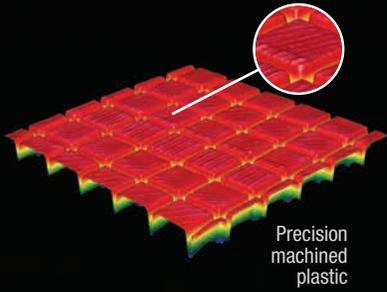
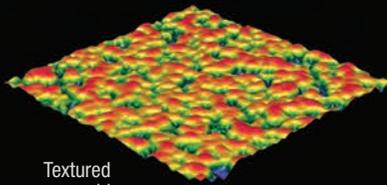


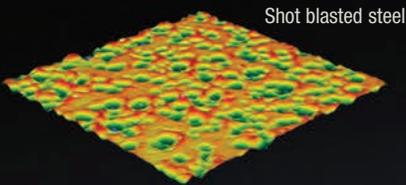
# PosiTector® **RTR3D** Replica Tape Reader



Precision machined plastic



Textured mold



Shot blasted steel



Advanced model shown



Measures and records surface profile parameters using replica tape



For use with **OPTICAL Grade** Testex™ Press-O-Film™ Replica Tape

**DeFelsko®**  
The Measure of Quality



Available on the App Store



# PosiTector® RTR3D

All Gages Feature...

## Simple

- Measures peak height (H<sub>L</sub>) and common 2D/3D profile parameters such as Ra, Rz, Sq, Spd, and more (see inset below)
- Ideal for measuring on flat, curved, or irregular surfaces
- NEW** Larger 2.8" impact resistant color touchscreen with redesigned keypad for quick menu navigation
- NEW** On-gage help explains menu items at the touch of a button
- RESET feature instantly restores factory settings

## Durable

- NEW** Weatherproof, dustproof, and water-resistant—IP65-rated enclosure
- NEW** Ergonomic design with durable rubberized grip
- Rugged indoor/outdoor instrument—ideal for field or laboratory use
- Shock-absorbing protective rubber holster for added impact resistance
- Two year warranty on gage body AND probe

## Accurate

- Certificate of Calibration (containing Ra and Rt measurements) showing traceability to an accredited national laboratory included
- Conforms to national and international standards including ISO and ASTM

## Versatile

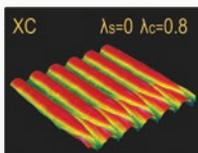
- PosiTector body accepts all PosiTector RTR, SPG, 6000, 200, DPM, IRT, SST, SHD, BHI, and UTG probes easily converting from a surface profile gage to a coating thickness gage, dew point meter, soluble salt tester, hardness tester, or ultrasonic wall thickness gage
- Selectable display languages
- NEW** Auto rotating display with Flip Lock

## Powerful

- Calculates and records all fourteen 2D and 3D parameters (below) with each measurement
- NEW** Screen Capture—save screen images for record keeping and review
- NEW** Up to 30% longer battery life
- 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.
- Every stored measurement is date and time stamped
- Includes PosiSoft suite of software for viewing and reporting data
- Apply short and long cutoff filters and discard lengths to optimize the analysis for a specific application
- Orient the 2D trace between horizontal, vertical and diagonal (XY, YX)

### 2D Parameters – ‘R’ – Profile Parameters

- R<sub>a</sub> Roughness average
- R<sub>q</sub> Root mean square roughness
- R<sub>p</sub> Maximum profile peak height
- R<sub>v</sub> Maximum profile valley depth
- R<sub>t</sub> Total profile height
- R<sub>z</sub> Average maximum height of the profile
- R<sub>pc</sub> Peak count per unit length



Ra	6.3	H <sub>L</sub>	65
Sa	6.9	S <sub>pd</sub>	82

Typical display of the Advanced model

### 3D Parameters – ‘S’ – Height/Amplitude

- H Average maximum peak-to-valley height
- S<sub>a</sub> Average roughness
- S<sub>q</sub> Root mean square roughness
- S<sub>z</sub> Maximum area peak-to-valley height
- S<sub>p</sub> Maximum area peak height
- S<sub>v</sub> Maximum valley depth
- S<sub>pd</sub> Areal peak density

Optical Grade Tape is required for measuring 2D/3D parameters

## Select Standard or Advanced Features

### Standard Models

Includes ALL features as shown on left plus...

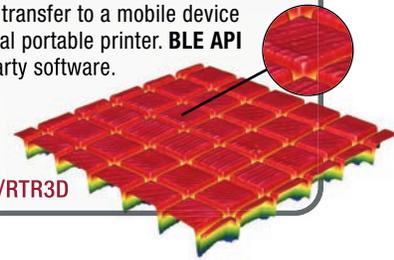
- NEW** Storage of 1,000 readings per probe—stored readings can be viewed or downloaded

### Advanced Models

Includes ALL features as shown on left plus...

- NEW** Storage of 250,000 readings from multiple probes in up to 1,000 batches
- Live graphing of measurement data
- Download high resolution Surface Data Files (.SDF) for analysis in the included PosiSoft or third-party software
- Generates two dimensional (2D) and three dimensional (3D) thumbnail images. Ideal for inclusion into reports and confirming consistent blasting results.
- NEW** Touchscreen keyboard for quickly renaming batches, adding notes, and more
- WiFi technology wirelessly synchronizes with PosiSoft.net and downloads software updates
- Bluetooth 4.0 Technology** for data transfer to a mobile device running the PosiTector App or optional portable printer. **BLE API** available for integration into third-party software.

For a complete comparison of the Standard and Advanced features visit [www.defelsko.com/RTR3D](http://www.defelsko.com/RTR3D)



Ordering Guide	Peak Height/2D/3D
Standard	RTR3D1
Advanced	RTR3D3
Probe Only	PRBRTR3D

Measuring Range (H)	20 – 115 μm	0.8 – 4.5 mils
Measuring Range (Rt)	10 – 115 μm	0.4 – 4.5 mils
Minimum Roughness (Ra)	2 μm	0.08 mils/80 μin
Accuracy (H)	± 5 μm	± 0.2 mils
Accuracy (Rt)*	± (7.5 μm + 5%)	± (0.3 mils + 5%)
Accuracy (Ra)*	± (0.5 μm + 5%)	± (0.02 mils + 5%)
Anvil Pressure	1.1 Newtons	110 grams-force
Anvil Size	Ø 6.35 mm	Ø 0.25 inches
Field of View	3.8 x 3.8 mm	0.149 x 0.149 inches
Lateral Sampling	3.7 μm	0.145 mils
Vertical Resolution	100 nm - 2D/3D	3.93 μin - 2D/3D
	10 nm - SDF	0.393 μin - SDF
Resolution	0.1 μm	0.01 mils

\* When measured using Optical Grade X-Coarse Replica Tape

**ALL GAGES COME COMPLETE** with one roll of Optical Grade X-Coarse tape, high accuracy burnishing tool, burnishing ball, 5 cleaning cards, check shim(s), replica tape holder, microfiber cleaning cloth, surface cleaning putty, protective rubber holster, wrist strap, 3 AAA alkaline batteries, instructions, nylon carrying case with shoulder strap, protective lens shield, Long Form Certificate of Calibration (containing Ra and Rt values) traceable to an accredited national laboratory, USB cable, PosiSoft Software, two (2) year warranty on body and probe.

Conforms to ASME B46, ASTM D4417/D7127, ISO 8503-5, NACE SP287, SSPC-PA 17, SSPC-SP5, SP6, SP10, SP11-87T and others.