

Roundtest RA-10

Series 211 - Form Measuring Instrument

Compact roundness tester combines outstanding cost/performance with full measurement capabilities and user-friendly operation.

- The control panel has large keys and an intuitive layout for easy operation.
- One-touch setup recall function : complex setups can be stored in advance and recalled with a single key stroke.
- Zero-set function : the detector level can be set to zero (0) with a single key stroke, thus relieving the user of the need for meticulous detector positioning.
- The positioning handles for vertical (Z-axis) and radial (X-axis) adjustments are positioned on the slider for best operability.
- Despite being a low-priced model, the turntable with air bearings offers rotational accuracy as high as $(0.04+6H/1000)\mu\text{m}$, thus assuring a precision that compares well with that of higher-priced models.
- Measurement results and recorded profiles are easy to view on the large LCD panel display.
- The machine has a compact body with integrated electronics and printer, making it ideal for installation in space-restricted locations.



RA-10 with optional X-axis stop and Z-axis scale unit



Z-axis scale unit



X-axis stop



211-016



997090



211-045



211-013

Specifications

Turntable

Rotational accuracy radial	$(0.04+6H/1000)\mu\text{m}$ H: Probing height (mm)
Rotational speed	6 rpm
Turntable diameter	150 mm
Max. probing diameter	100 mm
Max. workpiece diameter	320 mm
Max. turntable loading	10 kg

Vertical column (Z-axis)

Vertical travel	117 mm
Max. probing height	152 mm above turntable surface
Max. probing depth	100 mm (min. ID : 30 mm)

Horizontal arm (X-axis)

Horizontal travel	75 mm (-25 mm to 50 mm)
Measuring range	$\pm 1000 \mu\text{m}$
Measuring force	70 to 100 mN
Standard stylus	12AAB681 , carbide ball, $\phi 1.6\text{mm}$
Measuring direction	Bi-directional
Stylus angle adjustment	$\pm 45^\circ$ (with graduations)

Data analysis unit

Processing unit	Built-in
Data analysis items	Roundness, Coaxiality, Concentricity, Flatness, Runout radial
Type of roundness evaluation	LSC, MZC, MIC, MCC
Printer	Built-in thermal line printer
Recording magnification	X5 to X200,000 (15-step)
Filter	Low pass filter, Band pass filter
Filter types	2CRPC75, 2CPC50 (phase corrected)
Cutoff values	15upr, 50upr, 150upr, 500upr, 15-50upr, 15-500upr, 50-500upr

Air supply

Air pressure	390 kPa
Air consumption	30 L/min

Power supply

100-240 VAC, 50/60 Hz

Dimensions (WxDxH)

450 x 360 x 486 mm

Mass

26 kg