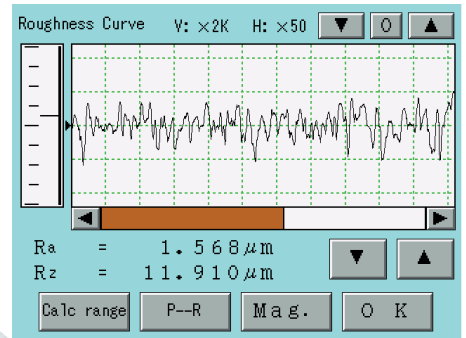


Surface Texture Measuring Instrument >>>

Operator-oriented Operation for the Workplace
New Surface Texture Measuring Instrument for Easy Operation

SURFCOM 480A-12

SURFCOM 480A

Supported Languages English, Japanese,
German, French, Italian, Spanish and Chinese!
JIS2001 compliant!
Simplified automatic 16% rule application

TFT Color LCD Touch Panel

The color LCD touch panel with a wide field of view features high clarity. Simply touch the desired icon to perform operation. Touch panel input can be performed by using your finger or with the touch-pen provided, facilitating on-site measurements.

**Customize Icons**

The customize function can be used to create a special menu where only the icons that are used most frequently are displayed, substantially enhancing operational efficiency.

**AI Function (patented)**

The AI (artificial intelligence) function automatically selects the ideal cut-off value, measuring range and other conditions by simply entering the parameters and allowable values denoted on the machining drawing. This automates measurement.

**Guidance Function**

This function guides the user through the measuring procedures, enabling beginners to make measurements.

**Memo Function**

A short note or diagram can be entered with the touch pen and printed using the memo function.

**Host of Analysis Functions**

The unit incorporates 34 types of roughness parameters (Ra, Rz, Ry, Sm, S, tp, etc.) and 32 types of waviness parameters. The steps on electrical parts, film thickness, surface area and other items can be analyzed.

**Tilt Correction Function**

Six types of automatic tilt correction are provided: Linear, first half, latter half, both end, round surface and spline curve (patented).

**Evaluation Range Setting (patented)**

The waveform on the screen is enclosed by two cursors, allowing the desired evaluation range to be set and the parameters to be calculated.

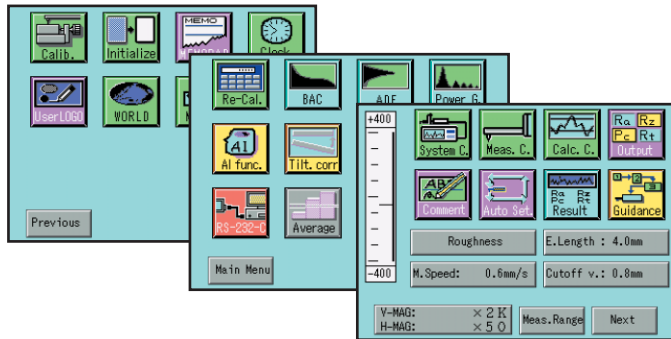
**PC Card Slot**

Measuring conditions, measured result management or measured data can be output in binary and text format. This data can be easily read from the PC card slot on a personal computer. Storage of data on CF cards and other types of memory cards is possible to use.

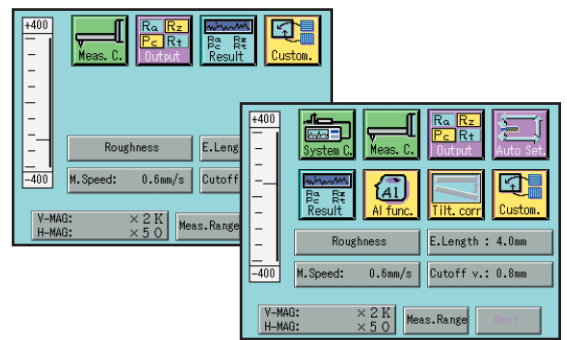
Sample Display

The customize function on the menu allows icons to be edited and arranged as desired.

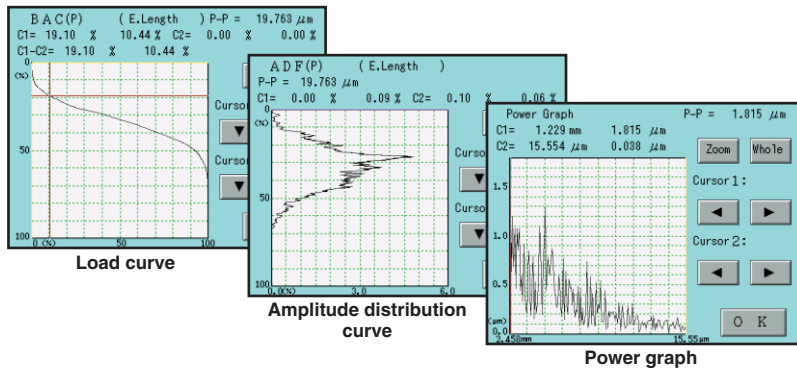
Main Menu



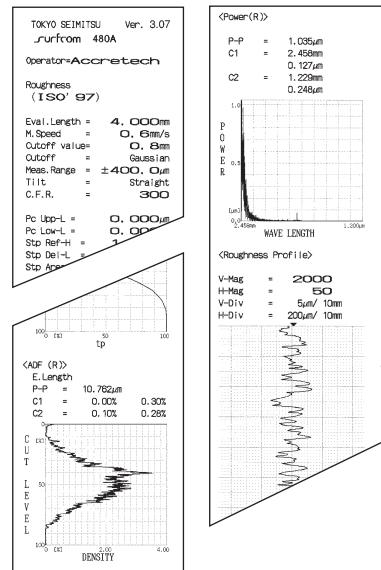
Sample Customized Screens



Analysis Results



Sample data sheet



Specifications

Model		SURFCOM 480A
Measuring Range	X-axis (horizontal)	100mm
	Z-axis (vertical)	800μm (Measuring range/resolution: 800μm/10nm, 80μm/1nm, 8μm/0.1nm)
Straightness accuracy		(0.05 + 1.5L/1000) μm L: Measuring length (mm)
Analysis items	Conformance	Complies with JIS-2001, JIS-1994, JIS-1982, ISO-1997, ISO-1984, DIN-1990, ASME-1995, CNOMO
	Parameters	Ra, Rq, Ry, Rp, Rv, Rc, Rz, Rmax, Rt, Rz.J, R3z, Sm, S, R Δa, R Δq, R λq, TILT A, Ir, Pc, Rsk, Rku, Rk, Rpk, Rvk, Mr1, Mr2, VO, K, tp, Rmr, tp2, Rmr2, R δc, AVH, Hmax, Hmin, AREA, NCRX, R, Rx, AR, NR, CPM, SR, SAR
	Evaluation curves	Section profile curve, roughness curve, filtered waviness curve, filtered center line waviness curve, rolling circle waviness curve, rolling circle center line waviness curve, DIN4776 special curve, roughness motif curve, waviness motif curve, envelope waviness curve
	Surface Characteristics graphs	Bearing area curve, amplitude distribution (ADF) curve, power graph
	Tilt correction	Linear correction, round surface correction, first half correction, latter half correction, both end correction, spline correction (linear, round surface, and both end correction are supported in an arbitrary range)
Magnification	Vertical (Z-axis)	50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 50K, 100K, 200K,* 500K,* auto
	Horizontal (X-axis)	1, 2, 5, 10, 20, 50, 100, 200, 500, 1K, 2K, auto
Filter types		Standard filter (2RC), phase compensation filter (2RC), phase compensation filter (Gaussian)
Measuring Speed		0.03, 0.06, 0.15, 0.30, 0.60, 1.5, 3, 6mm/s (8 speeds)
Detector		Tip radius: 2μm, Material: Diamond, Measuring force: 0.75mN
Special functions	Measuring AI	AI functions provide for easy procedures, enabling beginners to make measurements.
	Step analysis function	Ideal for film thickness and surface area measurement of semiconductor parts.
	PC card	Data output as text file for transfer to a personal computer.
Standard accessories		Standard specimen (E-MC-S24B), recording paper (E-CH-S21A), touch pen (E-MA-S54A), instruction manual
Dimensions and weight	Power Source	AC100-240V ±10%, 50/60Hz, 90VA
	Installation dimensions	1000 (W)×800 (D)×750 (H)mm
	Weight	88kg (for SURFCOM 480A-12)

* When high-magnification pickup is used