

Surftest SJ-500

Series 178 - With Dedicated Control / Display Unit

A high precision, high-performance type surface roughness tester with a dedicated control unit, featuring a user-friendly display and simple operation

- Equipped with a 7.5-inch, colour TFT LCD, large colour icons and touch panel controls the display unit is easy to read and simple to operate.
- A built-in joystick in the control unit allows quick and easy positioning. The manual knob allows fine positioning of a small stylus for measuring the surface of small holes.
- Simple setup for surface roughness measuring conditions. A simple input function is used to calculate according to ISO/JIS roughness standard drawing instruction symbols. Complicated measuring condition settings can easily be entered by selecting a drawing instruction symbol from the surface roughness menu.
- The detector unit allows a 90° displacement of the stylus.

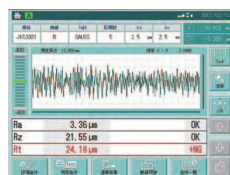


SJ-500

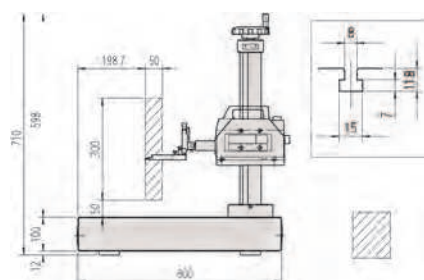
No.	Detector measuring force	Stylus Tip angle	Stylus Tip radius	Note
178-532-01D	0,75 mN	60°	2 µm	metric model
178-533-01E*	0,75 mN	60°	2 µm	inch model - UK only
178-532-02D*	4 mN	90°	5 µm	metric model
178-533-02E*	4 mN	90°	5 µm	inch model - UK only



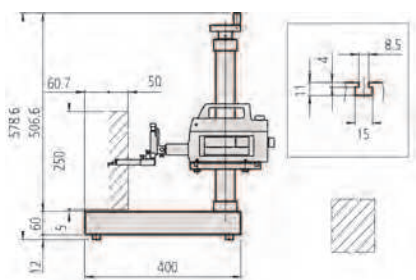
SJ-500 with optional manual column stand



Preview



178-085
600x450x710 mm



178-089
400x250x578 mm

Specifications

Drive unit	
Measuring range	50 mm
Resolution	0,05 µm
Scale	Linear encoder
Drive speed	0 - 20 mm/s and manual
Measuring speed	0,02 - 5 mm/s
Traverse direction	Backward
Traverse straightness	0,2 µm / 50 mm
Positioning	±1.5° (tilting, with D.A.T. function) 30 mm (up/down)
Detector	
Measuring range	800/0,01 µm, 80/0,001 µm, 8/0,0001 µm
Measurement method	Skidless/skidded
Stylus	Diamond, (60° / 2 µmR)
Type	Differential inductance
Control Unit	
Display	7.5" colour TFT LCD with backlight
Printer	Built-in thermal type
Drive unit control	Joystick operation with manual adjustment knob
Software	Ra, Rc, Ry, Rz, Rq, Rt, Rmax, Rp, Rv, R3z, Sm, S Pc, mr(c), δc, mr, tp, Htp, Lo, Ir, Ppi, HSC, Δa, Δq, Ku, Sk, Rpk, Rvk, Rk, Mr1, Mr2, A1, A2, Vo, λa, λq Roughness motif : R, AR, Rx Waviness motif : W, AW, Wx, Wte
Mass	6.7 kg Drive unit : 2.7 kg Control unit : 4.0 kg

Optional accessories

No.	Description
172-234	V-block with clamp (Max. workpiece ø50 mm)
172-142	Centre support
172-143	Centre support riser
181-902-10	Hardened V-Block
998291	Precision V-block
Step specimen	
178-611	Reference step specimen
178-610	Step gauge (1, 2, 5, 10 µm)
178-604	Roughness specimen 0,5/3 µm
Tables	
178-042-1	Digimatic XY leveling table 25x25 mm
178-043-1	XY leveling table 25x25 mm
178-089	Stand 400x250x578 mm
218-001	Cross-travel table XY range : 100x50 mm
178-085	Stand 600x450x710 mm
Vices	
172-144	Rotary vice (Max. workpiece ø60 mm)
178-019	Precision vice
218-003	Rotary vice (heavy-duty type)