

Surftest Extreme SV-3000CNC

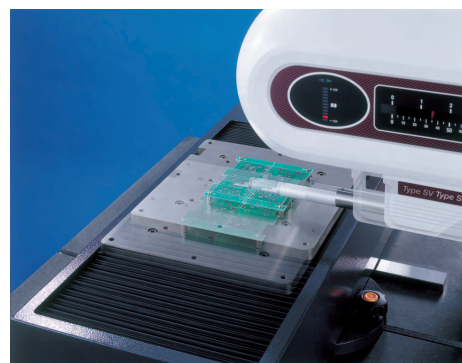
Series 178 - CNC Surface Roughness Testers Surftest Extreme SV-3000CNC

- Each axis has a maximum drive speed of 200 mm/s, permitting high-speed positioning for increased throughput of multiple-profile/multiple-workpieces measurement tasks.
- For models equipped with the α -axis, it is possible to perform continuous measurement over horizontal and inclined surfaces by power-tilting the drive unit.
- For models equipped with the Y-axis table, it is possible to expand the measuring range for multiple workpieces, etc., through positioning in the Y-axis direction.
- The detector unit incorporates an anti-collision safety device, causing the detector unit to automatically stop if its main body collides with a workpiece or jig.
- Inclined plane measurement is possible through 2-axis simultaneous control in the X and Y directions.



SV-3000CNC
with personal computer system and software

Model	SV-3000CNC-S	SV-3000CNC-H	SV-3000CNC-S.	SV-3000CNC-H.
No.	178-522-2*	178-542-2*	178-524-2*	178-544-2
Z2-axis vertical travel	300 mm	500 mm	300 mm	500 mm
Y-axis table unit	-	-	Installed	Installed
α -axis unit	Installed	Installed	Installed	Installed



Specifications

X1 axis	
Measuring range	200 mm
Resolution	0,05 μ m
Scale	Reflective-type linear encoder
Drive speed	200 mm/s (max. CNC) 0-60 mm/s (joystick)
Measuring speed	0,02 - 2 mm/s
Traverse direction	Backward
Traverse straightness	0,5 μ m / 200 mm
α axis	
Inclination angle	-45° (CCW) to +10° (CW)
Resolution	0.000225°
Rotational speed	1 rpm
Z2 axis (column)	
Resolution	0,05 μ m
Scale	Reflective-type linear encoder
Drive speed	200 mm/s (max. CNC) 0-60 mm/s (joystick)
Base size (WxD)	750 x 600 mm
Base material	Granite
Detector	
Range / resolution	800/0,01 μ m, 80/0,001 μ m, 8/0,0001 μ m
Measuring force	0.75 mN (178-396-2) 4 mN (178-397-2)
Stylus tip	Diamond, 60°/2 μ mR (178-396-2) 90°/5 μ mR (178-397-2)
Dimensions (WxDxH)	800 x 651 x 1000 mm
Mass	(800 x 651 x 1200 mm *1) 240 kg (250 kg*1)
Optional Accessories	
Mechanism	Vibration isolation stand
Natural frequency	Diaphragm air spring 2.5 - 3.5Hz
Levelling	Automatic control with mechanical valves
Air supply pressure	390 KPa
Max. loading capacity	350 kg
Dimensions (WxDxH)	1080 x 995 x 718 mm
Mass	315 kg
Y-axis table unit	
Measuring range	200 mm
Resolution	0,05 μ m
Scale unit	Reflective-type linear encoder
Drive speed	200 mm/s (max. CNC) 0-60 mm/s (joystick)
Max. loading capacity	20 kg
Traverse straightness	0,5 μ m/200 mm
Linear displacement accuracy (at 20°C)	$\pm(2+2L/100)$ μ m
Table size	200 x 200 mm
Dimensions (WxDxH)	320 x 646 x 105 mm
Mass	35 kg

*1 High column model

L : Dimension between two measurement points