
HST-330 High-precision surface roughness tester (22 parameters)



Overview:

HST-330 Precision Roughness Tester is a high-precision surface finish testing instrument that can measure the roughness of various machined parts surfaces, including planes, bevels, outer cylindrical surfaces, curved surfaces, small holes, grooves and axles.

Main Features:

- Mechatronic design, small size, light weight and easy to use;
- Use DSP chip for control and data processing, fast speed and low power consumption;

Compatible with multiple national standards such as ISO, DIN, ANSI and JIS;

- Continuous working time is more than 20 hours

Ultra-large data storage capacity, capable of storing 100 sets of original data and waveforms.

Real-time clock setting and display, convenient for data recording and storage.

- With power saving functions such as automatic sleep and automatic shutdown

Reliable anti-motor dead circuit and software design

Display measurement information, menu prompt information, error information, power on/off and other prompt information;

- Chinese/English language selection;

Can be connected to computer and printer;

Print all parameters or print any parameters set by the user. (Display and print all parameter values, support

rate curve, waveform)

Optional Bluetooth function.

• Optional accessories include curved surface sensor, small hole sensor, measuring platform, sensor sheath, extension rod, etc.

Technical Parameters

Item HST-330		Specification
Measurement scope	Z-axis (vertical)	160 μm
	X-axis (level)	17.5mm
Resolution	Z-axis (vertical)	0.01 μm / ± 20 μm
		0.02 μm / ± 40 μm
		0.04 μm / ± 80 μm
Measurement project	parameter	Ra Rz==Ry(JIS) Rq Rt==Rmax Rp Rv R3z R3y Rz(JIS) Rs Rsk Rku Rsm Rmr RPc Rk Rpk Rvk Mr1 Mr2
	standard	ISO,ANSI,DIN,JIS
	Graphics	Bearing ratio curve, roughness profile, direct profile
filter		RC, PC-RC, Gauss, DP
Sampling length (l r)		0.25,0.8,2.5mm
Evaluation length (l n)		L n = l r × nn = 1~5
sensor	Measuring principle	Displacement Differential Inductor
	Contact pin	Natural diamond, 90° cone angle, 5 μm \ 2 μm tip radius
	Force measurement	<4mN
	Guide head	Carbide, sliding radius 40mm
	Gliding speed	l r=0.25, Vt=0.135mm /s
		l r=0.8, Vt= 0.5mm/s
		l r=2.5, Vt= 1mm/s
		Return Vt = 1mm/s
Indication error		No more than ±10%
Indication variability		No more than 6%
power supply		Built-in lithium-ion rechargeable battery, charged with DC5V, 800mA charger
Dimensions		158x63.5x46mm
weight		About 300 g

Work Environment	temperature:- 20 °C ~ 40 °C Humidity: < 90% RH
Storage and transportation environment	temperature:- 40 °C ~ 60 °C Humidity: < 90% RH

Measuring range

parameter	Display Range
Ra,R	0.005 μm ~ 16 μm
Rz,R3z,Ry,Rt,Rp,Rm	0.02 μm ~ 160 μm
R	0 ~ 100%
R S, R Sm	1 mm
tp	0 ~ 100%

Standard Configuration:

- 330 Roughness tester host 1 set
- 1 sensor as standard
- 1 multi-line standard block
- Adjustable bracket 1
- Power adapter 1 set
- 1 instruction manual
- 1 certificate

Warranty card 1

Warranty period : Two years



