World standard instrument of highest-in-class accuracy applicable to downsized parts

Highest accuracy in its class
Small footprint, but wider measuring range
Energy-saving design (Less air consumption)

Assures rotation accuracy of 0.06μm at rotation speed of 4/min

With a rotation speed of 4/min (twice as fast as existing instruments) and rotation accuracy guaranteed at 0.06 μm (a long shaft measuring tool: 0.6 μm) which is the highest in its class, the RONDCOM 73A dramatically increases measuring throughput.

High Straightness/Parallel Accuracy (Actual Values)

RONDCOM 73A guarantees Z-axis straightness accuracy of 0.9 μm/200 mm or less which is the highest in its class. Z-axis parallelism is 0.9 μm/100 mm or less which is also the highest in its class.

Data shows an example when measuring with
H: 0 to 200 mm

Smaller Footprint

RONDCOM 73A achieved a 27% reduction of width and a 24% reduction of footprint X-axis stroke of 600 mm has been ensured while significantly downsizing the instrument body. In addition, Y-axis stroke has been extended to 120 mm. Z-axis stroke of 1015 mm has been ensured although the instrument body is only 2500 mm high.
Safety Device and Auto Balancing Mechanism on R-axis

Provided as standard, the detector holder safety device identifies a collision between a workpiece and a detector. An auto balancing mechanism is also provided on the R-axis, so there is no need to adjust a counterweight to accommodate different measuring diameters.

R-axis Feed Range: 265 mm

At 265 mm, the R-axis feed range is the widest in its class (equivalent to our existing instruments). This eliminates the need to change detector positions to accommodate different measuring diameters.

Adaptive to Higher Accuracy Requirements (Optional)

Pneumatic Vibration Isolation Stand Available (Optional)

Adaptive to 400 kg Loading (Optional)

All Orientation Detector May be Provided (Optional)

Manual Feed Mechanism Available for Each Axis (Optional)

Specifications

<table>
<thead>
<tr>
<th>Measurement range</th>
<th>RONDCOM 73A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. measuring diameter</td>
<td>Φ 450 mm</td>
</tr>
<tr>
<td>Maximum measurement height</td>
<td>615 mm (with standard detector)</td>
</tr>
<tr>
<td>Maximum load diameter</td>
<td>Φ 900 mm</td>
</tr>
<tr>
<td>Right/left feed range (X-axis)</td>
<td>600 mm (±300 mm)</td>
</tr>
<tr>
<td>Forward/backward feed range (Y-axis)</td>
<td>120 mm (±60 mm)</td>
</tr>
<tr>
<td>Up/down feed range (Z-axis)</td>
<td>1000 mm</td>
</tr>
<tr>
<td>R-axis feed range</td>
<td>265 mm</td>
</tr>
</tbody>
</table>

Table dimensions 600 mm (W) x 550 mm (D)

Max. permissible loading weight 200 kg

Position of center gravity of workpiece Within the range of Φ 200 mm of table

Tilting adjustment range 2° (±1°)

X-axis driving speed Max 30 mm/s

Y-axis driving speed Max 30 mm/s

Radial rotation accuracy 0.06 μm (with standard detector)

Axial rotation accuracy (Measuring radius: 50 mm) 0.2 μm (with standard detector)

R-axis rotational speed 1 to 6/min (at measuring) Max 10/min

Z-axis straightness accuracy 0.9 μm/200 mm (with standard detector)

Parallelism (U/pdown direction: Z-axis) 0.9 μm/100 mm

Z-axis driving speed 0.6 to 6 mm/s (at measuring) Max 30 mm/s

R-axis driving speed Max 30 mm/s

Software ACC/TeC

Measuring unit dimensions 1235 mm (W) x 1455 mm (D) x 2500 mm (H)

Control unit dimensions 800 mm (W) x 800 mm (D) x 1400 mm (H)

Table surface height 760 mm

Measuring unit weight 1500 kg

Control unit weight 100 kg

Voltage AC100 to 240 V ±10% 50/60Hz

Power consumption 1000 VA (except printer)

Air supply

<table>
<thead>
<tr>
<th>Supply</th>
<th>Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply pressure</td>
<td>0.35 to 0.7 MPa</td>
</tr>
<tr>
<td>Working pressure</td>
<td>0.3 MPa</td>
</tr>
<tr>
<td>Air consumption</td>
<td>30 NL/min</td>
</tr>
</tbody>
</table>

Air supply connecting nipple to main unit One-touch pipe joint for outer diameter Φ 8 mm hose

External view

Standard layout (Top view) Front view Side view