

# Talyrond 365XL / 385XL Roundness Systems

PRODUCT

## High Precision Instruments for Large Diameter Components



The Talyrond XL range provides precision measurement on large diameter components

Large diameter range with adjustable column and 300mm radial arm

Fully automated center and level capability with radial follow mode

Automatic gauge calibration in less than ten seconds

Patented arm attitude/orientation mechanism with choice of automated or manual modes

Choice of vertical straightness units up to 900mm



# High Precision Instruments for Large Diameter Components

## Talyrond 365XL / Talyrond 385XL

Extremely popular in the measurement of large diameter bearings and non-rotationally symmetric components. These instruments are based around Taylor Hobson's successful Talyrond 365 range and utilize a frictionless air bearing spindle and high accuracy column with adjustable positioning to allow the measurement of parts up to 1 meter in diameter.

Two versions are available, either with fully automated arm attitude/orientation or a manually operated version; in both cases these patented mechanisms provide access to the most difficult of components.

### 72,000 Radial data points

The Talyrond XL range is capable of measuring up to 72,000 data points enabling analysis of harmonics in the range 1-5000 UPR. This facility is particularly useful for large diameter components where data point spacing increases with component diameter. (ISO 12180-2).

### Automatic Gauge Calibration

An industry first for roundness instruments, this unique, precise and error free routine will calibrate the Talymin 5 gauge head in seconds considerably reducing set up time.

### Fully Automated centre and level

Our patented 3 point kinematic support system is designed to out-perform all other roundness instruments.

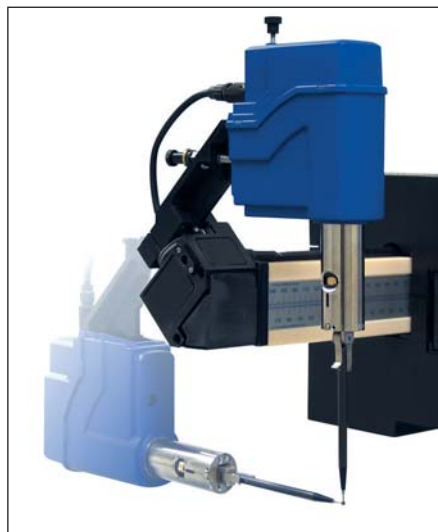
- During centering the spindle rotates continuously; this condition of "dynamic equilibrium" is good metrology and also speeds the centering process
- No null point means components can be centered and leveled at any point above the table top without the frustration of finding a "neutral tilting plane"
- Pre-defined eccentricity target levels less than  $0.8\mu\text{m}$  ensure repeatability and consistency between operators

### Automated follow mode

The column and arm of the XL range are capable of following the eccentricity and contour of the part outside of the normal gauge range reducing the need for manual pre-centering or the use of expensive work holding fixtures. This particular feature is a must for large diameter parts where pre-centering is more difficult.



Talyrond 385 XL with adjustable column position



fully automated arm orientation mechanism



ultra high precision air bearing spindle

## Serving a global market

Taylor Hobson is world renowned as a manufacturer of precision measuring instruments used for inspection in research and production facilities. Our equipment performs at nanometric levels of resolution and accuracy.

To complement our precision manufacturing capability we also offer a host of metrology support services to provide our customers with complete solutions to their measuring needs and total confidence in their results.

### Contracted Services from Taylor Hobson

- **Inspection services**  
measurement of your production parts by skilled technicians using industry leading instruments in accord with ISO standards
- **Metrology training**  
practical, hands-on training courses for roundness and surface finish conducted by experienced metrologists
- **Operator training**  
on-site instruction will lead to greater proficiency and higher productivity
- **UKAS Calibration and Testing**  
certification for artifacts or instruments in our laboratory or at customer's site

### For the above services, contact our Center of Excellence:

email: [taylor-hobson.cofe@ametek.com](mailto:taylor-hobson.cofe@ametek.com)  
or call: +44 116 276 3779

- **Design engineering**  
special purpose, dedicated metrology systems for demanding applications
- **Precision manufacturing**  
contract machining services for high precision applications and industries
- **Preventative maintenance**  
protect your metrology investment with a Talycare service cover plan

### For the above services, contact our Sales Department:

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