Linear series

SURFCOM 1500DX3/SD3

Linear Motor Drive Achieves Low Vibration Texture Measurement

SURFCOM 1500DX3

Printer is optional

SURFCOM 1500SD3

New, High-Performance Compact Pickup

- A new compact built-in pickup allows high-magnification, wide area measurement.
- The measuring range is 1000 µm with an outside diameter of 14 mm, and a measuring magnification of 500000 times.

Linear Motor Drive (Patented)

- A linear motor drive ensures high accuracy and high-speed movement.
- Low vibration ensures more stable measurement at high magnifications.

*See page 8 for the details of the linear drive.

High-Speed Measuring for Dramatically Improved Productivity

Very high speeds of 3 mm/s maximum for roughness measurement, 20 mm/s maximum for wave measurement, and a moving speed of 60 mm/s delivers measuring efficiency that is five to ten times better than existing models.

Allows Upgrading to a Multi-Purpose system

You can easily upgrade from 2D to 3D roughness measurement or support both roughness (2D/3D) measurement and contour measurement on a single instrument just by adding on units. It is possible to upgrade the instrument to a multi-purpose system by adding a contour detector after the delivery of the instrument.

*Upgrading of some units is performed at the factory.
*Note: Upgrading to a multi-purpose system by adding a contour detector is performed at the factory.

Patented AI Function Simplifies Measuring

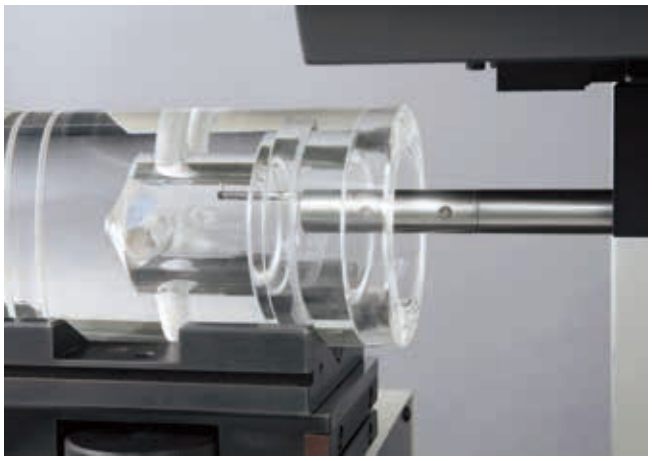
- The measuring instrument selects suitable roughness settings and analysis conditions, even when measuring condition settings are not pre-configured.
- A lesson mode is also provided to teach users measuring instrument operations. Just one more example of ACCRETECH's commitment to build measuring instruments that can be used by anyone.

World Wide Machine

- This model complies with the latest ISO, JIS, DIN, ASME, CNOMO and other standards.
- It has cleared the European safety standard requirements for CE marking.
- It supports operation using Japanese, Chinese, Korean, English, German, French, Italian and Spanish.

Full Automation for Improved Measurement Efficiency

- The teaching function fully automates the entire process, from multiple location measurements to creation of the final inspection report by pasting data into it.
- A moving speed of 60 mm/s dramatically improves measuring efficiency when performing full automatic measurement.



Conforms to all specifications of measuring pressure at all orientations
(with Auto Stop Function)
(Maintains measuring pressure of 0.45mN, facing upwards)

Freedom to Re-Analyze

Re-analysis can be performed easily after changing the measurement standard (linear, first half, latter half, round surface, both end), configuring the evaluation range, and removing defective data from a notch.

Able to Measure Film Thickness and Intricate Profiles

This instrument is applicable to film thickness measurement (step/area), wear volume calculation (superimposed profile area) and waviness evaluation of LCD glass requiring high accuracy.

Flexible Input and Output Functions

Import and export functions make it possible to paste image data into measurement results, and to paste measured waveform data into a standard word processor or spreadsheet file.

Horizontal Trace measurement

Measurements can be performed with roughness pickup rotated 90 degrees.

Specifications

Model			SURFCOM 1500DX3/SD3							
			-12	-13	-14	-15	-22	-23	-24	-25
Measuring range	Z-axis (vertical)		1000 µm							
	X-axis (horizontal)		100 mm				200 mm			
Accuracy	Detector resolution		0.02 µm/1000 µm range to 0.0001 µm/6.4 µm range							
	X-axis resolution		0.04 µm or 32000 points (300000 data uptake points)							
Straightness accuracy			(0.05 + L/1000) µm (L: Measuring length mm)							
Sensing method	Z-axis (vertical)		Differential inductance							
	X-axis (horizontal)		Linear scale							
Speed	Column up/down speed (Z-axis)		10 mm/s							
	Measuring speed (X-axis)		0.03 mm/s to 20 mm/s							
	Moving speed (X-axis)		60 mm/s max.							
Detector	Stylus, measuring force		Replaceable, 0.75 mN							
	Stylus radius (stylus material)		2 µmR (60° conical diamond) One piece equipped as standard							
Operation range	Tracing driver stroke		100 mm				200 mm			
	Column up/down stroke		250 mm	450 mm		650 mm	250 mm	450 mm		650 mm
Granite table	Dimensions		600 × 317 mm		1000 × 450 mm		600 × 317 mm		1000 × 450 mm	
	Permissible loading weight★		38 kg	29 kg	94 kg	85 kg	32 kg	23 kg	88 kg	79 kg
Other	Installation dimensions★	Width	1250 mm		1650 mm		1250 mm		1650 mm	
		Depth	800 mm		900 mm		800 mm		900 mm	
		Height	1480 mm	1680 mm		1880 mm	1480 mm	1680 mm		1880 mm
	Weight★		225 kg	235 kg	420 kg	430 kg	230 kg	240 kg	425 kg	435 kg
	Power supply, frequency, consumption		Single phase AC 100 V ±10% (grounding required), 50 Hz/60 Hz, 670 VA							

★Dimensions and weight are for the DX type.