elements).

Pull off testing is done in two ways:

1. In accordance with ASTM-C633 (two cylinders glued together)
(ASTM-jig is an optional accessory).

2. Pull testing directly on the coated component or on test panels



In addition this adhesion testing machine is used for tensile testing of various materials where strain measurements are not required.

Different test ranges are achieved by using different test element sizes (see table below).



Description

- Portable and simple to use.
- Produces comparable test results both in the laboratory and on site.
- Precision gauge with both MPa (N/mm^2) and p.s.i. reading.
- Simple layout of control panel.
- Rate of tensile force increase is infinitely variable between zero MPa/sec (standstill) up to maximum rate (the rate depends on the size test element used).
- 110/230V main power. Battery power is an optional extra.
- **All AT101 adhesion testing machine models can have the data logging module built in when new or retro-fitted into existing units.**
- Testing of coatings on any shaped substrates, e.g. inside and outside pipe surfaces.
- Supplied in solid aluminum case.

Order # **123-AT101-80kN**

Price \$ Please request a quote.

INCLUDED WITH STANDARD MODEL

- Automatic hydraulic pump unit with control display
- Hydraulic cable
- PAT testing head 40kN
- Adapter for main power
- Aluminum carry-case with protective interior
- Calibration Certificate

TECHNICAL DATA

Maximum certified pull force	68 kN
Accuracy	±1% of full scale
Power	110/230V AC
Battery	Optional
Hydraulic System Drive	Two-step servo motor
Weight complete in case	8.2 kg
Case Dimensions (WxLxH)	430 x 325 x 145mm / 17x13x6 inches
Complies with:	ISO 4924, EN24624, ASTM D4541, etc.

TESTING RANGE

Test element size (diameter mm)	Full Scale		Certified testing range	
	MPa	psi	MPa	psi
70.7	20	2900	17	2400
50	40	7200	34	4900
25	160	23200	136	19700