

CNC Machine with Superior Cost Performance

**RONDCOM 55B**

\* Anti-vibration table and system rack are options.



RONDCOM 55B

**■ Features****Top Class Rotation Precision**

The use of high-precision air bearings, a core ACCRETECH technology, guarantees the world's top class of rotation accuracy.

**High-Speed Alignment for High Measuring Efficiency**

Faster alignment and measuring speeds enable high-efficiency measurements, making the 55A ideal as a line-side evaluation instrument.

**Automatic Measurements Reduce Manpower Requirements**

The teaching/playback function automates the procedures from measurement to printout, making the unit perfect for measurement of mass-produced items.

**Standard [TIMS] Next-Generation Program**

The TIMS integrated program is perfectly matched to the age of networks, allowing data to be freely exchanged between different measuring instruments.

**Fully Automatic Detector Holder (option)**

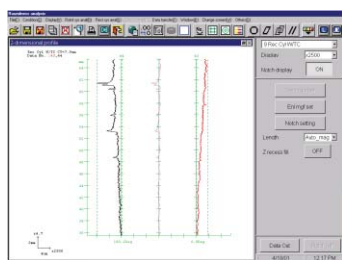
The fully automatic detector automates measurement of inner diameter, outer diameter, upper surface and lower surface.

**Roughness Measuring Function (option)**

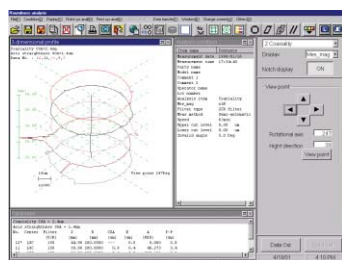
Additional measuring function of roughness enables measurement of roughness in directions of Z-axis and R-axis.

Fully Automatic  
Detector Holder (option)  
\* Patent pendingRoughness Measuring  
Function (option)

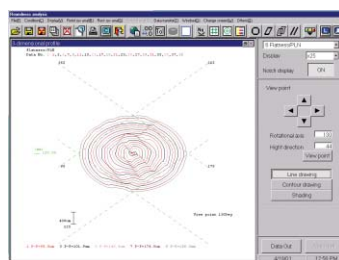
● Diverse evaluation of cylindrical workpieces



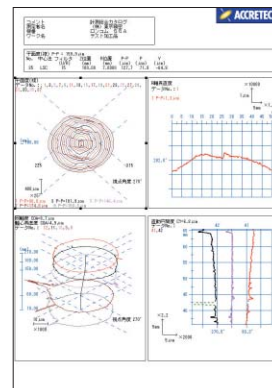
Cylindricity



Coaxiality



Flatness



Specifications

Model		RONDCOM 55B
Measuring range	Max. measuring diameter	φ350 mm
	Left/right feed (R axis)	191 mm
	Up/down feed (Z axis)	350 mm
	Max. load diameter	φ600 mm
	Max. measuring height	Outer diameter: 350mm (670mm for roundness/coaxiality measurement), Inner diameter: 350mm
Rotation accuracy	JIS B7451	(0.02 + 6H / 10000) μm H: Height from table surface to measuring point [mm]
	Max. deviation from min. square circle	(0.01 + 3H / 10000) μm
Straightness accuracy	Up/down direction (Z axis)	0.15μm/100mm, 0.3μm/350mm
	Radius direction (R axis)	1μm/100mm
Parallelism accuracy	Up/down direction (Z axis)	1.5μm/350mm
Rotation speed (θ axis)	Measurement	2 – 10/min
	Alignment	6, 10 or 20/min
Up/down speed (Z axis)	Measuring speed	0.6 – 6.0 mm
	Movement speed	0.6 – 20.0 mm
Radius speed (R axis)	Measuring speed	0.6 – 6.0 mm
	Movement speed	0.6 – 15 mm
Auto stop	Function	Z axis, R axis
	Stop accuracy	Z axis: ±5μm, R axis: ±5μm
Table load conditions	Table outer diameter	φ290 mm
	Centering adjustment range	±5mm (automatic)
	Tilting adjustment range	±1° (automatic)
	Load	60 kg (for measurement and centering)
Detector	Measuring force	30 – 100 mN
	Stylus shape	φ1.6mm carbide ball
Roundness evaluation of profile error		MZC (min. range center line method), LSC (min. square center line method), MIC (max. inscribed circle center line method) MCC (min. circumscribed circle center line method), N.C. (no correction)
Measuring items	Rotation direction (θ)	Roundness, flatness, parallelism, concentricity, coaxiality, cylindricity, diameter deviation, non-uniformity, squareness, run-out
	Rectilinear direction (Z)	Straightness, taper, cylindricity, squareness, parallelism
	Radius direction (R)	Straightness
Processing functions		CNC measuring function, Notch function (level, angle, cursor), parameter nominal value collation
Types of filters		Digital filters (2RC, Gaussian)
Cut-off value	Rotation direction (θ)	15, 50, 150, 500, 15 – 150, 15 – 500 peaks/rotation
	Rectilinear direction (Z)	0.025, 0.08, 0.25, 0.8, 2.5 or 8 mm
Display	Monitor	Color monitor (15 inch)
	Content	Measuring conditions, measuring parameters, profile drawing (expansion plan, 3D plan, shading) Printer output conditions, comments, error message, etc.
Recording unit	Method	Select color printer or laser printer
	Magnification	10 – 200 K (22 steps), auto, measuring magnification
Power source		AC 100V, 50/60 Hz
Power consumption		800 VA (not including printer)
Air source		0.5 – 0.7 MPa
Air consumption		30Nℓ/min
Installation dimensions		2000 (W) × 950 (D) × 1950 (H) mm
Weight		400 kg