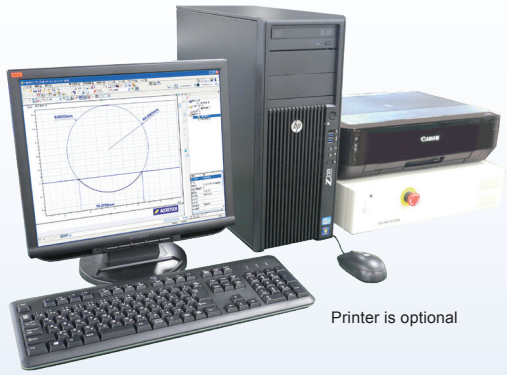
Standard Series

SURFCOM 2800G

Advanced Functions and Superior Operational Ease

SURFCOM 2800G

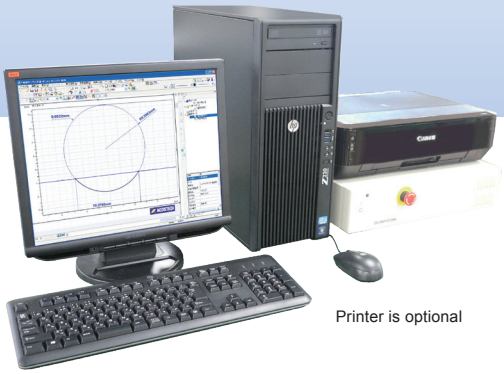


Printer is optional

SURFCOM 1800G

Surface Texture and Contour Analysis Integrated Measuring Instrument

SURFCOM 1800G



Printer is optional

AI Function (Roughness) patented

The AI function automatically sets the measurement conditions and executes measurement.

Automatic Operation Teaching/Playback Function (Roughness/Contour)

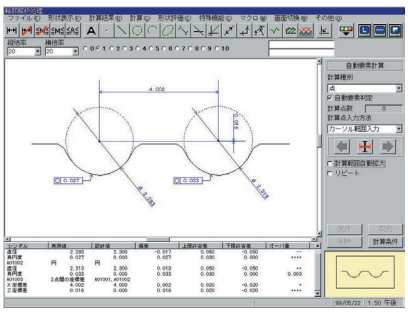
This function automatically stores measurement and analysis procedures in the memory, including tracing driver and column movements. This enables CNC measurements to be performed.

Dimension Line Display Function (Contour)

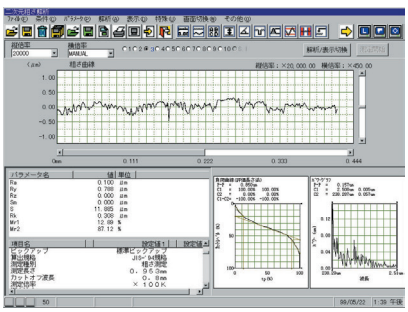
This enables dimension lines to be drawn on the diagram along with actual measured values for parameters and geometric deviation.

Built-in Shape Merge Function

The profile synthesis function eliminates the analysis range limitation created by the stylus angle (contour).

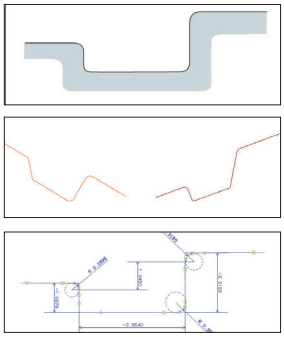


Dimension line display function



Roughness analysis function

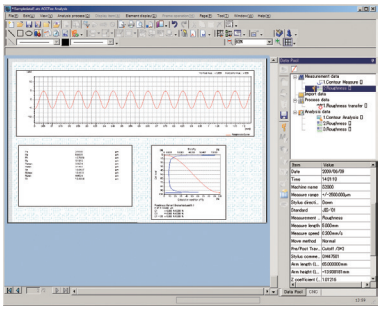
With normal measuring systems, limits are imposed on the measuring angle by the detector stylus angle. ACCRETECH has solved this problem by synthesizing the data for two profiles.



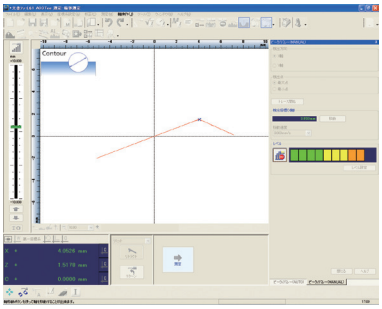
Shape merge function

ACCTee Measurement & Analysis Software

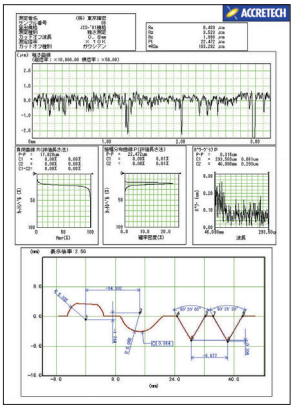
ACCTee is surface texture and contour profile measurement and analysis software with enhanced operability. Provided with wizard modes for easier operation, as well as a variety of support functions such as "AI function", "self-diagnosis function" and "peak and valley detection function", ACCTee makes all measurement tasks easier and more efficient.



Roughness analysis function (ACCTee)



Peak and Valley function (ACCTee)



Print data sheet

Specifications

Model					SURFCOM 2800G/1800G							
					-11	-12	-13	-14	-21	-22	-23	-24
Measuring range			Z-axis (vertical)		50 mm							
			X-axis (horizontal)		100 mm				200 mm			
Accuracy	S1800G series	Roughness	Measuring range		800 µm range to 25 µm range (6.4 µm range)*3							
			Resolution		0.02 µm to 0.0004 µm (0.0001 µm)*3							
		Contour	Z-axis indication accuracy (vertical)		±0.25% (full scale)							
			Resolution		0.1 µm/5 mm range, 0.4 µm/20 mm range, 1 µm/50 mm range							
	S2800G series	Roughness	Measuring range		800 µm range to 25 µm range (6.4 µm range)*3							
			Resolution		0.02 µm to 0.0004 µm (0.0001 µm)*3							
		Contour	Z-axis indication accuracy (vertical)		±(0.8 + |4H|/100) µm (H: Measuring height mm)							
			Resolution		0.025 µm/Full range							
	Common item	Contour	X-axis indication accuracy (horizontal)		±(1 + 2L/100) µm (L: Measuring length mm)							
Tracing driver			Resolution		0.04 µm							
			Straightness accuracy	Roughness	0.05 + 1.5L/1000 µm (L: Measuring length mm)							
				Contour	1 µm/100 mm				2 µm/200 mm			
			Sensing method		Moire striped scale				Linear scale			
			Measuring speed		0.03, 0.06, 0.15, 0.3, 0.6, 1.5, 3, 6 mm/s (8 speeds)							
			Colum up/down speed (Z-axis)		—	10 mm/s (3 mm/s)*1			—	10 mm/s (3 mm/s)*1		
Detector		Sensing method	S1800G series	Roughness	Differential transducer							
				Contour								
			S2800G series	Roughness								
				Contour	Laser optical diffraction scale							
		Roughness measurement	Stylus, measuring force		Replaceable, 0.75 mN							
			Stylus radius (material)		Roughness: Rtip 2 µm (60°conical diamond) Waviness: Rtip 800 µm (Ruby ball) Each stylus equipped as standard							
		Contour measurement	Stylus, measuring force, function		Replaceable, 10 mN to 30 mN, and stepless (retraction) function							
			Stylus radius (material)		Rtip 25 µm (24°conical carbide) Two pieces equipped as standard							
			Measuring direction, position		Pull/push and Up/down directions, Max. following angle: 77°							
Operation range			Tracing driver stroke		100 mm				200 mm			
			Column up/down stroke		250 mm		450 mm		250 mm		450 mm	
Grinate table			Dimensions		600 x 317 mm			1000 x 450 mm	600 x 317 mm			1000 x 450 mm
	Permissible loading weight		In use of desktop anti-vibration table (E-VS-S57B/S58B)		40 kg	34 kg	25 kg	-	34 kg	28 kg	19 kg	-
			In use of large-size desktop anti-vibration table (E-VS-S45A)		50 kg	40 kg	30 kg	90 kg	50 kg	40 kg	30 kg	84 kg
			In use of anti-vibration table (E-VS-R16 B)		50 kg	40 kg	30 kg	40 kg	50 kg	40 kg	30 kg	34 kg
			In use of anti-vibration table (E-VS-R21 B)		50 kg	40 kg	30 kg	100 kg	50 kg	40 kg	30 kg	100 kg
Other			Installation dimensions*2	Width	2000 mm			2300 mm	2000 mm			2300 mm
				Depth	1000 mm				1000 mm			
				Height	1700 mm		1900 mm		1700 mm		1900 mm	
			Weight		120 kg	125 kg	135 kg	240 kg	125 kg	135 kg	140 kg	245 kg
			Power supply, frequency, consumption		Single-phase AC 100 V ±10% (grounding required), 50 Hz/60 Hz, 710 VA							

*1: For joystick operation
*2: The dimensions of -11,-12,-13,-21,-22,-23 include the optional stand (E-VS-S13A), desktop anti-vibration table (E-VS-S57B) and computer rack (E-DK-S24A).
The dimensions of -14,-24 include the optional large anti-vibration table (E-VS-R16D) and computer rack (E-DK-S24A).
*3: The value is in use of high magnification pickup.