LITEsurf ROUGHNESS TESTER

The first Smart Roughness Tester





Bluetooth and USB connection





The new LITEsurf roughness tester is the simplest of the range. It born from the forty years of experience that SM has in the design of roughness testers and is ideal for measuring details directly on work islands or in production machines.

This is why we know very well what are the characteristics that are really necessary for an instrument of this family that must work there, right together with you.

The LITEsurf, thanks to the integrated Bluetooth and USB connection, allows you to connect it to Smartphones, Tablets and PCs in an intuitive and fast way, then sharing the information with the rest of the world thanks to the free APP "Roughness studio basic" included.

With a single instrument it is possible to measure details horizontally, vertically, below / above. Through the 90 ° laterally rotable probe preloaded, each area of the piece is measurable.

The light alloy body machined from solid combined with a PC / ABS shell that guarantees high rigidity with high impact resistance. Furthermore, the sophisticated integrated refill management system guarantees an autonomy of 10 hours of work and at least 300 measurements in 50 minutes.



ST2 granite stand, dimensions 630x400 mm - code: 1.401

The ST2 diabase stand, with manual positioning column, allows the positioning of the roughness tester in a stable and permanent way, thus allowing the creation of a fixed control station.

This system guarantees maximum measurement comfort, eliminates vibrations from the external environment and protects the instrument from possible bumps and accidental falls.

It is possible to complete the equipment of the stand with the sliding micrometric table (code: 1.425), on which it is possible mounting the centering "V" or the vice (code: 3.403).



SB51 plug-in rotable optical transduction probe for 90 $^\circ$ measurements as standard - code: 1.706

The probe is equipped with an innovative optical transduction system that guarantees high resolution and repeatability of the measurements. It is also possible to rotate it perpendicular to the translation movement to perform measurements in points that would be difficult to reach.

The probe, equipped with a plug-in connector, is interchangeable, and it is therefore possible to replace it quickly in the event, for example, of accidental damage or if there are now more probes for different measurements, in fact the operator can easily change it according to the current measurement requirement.



Bluetooth thermal printer - code: 1.422

The small and handy Bluetooth thermal printer allows you to print the values and graphs of the last roughness measurement carried out or of the memo that we have saved in the instrument

Equipped with a battery, it can be recharged by connecting it to any USB port thanks to the supplied cable.



Roughness Studio APP for Android and Windows devices - Basic APP code: 1.423 - Premium APP code: 1.42

With the standard Roughness Studio APP, the instrument can be connected to an Android or Windows device and allows you to download measurement data in real time or at a later time from the internal memory of the roughness tester.

In addition, the APP allows the creation of diversified measurement codes for each type of product with different measurement settings, it automatically synchronizes the instrument's date and time and allows the measurement to be started remotely. The connection is made via Bluetooth or USB cable, the latter guarantees to perform measurements while the instrument recharges the battery.

Roughness Studio APP for Android or Windows devices - Basic version code: 1.423 - Premium version code: 1.424



Probe SB21 - code: 1.704 Probe SB31 - code: 1.705

Probe SB121 - code: 1.710

Probe SB51 - code: 1.706

Extension: 50 or 100 mm











Technical data and dimensions

Product code: LITEsurf (code: 1.110) Measuring range: 250 um (+ 50 um -200 um)

Resolution: 0,001 µm 1° ISO/DIN Accuracy class:

0.25 - 0.8 - 2.5 mm Cut-off length: Selectable from 1 to 5 Number of cut-off:

Exploration travel: Until 17,5 mm

Probe: Optical transduction system, 90° rotable for lateral measurements

8 parameters (on board)

ISO: Ra, Rq, Rt, Rz, Rc, Rmax, RSm, RPc, MOTIF: Pt, R, AR, Rx, Ppc

44 parameters (with APP Roughness Studio PREMIUM) Measurement parameters:

ISO: Ra, Rq, Rt, Rz, Rp, Rv, Rc, Rsk, Rku, RSm, RAq, RAa, Rmax, Roc, Rmr, RPc, RLo, Rlr, Rzjis, RHSC, R3z, hp, Ep

JIS: Ra, Rq, Ry, RzJIS, tp, RSm, S ASME: Rp, Rpm, RPc, Rsk, tp

MOTIF: R, AR, Rx Rke, Rpke, Rvke, Mr1e, Mr2e, A1e, A2e

Millimeters and inches Unit of measure:

Monochrome OLED display and 3 waterproof membrane buttons Interface:

Italian, French, English, German, Spanish, Portuguese Language:

Memory: Approx.18000 parameters only (0,8mm x 5) - Approx.30 with profile (0,8mm x 5)

Autonomy: 10 hours of work and at least 300 measurements

Integrated Bluetooth and USB, connection to Smartphone, Tablet and PC Connectivity:

LITEsurf roughness tester, USB charger, USB type C cable, 8mm diameter tail piece for mounting on the stand, Standard equipment:

roughness specimen, transport case, user manual



