

Surface Measuring System SURFTEST SV-3200 Series



New Options Enhance Multifunctionality for Higher Throughput.

Form Measurement





Surface Measuring System SURFTEST SV-3200 Series

Features

- This high-accuracy, multi-functional stylus-type 2D surface roughness tester delivers best-in-class positioning speed (X-axis: up to 80mm/s, Z-axis: up to 30mm/s).
- Optional accessories reduce total setting, measurement and evaluation time.

Option

3D Surface Roughness Measurement

Capable of 3D surface roughness/contour measurement and analysis^{*1} by using X-direction 2D measurement data and high-accuracy Y-axis positioning table, 3D/Y-axis table^{*2}.

*1 Requires optional software FORMTRACEPAK-PRO or MCubeMap.

*2 Does not support Y-direction 2D measurement and X/Y-direction inclined measurement.

Option 3 Adaptable Detector Orientation

Optional holders allow manual change of the detector's orientation.









Option 2 Easy Drive Unit Alignment

Optional accessory tilts the drive unit to allow alignment with a large or heavy workpiece that cannot be mounted on the auto-leveling table.



Optional Detector Holders

Code	Туре	Remarks
S-3000	-	Standard accessory
S-3000C	Crank	Optional
S-3000CR	Crank, manual rotary	Optional
S-3000MR	Manual rotary	Optional, long type

The crank orientation enables surface roughness measurement of a crankshaft (in the axial direction). The rotary-type enables roughness measurement



on an upper/lower surface of a hole without the need for an extra setup. Furthermore, S-3000MR provides a 100mm longer reach than the other holders, thus enabling measurement in a deep hole (in its upward or downward orientation).

Specifications

Model No.		SV-3200S4	SV-3200H4	SV-3200W4	SV-3200L4	SV-320058	SV-3200H8	SV-3200W8	SV-3200L8		
Order No. (inch)		178-444-11A	178-445-11A	178-446-11A	178-484-11A	178-447-11A	178-448-11A	178-449-11A	178-485-11A		
Measuring range	X-axis	4" (100mm)				8" (200mm)					
	Z1-axis (detector)	32000μin / 3200μin / 320μin (800μm / 80μm / 8μm)									
Z2-axis (column) traverse range		12" (300mm)	20" (500mm)		27.5" (700mm)	12" (300mm)	20" (500mm)		27.5" (700mm)		
X-axis inclination angle		$\pm 45^{\circ}$ (only for a model with the X-axis leveling device)									
Detector detection method		Differential inductance									
Resolution	X-axis	1.97µin (0.05µm)									
	Z1-axis (detector)	.4µin, .04µin, .004µin (0.01µm, 0.001µm, 0.0001µm)									
	Z2-axis (column)	39.4µin (1µm) (ABS scale)									
Drive speed	X-axis	0 to 3.1 "/s (0 to 80mm/s) and manual operation									
	Z2-axis (column)	0 to 1.2 "/s (0 to 30mm/s) and manual operation									
Straightness		(2+L)µin (0.05+0.001L) µm			20μin / 8" (0.1+0.002L) μm						
Measuring force		0.75mN									
Stylus tip		60°, R2µm									
Base size (width × depth)		23.6 x 17.7" (600 x 450mm)	39.4 x 17.7" (1000 x 450mm)) x 450mm) 23.6 x 17.7" (600 x 450mm) 39.4 x 17.7" (1000 x 450mm)					
Base material		Gabbro									



Mitutoyo America Corporation

www.mitutoyo.com 1-888-MITUTOYO (1-888-648-8869)

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