

New compact touch probe offers high levels of accuracy for a wide range of machining centres

The Renishaw RMP600 is a compact, high accuracy touch probe with radio signal transmission, offering all the benefits of automated job set-up, plus the ability to measure complex 3D part geometries on all sizes of machining centres. With a robust construction, proven solid-state electronics and interference-free signal transmission, the RMP600 touch probe is also suited to the harshest of machine environments.



Using Renishaw's patented RENGAGE[™] strain gauge technology, the RMP600 touch probe is able to achieve far greater levels of accuracy than is possible when using a standard mechanical probe, making it suitable for a range of applications which demand high precision measurement. The RENGAGE[™] technology combines a patented sensing mechanism and advanced electronics to allow sub-micron 3D probe performance on contoured surfaces, even with long styli.

The use of strain gauges also allows the RMP600 to trigger at much lower and highly consistent contact forces, resulting in less bending of the stylus, negligible pre-travel and consequently, greater accuracy. Despite this precision, there is no compromise in overall robustness, with resistance to shock damage at the same levels of Renishaw's other market-leading machine tool probes.

The RMP600 touch probe is only the second touch probe in the world to use Renishaw's proven frequency hopping spread spectrum (FHSS) transmission, now in use in thousands of applications worldwide with the award-winning RMP60 touch probe. Unlike conventional radio transmission systems, the RMP600's FHSS transmission system does not use a dedicated radio channel. Instead, the probe and receiver 'hop' together through a sequence of frequencies, enabling multiple probe systems and other industrial equipment to coexist in confidence.

Paired with a RMI receiver, the RMP600's signals are transmitted over long distances with a negligible chance of interference. FHSS transmission for probes means that once matched, the RMP600 and RMI hop frequencies together to provide reliable communications. Radio "turn on" is available via an M-code signal. The system is compliant with radio regulations in the EU, USA, Japan, Canada, Switzerland, Australia, and many other countries.



The Renishaw RMP600 touch probe offers an unrivalled combination of size, accuracy, reliability and robustness and, for the first time, allows high accuracy probing on large machining centres or other machines where line-of-sight problems affect optical signal transmission. The probe's size ensures it can access surfaces cut with short tools, and it brings all the standard benefits of Renishaw touch probes including reduced set-up times, reduced scrap, reduced fixture costs, improved process control, plus superb 3D performance for high accuracy on-machine measurement.