

AXIAL SPINDLE

The Promess Single Axis and Dual-Axial Spindles are precision torque-rotation units designed to integrate with the Promess EMAP Press. These spindles provide controlled torque and angle measurement for applications requiring torquing while axial load is applied, or—in the case of the Co-Axial Spindle—rotating two tools independently inside one another.

The Axial (Single Axis) Spindle offers high-accuracy torque and force measurement, precise angle control, and a robust, easy-to-integrate design, making it ideal for applications requiring consistent single-axis torquing. The Co-Axial (Dual-Axis) Spindle features two independent rotational axes with multi-turn torque capability, delivering torque and angle control on both axes and making it well suited for applications that require simultaneous rotation of inner and outer tools.

MONITORING CAPABILITIES

- + Torque vs. angle
- + Force vs. angle monitoring
- + Gauging

APPLICATION EXAMPLES

- + High-capacity torque tightening with axial load
- + Bearing / pinion preload setting

SINGLE AXIAL SPINDLE



CO-AXIAL SPINDLE



AXIAL SPINDLE



AXIAL (SINGLE AXIS) SPINDLE

- + High-accuracy torque and force measurement
- + Axial load capability
- + Precise angle control
- + Ideal for applications requiring single axis torquing
- + Robust, easy-to-integrate design



CO-AXIAL (DUAL-AXIS) SPINDLE

- + Two independent rotational axes
- + Axial load capability
- + Multi-turn torque capability
- + Torque and angle control on both axes
- + Ideal for applications requiring simultaneous rotation of inner and outer tools

SYSTEM INCLUDES: BUILT-IN TORQUE SENSORS | SERVO MOTOR | CABLES | DIGITAL SIGN CONDITIONER

STANDARD SIZING

Additional sizes available, contact us to discuss your application

Max Axial Load	Torque	Speed
kN	Nm	RPM
12kN*	1500	70 RPM
25kN*	1000	75 RPM
40kN ⁺	500	200 RPM
50kN ⁺	200	250 RPM

*Minimum Press Size Required: 20kN

+Minimum Press Size Required: 12kN

PROMESS

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