RONDCOM 47B

Applicable to large and heavy workpieces
Offers Superior Cost Performance

Max. Loading Diameter: Φ 600 mm,
Max. Measuring Diameter: Φ 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: ±1000 µm
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.
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: (0.020 + 6H/10,000) μm
- Up/down direction (Z-axis): 0.15 μm/100 mm

**Straightness accuracy**
- Up/down direction (Z-axis): 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
- 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

**Measurement magnification**
- 50 to 100 k

**Roundness evaluation of form error**
- MZC (Min. zone circle method), LSC (Least square circle method), MCC (Max. inscribed 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

**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

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**Sample roundness measurement of outside diameter**

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**External view**

**RONDCOM47B**

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

**System rack**
- E-DK-S24A