

Surftest

Surftest SJ-220 SERIES 178 – On-site Surface Roughness Tester



**Wireless Unit for Measuring Instrument U-WAVE-TIB
264-628**

It can only be used in countries where wireless certification has been obtained, including the country of purchase. For use in countries other than the country of purchase, please contact the nearest Mitutoyo M³ Solution Center.

SPECIFICATIONS

Model No.	Standard drive unit		Retractable drive unit		Transverse tracing drive unit			
	SJ-220 (0.75 mN type)	SJ-220 (4 mN type)	SJ-220 (0.75 mN type)	SJ-220 (4 mN type)	SJ-220 (0.75 mN type)	SJ-220 (4 mN type)		
	inch/mm	178-741-13	178-742-13	178-743-13	178-744-13	178-745-13	178-746-13	
Drive Unit Order No.		178-747		178-748		178-749		
Measuring range	X-axis	16.0 mm				5.6 mm		
	Detector	Range					360 μm (-200 μm to +160 μm)	
		Range/Resolution					360 μm/0.0256 μm, 100 μm/0.0064 μm, 25 μm/0.0016 μm	
Measuring force/Stylus tip shape		Depends on the Order No.: 0.75 mN/2 μmR 60°					4 mN/5 μmR 90°	
Applicable standards		JIS B 0601:1982 / 1994 / 2013		JIS B 0671:2002		JIS B 0631:2000 ISO 4287:1997 ISO 13565:1996 ISO 12085:1996 ISO 21920:2021 ASME B46.1 VDA2006		
Assessed profile		Primary profile, Roughness profile, DF profile, Roughness motif profile						

Surftest SJ-310 SERIES 178 — On-site Surface Roughness Tester



SPECIFICATIONS

Model No.	Standard drive unit		Retractable drive unit		Transverse tracing drive unit			
	SJ-310 (0.75 mN type)	SJ-310 (4 mN type)	SJ-310 (0.75 mN type)	SJ-310 (4 mN type)	SJ-310 (0.75 mN type)	SJ-310 (4 mN type)		
	inch/mm	178-571-21A	178-571-22A	178-573-21A	178-573-22A	178-575-21A	178-575-22A	
Drive unit Order No.		178-747		178-748		178-749		
Measuring range	X-axis	16.0 mm				5.6 mm		
	Detector	Range					360 μm (-200 μm to +160 μm)	
		Range/Resolution					360 μm/0.0256 μm, 100 μm/0.0064 μm, 25 μm/0.0016 μm	
Measuring force/Stylus tip shape		Depends on the Order No.: 0.75 mN/2 μmR 60° (when the Order No. ends with "-21")					4 mN/5 μmR 90° (when the Order No. ends with "-22")	
Applicable standards		JIS B 0601:2001, JIS B 0601:1994, JIS B 0601:1982, VDA, ISO:1997, ANSI						
Assessed profile		Primary profile, Roughness profile, DF profile, Roughness motif profile, Waviness motif profile						

MeasurLink ENABLED
Data Management Software by Mitutoyo

Free Communication Software

Output software based on Microsoft-Excel for controlling the devices and reproducing and storing the measurement data.

Software

PC-linked software
"SJ-Communication-Tool"

Freely available

Can be downloaded from the Mitutoyo website.
 ■ Download site URL
<https://www2.mitutoyo.co.jp/eng/contact/products/SJ-Communication-Tool/>
 Windows 10/11, Bluetooth® 5.0 compatible (Windows only)

Dedicated "SJ-APP" for increased efficiency of measurement work
 The dedicated app that enables communication with the SJ-220 is equipped with various functions to increase work efficiency.
 It is also possible to manage data, create inspection reports, and export to CSV and PDF files on the terminal.

Standard accessories for SJ-220

- 12AA583** Handy case
- 12BA303** Connecting cable
- 12BAS450** AC adaptor
- 12BAS451** USB 2.0 cable
- 178-601-1** Roughness specimen (mm)
- 178-602-1** Roughness specimen (inch/mm)
- 178-605** Roughness specimen (mm) for Transverse drive
- 178-606** Roughness specimen (inch/mm) for Transverse drive
- 12BAK700** Calibration stage
- 12BAS476** Tool for battery switch
- 12AAE643** Point-contact adapter for transverse drive
- 12AAE644** V-type adapter for transverse drive

SJ Stand 178-069
(must order optional part 12AAA221 to mount SJ-220/310 drive unit)



MeasurLink ENABLED
Data Management Software by Mitutoyo

Standard accessories for SJ-310

- 12AAW066** Connecting cable for Drive unit to Display unit
- 178-602** Roughness reference specimen (Ra3 μm)
- 178-606** Roughness reference specimen (Ra1 μm) (For Transverse Drive Type only)
- 357651** AC adapter
- 12AAA217** Nosepiece for plane surface
- 12AAA218** Nosepiece for cylinder
- 12AAA216** Supporting leg
- 12AAE643** Point-contact adapter (For Transverse Drive Type only)
- 12AAE644** V-type adapter (For Transverse Drive Type only)
- 12BAK700** Calibration stage
- 12BAG834** Stylus pen
- 12BAL402** Protection sheet
- 270732** Printer paper (5 pieces)
- 12BAL400** Carrying case

Philips screwdriver, strap for stylus pen, operation manual, quick reference manual, warranty.

