

Talyrond® 595H

A revolutionary concept in automated roundness inspection









The Talyrond 595H series

A new concept in roundness measurement



Measure three critical performance elements...

Roundness, Surface finish, and now Contour

...exactly as they were produced

High precision emulation of your manufacturing process

The all-new Talyrond 595H roundness instruments use rotary, vertical and horizontal measuring datums to duplicate your machine tool's movement and exactly reproduce the workpiece shape. This ultra high precision simulation of the cutting tool path enables precise control of your manufacturing process.

Reproducible measurement results

Decades of experience, ultra precision machining expertise and FEA optimized design combine to provide low noise and near flawless mechanical execution of the measuring axes. Further enhancement via the use of traceable standards and exclusive algorithms effectively eliminates instrument influence from the measurement results.

Monitoring manufacturing



Gauge

Gauge Range Up to 4 mm

ResolutionDown to 0.3 nm



Roundness

Radial Accuracy ± 0.008 µm



Roughness

Noise Less than 20 nm Rq all axes

> **Ra values** Less than 0.05 μm



Contour

LS Arc measurement

5 µm

Pt 0.5 μm

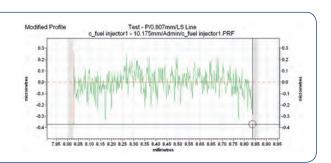
Unparalleled measurement capability

Five measurements in one

Emulating the manufacturing process with a higher degree of precision allows all features to be measured on one instrument

Roughness

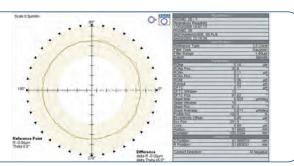
High resolution gauge and low axis noise enables linear or circumferential surface roughness measurement.



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Roundness

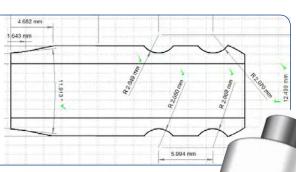
Frictionless air bearing spindle and precision column for roundness, cylindricity and straightness measurements.



3

Contour

Our patented calibration technique enables measurement of radius, angle, height, length, distance and more.



4

Cylindrical mapping

Precision control and low noise in all axes allows in depth analysis of cylindrical components including wear scars and material volume.



Cams and pistons

A precision encoder and linear scales in all axes enables measurement of non round parts such as cams and pistons.

