

# PosiTest<sup>®</sup> **AT** Series Pull-Off Adhesion Testers

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

Additional 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



WiFi

# 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 the 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 (*Automatic models only*)
- 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 (see inset below)
- 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

- Select from four stand-offs to suit nearly any application (see inset on opposite page)
- 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*)

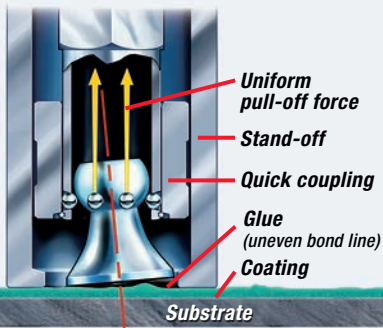
### Powerful

- Sealed USB port for fast, simple connection to a PC
- Includes PosiSoft suite of software for viewing and reporting data

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
- **NEW** High-contrast, easy to read color display
- 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
- **NEW** Field replaceable AAA alkaline batteries provide up to 16 hours of testing
- 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, downloads software updates, and allows access to stored measurement data using web browsers
- Rubberized, shock absorbing grips also provide a stable, skid-resistant footing
- Software updates via web keep your instrument current

**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 0	D/Y Interface: 80
Layer 2: C 0	C/D Interface: 0
Layer 1: B 0	B/C Interface: 0
Substrate: A 0	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

- 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 measures 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

- Ideal for measuring the tensile strength of concrete surfaces, concrete repairs, and overlay materials
  - Conforms to ASTM C1583 and BS 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 <sup>3</sup>	50 x 50 mm Tile Kit (EN 12004-2)	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 <sup>1</sup>	<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<sup>2</sup></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 <sup>3</sup> ) 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>4</sup>
<b>Resolution</b>	0.01 MPa (1 psi)			
<b>Accuracy</b>	±1% Full Scale			

1. Upgrade to the Pelican Case by adding a '-P' to the Ordering Code. 2. Kits include everything needed to convert the adhesion tester to a different model. 3. 50 mm Conversion Kit includes Qty. 12 Ø50 mm dollies. 4. 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 Cases™ (CASEATAB-P)

Heavy-duty, waterproof cases complete with custom foam insert to securely hold your instrument. *(Automatic models only)*



### 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 (AT-A only), 3 AAA batteries (AT-M only), 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, ISO 4624/16276-1, EN 1542/12004-2, AS/NZS 1580.408.5, and others

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