



Air Bearings on Each Axis Achieve
World's Top Precision

RONDCOM 75GB



RONDCOM 75GB

(Long shaft measuring tool is optional.)



Features

- **Rotation accuracy:** 0.2 μm (JIS B7451)
- **Straightness:** 1.5 μm/700mm
(When 700mm long shaft measuring tool is used)
- Static-pressure air bearings on X axis, Y axis, Z axis and θ axis.
- Incorporates fully automatic 7-axis control function.
- Provided with TIMS next-generation integrated program.
- Automatic measurement of multiple workpieces.
- Teaching function.
- Granite used for column and base maintains precision for many years.
- Automatic part program call function (option).

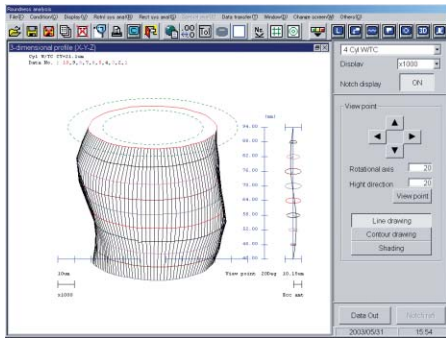
Sample Applications



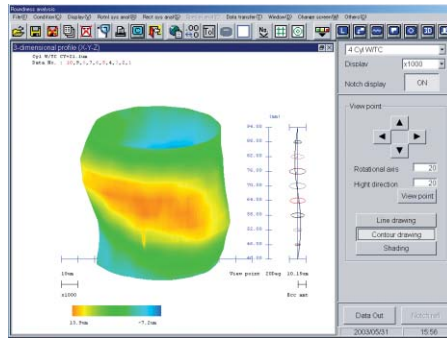
Crankshaft



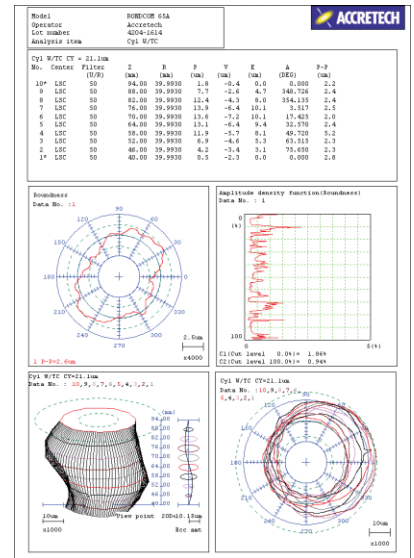
Cylinder block



3D display



Contour line display



Data sheet

Specifications

Model		RONDCOM 75GB Series		
		1000mm Type	1500mm Type	1 Ton Type
Measuring range	Max. measuring diameter	φ450 mm		
	Min. measuring ID	Filler diameter +2mm or more		
	Left/down feed range (X axis)	700 mm		1500 mm
	Front/rear feed range (Y axis)	200 mm		
	Up/down feed range (Z axis)	1000 mm	1500 mm	
	Max. load diameter	φ900 mm		
Rotation accuracy (JIS B7451)		0.2μm (standard detector), 0.4μm (long shaft measuring tool, ℓ = 700mm)		
Straightness accuracy		0.5μm/100mm (standard detector), 1.5μm/700mm (700mm long shaft measuring tool,)		
Parallelness accuracy	Up/down direction (Z axis)	1.5μm/100mm		
Drive speed	Rotation direction	2/min (measuring), 10/min (auto centering)		
	Up/down direction	0.6, 6 mm/s		
Table load conditions	Table dimensions	800 (W) × 680 (D) mm		1200 (W) × 800 (D) mm
	Load weight	200 kg		1000kg
Detector	Stylus profile	R0.25 mm sapphire		
	Measuring force	Arm a: 170 mN, Arm b: 85 mN		
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	Roundness, flatness, parallelness, concentricity, coaxiality, cylindricity, diameter deviation, non-uniformity, squareness, run-out		
	Up/ down direction	Straightness, taper, cylindricity, squareness, parallelness		
Functions		CNC measuring function, auto tilting function, auto centering function, notch processing function (level, angle, cursor), parameter design value collation function, real-time display function, centering support function		
Types of filters		Digital filters (2RC, phase compensation)		
Cut-off value	Rotation direction	15, 50, 150, 500, 15 – 150, 15 – 500 peaks/rotation		
	Rectilinear direction	0.025, 0.08, 0.25, 0.8, 2.5 or 8mm		
Display unit	Monitor	Color monitor		
	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, Auto, measuring magnification		
Power source		AC 100V, 50/60 Hz		
Power consumption		3 kVA		
Air source		0.35 – 0.7 MPa, 160 ℓ /min		
Installation dimensions (W × D × H)		4100 × 4200 × 3700	4100 × 4200 × 4100	4500 × 4300 × 4500
Weight	Measuring unit	6200 kg	6500 kg	11400 kg
	Control unit	100 kg	100 kg	100 kg