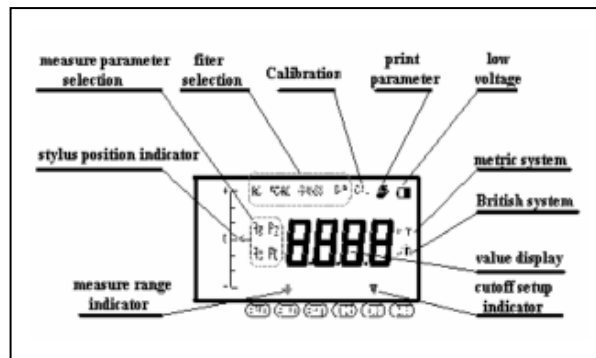


# Surface Roughness Tester TR210



- Extremely easy operation!
- 4 different roughness parameters
- Optional pickup for groove, bores and holes.
- Data output RS232 to printer TA220S or PC
- Li-ion rechargeable Battery
- Standard conform to ISO



## Technical specifications

Parameters	Ra, Rz, Ry, Rq,
Assessed profiles	Roughness profile (R)
Measuring system	Metric, imperial
Display resolution	0.001 $\mu$ m/ 0.04 $\mu$ inch
Display	LCD 128 x 64 dot-matrix, with backlight
Dimensions of LCD	50 x 30mm screen
Display features	Pickup stylus position indicator
	Direct display of parameters
	Direct printing
	Auto-off after 5 minutes with auto-store
	Calibration through software
Data output	RS232; direct to printer TA220S or PC
Measuring Range	Ra: 0.005~16 $\mu$ m
	Rz: 0.02-160 $\mu$ m
Cutoff length	0.25mm / 0.8mm / 2.5mm
Tracing length	1~5 cut-off (selectable)
Digital filter	RC, PC-RC, GAUSS, D-P
Pickup	Standard model TS100, inductive, Diamond tip radius 5 $\mu$
Bores from diameter	6.0mm, depth 15mm (TS100 )
Power	Li-ion battery rechargeable
Charger	220V / 110V, 50Hz, 2.5 hours (charging time)
Working temperature	5-40 $^{\circ}$ C
Relative humidity	<80%
Storing temperature	-25 $^{\circ}$ C -60 $^{\circ}$ C
Ventilation	Grade 3
Dimensions	140mm $\times$ 52mm $\times$ 48mm
Weight	440g

### Standard delivery

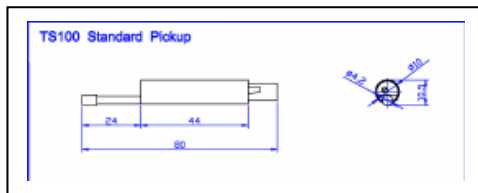
- Main unit
- Protection nose
- Standard Pickup TS100
- Specimen Ra
- Steel support
- Charger
- Screwdriver
- Instruction manual
- TIME certificate
- Warranty card
- Carrying case

### Optional accessories

- Pickup TS110, TS120, TS130 and TS131
- Measuring platform TA610/ TA620/TA630 /TA631
- Printer TA220S
- Steel adapter (8mm) for universal stand
- Steel adapter for connection to platform TA610 / TA620 / TA630
- Extension rod
- Interface cable

# Optional Accessories for TR200/210/220

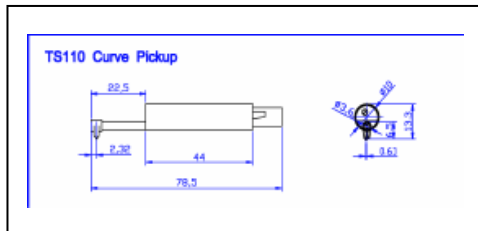
## Pickup



### TS100

#### Standard pickup

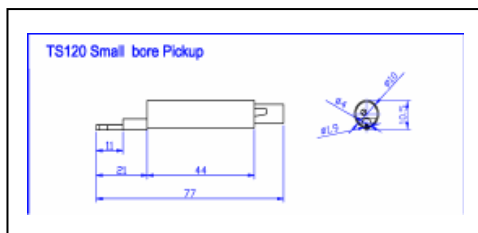
With skid for roughness tests on plane surface, shafts and in bores from 5mm diameter. Maximum bore depth 22mm.



### TS110

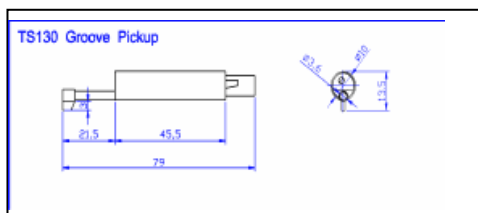
Pickup with side skid for roughness tests on convex and concave surfaces. Minimum bore diameter 8mm, maximum bore depth 20mm.

To be used with TA610 / TA620



### TS120

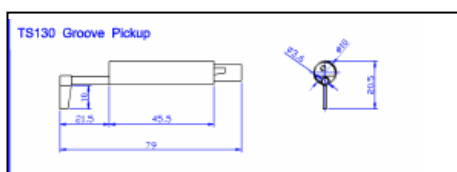
Pickup with mini-skid for roughness tests for in bores from 2mm. Maximum bore depth 9mm.



### TS130

Measure surface roughness of deep groove or step below 3mm, other function is the same to TS100

To be used with TA610 / TA620



### TS131

Measure surface roughness of deep groove or step below 10mm, other function is the same to TS100

To be used with TA610 / TA620

## Platform



### TA610 Measuring Platform

#### Specifications:

Surface Dimension: 400 x 250 mm

X-axial range: 28 mm

Y-axial range: 270 mm

Z-axial range: 40 mm

Vertical rotate range:  $\leq \pm 90^\circ$

Level rotate range:  $\leq \pm 25^\circ$

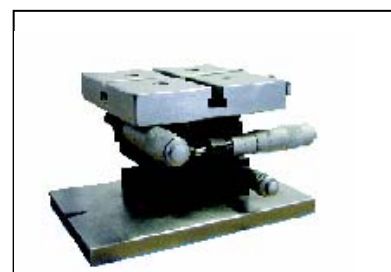


### TA620 Measuring Platform

#### Specifications:

Surface Dimension: 400 x 250 mm

Y-axial range: 300 mm



### TA630 / TA631 Micro Measuring Support

#### Specifications:

X-axial range: 12.5mm

Y-axial range: 12.5mm

Z-axial range: 40mm

Level rotate range:  $360^\circ$

Level:  $0 \sim 5^\circ$  (only for TA631)