



# PRECISIONRound

For quick, economical and high precision inspection of roundness and circular geometry

**Model: AMRT-2709**

## World class performance

PRECISIONRound incorporate a number of industry leading features that combine to deliver high accuracy, repeatability and ease of use.

**Quality Control** at a central inspection station or in the gauge room is comprehensive and in accordance with international metrology standards.

## Measuring excellence

The degree of excellence for any gauging device is its range to resolution. Mitutoyo gauge heads, with wide range resolution, vastly improve the measure of precision in your manufacturing process.



**Self centering mechanism** can help the object to place at center easily



- Wide range -  $\pm 0.3 \mu\text{m}$  (2mm) simplifies initial set-up of the component with the help of special fixtures
- Normal resolution -  $\pm 0.02 \mu\text{m}$  (20nm) - is ideal for most measurement requirement

PRECISIONRound AMRT-2709 shown with stage and mitutoyo GT31 probe. Customized work holding devices can be used to expand capability or simply increase throughput can be loaded with fixtures.

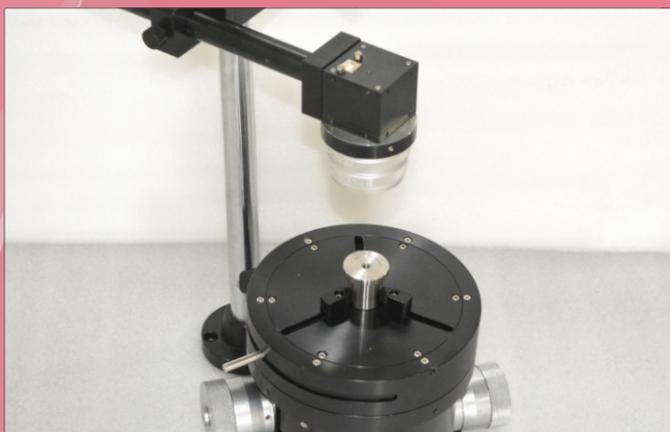
## Powered by PRECISIONRound software

PRECISIONRound software provides comprehensive analysis and programmable measurement capabilities for the instruments. It is the ideal tool for any environment where rapid component inspection is desired.

## Mechanical excellence throughout the measuring loop

**High Precision Air Bearing :** Spindle accuracy is crucial to the performance of any roundness instrument. Radial limit of error is a constant value measured at the table top. Coning error, how well the spindle rotates on its axis, increases relative to distance above the table top. Although radial error can be improved through software correction, coning error can be minimized only through meticulous construction. Precision spindle provides the best combination of precision and “stiffness”. The result is spindle error is less than 0.00025µm.

**Quad position gauge :** The measuring gauge is carried in a assembly for rapid changeover between vertical and horizontal attitude. Vertical for internal and external surfaces; horizontal for surfaces which may be upper or lower, external, angled or conical.



In the system, High performance USB2.0 CMOS camera used for non-contact roundness measurement.

These components can be measured with confidence and accuracy because spindle axis error is minimized to a remarkable level (0.0001mm)

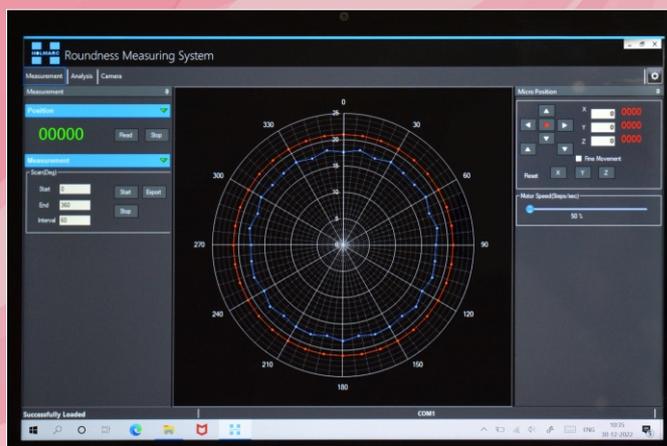


Air Bearing

**Anti Vibration Pads :** Compact design is important for the workshop where tabletop space is always at a premium. PRECISIONRound is made with steel legs and platform with on AMT vibration pad is extremely stable under typical production floor conditions.

**Integrated vibration isolation :** As a further guarantee that laboratory grade metrology is attained on the shop floor. Vibration isolation pads are built into PRECISIONRound instruments.

**Engineering assisted center and leveling :** The centering and leveling knobs are differentiated by look and feel, allowing operators to view the screen while setting the component to the spindle axis.



PRECISIONRound software



DST-AMRITA  
TECHNOLOGY  
ENABLING  
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## CONTACT US

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