**Renishaw showcases ATOM DX™ encoder and CENTRUM™ scales at Smart Production Solutions (SPS) exhibition**

Renishaw, the global engineering technologies company, will be exhibiting at SPS 2023 from 14 – 16 November in Nuremberg, Germany.

Attendees are invited to visit the Renishaw stand 231, Hall 4A, to discover the latest in encoder technologies, from miniature encoder stainless steel disc scales to a new handheld encoder diagnostic tool.

**The ATOM™ and ATOM DX encoder families**

The ATOM series is Renishaw's first miniature optical incremental encoder system. Its innovative, non-contact design combines miniaturisation with leading-edge signal stability, dirt immunity and reliability.

ATOM encoders represent a significant advance in the performance and reliability of miniature encoders and are ideal for space-critical applications with system heights under 10 mm. The ATOM readhead is also available as a flexible printed circuit (FPC) variant which helps to minimise overall package size, with a reduced Z-height of just 7.3 mm.

The ATOM DX encoder is Renishaw's smallest incremental optical encoder with digital output direct from the readhead, built on the market proven optical system of the ATOM encoder platform. It integrates Renishaw's latest high-performance interpolation technology, which reduces system size and removes the need for additional adaptors and interfaces.

ATOM DX readheads can also be used with a wide range of linear, partial arc and rotary (angle) scales to meet most application requirements. The readheads are available in two different formats, cabled and top exit variants, with either 20 µm or 40 µm scale options.

The encoder is ready to install straight from the box and features Renishaw's integrated set-up LED, for an intuitive and simple installation process.

**New and robust CENTRUM™ scales**

Renishaw has launched an innovative metal scale disc for its ATOM DX encoders. After an intensive research and development effort, rotary RCDM glass scales are now joined by CENTRUM stainless steel self-centring discs.

CENTRUM CSF40 scale discs are quick and easy to install ‘right first time', due to their innovative mounting features that automatically centre the scale when pushed onto an appropriately sized shaft. These alignment features can reduce installation time by 90 % and enable highly consistent installed accuracy.

CENTRUM discs are optimised to ensure the best performance in the smallest possible package while still offering customers ample design flexibility. Combined with the ATOM DX readhead, this provides a powerful and compact encoder solution.

Mounting of the CENTRUM disc is completed by the addition of three bolts that are tightened to pre-set torque values ꟷno additional gauges or set-up devices are required. Customers are also able to choose the mounting option of fixing CENTRUM rotary scale discs with a mechanical clamp.

CENTRUM discs are made from robust stainless steel, which is resilient and easy to clean. With 40 µm pitch incremental graduations, CSF40 discs are available in a range of sizes with external diameters down to 31 mm.

Visit stand 231, Hall 4A at SPS or [www.renishaw.com/encoders](http://www.renishaw.com/encoders)

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