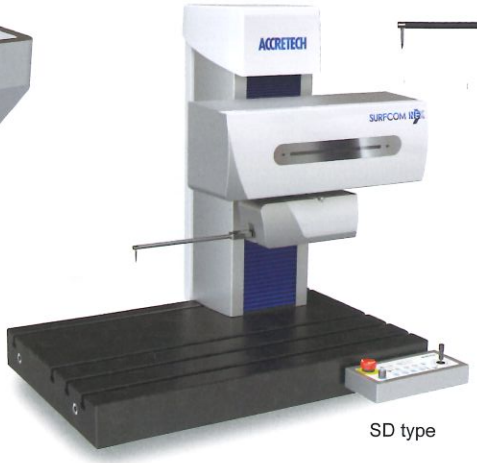
SURFCOM NEX (DX2/SD2) Series

SURFCOM NEX 041 DX2/SD2

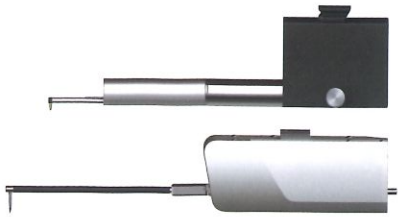
Dedicated catalog is available.

A complex measuring instrument that enables surface roughness measurement and high accuracy contour measurement

DX type



SD type



NEX 041 DX2/SD2 is a complex model capable of surface roughness measurement and high accuracy contour measurement. (Necessary to replace detector)
*Tracing driver tilting device is optional. Please refer to page 22 to 23 for surface roughness measurement and page 18 to 21 for contour profile measurement.

Measurement unit

Item					Model	SURFCOM NEX (DX2/SD2)							
						12	13	14	15	22	23	24	25
Tracing driver	X-axis (L: measuring lengh mm)	Sensing method				Linear scale							
		Straightness accuracy (When standard styli are used)	with High-accuracy contour detector			0.8 μm/100 /mm				2.0 μm/200 /mm			
			with Roughness pickup			(0.05+1.0L/1000) μm (L: Measuring length mm)							
		X-aixs indication accuracy: horizontal*1				±(0.8+1.0L/100) μm (L: Measuring length mm) *Contour measurement with 100 mm driver							
						±(0.8+3.0L/200) μm (L: Measuring length mm) *Contour measurement with 200 mm driver							
		Resolution				0.016 μm							
		Speed	Travel speed			0.03 to 100 mm/s							
			Measuring speed			0.03 to 30 mm/s							
		Tilt angle				±15 ° (Optional tilting device)							
Measuring stand	Column	Speed	Travel speed		CNC	Max. 50 mm/s							
					Joystick	Max. 35 mm/s							
	Base	Material				Gabbro							

Detector

High-accuracy contour detector	Measuring range	Z-axis: vertical			60 mm
	Contour	Sensing method			Laser optical diffraction scale
		Resolution			0.02 μm (Full range)
		Indication accuracy: vertical			±(0.8+|2H|/100) (H: Measuring height mm)
	Stylus	for Contour	Model		DM45505 (Standard accessory for *4*)
			Measuring force		2 to 30 mN (Adjustable on measuring/analysis integrated software "ACCTee")
			Tip material		Cemented carbide
			Tip shape		Rtip 25 μm/24° cone
	Function				Down/upward measurements / Collision detection safety function / Retract function
Roughness pickup	Measuring range	Z-axis: vertical			1000 μm
	Roughness	Sensing method			Differential inductance
		Measuring range			6.4 to 1000 μm
		Resolution			0.1 to 20 nm
	Stylus	for Rough-ness	Model		DM43801 (Standard accessory for NEX*1)
			Measuring force		0.75 mN
			Tip material		Diamond
			Tip shape		Rtip 2 μm/60° cone
	Function				Down/upward measurements / Upper limit detection safety mechanism

*1 Excluding when using roughness pickup