

# PosiTest<sup>®</sup> **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**<sup>®</sup>  
The Measure of Quality



Available on the  
App Store



# PosiTest<sup>®</sup> 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<sup>®</sup> 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*)

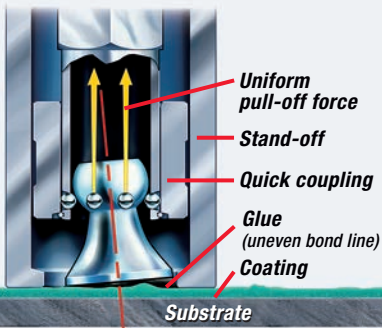
### Powerful

- 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](http://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 <input type="checkbox"/>	Y/Z Interface: 20 <input type="checkbox"/>
Layer 3: D <input type="checkbox"/>	D/Y Interface: 80 <input type="checkbox"/>
Layer 2: C <input type="checkbox"/>	C/D Interface: 0 <input type="checkbox"/>
Layer 1: B <input type="checkbox"/>	B/C Interface: 0 <input type="checkbox"/>
Substrate: A <input type="checkbox"/>	A/B Interface: 0 <input type="checkbox"/>
<b>Done</b>	

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<sup>1</sup>), 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 and EN 1542
  - 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	<b>NEW</b> 50 x 50 mm Tile Kit (EN 12004-2)	<b>NEW</b> 50 mm C1583 Kit (ASTM C1583 and EN 1542)
<b>Manual Models</b> with protective case	<b>ATM20</b> 0.7 – 20 MPa 100 – 3000 psi	<b>ATM50</b> 0.4 – 3.3 MPa 50 – 480 psi	<b>ATM50T</b> 0.4 – 2.585 MPa 50 – 375 psi	<b>ATM50C</b> 0.4 – 3.3 MPa 50 – 480 psi
<b>Automatic Models</b> with protective case*	<b>ATA20</b> 0.7 – 24 MPa 100 – 3500 psi 220 – 7550 N	<b>ATA50</b> 0.1 – 3.8 MPa 16 – 560 psi 220 – 7550 N	<b>ATA50T</b> 0.1 – 3.0 MPa 13 – 440 psi 220 – 7550 N	<b>ATA50C</b> 0.1 – 3.8 MPa 16 – 560 psi 220 – 7550 N
<b>Conversion Kit only**</b>	<b>AT20KIT</b>	<b>AT50KIT</b>	<b>AT50TKIT</b>	<b>AT50CKIT</b>
<b>Typical Application</b>	Higher bond strength coatings on metals	Lower bond strength coatings on wood, concrete and plastic	Cementitious adhesive for tiles	Concrete surfaces and overlays
<b>Included Dollies</b>	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
<b>Cutting Tool</b>	20 mm hole saw	50 mm hole saw	-----	50 mm diamond grit hole saw with arbor
<b>Adhesive</b>	ResinLab EP11HT 2-Part Epoxy	ResinLab EP11HT 2-Part Epoxy	ResinLab EP11HT 2-Part Epoxy	ResinLab EP11HT 2-Part Epoxy <sup>^</sup>
<b>Resolution</b>	0.01 MPa (1 psi)			
<b>Accuracy</b>	±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.



### 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 Case™ (CASEATAB-P)

Heavy-duty, waterproof case complete with custom foam insert to securely hold your PosiTest AT-A.



### 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, 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, EN 1542/12004-2, AS/NZS 1580.408.5 and others

©DeFelsko Corporation USA 2019. All Rights Reserved. Technical Data subject to change without notice. • Printed in USA • PDAT.v.LW/W1907