

SURFCOM I500DX3/SD3



Introducing the high accuracy linear motor for the surface roughness measurement machine first-ever of the world.

Achieving the world class low vibration, which allows high accuracy and large magnification measurement.

For the space-saving design of the DX3 model, the measurement room can be utilized efficiently.



SURFCOM 1500DX3



*Printer is optional.

■High-Performance Compact Pickup

A new compact built-in pickup allows high-magnification, wide area measuring. The measuring range is $1000\mu m$ with an outside diameter of 14 mm, and a measuring magnification of 500,000 times.

■ New Linear Motor Drive (Patent Pending)

The new linear motor enables the fastest measurement speeds in the world and low vibration for stable, high-magnification measurement.

A simple configuration (no feed screw or gear box) and non-contact driver also maintains stability over long term operation.

■ High-speed Measurement for Dramatically Improved Productivity

Roughness Measurement: 3mm/s max.; Waviness Measurement: 20mm/s max.; Moving Speed: 60mm/s max. Measurement Efficiency: 10 times better (compared with previous models)

Specifications

Model			SURFCOM 1500DX3/SD3								
			-12	-13	-14	-15	-22	-23	-24	-25	
Measuring Range	Z-axis (vertical)			1000μm							
	X-axis (horizontal)			100mm 200mm							
Accuracy	Detectors Measuring Resolution		0.01µm/1000µm range ~0.0001µm/6.4µm range								
	X-axis Resolution		0.04µm or 32,000 points (300,000 data uptake points)								
	Tracing driver Scale Resolution		0.016µm								
Straightness accuracy				(0.05+1.0L/1000)μm (L: Measuring length mm)							
Sensing method				Z-axis (vertical direction): differential transducer; X-axis (horizontal direction): linear scale							
Speed	Column up/down speed (Z-axis)			3~10mm/s							
	Speed (X-axis)			Measuring: 0.03~20mm/s, Movement: 60mm/s max.							
Detectors	Stylus, Measuring Force			Changeable, 0.75mN							
	Stylus radius (Stylus material)			2μmR(60°conical diamond), one equipped as standard							
Moving range	Pickup movement drive distance			100mm				200mm			
	Column up/down stroke			250mm	450)mm	650mm	250mm	450	mm	650mm
Stone table dimensions and weight	Dimensions			600x320mm		1000x450mm		600x320mm		1000x450mm	
	Max. load★			38kg	29kg	94kg	85kg	32kg	23kg	88kg	79kg
Dimensions and weight※★	In at all at an		Width	1250mm		1650mm		1250mm		1650mm	
	Installati		Depth	800mm		900mm		800mm		900mm	
	dirilerisio	OI IS	Height	1480mm	168	0mm	1880mm	1480mm	168	0mm	1880mm
	Weight			225kg	235kg	420kg	430kg	230kg	240kg	425kg	435kg
	Power source/power consumption			Single phase AC100 \sim 240V \pm 10% grounding required., 50/60Hz/670VA							