Surface Texture and Contour Integrated Measuring Instruments

SURFCOM 2800G

Advanced Functions and Superior Operational Ease

※Printer is optional

TiMS Integrated Measuring System (Roughness/Contour)

Simply touch the icon to change between the roughness and contour measuring modes. Measured data can be combined when printed.

AI Function (Roughness) (patented)

The AI function automatically sets the measuring conditions and executes measurement.

Automatic Operation Teaching/Playback Function (Roughness/Contour)

This function automatically stores measurement and analysis procedures in the memory, including drive unit and column movements. This enables CNC measurements to be performed.

Dimension Line Display Function (Contour)

This enables dimension lines to be drawn on the diagram along with actual measured values for parameters and geometric deviation.

Built-in Shape Merge Function

The profile synthesis function eliminates the analysis range limitation created by the stylus angle (contour).

High Precision Contour Detecotrs are Standard equipment

The laser optical diffraction scale is adopted, and high resolution has been achieved.

Model				SURFCOM 2800G							
				-11	-12	-13	-14	-21	-22	-23	-24
Measuring Range		Z-axis (vertical)		Roughness 800μm Contour 50mm							
		X-axis (horizontal)		100mm				200mm			
Accuracy	Roughness Detectors	Measuring Resolution		0.01μm/800μm range 0.0004μm/25μm range (0.0001μm/6.4μm range) ＊1							
	Contour Detectors	Z-axis Indication Accuracy (vertical)		±(0.8+|4H|/100)μm H:(Measuring length)							
		Resolution		0.025μm / Full range							
	Tracing driver (Roughness)	X-axis Resolution		0.04μm or 32,000 points (300,000 data uptake points)							
	Tracing driver (Contour)	X-axis Indication Accuracy (horizontail)		±(1+2L/100)μm							
		Resolution		0.1μm							
Straightness accuracy				Roughness System:(0.05+1.5L/1000)μm, Contour System:1μm/100mm, 2μm/200mm							
Sensing method		X-axis (horizontail)		Moiré striped scale				Linear scale			
		Detectors	Roughness Detector	Differential transducer							
			Contour Detector	Laser optical diffraction scale							
Speed		Column up/down speed (Z-axis)		—	10mm/s (3mm/s) ＊2			—	10mm/s (3mm/s) ＊2		
		Sensor		Measuring:0.03, 0.06, 0.15, 0.3, 0.6, 1.5, 3, 6mm/s (8 speeds)							
Sensor Unit	Roughness	Stylus, Measuring Force		Changeable, 0.75mN							
		Stylus radius (Stylus material)		2μmR(60°conical diamond), one equipped as standard							
	Contour	Stylus, Measuring Force		Changeable, 10 ～ 30mN, Retract function							
		Stylus radius (Stylus material)		25μmR(24°conical Tungsten Carbide), two equipped as standard							
		Measuring Direction, Orientation		Pull/push and Up/down directions							
Moving Range		Pickup movement drive distance		100mm				200mm			
		Measuring height		250mm		450mm		250mm		450mm	
Stone table dimensions and weight		Dimensions		600X317mm			1000X450mm	600X317mm			1000X450mm
		Max. load ＊3		40kg	35kg	26kg	41kg	35kg	29kg	20kg	35kg
Dimentions and weight		Installation dimensions ★	Width	2000mm			2300mm	2000mm			2300mm
			Depth	1000mm				1000mm			
			Height	1700mm		1900mm		1700mm		1900mm	
		Installation dimensions		120kg	125kg	135kg	240kg	125kg	130kg	140kg	245kg
		Power source Power consumption		Single phase AC100~240V±10% grounding required, 50/60Hz / 710VA							

＊1: When high-magnification pickup is used. ＊2: J/S Operation
＊3: Desktop Anti-vibration table(E-VS-S57B) is used with -11,-12,-13,-21,-22,-23. Anti-vibration table(E-VS-R16B) is used with -14,-24.
★ Optional ordinary stand, anti-vibration table, and computer rack included in dimensions.