RONDCOM 65B

Dedicated catalog is available.

RONDCOM 65B
*Offset type CNC detector holder is optional.

High-end roundness measuring machine

High accuracy

Highest rotation accuracy in this class: 0.01 µm

High throughput

Centering and tilting within 60 second. It realize high efficiency and save total measuring time.

Robust high accuracy and high rigidity structure

Gabbro with minimal susceptibility to age-related deterioration is used in the column, base and arm which guarantee top-class high accuracy over time.

Sophisticated new design

Brand-new and rich design which is worthy.

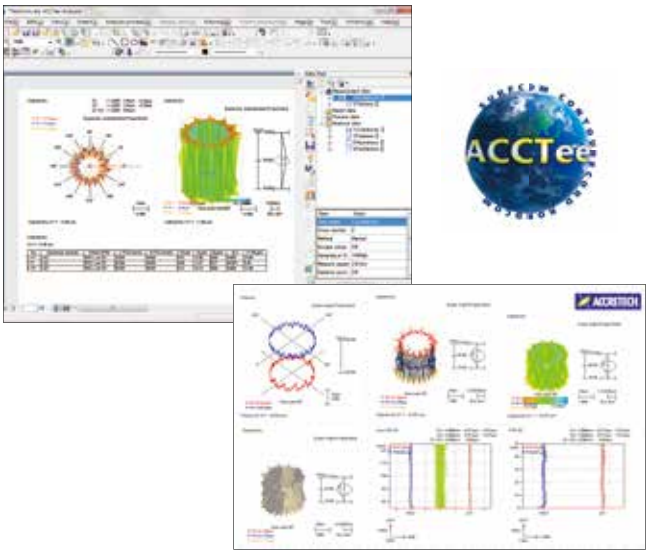
Built-In Vibration Isolation Stand

Offset type detector holder (Optional) patented

Wide variety of workpieces are measurable without interference with R-axis. Tilting the folder allows switching between the outer diameter measurement and the upper flat face measurement.

Easy-to-Use Interface for Leading-Edge Operability

ACCTee is equipped with a Windows style user interface that is easy for anyone to understand and use. User-friendly and intuitive icons guide you through a series of operations from measurement to the printing of analysis results.



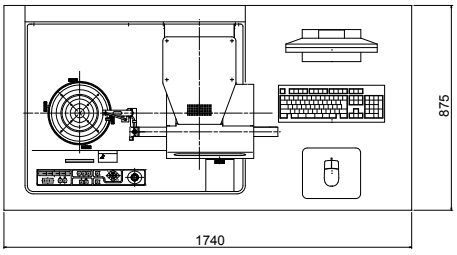
Offset type CNC detector holder (Optional) patented

Automatic control extremely improves the measuring efficiency by controlling the detector position at inner/outer, upper/lower and taper face.

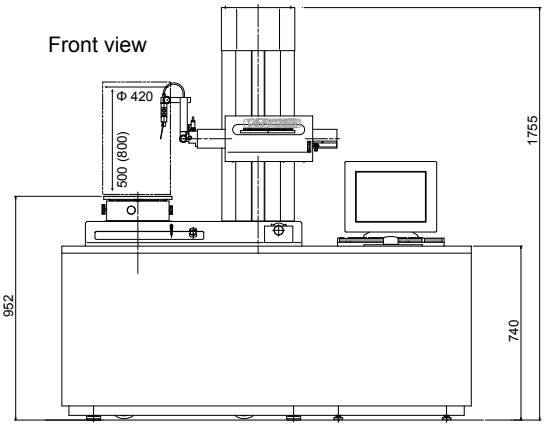
Sample of roundness measurement using the offset type CNC detector holder (option)

External view

Top view



Front view



Specifications

Model			RONDCOM 65B R65B
Measuring system			CNC and manual
Measuring range	Max. measuring diameter		Φ 420 mm
	Right/left feed range (R-axis)		220 mm
	Up/down feed range (Z-axis)		500 mm
	Max. loading diameter		Φ 680 mm
	Max. measuring height		500 mm
	Max. measuring depth (Throat height)		150 mm
			(Limited by size of measuring diameter and combination of detector and stylus)
Rotation accuracy	Radial direction JIS B 7451-1997		(0.01 + 4H/10,000) μm (H: Height from table top to measuring point mm)
	axial direction JIS B 7451-1997		(0.03 + 4R/10,000) μm (R: Distance from table center to measuring point in mm)
Straightness accuracy	Up/down (Z-axis) direction	Narrow range	0.05 μm/100 mm
		Wide range	0.2 μm/500 mm
	Radial direction (R-axis)		0.5 μm/200 mm
Parallelism accuracy	Up/down direction (Z-axis)		1.5 μm/500 mm
	Radial direction (R-axis)		0.5 μm/200 mm
Scale indication accuracy	Radial direction (R-axis)		(2 + L/220) μm L: Moving length(mm)
Measuring speed	Rotational speed (θ-axis)		2 to 10/min (At moving: Max20/min)
	In automatic centering/tilting		6, 10, 20/min
	Up/down speed (Z-axis)		0.6 to 6 mm/s (At moving: Max30 mm/s)
	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
Detector	Measuring force		30 to 100 mN (steplessly variable)
	Stylus shape		Φ 1.6 mm carbide ball, Length: 53 mm
Number of sampling			14,400 points/rotation
Type of filter	Digital filter		Gaussian/2RC/Spline/Robust (Spline)
Measurement magnification			50 to 100 k
Cutoff value	Rotational direction (θ-axis)	Low pass	15, 50, 150, 500, 1500 peaks/rotation, settable any value in range 15 to 500 peaks/rotation
		Band pass	1 to 1500 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)
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, flatness (compound), parallelism, concentricity, coaxiality, cylindricity, diameter deviation, squareness, thickness variation, run-out, radius measurement, partial circle
	Rectilinear direction		Straightness (Z), straightness (R), taper ratio, cylindricity, squareness, parallelism, diameter deviation, axis straightness
Analysis processing functions			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), CNC automatic measuring function, automatic centering/tilting adjustment function
Special function			Offset type CNC detector holder (option)
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 240 V ±10%, 50/60 Hz (grounding required)
	Power consumption		Approx. 800 VA (except printer)
	Air supply	Supply pressure	0.5 to 0.7 MPa
		Working pressure	0.4 MPa
		Air consumption volume	49 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		1740 x 875 x 1725
	Weight (except options)		930 kg

Please contact our sales personnel for customization for high column.