

## ROUGHNESS TESTER CODE ISR-C003



calibration block  
(included)



- Unit:  $\mu\text{m}$ ,  $\mu\text{in}$
- Automatic power off

### SPECIFICATION

Parameters	Ra, Rz, Rq, Rt	
Range	Ra, Rq: 0.05~15 $\mu\text{m}$ Rz, Rt: 0.1~50 $\mu\text{m}$	
Accuracy	$\pm 10\%$	
Resolution (Ra)	0.01 $\mu\text{m}$	
Probe	type	piezoelectric
	stylus radius/angle	10 $\mu\text{m}/90^\circ$
	stylus material	diamond
Measuring force	5mN	
Measuring unit	$\mu\text{m}/\mu\text{in}$	
Cut off	0.25/0.8/2.5mm	
Evaluation length	1.25mm for cut off 0.25mm 4mm for cut off 0.8mm 5mm for cut off 2.5mm	
Traverse speed	0.75mm/s	
Power	built-in rechargeable battery	
Dimension (L×W×H)	106×70×24mm	
Weight	200g	

### STANDARD DELIVERY

Main unit	1 pc
Calibration block	1 pc
AC/DC adapter	1 pc

## SURFACE ROUGHNESS SPECIMENS



- For checking, identifying and specifying the roughness by symbol
- Rust-proof, made of pure Nickel



ISR-CS315

Code	Machining method	Roughness (Ra)	Roughness (Rz)	Quantity
ISR-CS315	Surface grinding	0.025, 0.05, 0.1, 0.2, 0.4, 0.8, 1.6, 3.2 $\mu\text{m}$	0.29, 0.55, 0.91, 1.74, 2.6, 4.65, 7.87, 15.6 $\mu\text{m}$	8 pcs
ISR-CS316	Cylindrical grinding	0.025, 0.05, 0.1, 0.2, 0.4, 0.8, 1.6, 3.2 $\mu\text{m}$	0.3, 0.53, 0.88, 1.56, 2.64, 4.4, 7.71, 15.3 $\mu\text{m}$	8 pcs
ISR-CS317	Flat lapping	Criss-cross	0.025, 0.05, 0.1, 0.2 $\mu\text{m}$	0.4, 0.6, 0.74, 1.26 $\mu\text{m}$
		Parallel	0.025, 0.05, 0.1, 0.2 $\mu\text{m}$	0.34, 0.56, 1.12, 1.5 $\mu\text{m}$
ISR-CS318	Cylindrical lapping	0.025, 0.05, 0.1, 0.2 $\mu\text{m}$	0.46, 0.54, 0.63, 1.23 $\mu\text{m}$	4 pcs
	Superfinishing	0.025, 0.05, 0.1, 0.2 $\mu\text{m}$	0.36, 0.7, 1, 1.4 $\mu\text{m}$	4 pcs
ISR-CS319	Face turning	0.4, 0.8, 1.6, 3.2, 6.3, 12.5, 25, 50 $\mu\text{m}$	1.92, 3.2, 6.15, 12.5, 23.7, 48.7, 102, 185 $\mu\text{m}$	8 pcs
ISR-CS320	Cylindrical turning	0.4, 0.8, 1.6, 3.2, 6.3, 12.5, 25, 50 $\mu\text{m}$	1.7, 3.2, 6.1, 12.2, 23.7, 47.5, 95, 190 $\mu\text{m}$	8 pcs
ISR-CS321	End milling	0.4, 0.8, 1.6, 3.2, 6.3, 12.5, 25, 50 $\mu\text{m}$	1.92, 3.82, 6.45, 12.2, 25.2, 49.8, 92.6, 191 $\mu\text{m}$	8 pcs
ISR-CS322	Reaming	0.4, 0.8, 1.6, 3.2 $\mu\text{m}$	1.7, 3.2, 6.4, 12.8 $\mu\text{m}$	4 pcs
	Drilling	1.6, 3.2, 6.3, 12.5 $\mu\text{m}$	7.5, 15.5, 31, 60 $\mu\text{m}$	4 pcs
ISR-CS323	Horizontal milling	0.4, 0.8, 1.6, 3.2, 6.3, 12.5, 25, 50 $\mu\text{m}$	1.8, 3.68, 6.63, 12.8, 25.6, 53, 97.5, 197 $\mu\text{m}$	8 pcs
ISR-CS325	Shaping (planing)	0.8, 1.6, 3.2, 6.3, 12.5, 25, 50, 100 $\mu\text{m}$	3.84, 6.7, 12.2, 25.2, 48.7, 99.9, 190, 361 $\mu\text{m}$	8 pcs
ISR-CS326	Linishing (belt sanding)	0.1, 0.2, 0.4, 0.8, 1.6, 3.2 $\mu\text{m}$	0.9, 1.55, 3.37, 7.42, 18.5, 31 $\mu\text{m}$	6 pcs
ISR-CS328	Vertical grinding	0.2, 0.4, 0.8, 1.6, 3.2, 6.3 $\mu\text{m}$	1.1, 3.5, 6.15, 8.78, 22.19, 40.8 $\mu\text{m}$	6 pcs
ISR-CS329	Grit blasting	3.2, 10.5, 18, 25 $\mu\text{m}$	19.2, 63, 108, 150 $\mu\text{m}$	4 pcs
	Shot blasting	3.2, 8, 13, 18 $\mu\text{m}$	19.2, 48, 78, 108 $\mu\text{m}$	4 pcs
ISR-CS331	Spark erosion (EDM)	0.4, 0.8, 1.6, 3.2, 6.3, 12.5, 25, 50 $\mu\text{m}$	2.5, 4.5, 7.2, 14.2, 24.7, 51.2, 105, 196 $\mu\text{m}$	8 pcs
ISR-CS333	Hand filing	0.4, 0.8, 1.6, 3.2, 6.3 $\mu\text{m}$	3, 5.6, 12.4, 22.5, 61 $\mu\text{m}$	5 pcs
ISR-CS334	Castings	0.8, 1.6, 3.2, 6.3, 12.5, 25, 50 $\mu\text{m}$	3.2, 8, 16, 32, 56, 112, 225 $\mu\text{m}$	7 pcs
ISR-CS335	Honing	0.05, 0.1, 0.2, 0.4, 0.8, 1.6 $\mu\text{m}$	0.31, 0.56, 1, 2, 4.2, 9 $\mu\text{m}$	6 pcs
ISR-CS336	Polishing	0.0125, 0.025, 0.05, 0.1, 0.2 $\mu\text{m}$	0.29, 0.35, 0.67, 0.72, 1.52 $\mu\text{m}$	5 pcs