

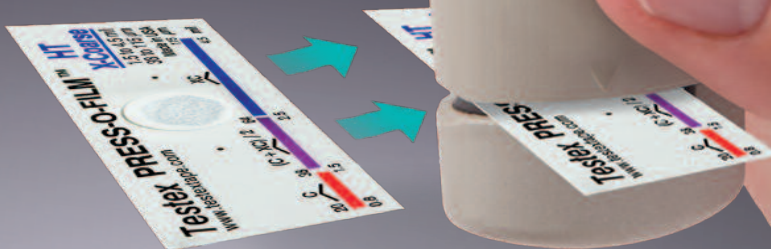
# PosiTector® **RTR**

## Replica Tape Reader

Digital spring micrometer measures and records peak to valley surface profile height using replica tape



For use with Testex™ Press-O-Film™ Replica Tape



**DeFelsko®**



Available on the  
App Store



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# PosiTector® RTR

## Gage Selection...

### All Gages Feature...

#### Simple

- One-handed menu navigation
- RESET feature instantly restores factory settings
- Automatically subtracts the 50.8  $\mu\text{m}$  (2 mil) incompressible substrate from all readings
- Minimizes inspector workload by reducing the number of replicas needed to ensure accuracy

#### Durable

- Solvent, acid, oil, water and dust resistant—weatherproof
- Rugged indoor/outdoor instrument—ideal for field or shop use
- Shock-absorbing, protective rubber holster with belt clip
- Two year warranty on body and probe

#### Accurate

- Measures height (H) and linearized height (H<sub>L</sub>) (see green inset)
- Certificate of Calibration showing traceability to NIST included
- Check Shim provided to verify accuracy
- Conforms to national and international standards including ISO and ASTM

#### Versatile

- PosiTector body accepts all PosiTector RTR, 6000, SPG, DPM, UTG and 200 probes easily converting to a coating thickness gage, surface profile gage, dew point meter or ultrasonic wall thickness gage
- Mills/Microns switchable
- Selectable display languages
- High contrast backlit display for bright or dark environments
- Flip display enables right-side-up viewing
- Uses alkaline or rechargeable batteries (built-in charger)

#### Powerful

- Continually displays/updates average, standard deviation, min/max height and number of readings
- Every stored measurement is date and time stamped
- Screen Capture—record and save screen images into memory for record keeping and review
- USB port for fast, simple connection to a PC and to supply continuous power. USB cable included.
- PosiSoft USB Drive—stored readings and graphs can be accessed using universal PC/Mac web browsers or file explorers. No software required
- Software updates via the internet keep your gage current
- Connects to PosiSoft.net (see far right panel)

### Select Standard or Advanced Features


#### Standard Models

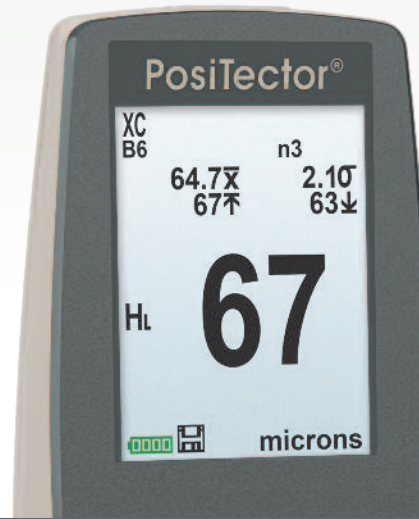
*Includes ALL features as shown on left plus...*

- Monochrome display with transfective technology enhances sunlight readability
- Storage of 250 readings—stored readings can be viewed or downloaded

#### Advanced Models

*Includes ALL features as shown on left plus...*

- High contrast reversible color LCD
- Storage of 100,000 readings in up to 1,000 batches
- Real time graphing, picture prompting and more
- Batch annotation—add notes and change batch names with onscreen QWERTY keyboard
- WiFi technology wirelessly synchronizes with PosiSoft.net, downloads software updates and connects with mobile devices for expanded functionality
- Data transfer via USB to a PC or via  Bluetooth® Wireless Technology to a PC or printer



*Advanced model display shown in Memory Mode*



Test Surface Cleaning Putty included



Stainless Steel Burnishing Tool ensures consistency



Align probe arrows with tape positioning dots

## Rugged Features...

Sealed USB Port  
for communicating  
with a PC or Mac

Water and dust  
resistant



High resolution  
color LCD

Scratch/solvent/impact  
resistant lens

**Advanced Model  
shown in  
Memory Mode**

Multi-function  
navigation button

Solvent, acid, oil  
resistant, high grade,  
industrial strength  
housing

Button operated spring  
micrometer applies  
constant anvil pressure

Probe easily accepts and  
helps position all grades  
of replica tape

Measuring anvils are  
sealed and protected



## PosiSoft® ... **FREE SOLUTIONS** for viewing, analyzing and reporting data:

**PosiSoft USB Drive** Connect to a PC/Mac using the  
supplied USB cable to access and print stored  
readings, graphs, photos, notes and screen  
captures. No software or internet connection required.



**PosiSoft.net** A web-based application offering secure centralized  
management of PosiTector readings. Access your data from any  
web-connected device.

**PosiSoft Software**  
Desktop software for  
downloading, viewing  
and printing your  
measurement data

**PosiSoft Mobile**  
Access readings,  
graphs, capture photos  
and update annotations through WiFi enabled devices such as tablets,  
smart phones and computers. (Advanced models only)



## Linearized Profile Height Measurement (H<sub>L</sub>)

Two grades of Testex Press-0-Film replica tape, "Coarse" and "X-Coarse," are available to span the primary range of surface profiles for the coatings and linings industry—20 to 115  $\mu\text{m}$ /0.8 to 4.5 mils.

An unfortunate characteristic of replica tape is that conventional spring micrometer measurements are most accurate near the middle of each grade's range and least accurate at the outer ends of each grade's range. That is why two other grades, Coarse Minus (<20  $\mu\text{m}$ /0.8 mils) and X-Coarse Plus (>115  $\mu\text{m}$ /4.5 mils), are used to check and, if necessary, adjust measurements at the upper and lower ends of the primary range.

Inside the primary range, Coarse and X-Coarse tape share a 38–64  $\mu\text{m}$  (1.5–2.5 mils) "overlap" region. Measurements with conventional micrometers require a complicated and time consuming procedure of averaging one reading using Coarse grade and one reading using X-Coarse grade to achieve reasonable accuracy.

With a single measurement, the PosiTector RTR produces a more accurate peak-to-valley height measurement H<sub>L</sub> from Coarse or X-Coarse tapes that has been adjusted for their non-linearity. There is no need to average two or more replicas from different grades of tape AND there is no need to subtract the 50.8  $\mu\text{m}$ /2 mils of incompressible polyester substrate. The advantages are a reduction in measurement uncertainty, inspector workload, likelihood of error, and the number of replicas needed by inspectors to assure accuracy.

The PosiTector RTR can also display a height value (H) that is comparable to what conventional analog spring micrometers would display after the 50.8  $\mu\text{m}$ /2 mils of incompressible polyester substrate has been subtracted.



## PosiTector *RTR* Ordering Guide

Standard	H1
Advanced	H3
Range	20–115 $\mu\text{m}$ 0.8 – 4.5 mils
Accuracy (H)	$\pm 5 \mu\text{m}$ $\pm 0.2 \text{ mil}$
Resolution	1 $\mu\text{m}$ 0.1 mil
Anvil Diameter	$\varnothing 6.3 \text{ mm}$ $\varnothing 0.25 \text{ in}$
Anvil Pressure	110 grams-force 1.1 Newtons



*PosiTector bodies accept all 6000, 200, DPM, UTG, SPG and RTR probes*



### Testex Press-O-Film Replica Tape

Replica Tape provides a simple way to obtain an impression of a surface for analysis. It consists of a layer of crushable plastic micro foam affixed to a 50.8  $\mu\text{m}$  (2 mil) incompressible polyester film. When compressed against a roughened surface, the foam collapses and acquires an impression, or reverse replica, of the surface. It is available in a number of grades to accommodate measurements in different profile ranges.

Placing the compressed tape (replica) into the PosiTector RTR gives a measure of the average maximum peak-to-valley height of the surface roughness profile.

The gage automatically subtracts the thickness of the polyester substrate from all measurements.



**ALL GAGES COME COMPLETE** with stainless steel burnishing tool, cleaning card (5), check shim, surface cleaning putty, protective rubber holster with belt clip, wrist strap, 3 AAA alkaline batteries, instructions, nylon carrying case with shoulder strap, protective lens shield, Long Form Certificate of Calibration traceable to NIST, USB cable, two (2) year warranty.

**Replica Tape sold separately**

**SIZE:** 152 x 61 x 28 mm (6" x 2.4" x 1.1")

**WEIGHT:** 140 g (4.9 oz.) without batteries

Conforms to ASTM D4417, ISO 8503-5, NACE RP287, SSPC-PA 17, SSPC-SP5, SP6, SP10, SP11-87T and others

### Options

**Testex Press-O-Film Replica Tape** Coarse and X-Coarse grades

**Bluetooth Printer** receives data from Advanced models

**AC Power Kit** for continuous operation or battery charging—works in any country

**Rechargeable Batteries**—a set of eneloop NiMH AAA batteries

**Protective Lens Shields** protect the display from overspray

**Replacement Stainless Steel Burnishing Tool**

**Replacement Cleaning Cards (20)**—to clean the residual adhesive and debris from the anvils

**Replacement Surface Cleaning Putty (5)**—to clean the test surface

**Replacement Check Shim**—to verify accuracy



**DeFelsko**<sup>®</sup>  
The Measure of Quality

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