*January 2018 – for immediate release Further information: Chris Pockett, +44 1453 524133*

**5-axis measuring technology enables measurement without compromise**

Measurement is an essential part of manufacturing, used to control processes and verify products. However, measurement time is often viewed as non-productive, causing unwanted bottlenecks and putting pressure on manufacturers’ operating margins.

Renishaw’s 5-axis measurement product range for co-ordinate measuring machines (CMMs) claims to be one of the biggest step-changes in measurement capability ever introduced in industrial metrology and goes a long way to overcoming these challenges.

The need to retain accuracy has historically compromised the ultimate speed of the measuring process due to the characteristics of a CMM’s structure. The non linear motion of a Cartesian CMM induces accelerations and decelerations that twist and deflect the machine structure, and result in measurement errors that increase with speed and acceleration.

CMM manufacturers work relentlessly on software and machine improvements to overcome those limitations, but ultimately the physical nature of the CMM structure constrains further improvement.

REVO® 5-axis systems approach this challenge from an entirely different perspective, minimising CMM accelerations whilst moving the stylus very rapidly over the component surface through the simultaneous control of the three machine and two probe head axes (X, Y, Z and A, B).

Additionally, the REVO® system offers five different probe families, each specifically designed to maximise the advantages of 5-axis motion and infinite positioning. The probes are automatically interchangeable and include tactile scanning, touch-trigger, surface finish and non-contact vision probes. All are used within a common co-ordinate reference frame and provide the choice of an optimum tool to measure multiple features all on a single CMM platform.

Automotive is one sector benefitting from this technology with manufacturers finding unparalleled advantages in the expanded SFP2 surface finish measurement product range, offering operator independent data collection and the opportunity to eliminate dedicated surface finish equipment. By integrating automated roughness measurement and drastically reducing the number of probe styli required to measure complex parts, REVO® systems have a direct impact on powertrain manufacturing effectiveness.

Renishaw has always been an innovation leader in industrial metrology. The company’s first product, the touch-trigger probe, led to a revolution in three-dimensional co-ordinate measurement. Ever since, a strong commitment to research and development has brought to market products that have been milestones in industrial metrology. The REVO® 5-axis measurement system is leading a new revolution in quality control, enabling manufacturers to stay competitive, push the boundaries of their production processes and improve the cost effectiveness of their manufacturing.

For more information on the REVO-2, visit [http://www.renishaw.com/en/revo-5-axis-measurement-system--10438.](http://www.renishaw.com/en/revo-5-axis-measurement-system--10438.%20)

**-ENDS-**

**Notes to editors**

UK-based Renishaw is a world leading engineering technologies company, supplying products used for applications as diverse as jet engine and wind turbine manufacture, through to dentistry and brain surgery. It has over 4,000 employees located in the 35 countries where it has wholly owned subsidiary operations.

For the year ended June 2017 Renishaw recorded sales of £536.8 million of which 95% was due to exports. The company’s largest markets are China, the USA, Japan and Germany.

Throughout its history Renishaw has made a significant commitment to research and development, with historically between 14 and 18% of annual sales invested in R&D and engineering. The majority of this R&D and manufacturing of the company’s products is carried out in the UK.

The Company’s success has been recognised with numerous international awards, including eighteen Queen’s Awards recognising achievements in technology, export and innovation.

Further information at [www.renishaw.com](file:///E:\www.renishaw.com)