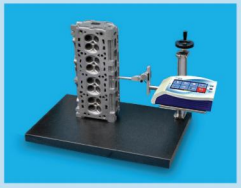
ACCESSORIES



Stand ST2 Code: 1401

Stand made up by a granit 630x400 and small column for positioning. Maximum measuring height reachable from the plane: h=300mm.

Calibration specimen

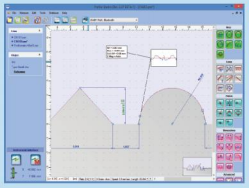
Code 6.302

Specific specimen to execute calibration for contour measurements.

Software Remote Control

Code 1409

Remote desktop viewer with simple and clean interface that reproduces the front panel of the instrument. Allows to control the instrument and download the measurement data on a PC.



Software Profile Studio

Code 1407

The Profile Studio software extends the analysis capability for profilometry measures carried with the WARPsurf through advanced functions as the automatic dimensioning of threads and bearings.

Stand ST4 Code 1418

Motorized stand made up by a granit 730x250 (820x250 with handles) and column for positioning. Maximum measuring height reachable from the plane: h=350mm.

4 axis positioner Code 2401

Positioner equipped with two translation axis, a rotation axis and a tilting axis.

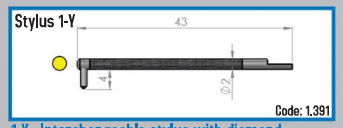
TECHNICAL DATA

Unit of measurement	Millimeters and inches
Cut-off length	0,08 - 0,25 - 0,8 - 2,5 - 8 mm
Cut-off number	Selectable from 1 to 19
Translator run	Up to 60 mm
Measuring field	3000 µm
Speed	0,25 - 0,5 - 1 mm/s
Resolution	0,1 nm (0,0001 µm)
Filter	Gaussian ISO 11562
Interface	TFT 7" colour touchscreen display and waterproof membrane keyboard with 3 keys
Language	Italian, English, French, German, Spanish, Chinese, Japanese, Korean and Russian
Memory	Up to 10000 measuers
Probe	The inductive probe is able to rotate till 90° for lateral measures
Curved surfaces	Capability to measure radius and subtract the arc shape
Exportation	PDF, Excel®, DXF, ASC
Reports	Direct printing on commercial HP or Epson printer

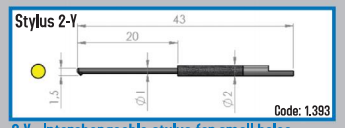
TABLE OF PARAMETERS

NORM	PARAMETRS									
ISO 4287 / JIS B0601	Ra	Rq	Rt	Rz	Rp	Rc	Rv	RSm	Rδc	Rsk
	Rku	RΔq	RPc	Rmr	Rmr rel.	RLo	Rlr			
	Pa	Pq	Pt	Pp	Pc	Pv	PSm	Pδc	Psk	Pku
	PΔq	PPc	PLo	Plr						
	Wa	Wq	Wt	Wz	Wp	Wv	Wc	WSm	Wδc	Wsk
	Wku	WΔq	WPc	WLo	Wlr					
VDA 2007	WDt	WDc	WDSm							
ISO 13565 / JIS B0671	Rk	Rp	Rvk	Mr1	Mr2	A1	A2			
ISO 12085 / JIS B0631	Pt	R	AR	Rx	Wte	W	AW	Wx	Rke	
	R3z	RΔa	RHSC	PHSC	WHSC	hp	Ep			

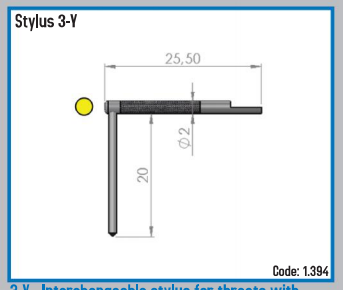
PROBES



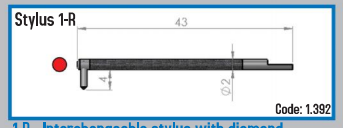
1-Y - Interchangeable stylus with diamond tip 90° - 2 µm. Measuring range 3 mm



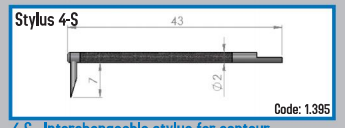
2-Y - Interchangeable stylus for small holes minimum Ø 2mm with diamond tip 90° - 2 µm



3-Y - Interchangeable stylus for throats with maximum depth 20 mm. Diamond tip 90° - 2 µm



1-R - Interchangeable stylus with diamond tip 60° - 2 µm. Measuring range 3 mm



4-S - Interchangeable stylus for contour measures with chisel tip. Measuring range 3 mm

Centro ACCREDIA
LAT N° 041

Metrology Systems

Roughness tester WARPsurf

The best way to measure

www.sm-instruments.com

Can the control of a particular be more difficult than its construction? We don't think so!
The roughness tester WARPsurf, thanks to a perfect integration of innovative and modern technologies, defines a new benchmark in the characterization of the profile and surface roughness, all encased in a single portable instrument.
Checking the roughness and the contour? As easy as using your smartphone.

10 reasons to choose the WARPsurf roughness tester

Simplicity
Modern and intuitive user interface, as familiar as the modern smartphone environment.

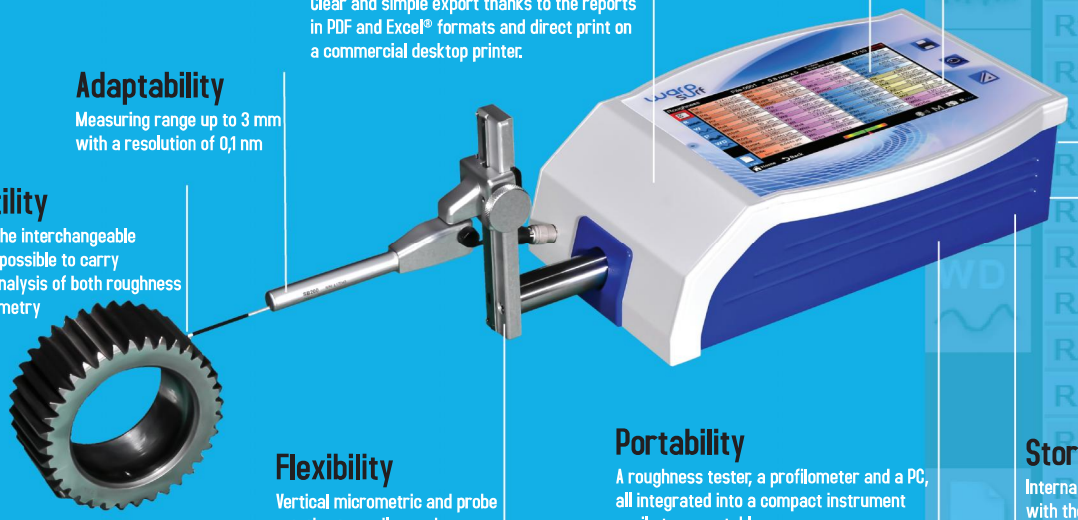
Visibility
Ability to inspect every detail thanks to the wide and defined 7" touchscreen display

Reports
Clear and simple export thanks to the reports in PDF and Excel® formats and direct print on a commercial desktop printer.

Sharing
Capability of sharing charts, parameters and images by saving them directly on a common USB key

Adaptability
Measuring range up to 3 mm with a resolution of 0,1 nm

Versatility
Thanks to the interchangeable stylus it is possible to carry accurate analysis of both roughness and profilometry



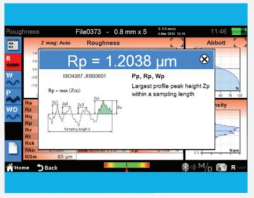
Connectivity
Bluetooth and USB interface for the integration with the Profile Studio and Remote Control

Flexibility
Vertical micrometric and probe rotation to easily reach every measure zone

Portability
A roughness tester, a profilometer and a PC, all integrated into a compact instrument easily transportable.

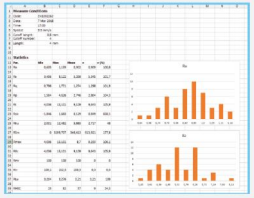
Storage
Internal management of measure codes, with the ability to save a very high number of measures and perform statistics

Profilometry
The instrument allows to perform advanced profilometry analysis thanks to the integraded CAD elaboration. It is possible to construct lines, arcs, points, as well as placing dimensions on distances, angles, radiuses to completely characterize the profile. Thanks to the advanced functions it is possible to align the profile on a reference, find the maximum and minumum of an area and calculate the tangent circle of a throat.



Online help
Any doubt on roughness parameters?
Click on the parameter to consult the complete description from the reference standard and the mathematical and graphical definition.

USB connection
The instrument is equipped with two USB ports to plug a common USB key on which saving the results and measures, or to interface to a commercial printer and create A4 reports.



Statistics
Through the integrated measure codes management, it is possible to comfortably subdivide the measures depending on the measured piece. This makes possible to catalog and retrieve them in a simple way, and allows the creation of statistic reports on the codes.

Exportation
The WARPsurf has been designed with the aim of sharing the measurement results, thanks to the integration with many common applications like spreadsheet viewer, programs that elaborate text files and CAD based software.

WARPsurf Code: 1.105

The WARPsurf roughness tester in characterized by a great maneuverability and offers a modern and innovative user experience, bringing to the field of metrology different technologies that result familiar for the users and guarantee simplicity of use. Thanks to the different styluses it is possible to measure the roughness parameters of a surface and the contour of profiles.
The instrument calculates more than 70 roughness parameters that belong to the international standards ISO 4287/JIS B0601 , ISO 12085 (MOTIF/CNOMO) / JIS B0621 e DIN.
If you are looking for an instrument that combines portability, accuracy and the best user experience, the WARPsurf is what you're looking for!