



Surtronic® R-100 series

High speed roundness measurement systems
for the bearings industry



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A range of roundness products robust enough for the shop floor but accurate enough for any inspection room.

Working closely with bearings manufacturers, Taylor Hobson has focussed on the key attributes that are most important for quality control in today's precision industries.

The new Surtronic® R-100 series instruments offer a flexible solution for all your roundness and form requirements with a variety of systems and application specific accessories along with fixtures that can be tailored to your specific need.

Speed (3 parts/minute including set-up)

The most important benefit these systems offer is speed. In precision industries as manufacturing volumes increase all too often the bottleneck is metrology. High measurement throughput systems ensure higher sampling rates are achieved while also supporting increased manufacturing volumes.

Precision (± 25 nm spindle accuracy)

Although many times faster than traditional benchtop roundness systems there is no loss of precision or accuracy. Full ISO compliant measurements can be taken with ± 25 nm accuracy and 6 nm gauge resolution.

Robustness (suitable for 24/7 operation)

All systems are designed for constant 24 hour, 7 days a week use in demanding shop floor environments; manufactured using only the most durable and hard wearing materials.

Ease of use (touchscreen software)

The X-sight touch screen software platform with intuitive navigation make the Surtronic® roundness system as easy to use as a SatNav or SmartPhone with everything you need at your fingertips.



X-sight touch screen software



Speed and reliability matter; we choose Taylor Hobson metrology.

Dr Sashi Balakrishnan, Chief Tribologist,
Mercedes-Benz High Performance Engines
(leading Formula 1 engine supplier)

World's highest throughput roundness system...

- Increase manufacturing output
- Reduce part scrappage

- Ensure part traceability
- Improve 'right first time'



What can it measure?

The Surtronic® R-series instruments are ideally suited to measuring high volume production parts across a wide variety of industries including:

Bearings

- Races, Balls, Needles and Rollers



Patented gauge orientation

Using Taylor Hobson's patented gauge orientation with its robust locking mechanism changing orientation from roundness to flatness or internal to external only takes a few seconds.

Accurate gauging

All systems incorporate Taylor Hobson's accurate and reliable Talymin gauge technology, delivering 6 nm resolution.

Patented rapid centre™

Rapid Centre avoids valuable cycle time being lost on manual part centring. On most parts precision results are achieved following a very simple and fast loading procedure. Now roundness measurements can be made in less than 30 seconds including part loading, centring, measurement, analysis and results display!



Accessories and standards

A full range of accessories and standards are available to support the instrument. These include Magnetic chuck, Rapid Centre fixture, Glass hemisphere, Calibration set, Precision test cylinder, Cresting standard, Stylus kit, Flick standard (20 µm or 300 µm) and replacement air filter modules.

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

Sales department

Email: taylor-hobson.sales@ametek.com

Tel: **+44 (0)116 246 2034**

- **Design engineering**
special purpose, dedicated metrology systems for demanding applications
- **Precision manufacturing**
contract machining services for high precision applications and industries

Service department

Email: taylor-hobson.service@ametek.com

Tel: **+44 (0)116 246 2900**

- **Preventative maintenance**
protect your metrology investment with an Amecare support agreement

Centre of Excellence department

Email: taylor-hobson.cofe@ametek.com

Tel: **+44 (0)116 276 3779**

- **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



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Taylor Hobson UK

(Global Headquarters)

PO Box 36, 2 New Star Road
Leicester, LE4 9JQ, England

Tel: +44 (0)116 276 3771 Fax: +44 (0)116 246 0579
email: taylor-hobson.uk@ametek.com



Taylor Hobson France

Rond Point de l'Epine Champs
Batiment D, 78990 Elancourt, France

Tel: +33 130 68 89 30 Fax: +33 130 68 89 39
taylor-hobson.france@ametek.com



Taylor Hobson Germany

Postfach 4827, Kreuzberger Ring 6
65205 Wiesbaden, Germany

Tel: +49 611 973040 Fax: +49 611 97304600
taylor-hobson.germany@ametek.com



Taylor Hobson India

1st Floor, Prestige Featherlite Tech Park
148, EPIP II Phase, Whitefield, Bangalore – 560 006
Tel: +91 1860 2662 468 Fax: +91 80 6782 3232
taylor-hobson.india@ametek.com



Taylor Hobson Italy

Via De Barzi
20087 Robecco sul Naviglio, Milan, Italy
Tel: +39 02 946 93401 Fax: +39 02 946 93450
taylor-hobson.italy@ametek.com



Taylor Hobson Japan

3F Shiba NBF Tower, 1-1-30, Shiba Daimon Minato-ku
Tokyo 105-0012, Japan
Tel: +81 (0) 3 6809-2406 Fax: +81 (0) 3 6809-2410
taylor-hobson.japan@ametek.com



Taylor Hobson Korea

#310, Gyeonggi R&DB Center, 906-5, Iui-dong
Yeongtong-gu, Suwon, Gyeonggi, 443-766, Korea
Tel: +82 31 888 5255 Fax: +82 31 888 5256
taylor-hobson.korea@ametek.com



Taylor Hobson China Beijing Office

Western Section, 2nd Floor, Jing Dong Fang Building (B10)
No.10, Jiu Xian Qiao Road, Chaoyang District, Beijing, 100015, China
Tel: +86 10 8526 2111 Fax: +86 10 8526 2141
taylor-hobson-china.sales@ametek.com.cn



Taylor Hobson China Shanghai Office

Part A1, A4, 2nd Floor, Building No. 1, No. 526 Fute 3rd Road East,
Pilot Free Trade Zone, Shanghai, China 200131
Tel: +86 21 5868 5111-110 Fax: +86 21 5866 0969-110
taylor-hobson-china.sales@ametek.com.cn



Taylor Hobson Singapore

AMETEK Singapore, 10 Ang Mo Kio Street 65
No. 05-12 Techpoint, Singapore 569059
Tel: +65 6484 2388 Ext 120 Fax: +65 6484 2388 Ext 120
taylor-hobson.singapore@ametek.com



Taylor Hobson USA

1725 Western Drive
West Chicago, Illinois 60185, USA
Tel: +1 630 621 3099 Fax: +1 630 231 1739
taylor-hobson.usa@ametek.com



www.taylor-hobson.com