

# Roundtest RA-H5200CNC

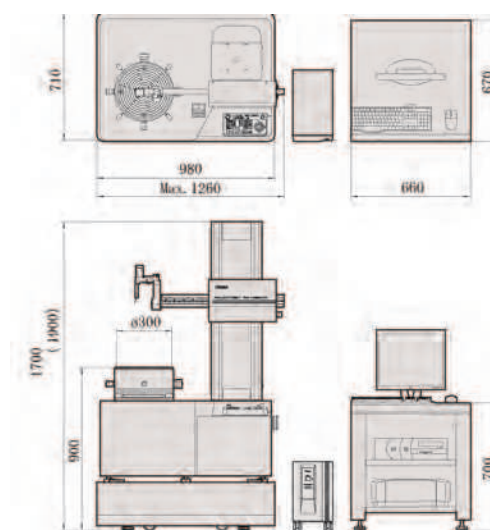
## Series 211 - High-precision Roundness/Cylindricity Measuring System

- A CNC system that combines high accuracy with automatic CNC measurements to greatly improve productivity and efficiency.
- Automatic orientation control for the detector unit enables this system to automatically execute high-speed, operator-less measurements.
- Available with the standard column specification (Z-axis traverse of 350 mm) or an extended specification (Z-axis traverse of 550 mm) for handling taller workpieces.



RA-H5200CNC  
with personal computer system and software

| No.      | Model                   | Order No.<br>UK only | Column<br>travel Z-axis | Straightness<br>(λc 2,5 mm)      | Parallelism to<br>turntable axis | Max. probing<br>height<br>ID/OD | Mass<br>main unit |
|----------|-------------------------|----------------------|-------------------------|----------------------------------|----------------------------------|---------------------------------|-------------------|
| 211-533D | RA-H5200CNC<br>Standard | 211-533E             | 350 mm                  | 0,05 μm/100 mm<br>0,14 μm/350 mm | 0,2 μm/350 mm                    | 350 mm                          | 650 kg            |
| 211-534D | RA-H5200CNC<br>High     | 211-534E             | 550 mm                  | 0,05 μm/100 mm<br>0,2 μm/550 mm  | 0,32 μm/550 mm                   | 550 mm                          | 670 kg            |



Dimensions

### Specifications

#### Turntable

|                              |                                                                  |
|------------------------------|------------------------------------------------------------------|
| Rotational accuracy radial   | (0,02+3,5H/10000) μm H :<br>Probing height (mm)                  |
| Rotational accuracy axial    | (0,02+3,5X/10000) μm X :<br>Distance from rotational center (mm) |
| Rotational speed             | 2, 4, 6, 10 rpm (Auto centering 20 rpm)                          |
| Effective turntable diameter | 300 mm                                                           |
| Centering range              | ±5 mm (with AAT function)                                        |
| Leveling range               | ±1° (with AAT function)                                          |
| Max. probing diameter        | 356 mm                                                           |
| Max. workpiece diameter      | 680 mm                                                           |
| Max. turntable loading       | 80 kg (Auto centering 65 kg)                                     |

#### Vertical column (Z-axis)

|                                         |                                                      |
|-----------------------------------------|------------------------------------------------------|
| Traverse speed                          | Max. 60 mm/s<br>(Measurement : 0,5/1,0/2,0/5,0 mm/s) |
| Max. probing depth with standard stylus | 104 mm for ø 32 or more, 26 mm for ø 12,7 or more    |

#### Horizontal arm (X-axis)

|                                     |                                                    |
|-------------------------------------|----------------------------------------------------|
| Straightness                        | 0,4 μm/200 mm                                      |
| Perpendicularity to rotation center | 0,5 μm/200 mm (reference generatrix)               |
| Traverse range                      | 225 mm (-25 mm to 200 mm)                          |
| Travel speed                        | Max. 50 mm/s (Measurement 0,5, 1,0, 2,0, 5,0 mm/s) |

#### Detector

|                 |                                                                                                      |
|-----------------|------------------------------------------------------------------------------------------------------|
| Measuring force | approx. 40 mN                                                                                        |
| Measuring range | standard ±400 μm/±40 μm/±4 μm, follow : ±5 mm<br>Tip shape, material : ø1,6 mm tungsten carbide ball |

#### Air supply

|                 |                           |
|-----------------|---------------------------|
| Air pressure    | 0.39 MPa                  |
| Air consumption | 45L/min. (standard state) |

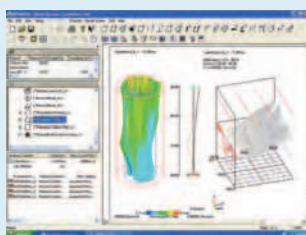
#### Power supply

100-240V AC, 50/60 Hz

#### Mass

Vibration isolator : 170 kg

Optional Accessories Refer to page Accessories



Roundpak

The roundness/cylindrical form analysis program