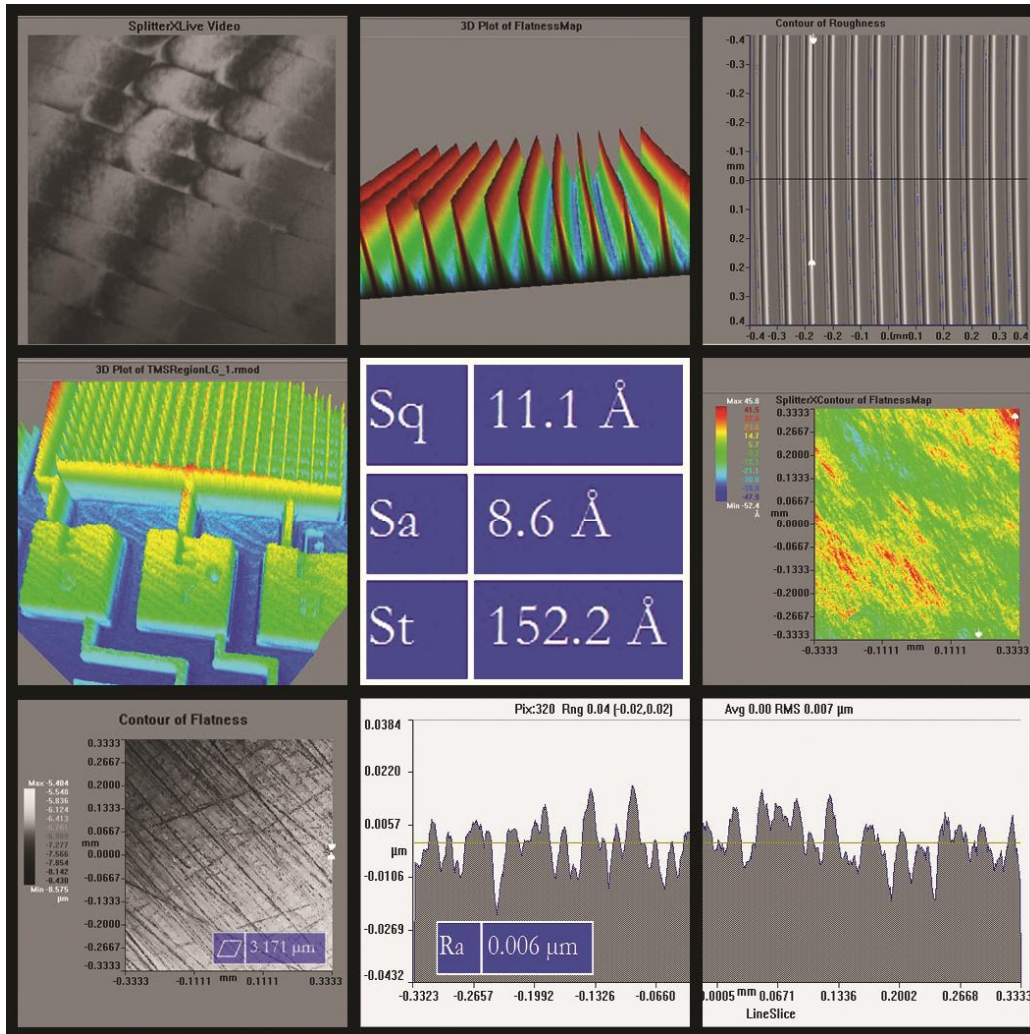


CORNING

Tropel® FlatMaster® System with Surface Roughness Measurement



Key Benefits

- Improves product quality, manufacturing yield and throughput
- Lowers manufacturing costs
- Increases process understanding and reduces time to market
- Increases customer satisfaction

Powerful

- Measure key surface characteristics including lay, roughness, and all standard profile parameters for 2D and 3D standards

Flexible

- Measures a broad variety of materials and surface finishes
- Easy to configure measurement analysis
- Suitable for production, quality control, or R&D applications

Easy to Use

- Simply place the part on the system and in seconds you will have full profile analysis
- Automatic exporting enables seamless integration into your SPC system

Tropel® FlatMaster® System with Roughness Specifications

Performance

	2.5X	10X	20X
Field of view	8.0 mm	0.8 mm	0.4 mm
Lateral resolution	4.4 μ m	0.96 μ m	0.48 μ m

Measurement method	White Light Scanning Interferometry		
Measurement time	15 seconds typical		
Auto Focus	5 seconds typical		
Measured data points	up to 1.0 million per measurement		
Materials	Metals, glass, polymers, ceramics, and many others		
Surfaces	Fine-ground, lapped, polished, super-finished and others		

Accuracy and Repeatability

RMS	
Repeatability*	0.01 nm (0.0004 μ m)
Resolution	0.02 nm (0.0008 μ m)

* Refers to instrument limited Accuracy and Repeatability (σ) as based on measurement of traceable artifact

Tropel Metrology Software (TMS5™)

Standard Parameters	Flatness, line profile, surface profile, Sa, Sv, Sz, Sp, Ra, Raa, Ryni, Rq, Rrms, Ry, Rp, Rt, Rsk, Rku, Rzdin, Rtm, Rzjis, and others.
User-defined Report Layouts	User-configurable including: OpenGL® 3-D, 2-D, line trace (X/Y, radial, circular), color contour, isometric, histogram, user-defined tolerances, pass/fail criteria
Data Management	Available in report layouts, also MS Excel®, CSV, optional export to industry standard database formats.

Environmental and Facility

Temperature	15 °C to 25 °C (59 °F to 77 °F)
Rate of temperature change	< 1.0 °C per hour
Vibration Isolation	Passive isolation included
Humidity	5% to 95% relative humidity, non-condensing
Power	100-240 VAC, 50/60 Hz, 4 Amp
Air/Vacuum	Not-Required
System Dimensions (W x D x H)	Depends on configuration
System Weight	Depends on configuration

Standard System Configuration

Computer	Windows® x64 based PC
Software	TMS5™ Analysis software
Traceable artifact	Optional

For more information about the Roughness option, or any of the other Tropel® Metrology Instruments, please contact:

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METROLOGY INSTRUMENTS

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