

# On Track to Become No. 1 in the World

Our customers want the best and at ACCRETECH we are committed to giving it to them, always striving to achieve the world's highest level of accuracy. The RONDCOM 65A, our flagship model, is a table-rotating type roundness measuring instrument that features reference guideways made of gabbro with minimal susceptibility to age-related deterioration. In addition, a sliding surface with air bearings to lessen friction resistance and advanced correction technology enable this precision instrument to realize nanometer-level accuracy. 鼎晶科技/WWW.HI-TOP.COM.TW email:cnc@hi-top.com.tw m:0925-622-111

RONDCOM 65A \* CNC detector holder is optional.

### Highest Rotation Accuracy In its Class: 0.01 µm

# Industry's First High-Accuracy Air Bearings for Z-, R-, and θ-axes.

Gabbro is used in the column, base, and R-axis, guaranteeing the top-class high accuracy over time.

#### World's Highest Throughput

within 60 seconds for alignment

# Air Type Anti-Vibration Table Provided as Standard

### **Detector with All Orientation Safety Function**

If stylus overload is detected, the emergency stop function is automatically activated to prevent damage to stylus and detector.

# Offset Type Detector Holder Available as an Option (patented)

Various workpieces can be measured easily without interference from the R-axis arm.

### **World's Top Class Accuracy for Each Axis**



RONDCOMESA







Vertical direction straightness (Using a straight edge) \*2 Value after separation of straightedge accurace Horizontal direction straightness (Using an optical flat) \*3 Data including optical flat errors.

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### RONDCOM 65A



Sample of roundness measurement using a non-contact detector (option)

#### **External view**





#### **Specifications**

Model Measuring system			RONDCOM 65A		
			R65A		
			High column model		
Max. measuring diameter			CNC and manual Φ 420 mm		
	Right/left feed range (R-axis)		220		
Measuring range	Up/down feed range (Z-axis)		500 mm	800 mm	
			Φ 68		
	Max. loading diameter		500 mm	800 mm	
	Max. measuring height				
	Max. measuring depth (Throat height)		150 mm (Limited by size of measuring diameter and combination of detector and stylu		
Rotation accuracy Straightness accuracy	Radial direct		(0.01 + 6H/10,000) μm		
	JIS B 7451-	1997	(H: Height from table top	to measuring point mm)	
	Up/down (Z-axis) direction	Narrow range	0.05 µm/100 mm	0.1 µm/100 mm	
		Wide range	0.2 µm/500 mm	0.5 µm/800 mm	
	Radial direction (R-axis)		0.5 μm/200 mm		
Parallelism	Up/down direction (Z-axis)		1.5 μm/500 mm		
accuracy	Radial direction (R-axis)		0.5 µm/200 mm		
Scale indication accuracy	Radial direct	tion (R-axis)	(2 + L/220) µm L: Moving length (mm)		
	Rotational speed (θ-axis)		2 to 10/min		
Measuring speed	,		(At moving: Max20/min) 2, 4, 6, 10, 20/min		
	In automatic centering/tilting		2, 4, 6, 10, 20/min 0.6 to 6 mm/s (At moving: Max30 mm/s)		
	Up/down speed (Z-axis)		· • ·		
	Radial direction speed (R-axis)		0.6 to 6 mm/s (At moving: Max20 mm/s)		
Auto stop accuracy	Z-axis/R-axis		±5 µm		
Rotary table	Table outside diameter		Φ 290 mm		
	Adjustment range of centering/tilting		±5 mm/±1°		
	Load		60 kg		
	Measuring force		30 to 100 mN (steplessly variable)		
Detector Stylus shape		Φ 1.6 mm carbide ball, Length: 53 mm			
Number of sampling		3600 points/rotation			
Type of filter Digital filter			Gaussian/2RC/Spline/Robust (Spline)		
Measurement magn	ification		50 to	100 k	
	Rotational Low pass		15 , 50 , 150 , 50	0 peaks/rotation,	
	Rotational	Low pass		settable any value in range 15 to 500 peaks/rotation 1 to 500 peaks/rotation	
	direction	Low pass	settable any value in rang		
Cutoff value		Low pass Band pass	settable any value in rang 1 to 500 pe	aks/rotation	
Cutoff value	direction (θ-axis)		settable any value in rang 1 to 500 pe 0.025, 0.08, 0.2 (any value in 0.	aks/rotation 5, 0.8, 2.5,8 mm 0001 mm units)	
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We have experience in special customization in terms of load capacity, etc.Contact the sales personnel for details.

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