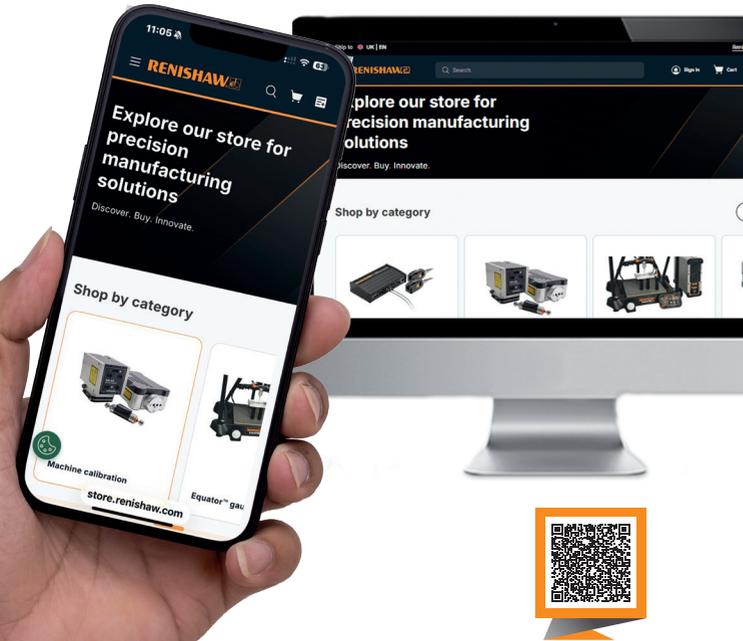


 **Need spares and accessories?**

Visit our Online store

www.renishaw.com/shop/calibration



www.renishaw.com/calibration

+44 (0) 1453 524524

uk@renishaw.com

#renishaw

© 2025 Renishaw plc. All rights reserved. RENISHAW® and the probe symbol are registered trade marks of Renishaw plc. Renishaw product names, designations and the mark 'apply innovation' are trade marks of Renishaw plc or its subsidiaries. Other brand, product or company names are trade marks of their respective owners. Renishaw plc. Registered in England and Wales. Company no: 1106260. Registered office: New Mills, Wotton-under-Edge, Glos, GL12 8JR, UK.

WHILE CONSIDERABLE EFFORT WAS MADE TO VERIFY THE ACCURACY OF THIS DOCUMENT AT PUBLICATION, ALL WARRANTIES, CONDITIONS, REPRESENTATIONS AND LIABILITY, HOWSOEVER ARISING, ARE EXCLUDED TO THE EXTENT PERMITTED BY LAW.



Part no.: L-9936-9105-02-A



 **QC20 ballbar**

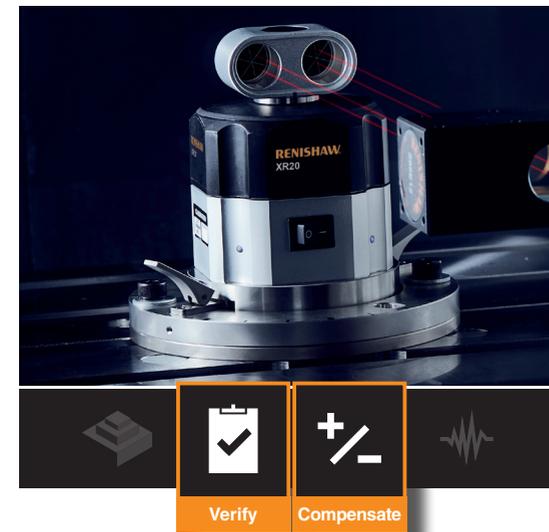
Wireless ballbar for machine tool performance diagnosis

Ballbar testing provides a simple, rapid check of a CNC machine tool's positioning performance to recognised international standards (eg. ISO, ANSI/ASME) allowing users to benchmark and track the performance of their machines and to quickly diagnose problems before they need maintenance.

Regular ballbar testing of machine tools helps to:

- ensure accurate parts, first time, from CNC machines
- reduce machine down-time, scrap and inspection costs
- demonstrate compliance with machine performance and quality management standards
- implement fact-based predictive maintenance

www.renishaw.com/qc20



 **XR20 rotary axis calibrator**

Highly accurate and repeatable rotary axis calibration

The XR20 rotary axis calibrator works in conjunction with XL-80 and XM-60 laser systems to measure and correct rotational errors. It provides rapid calibration for stages, jigs and machine tools and benefits from:

- calibration of rotary axes to ± 1 arc second accuracy
- wireless operation
- built-in alignment targets
- auto-calibration compensates for set-up alignment errors
- automatic direction and feedrate detection, up to 10 rpm

www.renishaw.com/xr20



Discover our calibration products

Precision tools to assess, monitor and improve the static and dynamic performance of motion systems.

Introducing our calibration range

Renishaw's calibration laser and ballbar products provide an accurate foundation to establish a high quality, known and repeatable level of process capability.

They are combined with intelligent calibration software to maximise the performance of your motion system.

RENISHAW



Build

Laser alignment of axes during assembly reduces linear and rotary errors.



Verify

Verification checks a machine's positioning capability to confirm it meets specifications.



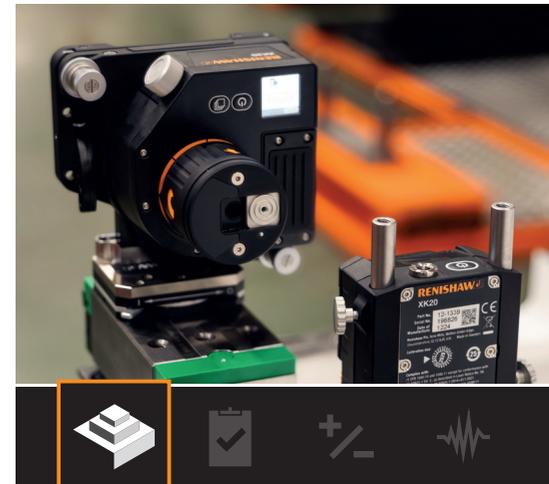
Compensate

Compensation reduces the error between a machine's indicated and actual positions, to improve its performance.



Diagnose

Identify error sources, target maintenance and minimise unplanned downtime.



Build



Verify



Compensate



Diagnose



XK20 alignment laser system

Build to international standards

The XK20 alignment laser delivers unmatched precision, performance and traceability while complying with ISO accuracy and reporting standards 230-11.

Used with the CARTO XK20 app, it makes the measurement process more manageable, enabling large and complex machine structures to be assembled and aligned faster.

It consolidates the number of steps needed to perform measurements, simplifies user interaction and increases throughput, ensuring the highest level of accuracy and traceability.



www.renishaw.com/xk20



Build



Verify



Compensate



Diagnose



XM-60 multi-axis calibrator

Measure six degrees of freedom in any orientation from a single set-up

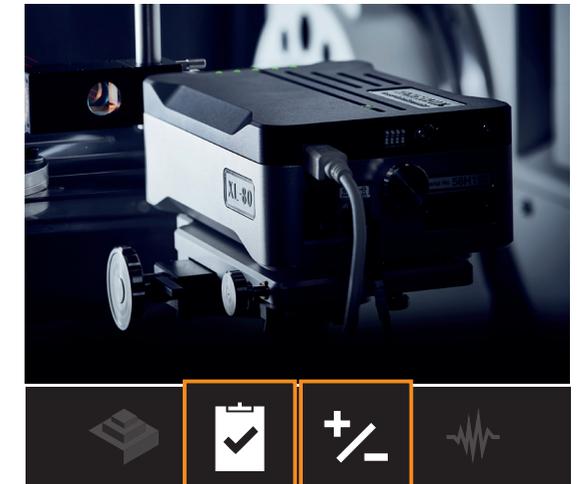
The XM-60 is a laser measurement system capable of measuring errors in six degrees of freedom along a linear axis, simultaneously from a single set-up. It is a powerful diagnostic tool measuring all geometric errors in the axis from a single capture. Its unique optical roll measurement system provides measurement in any orientation.

For volumetric compensation, the XM-60 multi-axis calibrator provides a quick and accurate method of data population. Easy upload of compensation files to the machine control results in consistent performance across the machine volume.



www.renishaw.com/xm60

RENISHAW
apply innovation™



Build



Verify



Compensate



Diagnose



XL-80 laser system

Directly measure geometric errors in a machine independently

The XL-80 laser system gives confidence in the measurements and makes it possible to isolate errors in real-time, unlike laser tracker and tracer systems.

This allows machine accuracy to be improved by:

- making targeted alterations to the machine's assembly
- using the data to apply error compensation
- documenting the improved capability of the machine

The XL-80 laser has become the system of choice for a variety of laboratory applications and calibration houses. Its ultra-stable laser frequency, published error budgets, and unbroken traceability make it ideal as a reference system. A variety of connections and triggering options are available.



www.renishaw.com/xl80