

# NEW PRODUCT INFORMATION

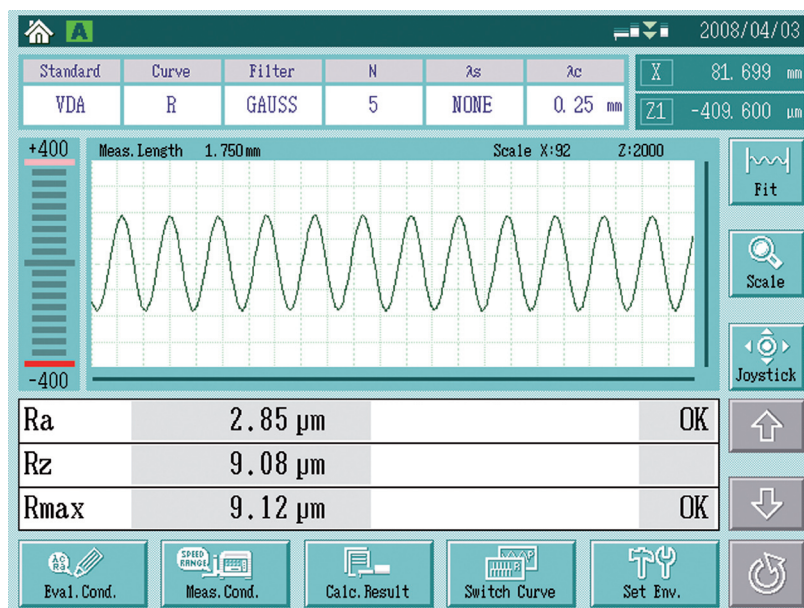
## Surftests: Portable SJ-500 and Desktop SV-2100

High-precision instruments for measuring surface roughness

### Features

Reference plane measuring system for analyzing: SV-2100S

- Roughness profile
- Waviness profile
- Primary profile
- Evaluation of geometric properties



7.5" (190 mm) TFT color display with touch-screen functionality



# Mitutoyo

## Key technical specifications

Messgerät		SJ 500	SV 2100 M4	SV 2100 S4	SV 2100 H4	SV 2100 W4
Measuring range	X axis	50 mm	100 mm			
	Z axis	800 µm / 0.01 µm 80 µm / 0.001 µm 8 µm / 0.0001 µm				
Measuring range / Resolution	Z axis	800 µm / 0.01 µm 80 µm / 0.001 µm 8 µm / 0.0001 µm				
Straightness	X axis	0.2 µm / 50 mm	0.15 µm / 100 mm			
	Z axis	ceramic / Linear scale				
Measuring method	X axis	ceramic / Linear scale				
	Z axis	differential inductance				
Standard stylus	X axis	-				
	Z axis	ABS scale				
Measuring speed		angle 60°, radius 2 µm				
Drive speed	X axis	up to 20 mm/s	up to 40 mm/s			
	Z axis	-	up to 20 mm/s			
Measuring force		0.75 mN				
Display unit		7.5" colour-TFT-display touchscreen				
Stand		option manual	standard manual	standard motorized		
Base material		Granite				
Column height		300 mm	350 mm	550 mm		
Base size (W x D) [mm]		600 x 450			1000 x 450	
Main unit mass		140 kg		150 kg	220 kg	

Display unit	for referenceplane measuring systems Surftest SJ 500 and SV 2100
Display	7,5 " TFT color screen (Touchscreen)
Printer	internal thermal printer
Joystick	used for motorized axis
<b>Features</b>	
Profiles	Roughness profile, Primary profile, Waviness profile, Contour analysis
Evaluation parameters	Ra, Rc, Ry Rz, Rq, Rt, Rmax, Rz1max, Rp, Rv, R3z, Sm, S, Pc, mr(c), δc, mr, tp, Htp, Lo, Lr, Ppi, HSC, Δa, Δq, Ku, Sk, Rpk, Rvk, Rk, Mr1, Mr2, A1, A2, Vo, λa, λq, R, AR, Rx, W, AW, Wx, Wte
Analysis graphs	BAC, power spectrum
Cutoff value	0.08 mm / 0.25 mm / 0.8 mm / 2.5 mm / 8 mm
Number of single sampling lengths	1x, 3x, 5x, XL (XL=selectable)
Filters	2CR, PC75 ( phase corrected), Gauss
Contour analysis	coordinate difference between two points, calculation of area, angle, radius and distance
Evaluation parameters	free selectable
Calibration	menu-driven
Inclination	menu-driven
Tolerance	upper and lower limit
Number of measurement conditions	10 sets recordable

### User-friendly display and simple operation

This surface measuring instrument is equipped with a 7.5" high-resolution, touch screen, TFT color display for user friendly, simple operation. A joystick integrated into the control unit allows safe and rapid stylus positioning. Manual fine adjustment is provided by handwheel and joystick on the SV-2100 to enable safe and precise positioning of the stylus when, for example, measuring the surface of features such as small bores.

### A wide choice of analysis options

46 surface parameters are available to analyze surface roughness and – additionally – a wide range of form analyses, such as radius, angle, steps and coordinate difference.

**Note:** All information about our products in this printed material, particularly the illustrations, drawings, measurement and performance specifications, as well as other technical specifications are to be interpreted as approximate average values. In this respect, changes in construction, technical specification, measures and weights remain reserved. Our specified standards, similar technical regulations as well as the technical specifications, descriptions and illustrations of products are accurate on the date of printing. Furthermore, our general terms of business in the currently applicable revision are binding. Only the offers we make are definitive.

Coordinate Measuring Machines	▬
Vision Measuring Systems	▬
Form Measurement	▬
Optical Measuring	▬
Sensor Systems	▬
Test Equipment and Seismometers	▬
Digital Scale and DRO Systems	▬
Small Tool Instruments and Data Management	▬

Mitutoyo Nederland b.v.  
Storkstraat 40  
3905 KX Veenendaal  
T 0031 318 534911  
F 0031 318 534811  
sales@mitutoyo.nl  
www.mitutoyo.nl

**Mitutoyo**