

SURFACE ROUGHNESS TESTER TR-200™

Handheld menu operated surface roughness tester, 13 roughness parameters, graphic display

- High performance instrument
- Easy to operate menu software
- Graphical display on large LCD
- 13 different roughness parameters
- Pick-up stylus position indicator
- Auto-off after 5 minutes, with auto-store
- Selectable language English, German, French, Italian, Spanish and Dutch
- Data output RS-232 to printer TA-220 or PC
- Excellent battery power with Li-ion technology



Technical specifications

Roughness parameter	Ra, Rz, Ry, Rq, Rt, Rp, Rmax, Rv, R3z, RS, RSm, RSk, Rmr, P
Assessed profiles	Primary profile (P), Roughness profile (R), Tp curve (material ratio Mr)
Profile recording magnification	Vv: 200x ~ 20000x, Vh: 20x, 50x, 200x
Standard	Conforms to ISO/DIN/JIS/ANSI (menu selectable)
Measuring system	Metric mm, imperial inch
Display resolution	0.001µm / 0.04 pinch
Display	LCD 128 x 64 dot-matrix, with back-light
Dimensions LCD	50mm x 30mm 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, German, French, Italian, Spanish, Dutch
Data output	RS-232; direct to printer TA-220 or PC
Range	Ra, Rq : 0.005 - 16µm Rz, Ry, Rp, Rt, R3z : 0.02 - 160µm RSm, RS : 2 - 4000µm 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, GAUSS, D-P
Detector	Standard model TS-100, Inductive, Diamond tip radius 5µm
Bores from diameter	6.0mm, depth 15mm (TS-100)
Power	Li-ion battery rechargeable
Battery capacity	1000mAh (>3000 measurements)
Charger	220V, 50Hz
Operating temperature	0°C ~ 40°C
Dimensions unit	141mm x 56mm x 48mm
Weight	480gr

Standard delivery

- Main unit
- Detector TS-100
- Roughness test plate Ra
- Protection nose
- Steel support for stand alone use
- Charger 220V, 50Hz
- Screwdriver
- Carrying case
- Data cable
- Manual
- Certificate

Optional accessories

- Special detectors for grooves/small bores; Detector TS-110, detector TS-120
- Extension TSE-A
- Extension TSE-B 90°
- UKAS certified reference standards
- TA-610 test platform
- Steel adapter (ø 8mm)
- Steel adapter for connection to platform TA-610 (L-attachment)
- TA-220 printer

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TS-100

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

TS-110

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

TS-120

Pick-up with mini-skid for finish 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 finish test on for instance crankshafts. Length 70mm x 25mm, diameter 10mm.

TS-100/TS-110/TS-120



TSE-A



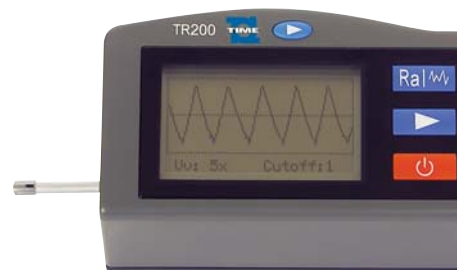
TSE-B



Initial display



Finish parameter display



Finish profile display



Material bearing ratio curve display



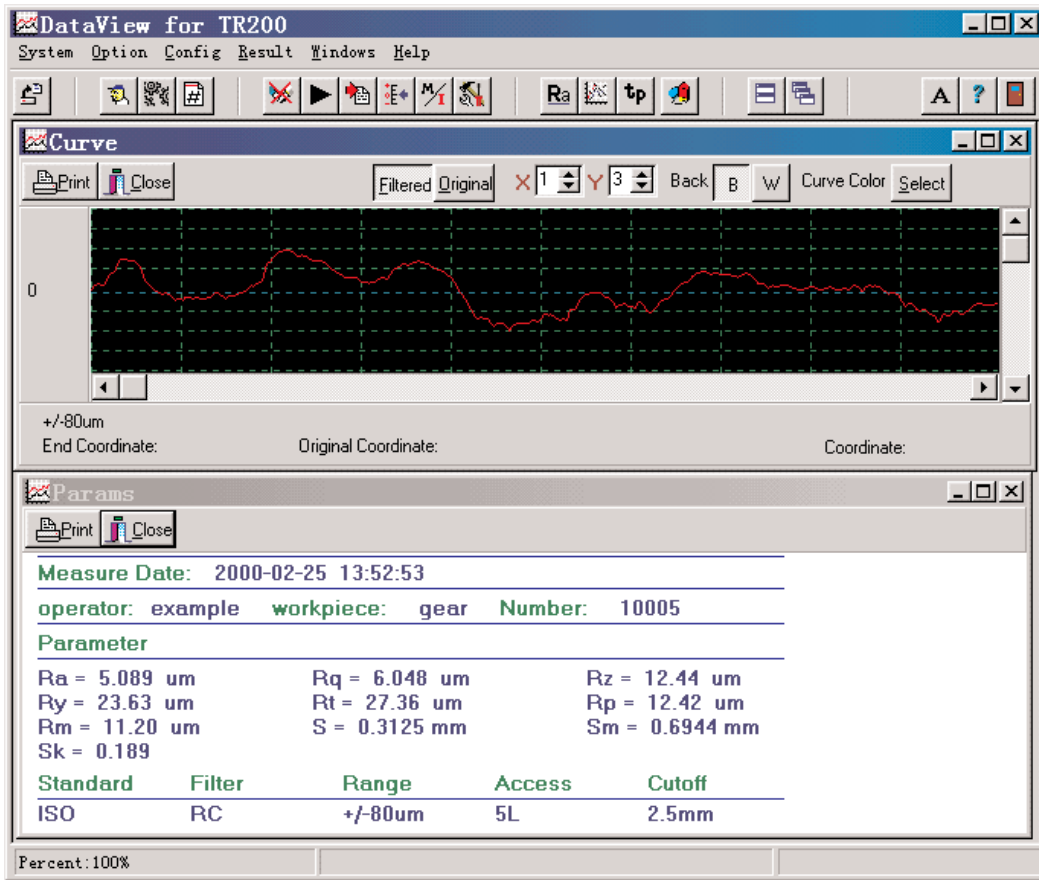
Data output RS-232 and charger input at back side



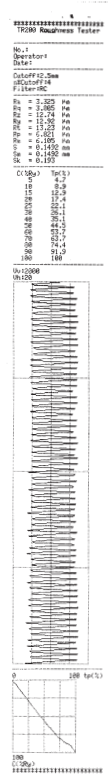
Extra start button easy accessible for hand held operation

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Print of TR-200 by TA-220



Holder for attachment of TR-200/210/220 unit to TA-610 stationary test platform

TA-610
Granite stand



TA-220
Micro printer for TR-200/TR-210/TR-220/TR-300