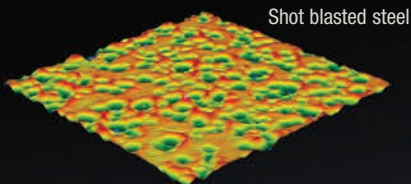
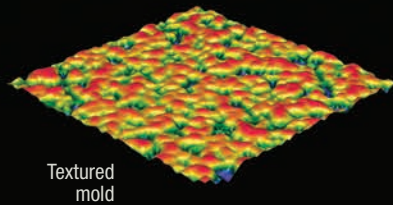
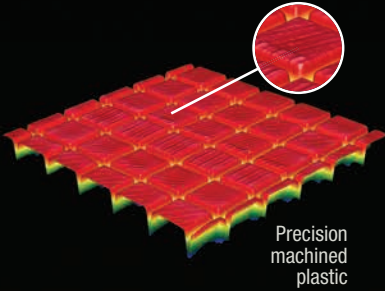


# PosiTector® **RTR3D**

## Replica Tape Reader

**IP65**



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

 **Bluetooth®**

  
**WiFi**

Available on the  
**App Store**



# PosiTector® **RTR3D**

## All Gages Feature...

### Simple

- Measures peak height ( $H_L$ ) and common 2D/3D profile parameters such as  $R_a$ ,  $R_z$ ,  $S_q$ ,  $S_{pd}$ , 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  $R_a$  and  $R_t$  measurements) showing traceability to an accredited national laboratory included
- Conforms to national and international standards including ISO and ASTM

### Versatile

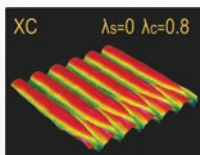
- PosiTector body accepts all PosiTector RTR, SPG, 6000, 200, DPM, IRT, SST, SHD, BHI, and UTG probes easily converting from a surface profile gage to a coating thickness gage, dew point meter, soluble salt tester, hardness tester, or ultrasonic wall thickness gage
- Selectable display languages
- **NEW**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

$R_a$	Roughness average
$R_q$	Root mean square roughness
$R_p$	Maximum profile peak height
$R_v$	Maximum profile valley depth
$R_t$	Total profile height
$R_z$	Average maximum height of the profile
$R_{pc}$	Peak count per unit length



$R_a$	6.3	$H_L$	65
$S_a$	6.9	$S_{pd}$	82

microns  
Typical display of the Advanced model

#### 3D Parameters – 'S' – Height/Amplitude

$H$	Average maximum peak-to-valley height
$S_a$	Average roughness
$S_q$	Root mean square roughness
$S_z$	Maximum area peak-to-valley height
$S_p$	Maximum area peak height
$S_v$	Maximum valley depth
$S_{pd}$	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...

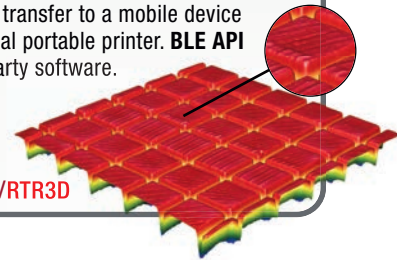
- **NEW** Storage of 1,000 readings per probe—stored readings can be viewed or downloaded

### 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 $\mu$ m	0.8 – 4.5 mils
Measuring Range (Rt)	10 – 115 $\mu$ m	0.4 – 4.5 mils
Minimum Roughness ( $R_a$ )	2 $\mu$ m	0.08 mils/80 $\mu$ in
Accuracy (H)	$\pm 5 \mu$ m	$\pm 0.2$ mils
Accuracy (Rt)*	$\pm (7.5 \mu$ m + 5%)	$\pm (0.3$ mils + 5%)
Accuracy ( $R_a$ )*	$\pm (0.5 \mu$ m + 5%)	$\pm (0.02$ mils + 5%)
Anvil Pressure	1.1 Newtons	110 grams-force
Anvil Size	$\varnothing 6.35$ mm	$\varnothing 0.25$ inches
Field of View	3.8 x 3.8 mm	0.149 x 0.149 inches
Lateral Sampling	3.7 $\mu$ m	0.145 mils
Vertical Resolution	100 nm - 2D/3D 10 nm - SDF	3.93 $\mu$ in - 2D/3D 0.393 $\mu$ in - SDF
Resolution	0.1 $\mu$ m	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, stainless steel 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  $R_a$  and  $R_t$  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.