

Renishaw launches the world's first strain gauge based inspection probe for grinding machines

The Renishaw MP250 is an ultra compact touch probe for grinding machines that sets new standards for the precision measurement of 3D part geometries, whilst offering all the standard probing benefits of reduced set-up times, reduced scrap and improved process control. With robust construction and proven solid-state electronics, the MP250 touch probe is also suited to the harshest of machine environments. Measuring only Ø25 mm x 40 mm long, the MP250 touch probe is ideal for grinding machine applications with restricted space. It is also specifically designed for use within the harsh environment found in grinding machines, with a body sealed using materials resistant to particle laden coolants and elevated temperatures. The MP250 has a simple hard-wired connection to the machine control, made possible through the new dedicated HSI interface, which can also be used with standard grinder inspection probes such as the Renishaw LP2.



Using Renishaw's patented Rengage[™] strain gauge technology, the MP250 touch probe is able to achieve far greater levels of accuracy than standard mechanical probes. This allows sub-micron 3D probe performance on a range of applications which demand high precision measurement, such as contoured surfaces like gear teeth or cutting tools. This performance is maintained even when the application requires long styli.

The Rengage[™] technology combines a patented sensing mechanism and advanced electronics, giving the MP250 a uniform triggering characteristic in all touch vectors. The result is significantly less stylus bending and pre-travel variation when taking measurement points, which gives users improved repeatability and accuracy in all probing directions and reduced probe calibration times compared to standard probes.



Despite the use of advanced technologies such as strain gauges, there is no compromise in overall robustness. Rengage[™] technology has already been proven in thousands of machine tool inspection applications worldwide, with Renishaw's other high accuracy touch probes such as the MP700 and OMP400. The MP250 resists shock damage to the same levels as these other marketleading probes, and offers resistance to false triggering through the use of digital filtering.