

ADHESION TESTER POSITEST AT

LD9330, LD9331, LD9332, LD9333

DATASHEET

PRODUCT DESCRIPTION

The new PosiTest Adhesion Tester measures adhesion substrates. There is a manual and an automatic model available.

Both models have a hydraulic pump. The pump of the automatic version is electronically controlled and applies smooth and continuous pull-off pressure. This greatly reduces user effort and the risk of influencing the pulling process. Self-aligning aluminum dollies enable accurate measurements on smooth or uneven surfaces



The internal memory of the Manual version stores maximum pull-off pressure, rate of pull, test duration and dolly size for up to 200 pulls. The automatic version stores maximum pull-off pressure, rate of pull, test duration, dolly size, pass/fail, nature of fracture and user notes for 100,000 pulls in up to 1,000 batches in its internal memory and pull rate, pull limit and hold time are user-adjustable with the impact and scratch resistant color touch screen with keypad for operation with or without gloves.

Every PosiTest Adhesion Tester pressure system is calibrated and certified to $\pm 1\%$ accuracy using a NIST traceable load cell. Evaluating measured values on PC is possible by using an adapter and PC-software.

STANDARDS

Conforms to international standards including ASTM D4541/D7234, ISO 4624/16276-1, AS/NZS 1580.408.5 and others. Look up the appropriate standard for a correct execution of the test.

FEATURES

- Self-aligning aluminum dolly enables accurate measurements on smooth or uneven surfaces
- Internal memory
- Compatible with PosiSoft desktop software
- Environmentally sealed enclosure – weatherproof, dustproof and shockproof - meets or exceeds IP65

SCOPE OF SUPPLY**Positest Adhesion Tester -Manual**

- LD9332: 20 mm dollies (20), 20 mm cutting tool and 20 mm stand off
- LD9333: 50 mm dollies (8), 50 mm cutting tool and 50 mm stand off
- Manual Adhesion Tester,
- built-in rechargeable NiMH battery with charger
- abrasive pad
- glue with mixing sticks and palettes

Positest Adhesion Tester-Automatic

- LD9330: 20 mm dollies (20), 20 mm cutting tool and 20 mm stand off
- LD9331: 50 mm dollies (8), 50 mm cutting tool and 50 mm stand off
- Automatic Adhesion Tester
- built-in rechargeable NiMH battery with charger
- abrasive pad
- glue with mixing sticks and palettes

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| <ul style="list-style-type: none"> • cotton swabs • USB cable • PosiSoft Software • instruction booklet and video • Certificate of Calibration traceable to NIST • two-year warranty • sturdy, lightweight carrying case | <ul style="list-style-type: none"> • cotton swabs • USB cable • PosiSoft Software • instruction booklet and video • Certificate of Calibration traceable to NIST • two-year warranty • sturdy, lightweight carrying case |
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ORDERING INFORMATION

LD9332	Defelsko Positest ATM20 Manual Adhesion tester with 20 mm dollies
LD9333	Defelsko Positest ATM50 Manual Adhesion tester with 50 mm dollies
LD9330	Defelsko Positest ATA20 Automatic Adhesion tester with 20 mm dollies
LD9331	Defelsko Positest ATA50 Automatic Adhesion tester with 50 mm dollies

ACCESSORIES

LD9250	TQC Dolly Drill for Adhesion Test
LD9304	20 mm accessories kit (for LD9331 and LD9333)
LD9305	50mm accessories kit (for LD9330 and LD9332)
LD9306	DeFelsko 20 mm dollies, 10 pieces
LD9307	DeFelsko 50 mm dollies, 4 pieces
LD9308	Glue set for PosiTest AT
LD9310	Dollies 20mm for PosiTest AT, 50 pieces
LD9312	20mm hole saw for PosiTest AT
LD9313	DeFelsko 10mm dollies, 10 pcs (only suitable for 20mm model)
LD9314	DeFelsko 14mm dollies, 10 pcs (only suitable for 20mm model)
LD9320	MC Quick Solid glue set
LD9321	Spare Glue cartridge MC-Quick Solid
LD9022	Araldite Epoxy Adhesive 2012 2x25ml

SPECIFICATIONS

Manual Adhesion Tester	Art. No: LD9332 0.7 – 20 MPa 100 – 3000 psi	Art. No: LD9333 0.4 – 3.5 MPa 50 – 500 psi
Automatic Adhesion Tester	Art. No: LD9330 0.7 – 24 MPa 100 – 3500 psi 100 – 7550 N	Art. No: LD9331 0.4 – 3.8 MPa 50 – 560 psi 100 – 7550 N
Dolly	20 mm	50 mm
Typical application	Coatings on metal	Coatings on wood, concrete and plastic
Resolution	0.01 MPa (1 psi)	
Accuracy	+/- 1% Full Scale	

USE

With this method, a loading fixture commonly called a dolly or stud supplied as smooth steel or aluminium must be cleaned before it is glued with epoxy or acrylic adhesives to the surface. The coating surface must also be cleaned. Roughen the bonding surface of the dolly either with sandpaper or light abrasive blasting. The adhesive must cure for the amount of time recommended by the manufacturer. This can be several hours to a day, depending on the adhesive and the temperature. A critical step in the test procedure is positioning the dolly onto the surface. Avoid any movement, especially twisting, that can result in stress discontinuities during the pull testing. Wipe away any excess adhesive with a cotton swab once the dolly is in place. Place the self aligning adapter over the dolly by lifting the quick coupling ring upwards and when in place to release it. The pull is perpendicular to the surface, so tensile strength is being measured. The manual AT load to the dolly should be increased continuously and smoothly at a rate not to exceed 1 MPa/s (145 psi/s). In case of the automatic AT-A this is done by continued build up provided by the unit. Keep applying the load until failure occurs (or until the maximum force has been applied).

SPECIAL CARE

- Though robust in design, this instrument is precision-machined. Never drop it or knock it over
- Always clean the instrument after use.
- Clean the instrument using a soft dry cloth. Never clean the instrument by any mechanical means such as a wire brush or abrasive paper. This may cause, just like the use of aggressive cleaning agents, permanent damage.
- Do not use compressed air to clean the instrument.
- Always keep the instrument in its case when not in use.
- We recommend annual calibration

SAFETY PRECAUTIONS

- Not suitable to be put in the sun or in the high light
- Avoid using it in over-high or over-low temperature environment
- Avoid humidity

DISCLAIMER

The right of technical modifications is reserved.

The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Whilst we endeavour to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or condition of the product or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.