

ROUGHNESS TESTER (COMPACT TYPE) CODE ISR-C200

INSIZE PLUS

BLUETOOTH

DATA
OUTPUT

PROBE CAN BE CHANGED



VIDEO



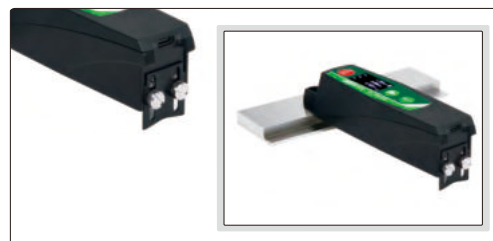
- The product is light, reliable and durable
- 13 roughness parameters
- Can be operated by mobile phones (only Android system) or computers
- Measurement results can be exported in Excel and PDF format
- Memory of 18000 measurements with only parameters or 30 measurements with graph
- Automatic power off



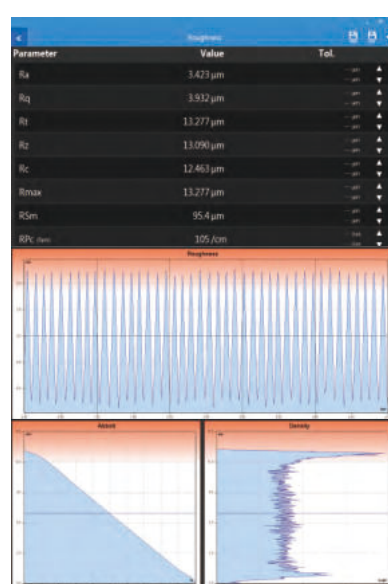
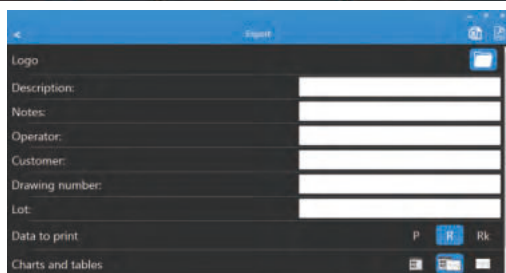
probe can be set at 90°,
for transverse measurement



probe cover (included)



adjustable stand (included)



measuring software (included), connect to mobile phones via bluetooth (only Android system) to control roughness tester, or connect to computers via USB cable or bluetooth to control roughness tester, display roughness values and curve, results can be exported in Excel and PDF format

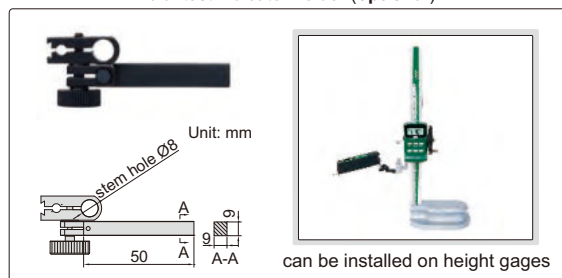
To be continued

Continued from previous page

magnetic stand adapter (included)



dial test indicator holder (optional)



SPECIFICATION

Parameters		Ra, Rq, Rt, Rz, Rc, Rmax, RSm, Rpc, Pt, R, AR, Rx, Ppc
Range	X axis	17.5mm
	Z axis	250µm
Accuracy		±(5%+0.025)µm
Resolution (Ra)		0.001µm
Probe	type	inductive
	stylus radius/angle	2µm/90°
	stylus material	diamond
Measuring unit		µm/µin
Cut off		0.25/0.8/2.5mm
Number of cut-off		1~5
Moving speed		0.5mm/s, 1mm/s
Memory		18000 measurements with only parameters, 30 measurements with graph
Power		built-in rechargeable battery
Dimension (L×W×H)		160×34×33.5mm
Weight		200g

STANDARD DELIVERY

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

OPTIONAL ACCESSORY

Dial test indicator holder	6293-6
Groove probe	ISR-C200-SB21
Small hole probe	ISR-C200-SB31
Deep groove probe	ISR-C200-SB121
Extension rod	ISR-C200-ER50
Extension rod	ISR-C200-ER100

SPECIFICATION OF PROBES

Unit: mm

standard probe (included) measurement for plane surfaces, also transverse measurement for plane surfaces, cylinders and grooves	groove probe (optional), code ISR-C200-SB21 measure plane surfaces and grooves
small hole probe (optional), code ISR-C200-SB31 measure holes with diameter > Ø4mm and depth < 20mm	deep groove probe (optional), code ISR-C200-SB121 measure grooves with depth < 20mm
extension rod (optional), code ISR-C200-ER50 for long holes	extension rod (optional), code ISR-C200-ER100 for long holes

ROUGHNESS TESTER CODE ISR-C002

BLUETOOTH

DATA
OUTPUT

CAN BE OPERATED BY
MOBILE PHONES OR COMPUTERS



VIDEO

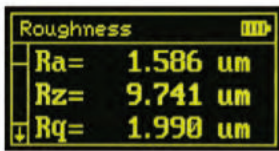
- Roughness tester can be operated by mobile phones (only Android system) or computers
- Data can be sent to Excel by connecting to computers via bluetooth or SPC cable
- Support bluetooth printer
- 21 roughness parameters
- Display roughness value, profile and curve
- Memory of maximum 100 results
- Automatic power off



software CD
(included)



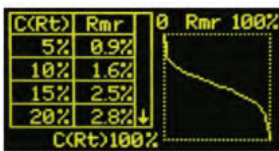
screen display



measurement result



roughness profile



Rmr analysis

probe cover (included)



put the small workpieces
directly under the
probe for measurement



adjustable stand (included)

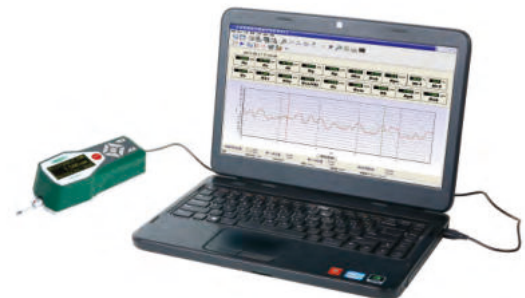


operate roughness tester by mobile phones



connect to mobile phones via bluetooth
(only Android system),
display roughness values, profile and curve

operate roughness tester by computers



connect to computers via USB cable (software is included),
display roughness values, profile and curve

data can be sent to Excel by connecting to computer via bluetooth or SPC cable

via bluetooth

receiver
(optional)



SPC cable (optional)



receiver (optional)



via SPC cable



bluetooth printer (optional)



To be continued

Continued from previous page

light duty test stand (optional)

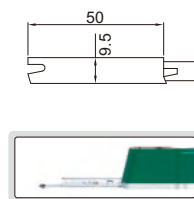


heavy duty test stand (optional)



Unit: mm

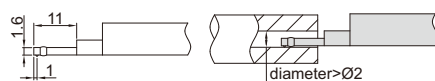
extension rod (optional),
code ISR-C002-ER



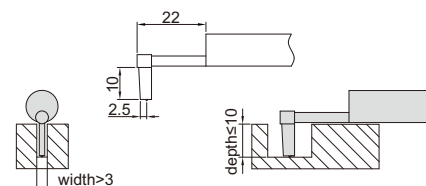
transverse rod (optional),
code ISR-C002-TR



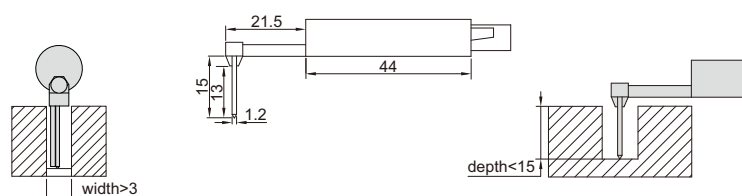
tiny hole probe (optional),
code ISR-C002-SBP



deep groove probe (optional),
code ISR-C002-DGP



deep groove probe (optional), code ISR-C002-DGP1



SPECIFICATION

Parameters	Ra, Rz, Rq, Rv, Rp, RS, R3z, R3y, Rt, Rz (JIS), Rk, Rku, Rsm, Rpc, Rpk, Rvk, Rsk, Mr1, Mr2, Ry (JIS), Rmax
Range	160µm
Accuracy	±10%
Resolution (Ra)	0.001µm
Probe	type: inductive
	stylus radius/angle: 5µm/90°
	stylus material: diamond
Measuring force	4mN
Measuring unit	µm/µin
Cut off	0.25/0.8/2.5mm
Number of cut-off	1 to 5
Moving speed	0.5mm/s, 1mm/s
Memory	100 measurement results
Output	bluetooth and USB
Power	built-in rechargeable battery
Dimension (L×W×H)	141×55×40mm
Weight	400g

STANDARD DELIVERY

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

OPTIONAL ACCESSORY

Extension rod	ISR-C002-ER
Transverse rod	ISR-C002-TR
Tiny hole probe	ISR-C002-SBP
Deep groove probe	ISR-C002-DGP
Deep groove probe	ISR-C002-DGP1
Light duty test stand	ISR-C002-STAND1
Heavy duty test stand	ISR-C002-STAND
Bluetooth printer	ISR-C002-PRINTER
Receiver	ISR-C300-RECEIVER
SPC cable	ISR-C300-SPC

ROUGHNESS TESTER (SEPARABLE TYPE) CODE ISR-C300

BLUETOOTH

TOUCH SCREEN

CAN BE OPERATED BY
COMPUTERS OR MOBILE PHONES

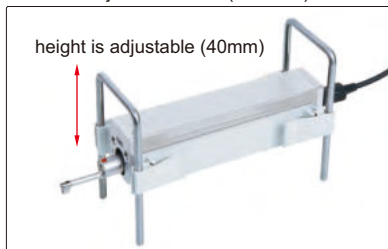
DATA
OUTPUT

- Roughness tester can be operated by mobile phones (only Android system) or computers
- Data can be sent to Excel by connecting to computers via bluetooth or SPC cable
- Support bluetooth printer
- 22 roughness parameters
- Meet ISO, DIN, ANSI, JIS standards
- Display roughness values, profile and curve
- Memory of maximum 100 data and waveform
- Built-in lithium battery, working time more than 50 hours
- Touch screen
- Automatic power off



adjustable stand (included)

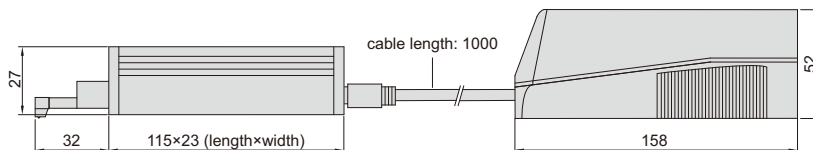
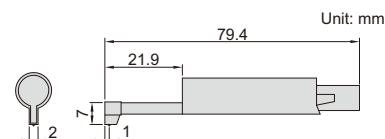
height is adjustable (40mm)



software CD
(included)



probe and main unit can be combined together



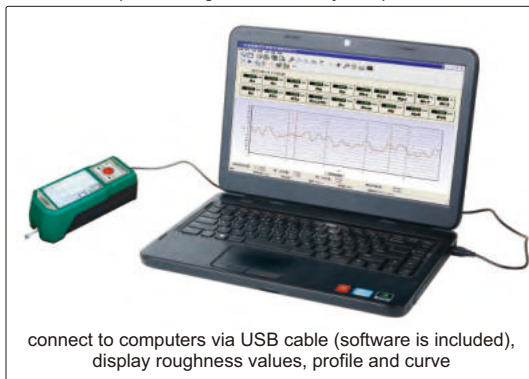
15

operate roughness tester by mobile phones



connect to mobile phones via bluetooth
(only Android system),
display roughness values, profile and curve

operate roughness tester by computers



connect to computers via USB cable (software is included),
display roughness values, profile and curve

data can be sent to Excel by connecting to computer via bluetooth or SPC cable

via bluetooth



via SPC cable

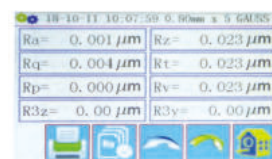
SPC cable
(optional)



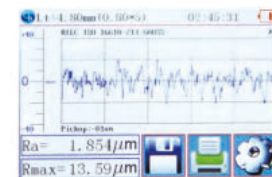
receiver
(optional)



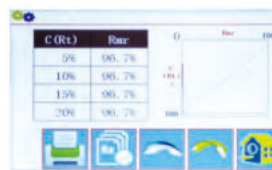
roughness tester screen display



measurement result



roughness profile



Rmr analysis

To be continued

Continued from previous page

bluetooth printer (optional)



magnetic stand adapter (included)



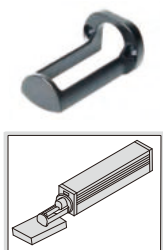
height gage adapter (optional)



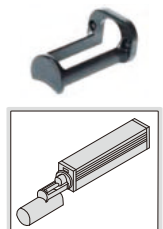
NOTE: Please check whether the adapter can fit your height gages. When using **INSIZE** height gages, please use the dial test indicator holder of height gages

probe support (optional)

support for flat surface



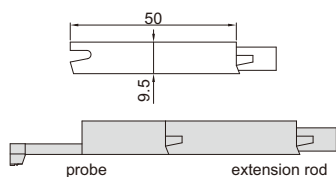
support for cylindrical surface



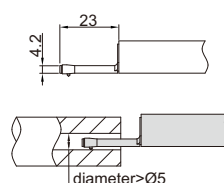
optional probes

Unit: mm

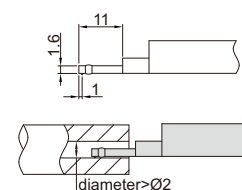
extension rod (optional), code **ISR-C002-ER**



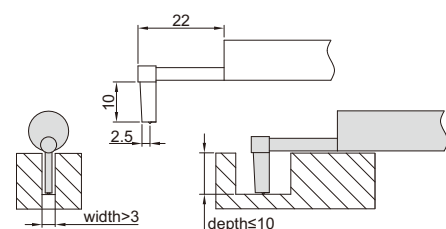
small hole probe (optional), code **ISR-C002-PROBE**



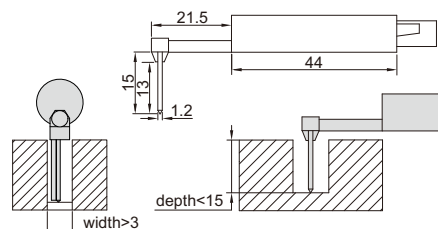
tiny hole probe (optional), code **ISR-C002-SBP**



deep groove probe (optional), code **ISR-C002-DGP**



deep groove probe (optional), code **ISR-C002-DGP1**



SPECIFICATION

Parameters		Ra, Rz, Rq, Rv, Rp, Rs, R3z, R3y, Rt, Rc, Rz (JIS), Rk, Rku, Rsm, Rpc, Rpk, Rvk, Rsk, Mr1, Mr2, Ry, Rmax
Range	X axis	17.5mm
	Z axis	320µm (-160µm~160µm)
Accuracy		±10%
Resolution (Ra)		0.001µm
Probe	type	inductive
	stylus radius/angle	5µm/90°
	stylus material	diamond
Measuring force		4mN
Measuring unit		µm/µin
Cut off		0.25/0.8/2.5mm
Number of cut-offs		1~5
Moving speed		0.135mm/s, 0.5mm/s, 1mm/s
Memory		100 measurement results
Output		USB and bluetooth
Power		built-in rechargeable battery
Dimension (L×W×H)		158×64×52mm
Weight		400g

STANDARD DELIVERY

Main unit	1 pc
Standard probe	1 pc
Calibration block and support	1 pc of each
Connecting cable (long and short)	1 pc of each
Magnetic stand adapter	1 pc
Adjustable stand	1 pc
Touch pen	1 pc
Software and USB cable	1 pc
AC/DC adapter	1 pc

OPTIONAL ACCESSORY

Extension rod	ISR-C002-ER
Small hole probe	ISR-C002-PROBE
Tiny hole probe	ISR-C002-SBP
Deep groove probe	ISR-C002-DGP
Deep groove probe	ISR-C002-DGP1
Bluetooth printer	ISR-C002-PRINTER
Height gage adapter	ISR-C300-LB1
Receiver	ISR-C300-RECEIVER
SPC cable	ISR-C300-SPC
Support for flat surface	ISR-C300-COVER1
Support for cylindrical surface	ISR-C300-COVER2

ROUGHNESS TESTER CODE ISR-C003

fixture for small shafts
(optional)



- Unit: μm , μin
- Automatic power off

STANDARD DELIVERY

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



VIDEO



calibration block (included)

SPECIFICATION

Parameters		Ra, Rz, Rq, Rt
Range		Ra, Rq: 0.05~15μm Rz, Rt: 0.1~50μm
Accuracy		±10%
Resolution (Ra)		0.01μm
Probe	type	piezoelectric
	stylus radius/angle	10μm/90°
	stylus material	diamond
Measuring force		5mN
Measuring unit		μm/μin
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
Moving speed		0.75mm/s
Power		built-in rechargeable battery
Dimension (L×W×H)		106×70×24mm
Weight		200g

OPTIONAL ACCESSORY

Fixture for small shafts	ISR-C003-FIXTURE
--------------------------	------------------

SURFACE ROUGHNESS SPECIMENS

INSIZE PLUS
MADE IN EUROPE

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

SURFACE ROUGHNESS SPECIMEN SET CODE ISR-CS130-W

INSIZE PLUS
MADE IN EUROPE

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

Machining method	Roughness (Ra)	Roughness (Rz)	Quantity
Flat lapping	0.05, 0.1, 0.2µm	0.55, 1, 1.6µm	3 pcs
	2, 4, 8µin		
Reaming	0.4, 0.8, 1.6µm	3, 6, 10µm	3 pcs
	16, 32, 63µin		
Plain grinding	0.05, 0.1, 0.2, 0.4, 0.8, 1.6µm	0.55, 1, 1.6, 3, 6, 10µm	6 pcs
	2, 4, 8, 16, 32, 63µin		
Horizontal milling	0.4, 0.8, 1.6, 3.2, 6.3, 12.5µm	2.5, 4, 8, 16, 32, 50µm	6 pcs
	16, 32, 63, 125, 250, 500µin		
Vertical milling	0.4, 0.8, 1.6, 3.2, 6.3, 12.5µm	2.5, 4, 8, 16, 32, 50µm	6 pcs
	16, 32, 63, 125, 250, 500µin		
Turning	0.4, 0.8, 1.6, 3.2, 6.3, 12.5µm	2.5, 4, 8, 16, 32, 50µm	6 pcs
	16, 32, 63, 125, 250, 500µin		

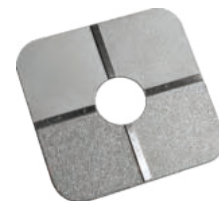


SHOT AND GRIT BLASTING SURFACE ROUGHNESS SPECIMENS

INSIZE PLUS
MADE IN EUROPE

- To check the roughness of steel surfaces which have been blast cleaned before painting
- Meets ISO 8503/1
- Rust-proof, made of pure Nickel
- Each piece contains 4 parts

Code	Machining method	Roughness (Ra)	Roughness (Rz)
ISR-CS017	Shot blasting	3.2, 8, 13, 18µm	19.2, 48, 78, 108µm
ISR-CS018	Grit blasting	3.2, 10.5, 18, 25µm	19.2, 63, 108, 150µm



ISR-CS017

15

MEASURING ACCURACY OF ROUGHNESS TESTERS CAN BE IMPROVED, IF THE CALIBRATION IS MADE ON A REFERENCE SPECIMEN WITH THE ROUGHNESS VALUE CLOSE TO THE WORKPIECE TO BE MEASURED

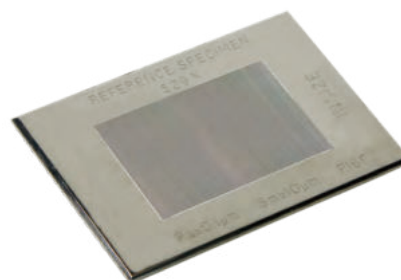
SURFACE ROUGHNESS REFERENCE SPECIMENS

INSIZE PLUS
MADE IN EUROPE

- To calibrate roughness testers
- Meets ISO 5436-1: 2000
- Rust proof, made of pure Nickel

Code	Roughness (Ra)
ISR-RS525X	6.25µm *
ISR-RS526X	3.15µm *
ISR-RS527X	3.0µm *
ISR-RS528X	0.5µm *
ISR-RS529X	0.1µm *
ISR-RS530X	1.0µm *
ISR-RS531X	0.3µm *

*The actual value may be slightly different



ISR-RS529X