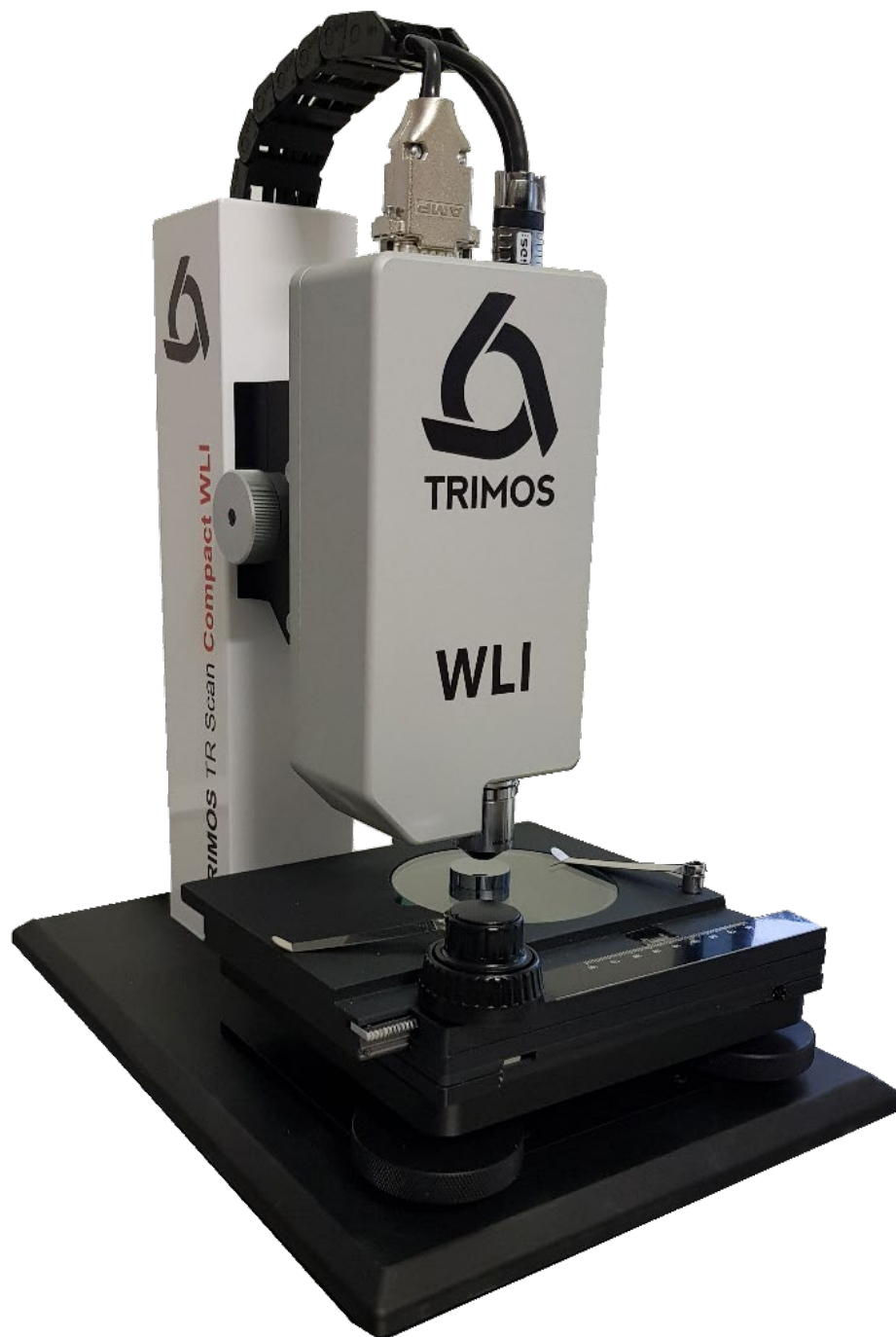


TR Scan Compact WLI

High precision non-contact surface measurement



1.

PRESENTATION

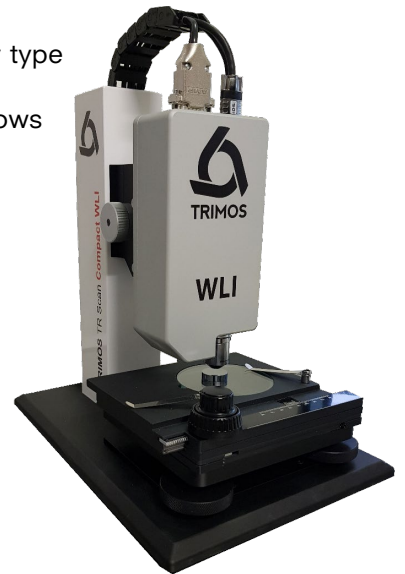
The new TR Scan Compact WLI range from Trimos allows measurements on any type of material with **sub-nanometric** resolution.

WLI (**W**hile **L**ight **I**nterferometry) technology combined with a piezo motor allows extremely fast measurements.

The table allows manual movement with workpieces weighing up to 5 kg.

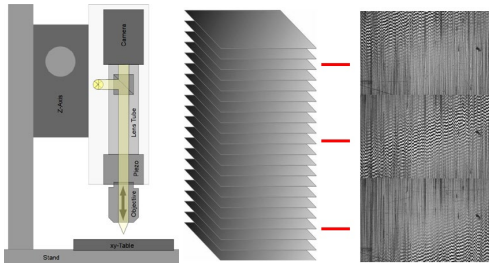
Motorized tables are available as an option to extend the X&Y measuring range.

- Small footprint
- Measuring range 400 µm
- Resolution 0.1 nanometer
- Extremely easy to use
- 2.5x and 5x Michelson type optics for a wide field of view
- Optics 10x; 20x; 50x; 100x Mirau type optics
- Exchangeable optics, or mounted on a carousel



2.

WLI TECHNOLOGY



The piezo motor lifts the lens on the z-axis and the camera captures images in equidistant steps.

The image stack contains the information for calculating profile data from the surface.

Each independent pixel will have a so-called correlogram and the maximum variation of the sine light indicates a defined distance Z from the lens.

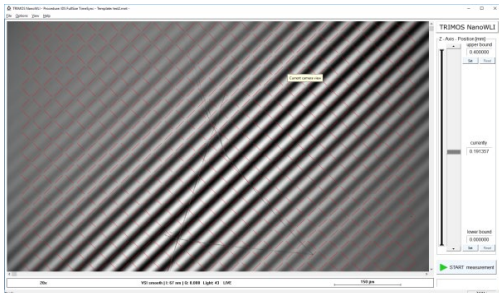
3.

TECHNICAL SPECIFICATIONS OF OPTICS

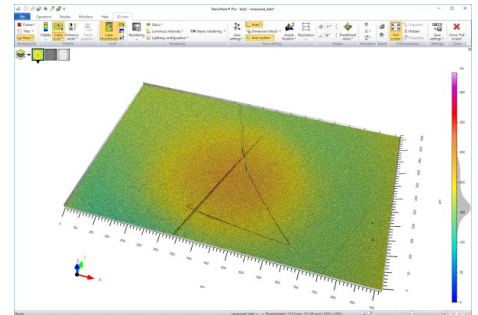
Specifications	WLI 2.5x	WLI 5x	WLI 10x	WLI 20x	WLI 50x	WLI 100x
Resolution	0.1 nm	0.1 nm	0.1 nm	0.1 nm	0.1 nm	0.1 nm
Lateral resolution (X/Y)	4.81 µm	4.81 µm	1.2 µm	0.9 µm	0.66 µm	0.52 µm
Measuring range	400 µm	400 µm	400 µm	400 µm	400 µm	400 µm
Measuring range X/Y	~4536 µm	~2268 µm	~1134 µm	~567 µm	~226 µm	~113 µm
	x ~3447 µm	x ~1723 µm	x ~861 µm	x ~430 µm	x ~172 µm	x ~86 µm
Optical Zoom	2.5x	5x	10x	20x	50x	50x
Working distance	~10.3 mm	~9.3 mm	~7.4 mm	~4.7 mm	~3.4 mm	~3.4 mm

4.

SOFTWARE



The extremely simple **Trimos Compact WLI** software allows fast measurement even by an inexperienced user. In addition to the 3D analysis software, it is possible to carry out any type of analysis on the measurements taken.

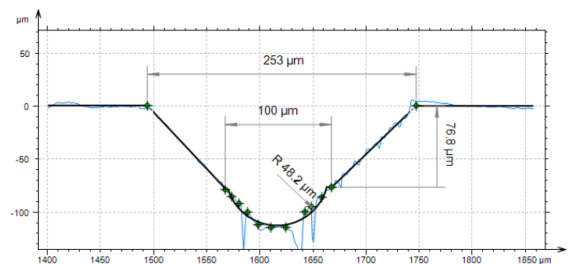


Developed around a graphic interface, the analysis software can work in 2D or 3D. Surface and profile extractions allow the analysis of all roughness parameters in 2D and 3D mode according to current standards.

Optional software module :

Contour Basic & Advance

The **Contour** module enables additional measurements to be made on the extracted profile, such as angles, distances, radius calculation, etc. With the **Contour Advanced** module, it is possible to compare a DXF with the current contour.



Other specific modules are available on request

5.

APPLICATIONS

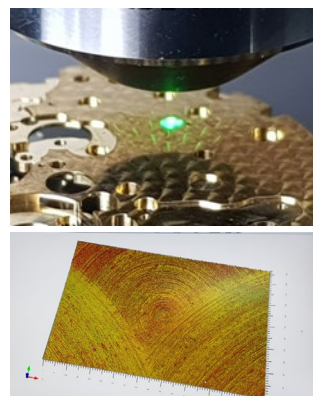
ELECTRONICS



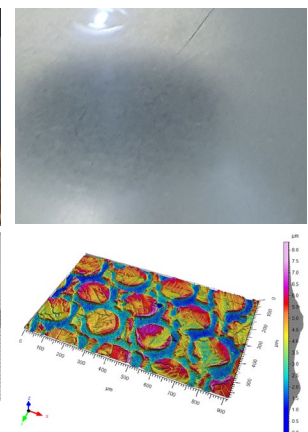
TRANSPARENT SAMPLE



SURFACE QUALITY



METAL DEPOSITS



7.

DETAILS



Z-axis displacement

The Z-axis travel wheel has two functions: quick movement and fine positioning to easily adjust the working distance.

Tilt adjustment

The tilt adjustment of the table is done using the two knobs on the front of the table.



Mounting Bases

The table's thumbwheel allows precise movement in X & Y.

Optics

The optics can be changed quickly. A carousel of optics is available as an option.

8.

MODELS

The TRSCAN Compact WLI is delivered with an external controller that integrates the pc and the piezo motor controller, as well as a 22" display and the measurement and analysis software.

Reference	Model	Optics	Manual table	Motorized table
TR Scan Compact WLI				
700 406 10 31	TR Scan C. WLI MA 73x55	5x, 20x,	73x55	
700 406 10 34	TR Scan C. WLI MO 75x50	5x, 20x,		75x50
700 406 10 35	TR Scan C. WLI MO 100x100	5x, 20x		100x100
TR Scan Extended WLI Multiple objectives (Carousel)				
700 406 10 32	TR Scan E. WLI MA 73x55	5x, 10x, 50x	73x55	
700 406 10 36	TR Scan E. WLI MO 75x50	5x, 10x, 50x		75x50
700 406 10 37	TR Scan E. WLI MO 100x100	5x, 10x, 50x		100x100

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