

Compact Desktop Roundness Measuring Instruments with Superior Cost Performance and Analysis Functions of a High Class Machine

RONDCOM 43C/41C/31C



RONDCOM 43C



RONDCOM 41C



RONDCOM 31C

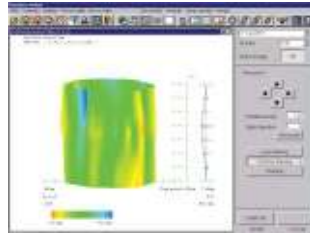
Superior Cost-Performance Roundness Measuring Instrument with TIMS Next-Generation Integrated Program

- Standard high-precision static-pressure air bearings (θ axis).
- Provided with TIMS next-generation integrated program.
- High-precision column (Z axis) enables cylindricity analysis (for 43C/41C).
- User-friendly centering/tilting support function.
- Standard semi-automatic measuring function where height is specified.
- Provided with power spectrum, Fournier analysis and other surface analysis functions.

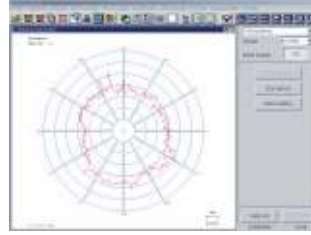
RONDCOM 43C/41C



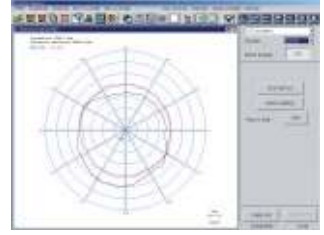
Cylindricity display



Contour line display



Roundness display



Concentricity display

RONDCOM 31C

Specifications

Model		RONDCOM 43C	RONDCOM 41C	RONDCOM 31C
Measuring range	Max. measuring diameter	φ250 mm		
	Left/right feed (R axis)	125 mm		
	Up/down feed (Z axis)	300 mm		200 mm
	Max. load diameter	φ400 mm		
	Max. measuring height	OD: 520mm / ID: 300mm		OD: 420mm / ID: 200mm
Rotation accuracy	ISO 4291/ JIS B7451	(0.02 + 6H / 10000) μm	(0.04 + 6H/10000) μm	
	Max. deviation from min. square circle	(0.01+3H/10000) μm	(0.02+3H/10000) μm	
Straightness accuracy		0.25 μm/100mm, 0.8 μm/300mm	0.50 μm/100mm, 1.5 μm/300mm	-----
Parallelness accuracy		1.5 μm/300mm	3 μm/300mm	-----
Rotation speed (θ axis)		6/min		
Up/down speed (Z axis)	Measuring	0.6 – 6 mm/s		5 mm/s
	Movement	15 mm/s		5 mm/s
Radius speed (R axis)		5 mm/s		
Auto stop function	Z axis/R axis	±5mm		
Rotating table	Table outer diameter	φ148 mm		
	Centering adjustment range	±2mm		
	Tilting adjustment range	±1°		
	Load	25 kg *		
Detector	Linearity range	±400 μm		
	Measuring force	70 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, parallelness, concentricity, coaxiality, cylindricity, diameter deviation, squareness, non-uniformity, run-out		Roundness, flatness, parallelness, concentricity, coaxiality, squareness, non-uniformity, run-out
	Rectilinear direction up/ down direction (Z)	Straightness, taper, cylindricity, squareness, parallelness		-----
Functions		Centering/tilting support function, shading processing function, notch processing function (level, angle, cursor), real-time display function, simplified automatic measurement, combination of roundness evaluation methods, design value collation function		
Types of filters		Digital filters (phase compensation, 2RC)		
Cut-off value	Rotation (low pass)	15, 50, 150, 500 peaks/rotation		
	Rotation (bound pass)	15 – 150, 15 – 500 peaks/rotation		
	Rectilinear direction up/ down (low pass)	0.025, 0.08, 0.25, 0.8, 2.5 or 8mm/s		-----
Display		Color monitor (15 inch)		
Display items		Measuring conditions, measuring parameters, profile drawing (expansion plan, 3D plan)		
		Printer output conditions, comments, error message, etc.		
Recording unit	Method	Select color printer or laser printer		
	Magnification	50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 50K, 100K (automatic)		
Power source		AC 100V, 50/60 Hz		
Power consumption		600 VA		
Air source		0.35 – 0.7 MPa		
Air consumption		30 ℓ /min. (standard status)		
Installation dimensions		1800 (W) × 1000 (D) × 1700 (H) mm (when optional system rack is used)		
Weight		130 kg	120 kg	

* When optional E-VS-S38A vibration isolation stand is used for RONDCOM 43C, the allowable load is 15 kg or less.