

Portable Surface Roughness Tester

TR200

- Graphical display on large LCD
- Very complete instrument
- Pickup stylus position indicator
- 13 different roughness parameters
- Auto-off after 5 minutes with auto-store
- Display 6 languages, English, French, German, Italian, Spanish and Dutch
- Data output RS232 to optional printer TA220 or PC
- Excellent battery power with Li-Ion technology



STANDARD CONFIGURATION INCLUDES:

- Main unit
- Detector TS100
- Roughness test plate
- Steel support for stand alone use
- Interface cable
- Charger 220V / 110V, 50 Hz
- Screw driver
- Suitcase
- Instructions Manual
- Certificate

Initial Display

- Roughness Parameter Display
- Roughness Profile Display

Material Bearing Ratio Curve Display

- Data Output RS232 and
- Charger input
- Extra start button easy accessible for hand-held operation nical Specifications

Roughness parameters

Ra, Rz, Ry, Rq, Rt, Rp, Rmax, Rm, R3z, S, Sm, Sk, tp

Assessed profiles

Primary profile (P), Roughness profile (R), tp curve (material ratio Mr)

Profile recording magnification

Vv:200x — 20000x Vh:20x, 50x, 200x

Standard

Conform ISO/DIN/JIS/ANSI

Measuring system

Metric µm, Imperial µinch

Display resolution

0.001 µm/ 0.04 µinch

Display

LCD 128 x 64 dot-matrix, with backlight

Dimensions of LCD

50 x 30 mm screen

Display features:

- Detector stylus position indicator
- Battery level indicator
- Direct display of parameters and profiles
- Direct printing
- LCD brightness adjustment
- Auto-off after 5 minutes with auto-store
- Calibration through software (each cut-off)

Display languages

English, French, Spanish, German, Italian, Dutch

Data output

RS-232, direct to printer TA220 or PC

Range

- Ra, Rq: 0.01 - 40 µm
- Rz, Ry, Rp, Rt, R3z: 0.02 - 160 µm
- Sm, S: 2 - 4000 µm
- tp: 1 - 100% (%Ry)

Cut-off length

0.25mm/0.8mm/2.5mm

Evaluation length Ln

1-5 cut-off

Tracing length Lt

(1-5 cut-off) +2 cut-off

Digital filter

RC, PC-RC, Gaussian, D-P

Detector

Standard model TS100, inductive, Diamond tip radius 5 µm

Bores from diameter

6.0 mm, depth 15mm (TS100)

Power

Li-Ion Battery, rechargeable

Battery capacity

1000mAh (>3000 measurements)

Charger

220V/110V, 50 Hz

Operating temperature

5-40 degrees Centigrade

Dimensions

141mm x 56mm x 48mm

Weight

440 g



Initial Display



Roughness Parameter Display



Roughness Profile Display



Material Bearing Ratio Curve Display



Data Output RS232 and Charger input



Extra start button easy accessible for hand-held operation

TR-200 Accessories

TA-610 Measuring Platform

TA-610 measurement stand can adjust the positions between the tester and measured part conveniently with flexible and stable operation and wider application range. Roughness of complex shapes can also be measured. TA-610 measurement stand enables the adjustment of the position of position of stylus to be more precise and measurement to be more stable. If Ra value of a measured surface is relatively low, using the measurement platform is recommended.

- Solid Stand for stationary measurements with surface roughness tester TR-200
- Robust vertical column for vibration free measurements
- Swivel holder can be adjusted in any direction to align the pick-up with the work piece surface
- Granite table with high grade 00
- Work piece height on table maximum 270mm
- Fine adjustment for optimal positioning of detector stylus

TECHNICAL SPECIFICATIONS

Holder	Suitable for fixation of drive units of TR-200 roughness tester
Positioning	Inclination, swivel in any direction
Column	height 350mm
Maximum specimen height	270mm
Height	By hand wheel adjustment
Fine adjustment	20mm
Granite plate	Grade 00
Dimensions Granite table	400mmx250mm
Total height	Table and stand 420mm
Weight	21kg (including column 5.7kg)



PICK-UPS AND EXTENSIONS

TS100 Standard pick-up with skid for roughness tests on plane surfaces, shafts and in bores from 5mm diameter. Maximum bore depth 22mm.

TS110 Pick up with side for roughness tests on convex and concave surfaces. Minimum bore diameter 8mm, maximum bore depth 20mm.

TS120 Pick up with mini-skid for roughness tests for in bores from 2mm. Maximum bore depth 9mm.

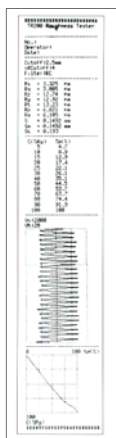
TSE-A extension

Extension rod for all pick-ups. Length 50mm. Diameter 10mm.

TSE-B extension 90°

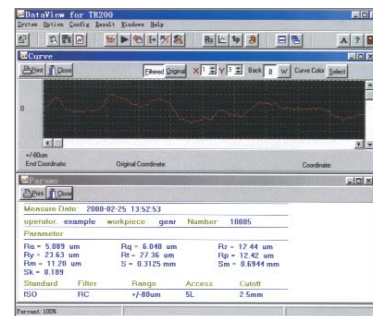
Extension rod with angle 90°, to create a configuration for roughness test on for instance crankshafts. Length 70mmx25mm, diameter 10mm.

TA-220 Micro Printer Data View for TR-200



TA220 Mini-printer is a multifunctional intelligent printer, capable of rapid and accurate printing of characters and graphs. It features small size, a full range of functions including calculation, clock and recharging functions, simple operation and easy connection. The built-in rechargeable batteries make it easy to carry and work in any work environment.

Dataview is designed for the TR200



Surface Roughness Tester, so that you may complete all the operations without touching any buttons on the TR200. With this software, you may also view the profile graph clearly and conveniently. In addition, you can transfer and store data of measurements into any PC.