SERIESBLK

STANDARD HARDNESS BLOCK







Rockwell/Vickers/Brinell

Shore A

Leeb

SPECIFICATION

Code	Туре	Hardness
BLK-HRC1	Rockwell C	60-70HRC
BLK-HRC2		20-30HRC
BLK-HRC3		30-35HRC
BLK-HRC4		40-50HRC
BLK-HRC5		50-55HRC
BLK-HRB1	Rockwell B	85-95HRB
BLK-HRB2	Nockwell D	60-70HRB
BLK-HV1		700-800HV5
BLK-HV2	Vickers	700-800HV10
BLK-HV3	VICKEIS	400-600HV5
BLK-HV4		400-600HV10
BLK-HB1	Brinell	150-250HBW 10/3000
BLK-HB2	Dilliell	150-250HBW 5/750
BLK-HLD	Leeb	750-830HLD
BLK-HSA	ShoreA	7pcs/set: 30-39HA, 40-49HA, 50-59HA, 60-69HA, 70-79HA, 80-89HA, 90-99HA

RC30

SURFACE ROUGHNESS SPECIMEN

- For checking, identifying and specifying the roughness by symbol
- ◆ Accuracy:-17%~+12%



Machining method	Quantity	Roughness (Ra)
Flatlapping	2	0.1, 0.05μm
External grinding	4	0.2, 0.4, 0.8, 1.6µm
Plain grinding	6	0.05, 0.1, 0.2, 0.4, 0.8, 1.6µm
Horizontal milling	6	0.4, 0.8, 1.6, 3.2, 6.3, 12.5µm
Vertical milling	6	0.4, 0.8, 1.6, 3.2, 6.3, 12.5µm
Turning	6	0.4. 0.8. 1.6. 3.2. 6.3. 12.5um

SERIES RP100XS

PROFILE AND ROUGHNESS MEASURING MACHINE



- Measure the surface profile and roughness with same probe at same time (for RP100RS)
- ◆ With high precision and good linearity digital probe(for RP100RS and RP100TS)
- Easy to install and replace without calibration
- Stylus can contact, lift and return automatically
- CAD file can be exported and imported (for RP100RS and RP100JS)
- With manufacturer inspection certificate





stage



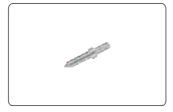
vice



profile calibration block (for RP100RS and RP100JS)



roughness calibration block (for RP100RS and RP100TS)



Φ3*20mm point stylus



Φ3*21mm knife stylus

SERIES RP100XS

PROFILE AND ROUGHNESS MEASURING MACHINE

SPECIFICATION

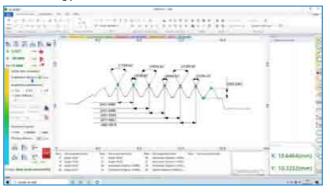
Code		RP100RS	RP100TS	RP100JS
Measuring object		profile and roughness	roughness	profile
Roughness parameter		Ra, Rq, Rz(Ry), R3z, Rz(DIN), Rz(JIS), Rz(ISO), Rp, Rv, Rt, Rsk, Rsm, Rc, Rpm, Rku, Rdq, Roc, Mr1, Mr2, Rpk, Rvk, Rk, Rdc, A1, A2, R, Rx, AR, Rcp, Rmax		1
Wave parameter		wt, wa, wp, wv, wq, wc, wku, wsk, w, wx, wz, wsm, wdc, wte, wmr, Aw, c(wmr), wmr(c), wdq		1
Profile parameter		Pt, Pa, Pp, Pv, Pq, Pc, Pku, Ps Pdc, Pmr(c), Pz, pmr, C(pmr)	k, Pdq/p∆q, Psm,	1
	X axis range	100mm	1	100mm
	X axis straightness	0.8µm/100mm	1	0.8µm/100mm
	Z axis range	650mm	1	650mm
	Z1 axis range (probe)	40mm	1	40mm
Profile	Accuracy	±(1+0.12H)um, H is measuring height in mm	1	±(1+0.12H)um, H is measuring height in mm
	Measuring arc accuracy	±(1.5+R/8)um, R is measuring radius in mm	1	±(1.5+R/8)um, R is measuring radius in mm
	Measuring angle accuracy	±2'	\	±2'
	Z1 axis range (probe)	40mm	20mm	1
	Accuracy	±5%		1
Roughness	Repeatability	±3%		l
Rougilless	Resolution	0.0001um		1
	Number of cut-offs	3-7		1
Cut off		0.025, 0.08, 0.25, 0.8, 2.5, 8mm		1
Climbing ability		77°(up), 88°(down)		
Measuring speed		0.02mm- 4.0mm/s		
Measuring mode		probe movement		
Movement control		joystick		
Powersupply		220V		
Size		985x710x1450mm		

INCLUDED ACCESSORIES

Main unit	1pc
Profile calibration block(for RP100RS and RP100JS)	1pc
Roughness calibration block(for RP100RS and RP100TS)	1pc
Stage	1pc
Vise	1pc
Φ3x21mm R0.025mm knife stylus	2pcs

Ф3x20mm R5µm point stylus	1pc
Ф8x150mm measuring rod	1pc
Computer	1pc
Printer	1pc
Anti-dust cover	1pc

Measuring profile



Measuring roughness



KUUUNESS

SR200

ROUGHNESS TESTER









- 13 roughness parameters
- With probe position indicator
- Roughness values, profile, and curve can be shown on the display
- ◆ Memory of maximum 100 results
- ◆ With a mini SD card slot, can save the result into SD card
- ◆ Automatic power off
- With manufacturer inspection certificate

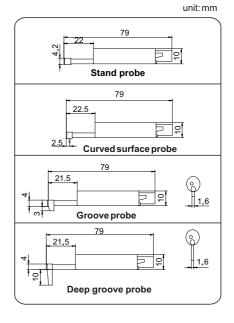




SR200-STD Stand(optional)



Measuring software



SPECIFICATION

SPECIFICATION		
Parameters		Ra, Rz, Ry,Rq, Rp, Rm, Rt, R3z, Rmax, Sk, S, Sm, tp
Range		160μm(±80μm)
Accuracy		±10%
Resolution	(Ra)	0.001µm
	type	inductive
Probe	stylus radius/angle	5μm/90°
	stylus material	diamond
Measuring 1	orce	0.4mN
Measuring (ınit	μm/μin
Cut off		0.25/0.8/2.5mm
Number of cut-offs		1-5
Traverse sp	eed	0.5mm/s,1mm/s
Memory		100 measurement results
Output		USB
Power		built-in rechargeble battery
Dimension(L×W×H)		140×52×48mm
Weight		440g

INCLUDED ACCESSORIES

Main unit	1pc
Standard probe	1pc
Calibration block	1pc
Calibration support	1pc
Adjustable stand	1pc
Probe cover	1pc
USB cable and software	1pc
AC/DC adapter	1pc
Software	1pc

OPTIONAL ACCESSORIES

OF HORAL ADDEDUCKTED	
Extension rod	SR200-ER
Curved surface probe	SR200-02
Groove probe	SR200-03
Deep groove probe	SR200-04
Test stand	SR200-STD
Printer	SR200-PR

ROUGHNESS TESTER





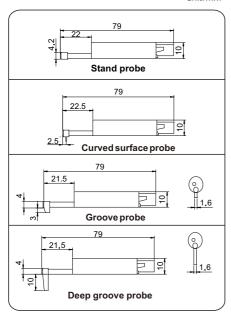


- ◆ Pocketsize
- With a tablet, can set the parameter quickly
- ◆ Connected with tablet via bluetooth
- Roughness values, profile, and curve can be shown on the display
- With manufacturer inspection certificate





unit: mm









SR200-STD Stand(optional)

SPECIFICATION

Parameters		Ra, Rz, Ry,Rq, Rp, Rm, Rt R3z, Rmax, Sk, S, Sm, tp
Range(F	Ra)	0.025-12.5μm
Accurac	су	±10%
Resolut	ion (Ra)	0.001µm
	type	inductive
Probe	stylus radius/angle	5μm/90°
	stylus material	diamond
Measuring force		0.4mN
Measuring unit		μm/μin
Cutoff		0.25/0.8/2.5mm
Number of cut-offs		1-5
Traverse speed		0.5mm/s, 1mm/s
Output file format		Word, Excel
Power		built-in rechargeble battery
Dimension(L×W×H)		130×40×44mm
Weight		340g

INCLUDED ACCESSORIES

Main unit	1pc
Standard probe	1pc
Tablet	1pc
Calibration block	1pc
Calibration support	1pc
USB cable	1pc
AC/DC adapter	1pc

OPTIONAL ACCESSORIES

Extension rod	SR200-ER
Curved surface probe	SR200-02
Groove probe	SR200-03
Deep groove probe	SR200-04
Test stand	SR200-STD
Printer	SR200-PR

SR400

ROUGHNESS TESTER

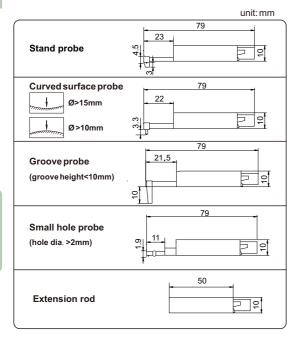






- The probe can be working with the main unit separately
- 22 roughness parameters
- With probe position indicator
- Roughness values, profile, and curve can be shown on the display
- ◆ Memory of maximum 100 results
- ◆ Automatic power off
- With manufacturer inspection certificate







Work together



SR200-STD Stand(optional)

SPECIFICATION

SPECIFICATION		
Parameters		Ra, Rz, Rq, Rp, Ry, Rv, Rs, R3z, R3y, Rc, Rt, Rmax, Rk, Rku, Rsm, Rpc, Rpk, Rvk, Rsk, Mr1, Mr2, Rz(JIS)
Range		±160μm
Accurac	су	±10%
Resolut	ion(Ra)	0.001µm
	type	inductive
Probe	stylus radius/angle	5μm/90°
	stylus material	diamond
Measuri	ing force	4mN
Measuring unit		μm/μin
Cut off		0.25/0.8/2.5mm
Number of cut-offs		1-5
Travers	e speed	0.5mm/s, 1mm/s
Memory		100 measurement results
Output		USB
Power		built-in rechargeble battery
Dimension(L×W×H)		158×64×52mm
Weight		400g

INCLUDED ACCESSORIES

Main unit	1pc
Standard probe	1pc
Calibration block	1pc
Calibration support	1pc
Adjustable stand	1pc
Cable(long and short)	2pcs
USB cable and software 1p	
AC/DC adapter	1pc

OPTIONAL ACCESSORIES

OPTIONAL ACCESSORIES		
50mm extension rod	SR400-ER	
Curved surface probe	SR400-02	
Deep groove probe	SR400-03	
Small hole probe	SR400-04	
Test stand	SR200-STD	
Printer	SR400-PR	
Connector for height gage	SR400-SP1	

En Charge

- ◆ Pocket size
- ◆ Automatic power off
- ◆ With manufacturer inspection certificate

SPECIFICATION

Parame	eters	Ra, Rz, Rq, Rt	
Range ((Ra)	±10µm	
Accura	су	±15%	
Resolu	tion (Ra)	0.001µm	
	type	piezoelectric	
Probe	stylus radius/angle	10µm/90°	
	stylus material	diamond	
Measur	ing force	0.5N	
Measur	ing unit	μm/μin	
Cutoff		0.25/0.8/2.5mm	
Evaluat	tion length	1.25/4/5mm	
Power		built-in rechargeble battery	
Dimension(L×W×H)		114×82×33mm	
Weight		160g	



INCLUDED ACCESSORIES

Main unit	1pc
Calibration block	1pc
Calibration support	1pc
USB cable	1pc
AC/DC adapter	1pc

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DIGITAL SURFACE PROFILE GAUGE





- Measure peak-to-valley height of blast cleaned surface.
 If the profile is too low, the adhesion of the coating to the surface will be reduced.
 - If the profile is too high, it is dangerous that the profile peaks will remain non-coating, rust spots maybe occur.
- ◆ Meet ASTM D 4417-B
- ◆ Zero set block is included, set zero before measurement
- Buttons: tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, ABS/INC measurement
- ◆ Automatically power off (time is adjustable)
- ◆ Data output (cable code:200-03 or 200-04)
- ◆ Stainless steel base



Code	Range	Digital indicator stroke	Digital indicator resolution	Accuracy
489-010-01	0-12.7mm/0-0.5"	12.7mm/0.5"	0.001mm/0.00005"	±0.005mm

zero set block (included)

DIGITAL SURFACE PROFILE GAUGE





◆ Measure peak-to-valley height of blast cleaned surface. If the profile is too low, the adhesion of the coating to the surface will be reduced.

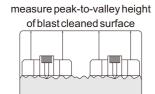
If the profile is too high, it is dangerous that the profile peaks will remain non-coating, rust spots maybe occur.

◆ Meet ASTM D 4417-B

489

- ◆ Zero set block is included, set zero before measurement
- ◆ Buttons: on/off,zero, mm/inch, ABS/INC measurement
- ◆ Automatically power off (time is adjustable)
- ◆ Data output (cable code:200-03 or 200-04)
- ◆ Stainless steel base



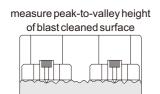


Code	Range	Digital indicator stroke	Digital indicator resolution	Accuracy
489-010-02	0-12.7mm/0-0.5"	12.7mm/0.5"	0.001mm/0.00005"	±0.005mm

489

SURFACE PROFILE GAUGE

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- ◆ Meet ASTM D 4417-B
- ◆ Zero set block is included, set zero before measurement
- ◆ Stainless steel base





Code	Range	Dial indicator stroke	Dial indicator graduation	Accuracy
489-001-01	0-1mm	1mm	0.001mm	±0.005mm



zero set block (included)