



SURFCOM TOUCH 50

High-level compact-type model in the SURFCOM TOUCH series with high resolution and straightness



Extended Z-axis measurement range from 800 to 1,000 μm (25% increase)



The high performing pickup with a measurement range of 1,000 μm and a Z-axis minimum resolution of 0,0001 μm allows for wide-range and high resolution skidless measurement. No need to consider measurement range. In addition to flat surface, the roughness or waviness on undulating surface such as stepped or round surface can be evaluated with one trace. Leveling and zeroing before measurement can also be performed easily.



A compact high performing tracing driver

The portable compact size tracing driver for easy installation has an X-axis measurement range of 50 mm, a straightness accuracy of 0.3 $\mu\text{m}/50$ mm, and a detector vertical movement volume of 50 mm.

Safe positioning at a constant speed is possible by operating the tracing driver in the X direction from the screen of the amplifier.



A handy-type driver can be attached

SURFCOM TOUCH 50 can be connected with a handy-type tracing driver*.

Measurement on vertical or ceiling surface and in narrow areas can be performed.

*Tracing driver attached to SURFCOM TOUCH 35/40/45, HANDYSURF+ 35/40/45, HANDYSURF E-35B/40A/45A, and SURFCOM FLEX-35B/40A/45A. An optional dedicated cable is required for connection.



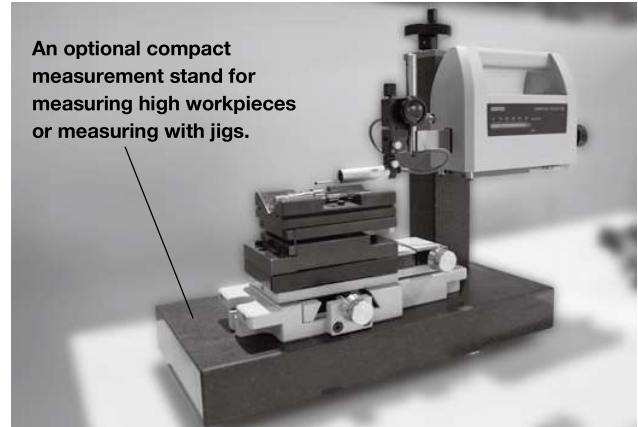
Usage example of roll footing

Suited for measuring cylindrical workpieces. A tracing driver can be placed on workpieces by using an optional roll footing.



Usage example of compact measurement stand

An optional compact measurement stand for measuring high workpieces or measuring with jigs.



Surface Texture Measuring Instruments

Roll footing (Option)



Roll footing (Option)



Compact measurement stand (Option)



SURFCOM TOUCH 50 Specifications

Model		SURFCOM TOUCH		
		50		
Measurement range	Z direction	±500 μm		
	X direction	50 mm		
Tracing Driver	Evaluation Length	0.1 to 50 mm		
	Straightness accuracy	0.3 μm/50 mm		
	Detector vertical movement volume	50 mm		
	Measurement Speed	0.15, 0.3, 0.6, 1.5, 3 / 0.05, 0.1, 0.2, 0.5, 1 mm/s (Switching)		
Pickup	Sensing type		Differential inductance	
	Measurement Method		Skidless/Skid (optional)	
	Z direction resolution		0.001 μm/±40 μm, 0.00125 μm/±500 μm	
	Stylus (standard accessory)	Model	DM43801	
		Measurement force	0.75 mN	
		Radius	r _{tip} = 2 μm	
Angle		60° cone		
	Material	Diamond		
Analysis item	Calculation Standards		Comply with JIS2013/2001, JIS1994, JIS1982, ISO1997/2009, ISO13565, DIN1990, ASME2002/2009, ASME1995, CNOMO	
	Parameter	Profile Curve	Pa, Pq, Pp, Pv, Pc, PSm, PΔq, Ppc, Psk, Pku, Pt, Pmr(c), Pmr, Pδc, Rz82, TILTA, AVH, Hmax, Hmin, AREA, Rmax, Rz, Sm, Δa, Δq, λa, λq, Lr, Rsk, Rku, Rk, Rpk, Rvk, Mr1, Mr2, Vo, K, tp, tp2, Hp	
		Roughness Curve	Ra, Rq, Rz, Rv, Rc, Rt, RSm, RΔq, Rsk, Rku, Rmr(c), Rmr, Rδc, Rz94, R3z, RΔa, Rλa, Rλq, Ry, Lr, Sm, S, tp, tp2, PC, RPc JIS, RPc ISO, RPc EN, Pci, PPI, Rp, Rmax, Rz, I, RS, Rmr2, Mr1, Mr2, Rpk, Rvk, Rk, Vo, K, A1, A2, Rpm, Δa, Δq, Htp	
		Waviness Profile Curve	Wa, Wq, Wt, Wp, Wv, WSm, Wpc, Wsk, Wmr(c), Wmr, Wδc, Wz, Wc, Wku, WΔq, WEM, WEA, WE-a, WE-q, WE-p, WE-v, WE-Sm, WEC-q, WEC-m, WEC-p, WEC-v, WEC-Sm	
		Motif	R, Rx, AR, W, Wx, AW, Rke, Rpk, Rvk, NCRX, NR, CPM, SR, SAR, Wte, NW, SAW, SW, Mr1e, Mr2e, Vo, K	
	Evaluation Curve		Profile Curve, Roughness Curve, Filtered Waviness Curve, Waviness Profile Curve, ISO13565 Special Roughness Curve, Roughness motif curve, Upper envelope waviness curve, Rolling Circle Waviness Curve	
	Characteristics graph		Abbott curve, Amplitude density function, Power graph	
Filter	Filter type		Gaussian, 2RC (phase compensation), 2RC (non-phase compensation)	
	Cutoff value	λc	0.08, 0.25, 0.8, 2.5, 8, 25 mm	
		λs	None, 2.5, 8, 25 μm	
Amplification indicator	Display		7-inch color liquid crystal touch panel	
	Data output	USB connectors for USB memory x 2 (model without printer) x 1 (model with printer), Micro USB connector for USB communication x 1		
	Print output	Standard function for models with printer and optional for models without printer (external printer unit)/Thermal recording paper width: 58 mm (recording width: 48 mm)		
	Language	Japanese, English, Chinese (Traditional Chinese/Simplified Chinese), Korean, Thai, Malay, Vietnamese, Indonesian, German, French, Italian, Czech, Polish, Hungarian, Turkish, Swedish, Dutch, Spanish, Portuguese		
Specifications	Power Supply	Charging	Built-in battery (to be charged using AC adaptor), charging period: 3 hours (about 600 measurements can be take when fully charged)	
		Power Supply	AC100 to 240 V ±10%, 50/60 Hz, Single phase	
		Power consumption	Maximum 80 VA	
	External dimensions (W x D x H)/Weight	Printer-Equipped Model	Amplification indicator: 320 x 167 x 44 mm/about 4.2 kg for the entire system	
Models without printer		Amplification indicator: 252 x 167 x 44 mm/about 3.8 kg for the entire system		
Standard accessories		Roughness specimen (E-MC-S109A: For Japan (indication in millimeters), E-MC-S24D: For outside Japan (indication in millimeters / inches)), touch pen (E-MA-S112A), printing paper (E-CH-S25A)*1, instruction manuals, SupportWare II		

*1 For models with printer only