

ROUNDNESS TESTER CV-EC1550™

PC controlled roundness measuring instrument

- Manual centering and tilting support function
- Geometrical features:
Roundness, straightness, cylindricity, spiral cylindricity, co-axiality, concentricity, parallelism, flatness, squareness, circular runout, thickness deviation, radius deviation, knife-edge analysis
- Powerfull data processing software
- Static air bearing
- Very high rotating accuracy of $(0.04+0.0006H)\mu\text{m}$
- Max. workpiece diameter 368mm
- Max. probing height (OD): 420mm for outer diameter
- Max. probing height (ID): 270mm for inner diameter
- 12 interchangeable styli available for all kinds of special applications



ROUNDNESS TESTER CV-EC1600W™

PC controlled roundness measuring instrument

- Manual centering and tilting support function
- Geometrical features:
Roundness, straightness, cylindricity, spiral cylindricity, co-axiality, concentricity, parallelism, flatness, squareness, circular runout, thickness deviation, radius deviation, knife-edge analysis
- Powerfull data processing software
- Static air bearing
- Very high rotating accuracy of $(0.04+0.0005H)\mu\text{m}$
- Max. workpiece diameter 368mm
- Max. probing height (OD): 545mm for outer diameter
- Max. probing height (ID): 320mm for inner diameter
- 12 interchangeable styli available for all kinds of special applications



ROUNDNESS TESTER CV-EC1550/CV-EC1600W™

PC controlled roundness measuring instrument

Technical specifications

Turntable

Rotating method	Static air bearing
Rotating accuracy	(0.04+0.0006H) μ m H: Probing height (mm) (CV-EC1550) (0.04+0.0005H) μ m H: Probing height (mm) (CV-EC1600W)
Rotating speed	1 to 10rpm (adjustable)
Table size	160mm (CV-EC1550), 180mm (CV-EC1600W)
Centering adjustment range	\pm 2mm
Leveling adjustment range	\pm 1.0°
Min. angle indication	0.1
Max. workpiece load	20kg
Max. workpiece diameter	368mm

Column unit

Straightness	0.6 μ m/100mm (1.2 μ m/250mm) (CV-EC1550) 0.4 μ m/100mm (0.8 μ m/300mm) (CV-EC1600W)
Parallelism	0.75 μ m/100mm (1.5 μ m/200mm) (CV-EC1550) 0.5 μ m/100mm (1.0 μ m/200mm) (CV-EC1600W)
Vertical travel	250mm (CV-EC1550), 300mm (CV-EC1600W)
Travelling speed	0.5, 1, 2, 5mm/s at measuring
Max. probing height (OD)	420mm (CV-EC1550) for outer diameter, 545mm (CV-EC1600W) for outer diameter
Max. probing height (ID)	270mm (CV-EC1550) for inner diameter, 320mm (CV-EC1600W) for inner diameter

Radial arm unit

Radial travel	130mm (CV-EC1550), 160mm (CV-EC1600W)
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Pick up unit

Measuring force	100mN or less (adjustable)
Measuring range	1800 μ m
Stylus	Radius 0.8mm, Tungsten carbide

Analysis unit

Measuring magnification	100, 200, 500, 1.000, 2.000, 5.000, 10.000, 20.000, 50.000X
Digital filter	
Roundness	2CR N15, N50, N150, N500, N15-500, non-filter Gaussian D15, D50, D150, D500, D15-500, non-filter
Straightness	2CR fh0.025, 0.08, 0.25, 0.8, 2.5, 8mm, non-filter Gaussian fh0.025, 0.08, 0.25, 0.8, 2.5, 8mm, non-filter
Determination method	MZC, LSC, MCC, MIC
Geometrical features	Roundness, flatness, cylindricity, co-axiality, concentricity, runout, squareness, straightness, parallelism, thickness deviation

Utilities

Power supply	AC100V-220V, \pm 10%, 50/60Hz
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Analysis unit

Air supply	4.5 to 9.9kgf/cm ² (440 to 970KPa), dry air
Air pressure	4 to 5kgf/cm ² (390 to 490KPa), 30NI/min

Analysis unit

Measuring unit	590mm x 332mm x 918mm, 130kg (WxDxH)
Amplifier	406mm x 342mm x 270mm, 20kg (WxDxH)
PC and printer	Local supply

Operating environment 10°C to 30°C, RH 80% or less

Standard delivery

- Measuring unit
- Standard probe
- Controller
- Programm software

Optional accessories

- PC with monitor
- Interchangeable styli for different applications:
Ask for separate overview
- Chucks \varnothing 0.8 ~ 56mm used for clamping small diameter workpieces
- Reference hemisphere for checking accuracy
- Printer