Advanced 3D Roughness Analysis Software

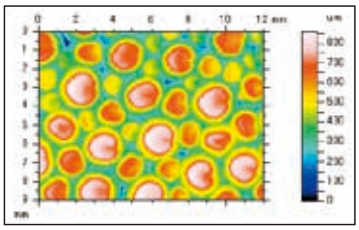
SURFCOM Map

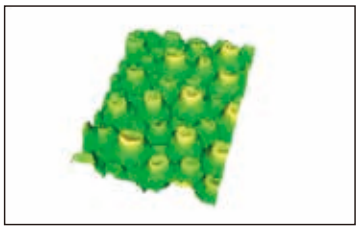
Versatile 3D Analysis, Simple Operation

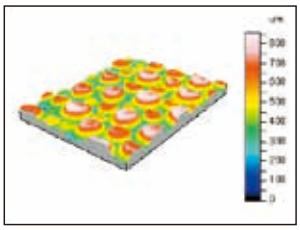
SURFCOM Map imports 3D roughness data measured with SURFCOM Series software for more tha lysis. A rich collection of analysis functions combines with simple operation to make SURFCOM Map the m ss analysis software available.

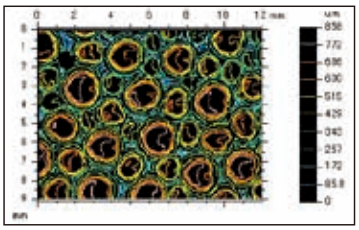
Rich Collection of Analysis Functions

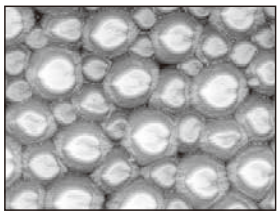
More than 20 types of analysis, including color display, photograph display, contour line display, 3D display, load curve graph, and more.

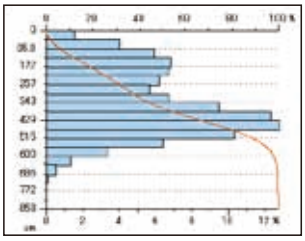

Color display


3D display (surface)


3D display (line)

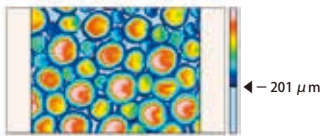

Contour screen


Photograph display


Bearing area curve

Volume calculation, section profile display, distance/angle calculation, level difference calculation

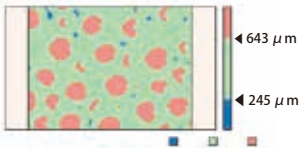
Island volume



Number of islands	3
Island average volume	7.4 m^3
Island average height	276 m
Island average area	33.7 mmL
Average height/surface area ratio	8.18 μm/mmL

Calculates the volume of islands that exceed a specified level.

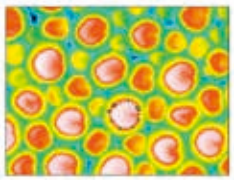
Section profile display



Region (%)	0.832	742	25
Space volume (%)	0.168	35	90.2
Material volume (%)	90.8	65	9.73
Space volume (μm,mm^2/mm^2)	0.36	150	194

Color classification of surfaces higher and lower than a specified level.

Hole and projection volume



	Holes	Projections
Surface (mm^2)	0.000298	1.77
Volume (mm^2)	0.00e-000	0.162
Max. depth/height (μm)	0.00e-000	0.251
Average depth/height (μm)	0.00e-000	0.0913

Calculates the volume of specified holes and projections.

Distance and angle calculation

Cursor 1	Cursor 2
X=1.75 mm	X=9.38 mm
Y=7.05 mm	Y=3.8 mm
Z=670 mm	Z=737 mm

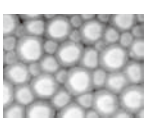
Horizontal distance	8.29 mm
Vertical height	66.8 μm
Diagonal distance	8.29 mm

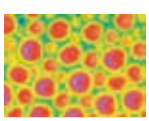
Calculates the distance between two specified points and the angle formed by two straight lines.

Wide Range of Visual Representations of Surface Properties

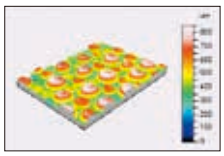
A color palette makes it easy to change the appearance of the display. A custom palette also can be created.



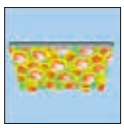


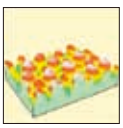


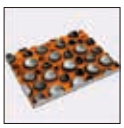
Freely selectable display color, viewpoint, magnification scale, light direction, etc.



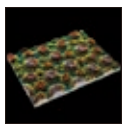
Rotation


Background change


Magnification change

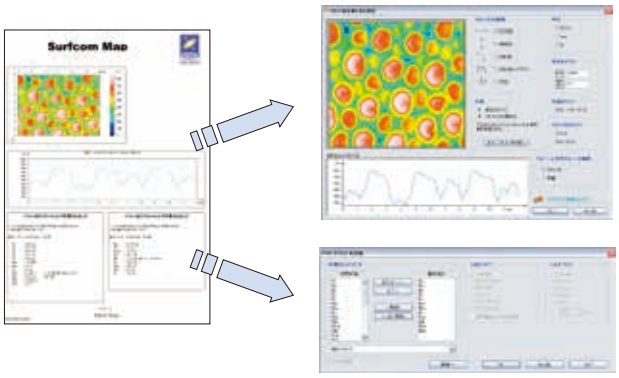

Pallet change


3D display (line)


3D display (line: color)

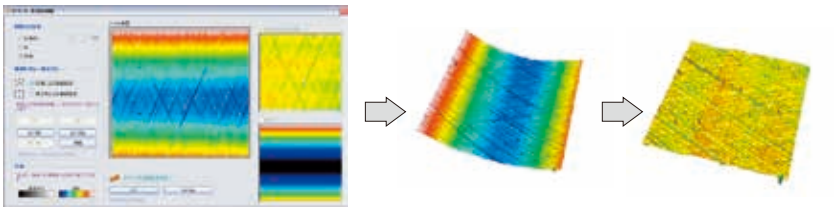
Outstanding Ease of Operation Enhances Analysis Efficiency

Object orientation software that enables condition modification on the inspection report.



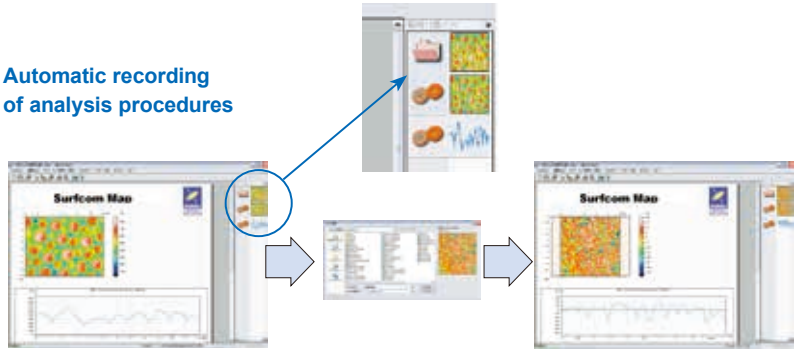
Intuitive operation lets you modify conditions simply by using the mouse to click the object on the inspection report.

Effects can be viewed on the analysis condition modification screen.



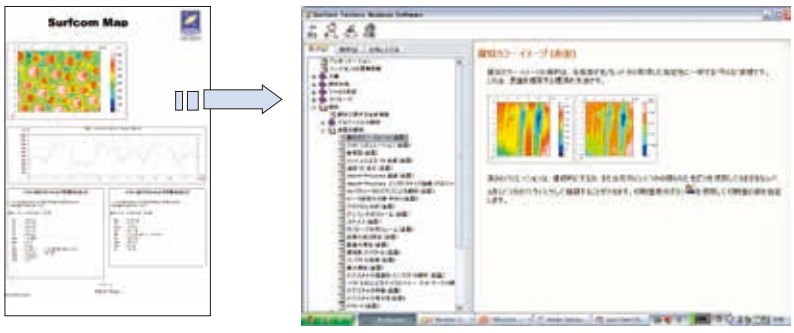
Condition settings can be configured, while monitoring the effect on the analysis condition modification screen. This makes it easy to set optimal conditions.

Automatic recording of analysis procedures



Analytical procedures performed by the operator are recorded automatically, which means that the same procedure can be applied easily to another profile.

Help function



Help can be displayed by selecting an object on the inspection report and pressing the [F1] key.

Workpiece movement type

Workpiece movement type with proven accuracy

Applicable models

SURFCOM2000 SURFCOM2900
SURFCOM1900 SURFCOM1500
SURFCOM2800 SURFCOM1800
SURFCOM1400 SURFCOM5000

Detector movement type (patented)

A compact Y-axis tracing driver (Y-driver) is located under the X-axis tracing driver, eliminating the need for moving the workpiece. This makes it possible to perform 3D roughness analysis on large, heavy workpieces.

Applicable models

SURFCOM2000 SURFCOM1500
SURFCOM2900 SURFCOM1900

*Additional installation after delivery of the instrument is possible.

Specifications	Y-axis fixed pitch tracing driver				
Drive system	Detector movement	Workpiece movement			
Model	E-DH-S173A	E-YM-SO6A	E-YM-S12A	E-YM-SO7A	E-YM-S08A
Drive range	13 mm	50 mm	100 mm	150 mm	200 mm
Min. feed pitch	0.001 mm				
Number of feed line	2 to 4001 lines				
Straightness accuracy	1 µm	0.05 + 3L/1000 µm			
Table surface dimensions	—	80 × 120 mm	100 × 120 mm	120 × 150 mm	150 × 150 mm
Max. loading weight	—	5 kg	10 kg	5 kg	10 kg

Three Types of Software

A color palette makes it easy to change the appearance of the display. A custom palette also can be created.

Main Function Comparison

Analysis functions	Premium	Expert	Standard
Color display	○	○	○
Photograph display	○	○	×
Contour line screen	○	○	○
3D display (line)	○	○	○
3D display (continuous surface)	○	○	×
Load curve	○	○	○
Peak distribution	○	○	○
Island volume	○	○	×
Section profile display	○	○	×
Hole and projection volume	○	○	×
Distance, angle	○	○	×
2D surface analysis	○	×	×