



# RONDCOM 47B

Applicable to large and heavy workpieces  
Offers Superior Cost Performance



RONDCOM 47B  
\* Printer is optional.

**Max. Loading Diameter:  $\Phi$  600 mm,**  
**Max. Measuring Diameter:  $\Phi$  350 mm,**  
**Loading Weight: 60 kg**  
(Larger diameter measurement available as special order)

High column specification is ideal for large and small-lot workpieces.

### Simple Operation

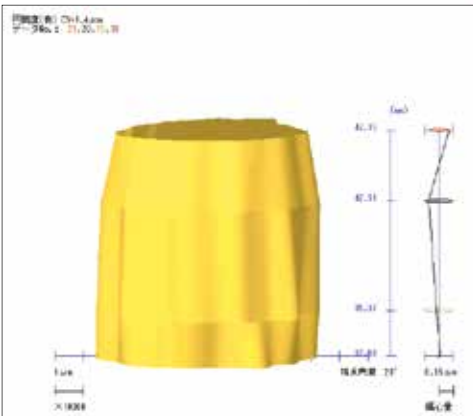
Bar graph type centering/tilting function improves user operability and reduces measuring time.

**All Position Detector with All Orientation**  
**Safety Function Measuring Range:  $\pm 1000 \mu\text{m}$**

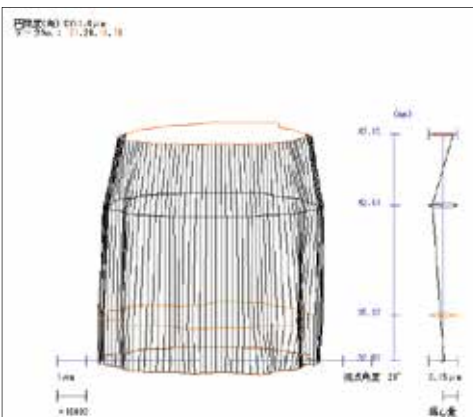
If stylus overload is detected, the emergency stop function is automatically activated to prevent damage to stylus and detector. Measuring force adjustment and front adjustment allow measurement of deformable and notched workpieces.

**Offset Type CNC Detector Holder (option) patented**

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



Shading diagram



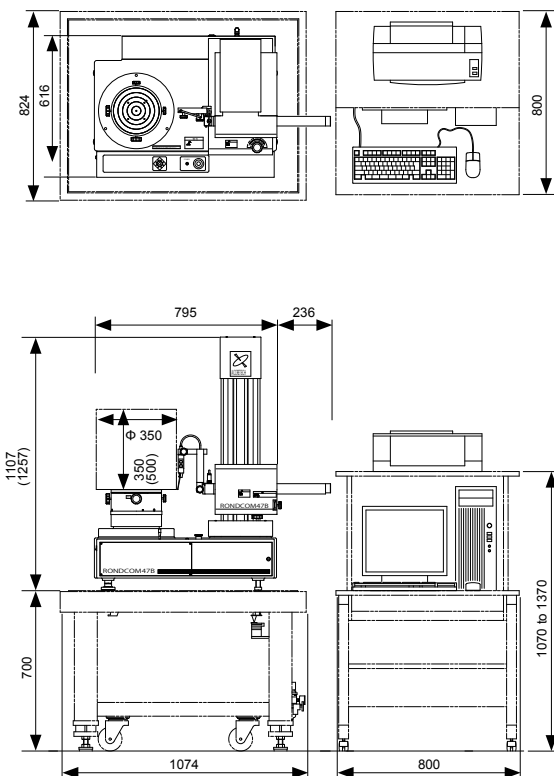
3D diagram



Sample roundness measurement of outside diameter

## External view

RONDCOM47B



### Options

Anti-vibration table: E-VS-S21B (H=700)  
E-VS-R20B (H=500)

System rack: E-DK-S24A

## Specifications

Model		RONDCOM 47B	
Measuring system		Manual	
Measuring range	Max. measuring diameter	Φ 350 mm	
	Right/left feed range (R-axis)	190 mm	
	Up/down feed range (Z-axis)	350 mm (High column: 500 mm)	
	Max. loading diameter	Φ 600 mm	
	Max. measuring height	OD/ID* measurement: 350 mm (High column: 500 mm)	
Rotation accuracy	Radial direction JIS B 7451-1997	(0.020 + 6H/10,000) μm (H: Height from table top to measuring point mm)	
Straightness accuracy	Up/down direction (Z-axis)	0.15 μm/100 mm, 0.3 μm/350 mm (High column: 0.5 μm/500 mm)	
Parallelism accuracy	Up/down direction (Z-axis)	1.5 μm/350 mm (High column: 2.0 μm/500 mm)	
Rotational speed (θ-axis)		6/min	
Up/down speed (Z-axis)		0.6 to 6 mm/s (At moving: Max 15 mm/s)	
Radial direction speed (R-axis)		0.6 to 5 mm/s (At moving: Max 5 mm/s)	
Auto stop accuracy	Z-axis/R-axis	±5 μm	
Rotary table	Table outside diameter	Φ 220 mm	
	Adjustment range of centering/tilting	±2 mm/±1°	
	Load	60 kg	
Detector	Measuring force	30 to 100 mN (steplessly variable)	
	Stylus shape	Φ 1.6 mm carbide ball, Length: 53 mm	
Type of filter	Digital filter	Gaussian/2RC/Spline/Robust (Spline)	
Cutoff value	Rotational direction (θ-axis)	Low pass	15, 50, 150, 500 peaks/rotation 15 to 500 peaks/rotation
		Band pass	1 to 500 peaks/rotation
	Rectilinear direction (Z-axis)	Low pass	0.025, 0.08, 0.25, 0.8, 2.5, 8 mm (any value in 0.0001 mm units)
Measurement magnification		50 to 100 k	
Roundness evaluation of form error		MZC (min. zone circle method), LSC (least square circle method), MIC (max. inscribed circle method), MCC (min. circumscribed circle method), N.C. (no compensation), MULTI (multiple setting)	
Measuring items	Rotational direction	Roundness, flatness, parallelism, concentricity, coaxiality, cylindricity, diameter deviation, squareness, thickness variation, run-out, partial circle	
	Rectilinear direction	Straightness (Z), taper ratio, cylindricity, squareness, parallelism	
Analysis processing functions		Centering/tilting support function, notch function (level, angle, cursor), combination of roundness evaluation methods, nominal value collation, cylinder 3D profile display (line drawing, shading, contour line), real-time display, profile characteristic graph display (bearing area curve, amplitude distribution function, power spectrum), semiautomatic measuring function, automatic centering/tilting adjustment function	
Display (color monitor)		17" LCD	
Display items		Measuring conditions, measuring parameters, comments, printer output conditions, profile graphics (expansion plan, 3D plan), error messages, etc.	
Recording system		Color or laser printer can be selected	
Other	Power supply (Voltage to be specified), frequency		AC100 to 120 V ±10%, AC220 to 240 V ±10%, 50/60 Hz (grounding required)
	Power consumption		600 VA (except printer)
	Air supply	Supply pressure	0.35 to 0.7 MPa
		Working pressure	0.3 MPa
		Air consumption volume	30 NL/min
		Air supply connecting nipple to main unit	One-touch pipe joint for outer diameter Φ 8 mm hose
	Installation dimensions (W x D x H) mm		2000 x 1000 x 1850 (2000) mm
Weight (except options)		300 (320) kg	