

Surftest SV-3100

Series 178 - Surftest SV-3100

The Surftest SV-3100 Series provides highly accurate, high-level analysis, and multifunctionality in the measurement of surface roughness.

- The X-axis drive unit guide is made of superbly anti-abrasive ceramic. No lubrication is required.
- High-accuracy glass scales, built-in to the X-axis and Z2-axis ensure highly accurate positioning.

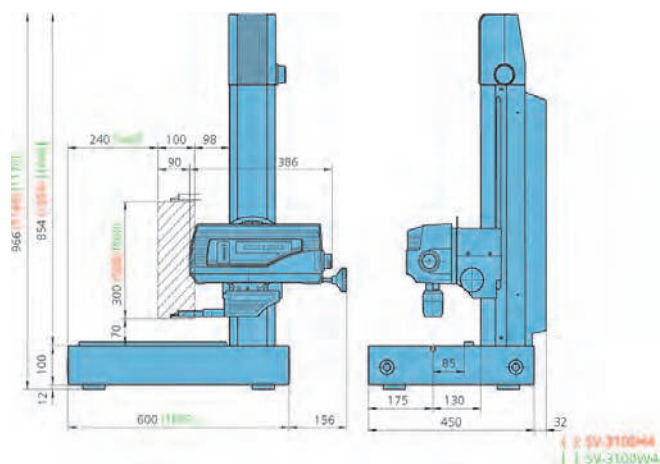


SV-3100

X-axis measuring range : 100 mm

X-axis Traverse straightness : $(0.05+1L/100)$ μm , L = Measurement length (mm)

Model	SV-3100S4	SV-3100S4.	SV-3100H4	SV-3100H4.	SV-3100W4	SV-3100W4.
No.	178-471D-1	178-471D-2*	178-472D-1	178-472D-2*	178-473D-1*	178-473D-2*
Order No. UK only	178-481E-1	178-481E-2	178-482E-1	178-482E-2	178-483E-1	178-483E-2
Stylus Tip angle	60°	90°	60°	90°	60°	90°
Stylus Tip radius	2 μm	5 μm	2 μm	5 μm	2 μm	5 μm
Detector measuring force	0.75 mN	4 mN	0.75 mN	4 mN	0.75 mN	4 mN
Vertical travel	300 mm power column	300 mm power column	500 mm power column	500 mm power column	500 mm power column	500 mm power column
Granite base size (WxD)	600 x 450 mm	600 x 450 mm	600 x 450 mm	600 x 450 mm	1000 x 450 mm	1000 x 450 mm
Dimensions main unit (WxDxH)	756 x 482 x 966 mm	756 x 482 x 966 mm	756 x 482 x 1166 mm	756 x 482 x 1166 mm	1156 x 482 x 1176 mm	1156 x 482 x 1176 mm
Mass main unit	140 kg	140 kg	150 kg	150 kg	220 kg	220 kg



SV-3100S4 - SV-3100H4 - SV-3100W4

Specifications

X-axis

Resolution	0,05 μm
Scale	Linear encoder
Drive speed	0 - 80 mm/s
Measuring speed	0,02 - 5 mm/s
Traverse direction	Backward
Inclining range	$\pm 45^\circ$

Z2 axis (column)

Resolution	1 μm
Scale	ABSOLUTE linear encoder
Drive speed	0 - 20 mm/s

Detector

Range / resolution	800/0,01 μm , 80/0,001 μm , 8/0,0001 μm , (up to 2400 μm with an optional stylus)
Stylus tip	Diamond
Type	Differential inductance

Software

Assessed profiles	FORMTRACEPAK P (primary), R (roughness), WC, WCA, WE, WEA, DIN4776, envelope residual profile, roughness motif, waviness motif
Evaluation parameters	Ra, Rq, Rz, Ry, Rz(JIS), Ry(DIN), Rc, Rp, Rpmx, Rpi, Rv, Rvmax, Rvi, Rt, Rti, R3z, R3zi, R3y, S, Pc(Ppi), Sm, HSC, mr, δ_c , plateau ratio, mrd, Rk, Rpk, Rvk, Mr1, Mr2, Δa , Δq , λa , λq , Sk, Ku, Lo, Lr, A1, A2 Roughness motif parameters : R, AR, SR, SAR, NR, NSRX, CPM Waviness motif parameters : Wte, Wx, W, AW, SW, SAW, NW

Optional

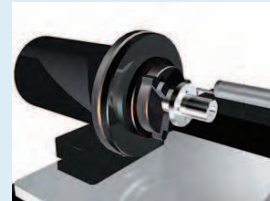
Accessories See next page



Using Y-axis Table



Using Rotary Table 01



Using Rotary Table 02



Refer to the SV-3100 brochure