

ROUGHNESS STUDIO APP



The LITEsurf can be connected to the Roughness Studio application. The software can be installed on portable devices (tablet and smartphone) and even on a PC; it allows to extend the instrument functionalities. The basic version of the application Roughness Studio, freely available, allows to interactively view the roughness chart just measured, creating customized reports in A4 format with descriptions, notes and a picture of the measured particular. This report can be transformed in Pdf or Excel format, making it shareable right away through email or the new channels (WhatsApp, Google Drive, Dropbox, ...)

Thanks to the big storage capabilities of the modern devices, the number of measures that you can store inside the App is practically unlimited. This, combined to an archive based on a modern database, allows to retrieve just as easily the measures done in previous lots.

The Premium version of the application calculates 44 roughness parameters, just like a laboratory roughness tester and integrates the statistics module into the internal database.

This advanced version allows to further extend the LITEsurf functionalities, having the possibility to select more cut-off lengths and more cut-off numbers than those available on the instrument.

The measures that have been archived inside the App can be re processed with the current App settings with a recalculation; it is pretty comfortable to recalculate with different settings without making the measurement twice!

With the function "Best Cut-Off" the instrument is able to select the best measurement settings according to the surface in analysis following the ISO 4288 standard. This allows also to novices to always perform correct measures.

Doubts on a roughness parameter you see on the screen? Just click on it to make appear the textual and graphical explanation of the parameter. A nice help!



The LITEsurf roughness tester (code 1.110) is supplied inside a robust and elegant suitcase that contains the instrument, the calibration specimen, the power supply and USB cable, the Ø8mm pin for fixing it onto the stand, the USB pen with the calibration certificate, the instruction manual and the basic version of the Roughness Studio App.

www.sm-instruments.com
info@sm-instruments.com

SM s.r.l.
Via Brandizzo 182,
10088 VOLPIANO (TO)

Tel. +39 0119953753
Fax. +39 0119953754



ROUGHNESS TESTER LITEsurf



WHY CHOOSING LITEsurf

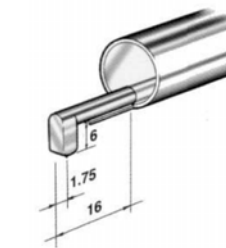
TECHNICAL SPECIFICATIONS

USE CASES



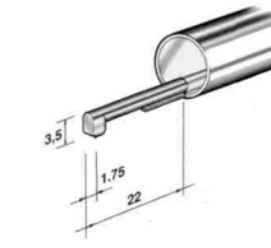
INTERCHANGEABLE PROBES

SB21



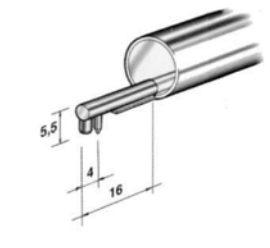
Code 1.704
For plane surfaces, throats and shoulders. Max depth 5 mm.

SB31



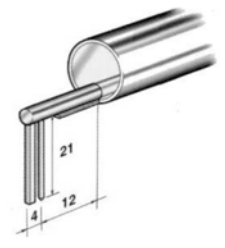
Code 1.705
For planes and holes. Hole Ø minimum 4 mm, max depth 20 mm.

SB51



Code 1.706
With fore skid, for plane or concave surfaces, ideal to measure at 90°.

SB121



Code 1.710
For throats and grooves, max depth 20 mm.

ACCESSORIES

1.707 Extension 50 mm



Extends the length of the probe by 50 mm to measure in less accessible areas.

1.708 Extension 100 mm



Extends the length of the probe by 100 mm to measure in less accessible areas.

1.422 Portable printer



Portable thermal printer with Bluetooth connection to print parameters and charts of the measure.

1.424 App Roughness Studio Premium



Premium version, it allows to have a greater number of calculated parameters, the statistics, the reports customization, codes management and extended measure settings.

1.400 STI stand



Granit basement 400x250 mm and positioning column, maximum measuring height respect to the plane: h=150 mm.

Measuring range X	17,5 mm
Measuring range Y	250 µm (+ 50 µm -200 µm)
Resolution	1 nm
Filter	Gauss
Number of cut-off	1-2-3-4-5
Length of cut-off	0,25 - 0,8 - 2,5 mm
Speed	0,5 - 1 mm/s
λs	λc/λs: 30-100-300 (according to standard ISO 3274)
Travel length with MOTIF	1,5 - 2,5 - 4 - 8 - 12 - 16 mm
Calibration	Ra (ISO, single) - R (MOTIF, single)
Saving	About 18000 parameters only (0,8x5), about 30 with profile (0,8x5)
Autonomy	800 measures 0,8x5
Weight	200 g
Dimensions	160 x 34 x 33,5 mm
Languages	English, French, German, Italian
Parameters	ISO 4287: Ra, Rq, Rt, Rz, Rc, Rmax, RSm, RPc ISO 12085: Pt, R, AR, Rx, Ppc
Interface	OLED display Monochromatic 128x64
Probe	Optical rotatable 90° for lateral measurements
Diamond	90° - 2µm
Precision class	1° according to ISO 3274



AUTONOMY

How many times the battery-powered devices are discharged when you need them? We know this as well, this is why the LITEsurf has got a sophisticated charging management system that takes 50 minutes to reach the full charge and guarantees 10 work hours and at least 800 measurements. You don't have this long? Just charge it for 2 minutes and you will be able to make at least 20 measurements. The life of the instrument's internal battery? It has been designed to live at least 5 years with a daily usage, and furthermore it is not necessary to have a dedicated battery charger because you can charge it with the same cable you use for your smartphone or your tablet (USB type C). A pretty simplification, isn't it?

WEIGHT

The weight of this new instrument is 200g, practically impossible to find a lighter and more compact roughness tester. Two characteristics that make it extremely handy.

FLEXIBILITY

Do you want to measure with a single instrument horizontal or vertical particular, upside/down or laterally (for example throats), many would answer it's impossible, but the LITEsurf can do all of this. Through the 90° rotating probe and the balanced and preloaded sensor every area of the piece is measurable.

CONNECTIVITY

Today the technology allows us to share in a simple way the information. Will your new roughness tester do it? The new LITEsurf, thanks to the integrated Bluetooth and USB connections, allows to connect to smartphone, tablet and PC in intuitive and quick manner, sharing information with the rest of the world.

MOBILITY

The dimensions of the LITEsurf roughness tester are the most compact of all competitors; you will hardly find a smaller roughness tester, completely integrated, than this. The compact dimensions guarantee mobility and absolute ease of use, even in the toughest measuring conditions.

REPORTS

Do you need to generate customized reports with company logo, description, notes and even a photo of the measured particular, and then saving them to a standard format like Pdf or Excel for easy sharing? Many offer additional payed software, maybe not so flexible; the LITEsurf can connect to an external device like your smartphone or tablet with the free Roughness Studio App installed, and can do all of this with simplicity.

RELIABILITY

What if we said that your future roughness tester is accidental fall-proof? Many would look at us perplexed! The LITEsurf thanks to a light alloy machined from solid, combined with a body in PC/ABS that guarantee high stiffness and high resistance to impacts. This instrument is not afraid of bumps and falls, so it is suited to production places and withstands the accidents of use.