

## Renishaw to launch its new low temperature, true absolute position encoder at the DSEI military exhibition, 13<sup>th</sup> -16<sup>th</sup> September 2011, ExCeL London

Visitors to stand 159, hall N3, will see a range of high performance position encoders for tough environments and mission critical reliability, including a new low temperature absolute optical encoder with a range of serial communication protocols, a new component level magnetic encoder, and new additions to Renishaw's popular TONiC<sup>™</sup> range of incremental encoders.

Suitable for use in demanding applications such as targeting systems, remotely-operated weapons, long-range vision systems and radar installations, RESOLUTE<sup>™</sup> ETR (Extended Temperature Range) is the latest true absolute encoder from Renishaw, guaranteeing operation down to -40 °C (-40 °F) in non-condensing environments. RESOLUTE ETR provides all the benefits of the revolutionary RESOLUTE absolute, fine pitch angle encoder, such as a market-leading resolution of just 1 nanometre at up to 100 m/s, 27-bit resolution at 36,000 rev/min, and excellent dirt immunity. Furthermore, the RESOLUTE absolute encoder uses sophisticated new optics to read a fine pitch 30 µm scale with impressive low noise levels (jitter <10 nm RMS), while the enhanced detection method intrinsically provides a very low sub-divisional error (SDE) of ±40 nm for exceptional velocity control and rock-solid positional stability.

For embedded motion control applications, RoLin<sup>™</sup> is a component level non-contact magnetic encoder designed for use as a position control loop feedback element. The electronics inside the rugged readhead allow high interpolation rates up to 13 bits and fault monitoring. A wide range of resolutions is available from 0.244 µm to 125 µm, with speeds up to 40 m/s dependent on chosen resolution.

Renishaw's super-compact TONiC optical incremental encoder provides the accuracy normally only available from fragile fine-pitch glass based encoders, in a rugged all metal, easy-to-install package. New additions to the TONiC range of linear and rotary encoders include 1 nm and 2 nm resolutions, a dual output encoder interface, UHV compatible formats and compatibility with Renishaw's Dual Signal interface (DSi) for high accuracy angle encoding.

All Renishaw incremental and absolute encoders are backed by a truly responsive global sales and support network.



For more information about Renishaw's encoder products visit:

## www.renishaw.com/encoders