

PosiTest[®] **AT** Series Pull-Off Adhesion Testers

Measures the adhesion of coatings to metal,
wood, concrete and other rigid substrates

Models available for conforming to **ASTM C1583** (tensile strength
of concrete overlays) and **BS EN 12004** (cementitious adhesives).



*Available in Automatic
or Manual models*



DeFelsko[®]
The Measure of Quality



Available on the
App Store



PosiTest[®] AT Series

Measures the force required to pull a specified test diameter of coatings or material away from its substrate using hydraulic pressure

All Models Feature...

Simple

- Portable — requires no external power source - ideal for field or lab use
- Pull Rate Indicator allows operator to easily monitor and adjust the rate of pull in accordance with international test methods
- Easily select dolly sizes, change measurement units or store readings with the touch of a button
- Conversion charts not required – tester automatically calculates pressure based on dolly or plate size
- Inexpensive, single-use dollies and plates eliminate cleaning for re-use and can be kept as a permanent record
- Each kit comes with everything needed for testing

Durable

- Environmentally sealed enclosure – weatherproof, dustproof and shockproof — meets or exceeds IP65
- Can be used in any position
- Hard-shell carrying case included, with optional upgrade to a heavy-duty Pelican[®] case
- Two year warranty

Accurate

- Calibrated and certified to $\pm 1\%$ accuracy using a NIST traceable load cell. Certificate of Calibration showing traceability to NIST included.
- Self-aligning dolly enables accurate measurements on smooth or uneven surfaces
- High-grade, industrial pressure sensor ensures continued accuracy
- Conforms to national and international standards including ASTM C1583/ D4541/D7234, ISO 4624/16276-1, BS EN 12004-2, AS/NZS 1580.408.5 and others

Versatile

- **NEW** Select from four Stand-offs to meet your requirements
- Internal memory stores maximum pull-off pressure, rate of pull, test duration and dolly size
- 10 mm, 14 mm, 20 mm, 50 mm, 50 x 50 mm Tile and 50 mm C1583 dollies maximize capability and measurement resolution across a wide range of bond strengths
- LCD displays pressure value in PSI, MPa and Newtons (*Automatic models only*)

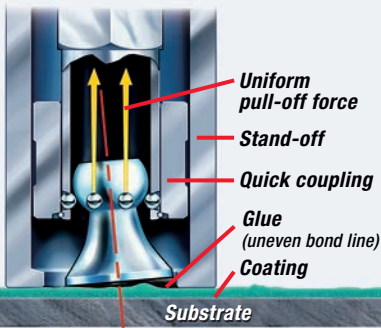
Powerful

- Sealed USB port for fast, simple connection to a PC
- Includes PosiSoft suite of software for viewing and reporting data
- Software Updates via web keep your instrument current

For a complete list of product features and available options visit www.defelsko.com

Self-Alignment Feature

The PosiTest Adhesion Tester compensates for misalignment. The self-aligning, quick-coupling actuator and spherical articulating dolly head enable uniform distribution of the pulling force over the surface being tested, preventing a one-sided pull-off.



Select Manual or Automatic...

PosiTest AT-M Manual

- Manual hydraulic pump designed to apply smooth and continuous pressure with a single stroke
- Pull Rate Indicator to manually monitor and adjust the rate of pull
- Internal memory stores maximum pull-off pressure, rate of pull, test duration and dolly size for up to 200 pulls
- Compatible with PosiSoft desktop software for viewing, printing and storing measurement data

PosiTest AT-A Automatic

- Electronically controlled hydraulic pump automatically applies smooth and continuous pull-off pressure. Greatly reduces user effort and the risk of influencing the pulling process.
- Impact and scratch resistant color touch screen with keypad for operation with or without gloves
- User adjustable pull rate, pull limit and hold time
- Rotating display for horizontal and vertical use
- Built-in rechargeable battery performs over 200 tests per charge. Continue testing with AC power while the battery recharges.
- Internal memory stores maximum pull-off pressure, rate of pull, test duration, dolly size, pass/fail, the nature of fracture and user notes for 100,000 pulls in up to 1,000 batches
- Compatible with PosiSoft desktop software, PosiSoft.net and PosiTector App
- PosiSoft USB Drive - stored readings and graphs can be accessed using universal PC/Mac web browsers or file explorers. No software required.
- WiFi technology wirelessly communicates with PosiSoft.net and downloads software updates and allows access to stored measurement data using web browsers
- Rubberized, shock absorbing grips also provide a stable, skid-resistant footing

Impact and scratch resistant color touch screen with keypad for operation with or without gloves

Wirelessly connect the PosiTest AT-A to your smart device using our free app

- Add images and notes using camera and keyboard
- Create customized, professional PDF reports
- Share, backup, synchronize and report measurement data
- Auto-pairing Bluetooth (BLE) connection



B4 #1 Layers: 3	
Cohesive%	Adhesive%
Glue: Y 15	Y/Z Interface: 20
Layer 3: D	D/Y Interface: 80
Layer 2: C	C/D Interface: 0
Layer 1: B	B/C Interface: 0
Substrate: A	A/B Interface: 0
Done	

Record the pass/fail result and the nature of fracture - cohesive, adhesive, and glue failures - using the app (left) or the instrument's touch screen display (above)

Select from four Stand-offs...

20 mm Kit

- Ideal for measuring higher bond strength coatings on metals
- Can be used with optional 10 and 14 mm dollies
- Includes 20 mm aluminum dollies (20), 20 mm cutting tool and 20 mm stand-off



50 x 50 mm Tile Kit

- **NEW** Ideal for measuring the tensile strength of ceramic tile cementitious, dispersion and reaction resin adhesives
- Conforms to BS EN 12004-2
- Includes 50 mm x 50 mm steel dollies (4), and 50 mm x 50 mm stand-off



PosiTest AT 50T KIT converts the adhesion tester to measure the tensile strength of ceramic tile adhesives.

50 mm Kit

- Ideal for measuring lower bond strength coatings on wood, concrete and plastic
- Includes 50 mm aluminum dollies (8), 50 mm cutting tool and 50 mm stand-off

50 mm C1583 Kit

- **NEW** Ideal for measuring the tensile strength of concrete surfaces and concrete repairs and overlay materials
 - Conforms to ASTM C1583
 - Includes 50 mm C1583 steel dollies (4), 50 mm diamond grit cutting tool with arbor and 50 mm C1583 stand-off
- NOTE: Drill required (not included)



PosiTest AT-M with 50 mm C1583 Kit measures the tensile strength of concrete surfaces, concrete repairs and overlay materials

All Models Feature...



ORDERING GUIDE	20 mm Kit	50 mm Kit	NEW 50 x 50 mm Tile Kit (BS EN 12004-2)	NEW 50 mm C1583 Kit (ASTM C1583)
Manual Models with protective case*	ATM20 0.7 – 20 MPa 100 – 3000 psi	ATM50 0.4 – 3.3 MPa 50 – 480 psi	ATM50T 0.4 – 2.585 MPa 50 – 375 psi	ATM50C 0.4 – 3.3 MPa 50 – 480 psi
Automatic Models with protective case*	ATA20 0.7 – 24 MPa 100 – 3500 psi 100 – 7550 N	ATA50 0.4 – 3.8 MPa 50 – 560 psi 100 – 7550 N	ATA50T 0.4 – 3.033 MPa 50 – 440 psi 100 – 7550 N	ATA50C 0.4 – 3.8 MPa 50 – 560 psi 100 – 7550 N
Conversion Kit only**	AT20KIT	AT50KIT	AT50TKIT	AT50CKIT
Typical Application	Higher bond strength coatings on metals	Lower bond strength coatings on wood, concrete and plastic	Cementitious adhesive for tiles	ASTM C1583 Concrete surfaces and overlays
Included Dollies	Ø20 mm (qty 20) Aluminum	Ø50 mm (qty 8†) Aluminum	50 x 50 mm Plate (qty 4) with threaded post Steel	Ø50 mm (qty 4) with ≥ 25 mm thickness Steel
Cutting Tool	20 mm hole saw	50 mm hole saw	-----	50 mm diamond grit hole saw with arbor
Adhesive	ResinLab EP11HT 2-Part Epoxy	ResinLab EP11HT 2-Part Epoxy	ResinLab EP11HT 2-Part Epoxy	ResinLab EP11HT 2-Part Epoxy^
Resolution	0.01 MPa (1 psi)			
Accuracy	±1% Full Scale			

* Upgrade to the Pelican Case by adding a '-P' to the Ordering Code. ** Kits include everything needed to convert the adhesion tester to a different model. † 50 mm Conversion Kit includes Qty. 12 Ø50 mm dollies. ^ ASTM C1583 specifies an ASTM C881 Type IV, Grade 3 epoxy. While the included ResinLab epoxy is suitable for many applications, it does not meet this specific requirement.

Options

Conversion Kits

Convert your adhesion tester to a different model with our choice of Conversion Kits. Choose from 20 mm, 50 mm, 50 x 50 mm Tile and 50 mm C1583 kits. Kits include the appropriate stand-off, holesaw (if applicable) and test dollies.



PosiTest AT 50 mm C1583 KIT

Dollies

Select from 10 mm, 14 mm, 20 mm, 50 mm, 50 mm C1583 and 50 x 50 mm tile dollies available in assorted quantities. Multipacks offer larger quantities at a reduced cost.

Pelican Cases™

(CASEATM-P/CASEATMB-P)

Heavy-duty, waterproof cases complete with custom foam insert to securely hold your instrument.



Glue Kit (ATADHESIVEKIT)

Additional glue, mixing sticks, palettes and cotton swabs

PosiTest AT Verifier (ATVERIFY)

Ideal for checking the accuracy and operation of PosiTest Adhesion Testers and is an important component in fulfilling both ISO and in-house quality control requirements.



Adhesion testers include everything needed for testing: Adhesion Tester, built-in rechargeable NiMH battery with charger, dollies, abrasive pad, cutting tool, glue with mixing sticks and palettes, cotton swabs, USB cable, PosiSoft Software, instruction booklet and video, shoulder strap (AT-A only), Certificate of Calibration traceable to NIST, two-year warranty, and sturdy, lightweight carrying case

Conforms to international standards including ASTM C1583/D4541/D7234/D7522, ISO 4624/16276-1, BS EN 12004-2, AS/NZS 1580.408.5 and others

In support of our policy of continuous product improvement we reserve the right to change materials and specifications without notice. Drawings, where used, are not to scale. All dimensions are in millimetres and sizes given are approximate. Where possible, technical MSDS data sheets are made available on the website. All products should be installed and used in accordance with manufacturer's instructions provided. Warning: products may be the subject of registered designs and patents. Refer to website for terms and conditions on warranty.