*August 2022*

**Renishaw to showcase RUP1 ultrasonic probe and CMM metrology software tools at IMTS 2022**

Global engineering technologies company [Renishaw](https://www.renishaw.com/en/cmm-probes-software-and-retrofits--6329?utm_source=StoneJunction&utm_medium=HN&utm_id=REC634), a world-leading manufacturer of metrology systems, will showcase the RUP1 ultrasonic sensor for its REVO® 5-axis multi-sensor CMM measurement system at IMTS 2022. From September 12th to 17th at McCormick Place Chicago, visitors can see the system alongside other products, including the extended range of modules for the SFP2 surface finish measurement probe and enhancements for the RVP non-contact vision probe.

**REVO5-axis multi-sensor CMM measurement system**

The unique REVO 5-axis multi-sensor system synchronises the motion of the CMM and the measuring head’s two axes to minimise the CMM’s dynamic errors at ultra-high measuring speeds. The introduction of the RUP1 ultrasonic probe extends the system’s range to six interchangeable sensors. These provide tactile touch-trigger and scanning measurement, surface finish, ultrasonic thickness measurement, non-contact vision, and structured light measurement on a single CMM - all with the speed, accuracy and flexibility of a 5-axis system.

**New RUP1 ultrasonic probe enables 5-axis thickness measurement with the REVOsystem**

The RUP1 probe increases the multi-sensor capability of the REVO system by adding ultrasonic thickness inspection to the existing product range.

Unlike other ultrasonic systems, the RUP1 probe does not require the use of water tanks or coupling gel to enable a good transmission of the signal. Instead, the RUP1 probe uses an innovative elastomer tip ball to provide excellent coupling between the probe and the material being measured, eliminating the need for some dedicated ultrasonic equipment and integrating automated ultrasonic measurement into the REVO 5-axis multi-sensor system.

Ultrasonic thickness measurement delivers clear advantages over traditional tactile probing techniques for parts where access to internal features is challenging. Aircraft landing gear parts, power generation drive shafts, and hollow aerospace blades are all parts where the RUP1 probe will provide benefits.

**Angle change mirror (ACM) for use on the RVP vision probe**

ACM is an accessory designed to enhance access for the RVP non-contact vision system. Using a precision first surface mirror to provide a true reflection, the ACM rotates the field of view through 90° allowing vision inspection of bore surfaces and other features previously inaccessible to RVP. ACM is compatible with the VM11-2 module and mounts magnetically to a kinematic ring on VM11-2, allowing orientation at multiple positions to maximise part accessibility; 24 positions are available at 15° intervals around the VM11-2 axis.

**Extended range of modules for SFP2 surface finish probe for the REVO system**

Since the launch of the REVO SFP2 surface finish probe with expanded capability in 2017, Renishaw has released additional specialised modules, extending the surface finish measurement capability of the REVO system.

The latest additions include the G1 and H1 modules. The G1 module comprises a special stylus for groove measurement and has its own unique analysis package. The G1 module is used in the measurement of grooves in engine cylinder bores prior to a plasma coating process (also known as LDS). The H1 module is characterised by its elongated skid with a large radius (125 mm), enabling it to be used with cut-off values greater than 0.8 mm. This makes it more tolerant of measuring parts that may not be perfectly clean, whilst still being compliant with international standards.

From September 12th to 17th, visitors will be able to see the RUP1 system, the ACM and the extended set of surface finish modules for the REVO system as well as MODUS software demonstrations on booth 135509 in the East Building, Level 3 at IMTS 2022.

For further information, visit [www.renishaw.com/en/cmm-probes-software-and-retrofits--6329](https://www.renishaw.com/en/cmm-probes-software-and-retrofits--6329?utm_source=StoneJunction&utm_medium=HN&utm_id=REC634).

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**Notes to editors**

**About Renishaw:**

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 4,500 employees located in the 36 countries where it has wholly owned subsidiary operations.

For the year ended June 2021 Renishaw recorded sales of £565.6 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 13 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](http://www.renishaw.com/)