Leeb®
Testing Instrument

LeebS480
Surface Roughness Tester

Measure the Roughness / Waviness
Carried standards **ISO, DIN, JIS, ANSI**

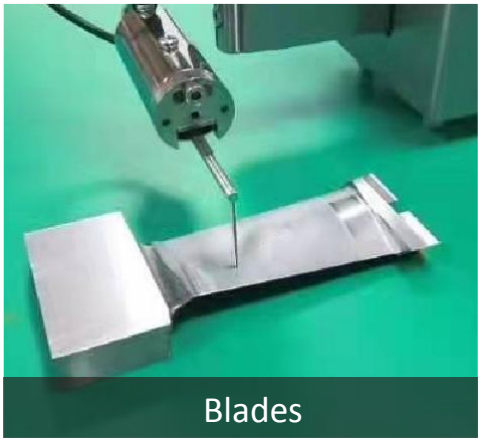
Equipped with Industrial PAD
Wired connection or WIFI connection available

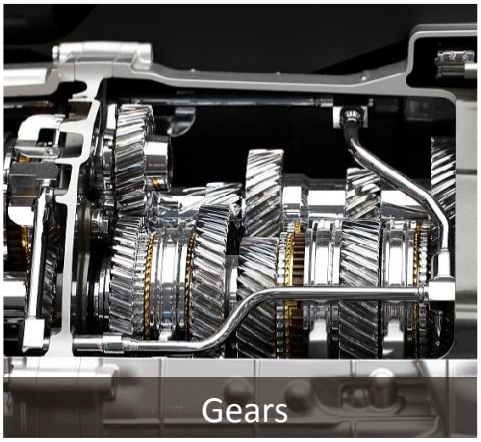
Application Cases


Bearing


Automobile piston


Connecting rod


Blades

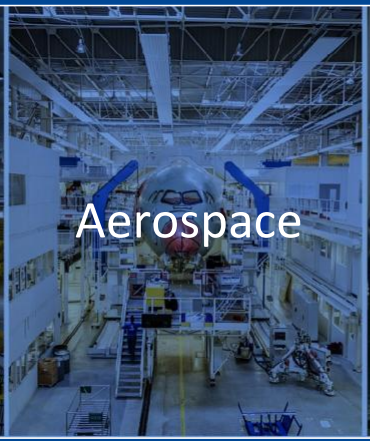

Gears


Gearbox spindle

It is suitable for measuring all high-precision mechanical production or processing processes

Application industry


Automobile manufacturing


Aerospace


Hardware Accessories


Production machinery

Product Briefing

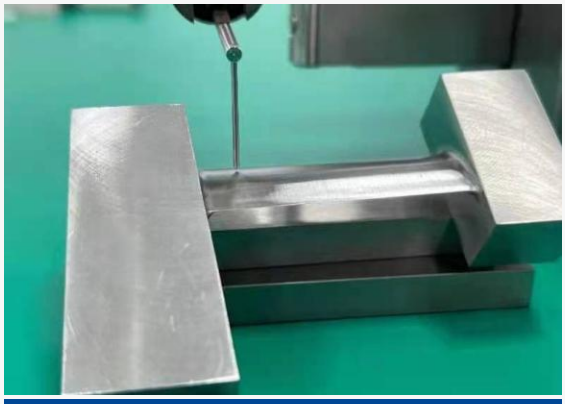
LeebS480 roughness tester is a product that fully conforms to the latest ISO, DIN, JIS, ANSI international standards. It is a multi-purpose portable instrument for evaluating the surface quality of parts. It has multiple parameters that meet multiple national standards and international standards. It can evaluate the surface roughness, waviness and primary profile of various parts. It can measure the plane, outer cylinder surface, inner hole surface and bearing channel. The surface roughness meter has the characteristics of large measurement range, stable performance and high accuracy. It is suitable for production site, scientific research laboratory and enterprise measurement room. According to the selected measurement conditions, the corresponding parameters are calculated. The measurement results can be displayed digitally and graphically on the LCD touch screen industrial pad. The instrument calculates the parameters on the two profiles of filter profile and direct profile.

The instrument can also be connected to the computer and printer. The special analysis software can directly control the measurement operation and provide powerful analysis functions.

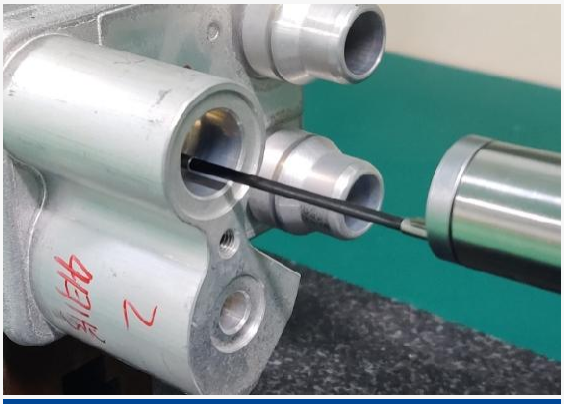
Product Features

- The scratch depth can be measured
- 1000μm large measurement range inductive sensor (2000μm available)
- It is for measuring Roughness profile, Waviness profile, Primary profile, Abbott curve and Motif
- There are two measurement methods with guide head and without guide head
- The sensor and the host are connected through the sensor lifting frame, and the height of the sensor can be adjusted without the aid of a platform
- Chinese / English language can be selected

Hub bearing unit measurement



Blade measurement



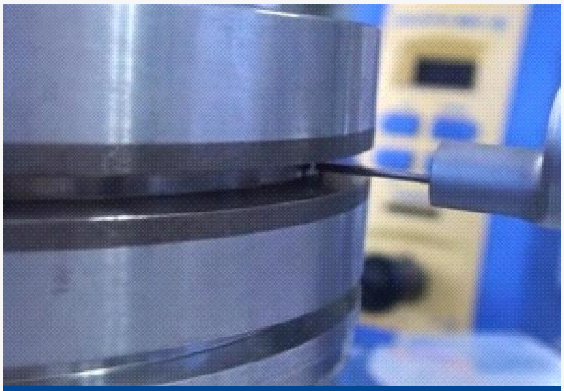
Cooling radiator

Engine cylinder cover

Inner raceway measurement

Tooth surface measurement

Concave R angle Measurement

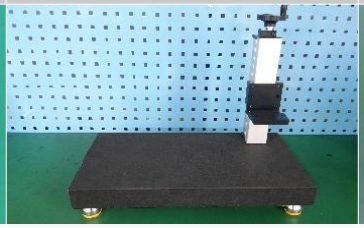
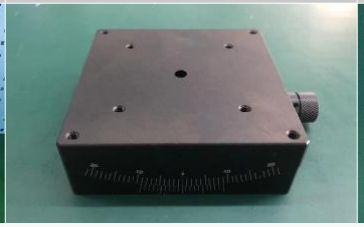
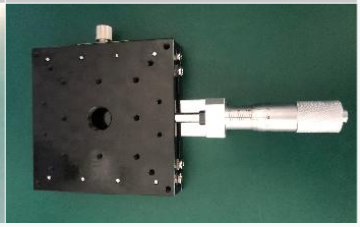


Narrow groove side measurement (piston)

Standard Configuration

Name	Specification	Remarks	Quantity
Host	Stroke 50mm		1
Sensor	Measuring range 1000μm		1
Standard Stylus	5mm		1
Standard Test Block			1
Industrial Pad	10 inches		1
Pad Charger			1
Host charger			1
Connection Cable	2m		1
Certificate			1
Manual			1
Warranty Card			1
Instrument Box			1
Tools			1set

Optional Accessories

5~25mm deep groove stylus	Marble lifting platform	Angle adjustment table	Fine-tuning platform
			

Technical Specifications

Model		LeebS480
Range	X direction	50mm
	Z direction	1000μm (2000μm is available)
Resolution	X direction	0.0016μm/±50μm -0.016μm/±500μm
Driver	Straightness	1μm/50mm
Carried Standards		JIS-82、JIS-87、JIS-94、JIS-01、JIS-13、ISO-84、ISO-97、DIN-90、ASME-95、GB-14
Technical Parameter	Roughness Profile	Ra75、Rq、Rp、Rv、Rc、Rt、S、R3z、PPI、Ra、Rsk、Rku、Ry、Sm、RΔa、RΔq、Rz、Pc、Rλa、Rλq、lr、RSm、Rz94、RPc、RS、Rz.I、Rpm、HSC
	Waviness Profile	WCA、WCC-q、WCC-p、WCC-v、WCC-m、WCC-Sm、WCA、WC-q、WC-p、WC-v、WCM、WC-Sm、WC-t、Wa、Wq、Wsk、Wku、Wp、Wv、Wz、Wc、Wt、WSm、WΔq、WPc
	Primary Profile	Rsk、Rku、Rmax、Sm、Δa、Δq、Rz、λa、λq、lr、TILT A、AVH、Hmax、Hmin、AREA、Rz.J、Pa、Pq、Psk、Pku、Pp、Pv、Pc.I、Pt、PSm、PΔq、PPc、Pc
	Abbott Curve	Rk、Rpk、Rvk、Mr1、Mr2、V0、K、A1、A2
	Motif	NCRX、AR、R、Rx、NR、CPM、SR、SAR、AW、W、Wx、Wte、NW、SW、SAW、Rke、Rpke、Rvke、Mr1、Mr2、V0、K
Evaluation curve		Roughness profile、Waviness profile、Primary profile、Abbott curve、Motif
Characteristic curve		Abbott curve (Rmr(c) , Rmr2(c) , Rδc(c) , tp(c) , tp2(c) , Htp(c) , Amplitude frequency analysis curve , amplitude distribution curve
Form remove		global, first half, second half, center, 2 points, curve
Filter type		Gaussian、FFT、PC、DP、2RC
Filtering wavelength	λs	0、2.5、8、25μm
	λc	0.08、0.25、0.8、2.5、8mm
	λf	0.8、2.5、8、25mm
Evaluation length		Sampling length × number of samples (sampling length has standard mode and custom mode)
Measurement speed		0.05mm/s、0.10mm/s、0.50mm/s、1.00mm/s、2.00mm/s
Return speed		0.05mm/s、0.10mm/s、0.50mm/s、1.00mm/s、2.00mm/s
Sensor	Model	Standard type
	Method	Differential inductance
	Range	±500μm (± 1000μm is available)
	Stylus	5μmR diamond 90°
	Force	7.5mn Adjustable
Operator (Pad)	Display part	10-inch color IPS touch screen
	Data output	TF card/U disk/WIFI printing/PDF file
	Language	Chinese/English
Power Supply		AC220V±10% Built-in rechargeable battery (AC adapter charging) 8 hours charging time
Power Consumption		About 30VA (800 times can be measured after fully charged)
Dimension		Host Body 80(W)*392(L)*180(H) Industrial Pad 245(W)*162(L)*68(H)
		Net weight 4Kg Gross Weight 8Kg