

# TIME® 3200/3202

## SURFACE ROUGHNESS TESTER

### Standard Delivery

●Main unit	1	●Steel support	1
●TS100 standard pickup	1	●Dataview	1
●Roughness test plate Ra	1	●Communication cable	1
●Charger	1	●TIME certificate	1
●Protection nose	1	●Warranty card	1
		●Instruction manual	1

### Optional Accessory

- TS110 pickup for curved surface
- TS120 pickup for small holes
- TS130 pickup for deep grooves
- TS140 right-angled pickup
- Measuring platform TIMEA202
- Leveling table TA630/TA631
- Magnetic stand
- Steel adapter (Φ8)
- Steel adapter (L-attachment)

### Features

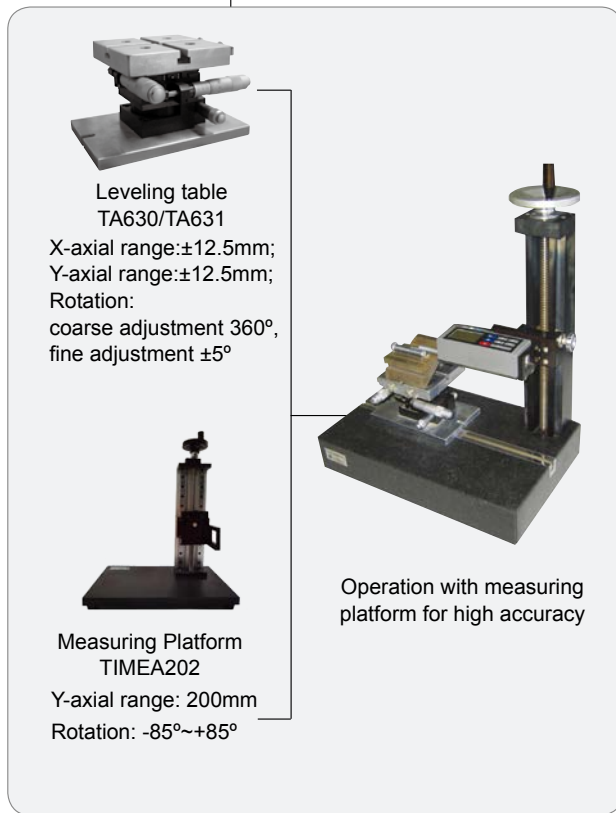
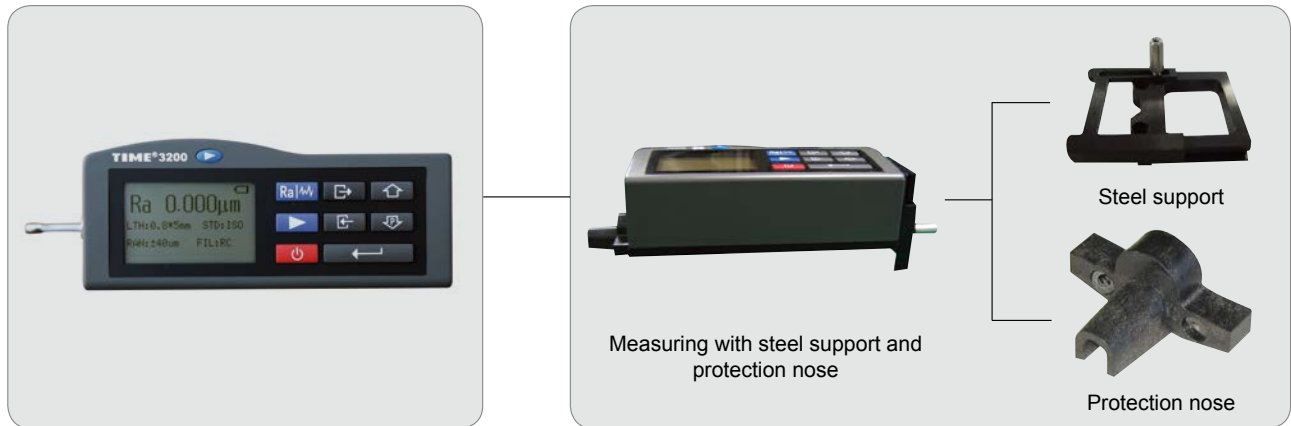
- Over dozen measurement parameters applicable for roughness test of various mechanical manufacturing processes in production lines, workshops and labs.
- High accuracy inductive pickup
- Easy operation manual and large LCD display with backlight.
- Pickup stylus position indicator.
- Transfer to PC via RS232 with advanced PC Software TIMESurf for more analyzing management.
- Connected with printer to print the data and graphs on-site.
- Storage and review function for up to 15 groups data and graphs.
- Rk data and graphic are available.
- Digital filter: RC, PC-RC, Gauss, D-P
- Optional delicate accessories for more accurate results and easier operation eg. measuring platform, steel support and so on
- Conform to ISO standard, compatible with DIN, ANSI and JIS standard.
- Top quality Li-ion rechargeable battery.



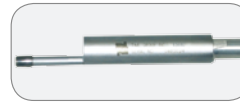
### Technical Specification

Model	TIME®3200	TIME®3202
Roughness parameters	Ra, Rz, Ry, Rq, Rt, Rp, Rmax, Rv, R3z, RS, RSm, RSk, Rmr,	Ra, Rz, Ry, Rq, Rt, Rp, Rmax, Rv, R3z, RS, RSm, RSk, Rmr, Rpc, Rk, Rpk, Rvk, Mr1, Mr2
Assessed profiles	Roughness profile (R)	
	Primary profile (P)	Primary profile (P)
Measuring system	Metric, imperial	
Display resolution	0.001 µ m	
Data output	RS232	
Pickup measuring range	±20µ m, ±40µ m, ±80µ m	
Cutoff length (L)	0.25mm / 0.8mm / 2.5mm/Auto	
Evaluation length	1~5L (selectable)	1~5L (selectable)
Tracing length	3-7L(selectable)	3-7L(selectable)
Digital filter	RC, PC-RC, Gauss, D-P	
Max. tracing length	17.5mm/0.71inch	
Min. tracing length	1.3mm/0.052inch	
Pick-up	Standard pickup TS100, inductive, diamond stylus radius 5µm, angle of stylus 90°	
Tolerance	≤±10%	
Repeatability	≤6%	
Power	Li-ion battery rechargeable	
Dimensions (mm)	140×52×48	
Weight (g)	440	440

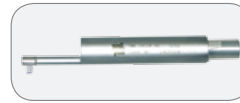
## System Diagram



## Pickups Optionals



**TS100 standard pickup**  
With skid for roughness test on plane surface, shaft and inner surface of holes with max. depth of 22mm, min diameter 5mm



**TS110 pickup for curved surface**  
Used for roughness testing of curved surface with min curvature radius 3mm, working with measuring platform TIMEA202



**TS120 pickup for small holes**  
Used for roughness testing of small holes with min. 2mm diameter of inner surface, max. depth 9mm



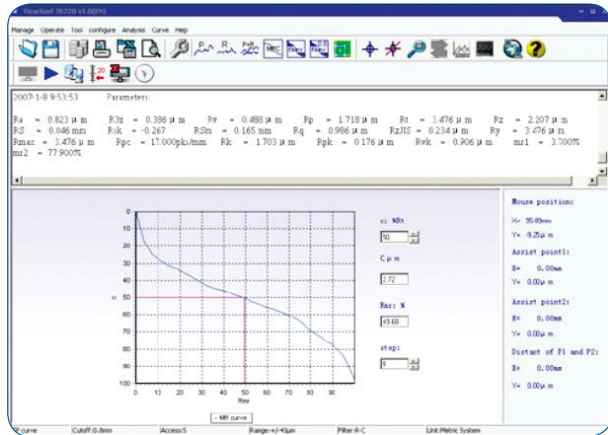
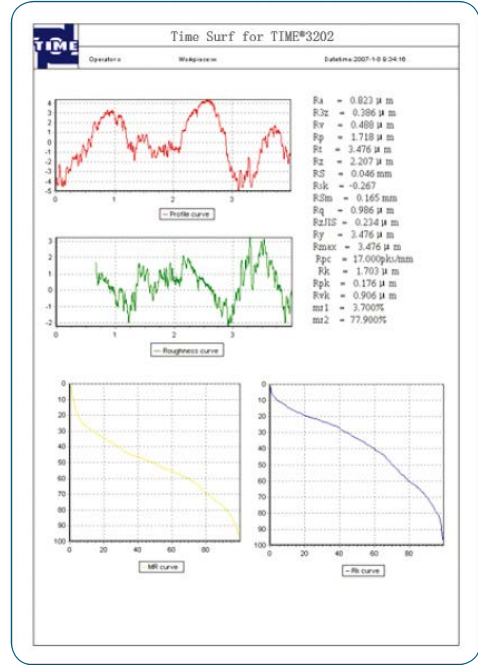
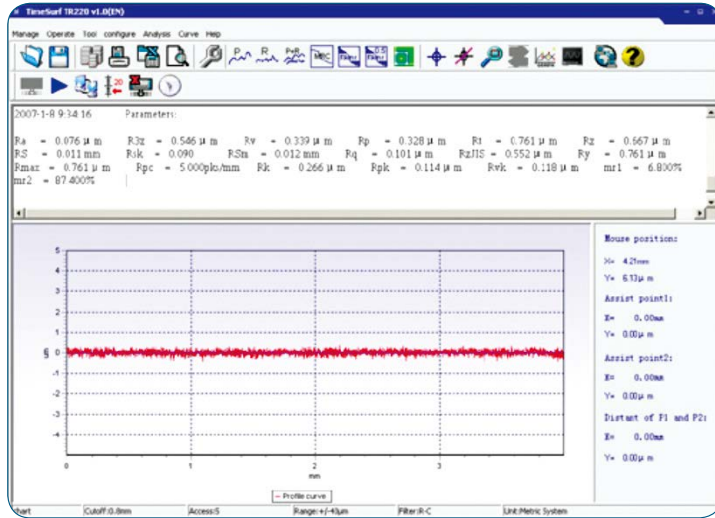
**TS130/131 pickup for deep grooves**  
TS130: Used for roughness testing of deep groove with min. width 2mm, max. depth 3mm or of step with max. height 3mm,  
TS131: Used for roughness testing of deep groove with min. width 3mm, max. depth 10mm or of step with max. height 10mm, working with measuring platform TIMEA202



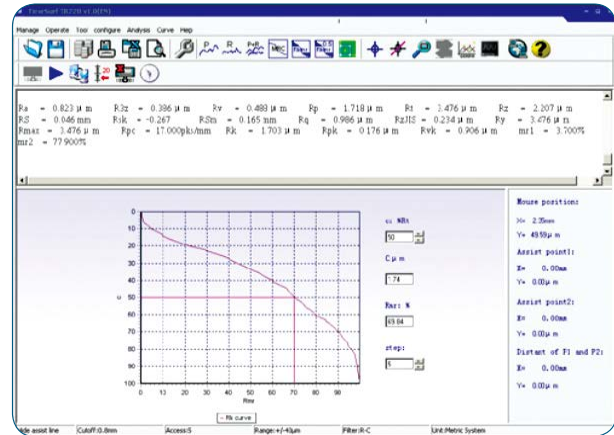
**TS140 right-angled pickup**  
Comprising right-angled pickup and right-angled transmit rod, used for roughness testing of groove and crank with min. width 7.5mm~20mm, and of steps with max. height 2.5mm, working with TIMEA202

# TIMESurf for TIME®3200/3202

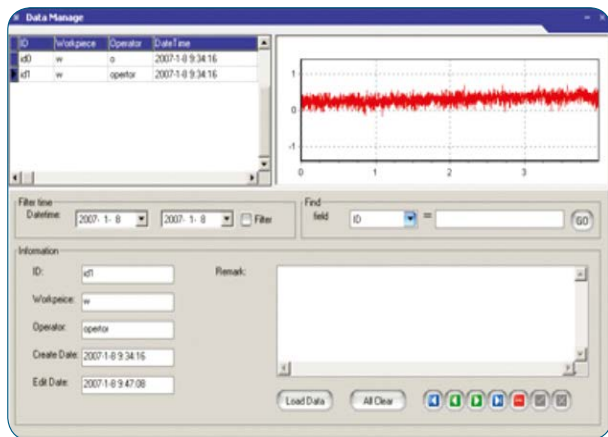
Software works for advanced surface roughness tester TIME®3200/3202 managing, analyzing, printing and searching measured data and graphs



MR curve



RK curve



Database management

The screenshot shows the 'Online' measurement form in the TIMESurf software. It contains the following input fields:

- Sample interval time: 4 min
- Operator: operator
- Workpiece: workname
- Sample times: 3 times
- State: (empty field)

At the bottom of the form, there are 'Start' and 'Cancel' buttons.

Online measurement