

Surftest SJ-410

Series 178 - Portable Surface Roughness Testers SJ-411 / 412

- Portable skidless surface roughness tester with touch-sensitive operation panel and integrated printer.
- The large 5.7" color LCD makes it easy to navigate through measurement conditions, results and analysis graphs.
- Skidless detector to measure Primary profile (P), Roughness profile (R), Filtered waviness profile (W) and more.
- Easy & intuitive menu navigation.
- Complies with many industry standards like DIN EN ISO, VDA, ANSI, JIS as well as customized settings.
- 10 different measuring conditions can be stored inside the SJ-411 /412. Up to 500 with optional SD card.
- Statistic functions and colored tolerance judgement.
- 2 different evaluation conditions within 1 measurement.
- Each function separately protectable by password.
- 16 languages supported.
- Optionally autoset unit as well as X-axis adjustment and digital leveling unit.



SJ-410

5.7" color LCD touchscreen with intuitive menu navigation

SJ-411 model

Traverse : 25 mm

Traverse straightness : 0,3 µm/25 mm

Mass Drive unit : 600 g

No.	Detector measuring force	Stylus Tip angle	Stylus Tip radius	Note
178-580-01D	0,75 mN	60°	2 µm	mm
178-581-01E	0,75 mN	60°	2 µm	Inch/mm
178-580-02D*	4 mN	90°	5 µm	mm
178-581-02E*	4 mN	90°	5 µm	Inch/mm

SJ-412 model

Traverse : 50 mm

Traverse straightness : 0,5 µm/50 mm

Mass Drive unit : 640 g

No.	Detector measuring force	Stylus Tip angle	Stylus Tip radius	Note
178-582-01D	0,75 mN	60°	2 µm	mm
178-583-01E	0,75 mN	60°	2 µm	Inch/mm
178-582-02D*	4 mN	90°	5 µm	mm
178-583-02E*	4 mN	90°	5 µm	Inch/mm

Specifications

Drive unit	
Traverse	25 mm (SJ-411) 50 mm (SJ-412)
Measuring speed	0,05; 0,1; 0,2; 0,5; 1,0 mm/s
Return speed	0,5; 1,0; 2,0 mm/s
Positioning	±1.5° (tilting), 10 mm (up/down)
Detector	
Measuring range	800 µm, 80 µm, 8 µm (up to 2400 µm with an optional stylus)
Measurement method	Skidless - differential inductive
Power supply	Via AC adapter, rechargeable battery
Battery life	Max. 1000 measurements (w/o printing) Recharge time : 4 hours
Interface	USB, Digimatic, RS-232C, Footswitch
Mass	Control unit : 1,7 kg Height-tilt adjustment unit : 0,4 kg
Software	Assessed profiles : Primary Profile (P), Roughness Profile (R), DF Profile, Filtered Waviness Profile (W), R-Motif, W-Motif Standards: DIN EN ISO, VDA, JIS, ANSI and customized setting Analysis graphs : Bearing Area Curve (BAC), Amplitude Distribution Curve (ADC) Digital filter : 2CR75, PC75, Gaussian Cutoff length : 0,08, 0,25, 0,8, 2,5, 8, 25 mm Sampling length : 0,08, 0,25, 0,8, 2,5, 8, 25 mm or arbitrary length No. of sampling lengths : 1-20 Printer : Thermal type

Function

Customize : Selection of display/ evaluation parameter.
Data compensation : R-surface, Tilt compensation.
D.A.T. function : Helps to level workpiece prior to skidless measurement.
Statistical processing : Max. value, Min. value, Average value, Standard deviation (σ), Pass rate, Histogram.
Tolerance : Colored upper / lower limit.
Measuring condition storage : Internally 10 (optional SD card available).
Language: 16 languages supported