

Keyless Locking Devices Provide Reliable Connections for Plastic Extrusion Equipment

Climax Keyless Locking Devices eliminate the use of keyed connections on plastic extrusion machinery while delivering enhanced longevity, reliability, and performance.



The KLD Advantage:

- Eliminates the need for keys, keyways, & set screws, prone to shaft damage & fretting corrosion
- Superior to splines susceptible to fretting corrosion & require expensive machining
- Shrink fits or press fits are difficult to install & remove
- KLDs only require standard hand tools for installation & removal
- KLDs transmit high torque, thrust, & bending loads

The global market for extrusion machinery is set to grow 4.5% annually by 2030. Plastics leads the industry, driving 77.2% of total revenue. This growth is driven by a rising demand across various sectors and a stronger push towards sustainability.

In high-pressure plastics manufacturing, high-torque injection molding machines are the industry standard. These machines face strenuous demands, particularly when maintaining positional accuracy and repeatability across the driveline. Over time, traditional keyed connections can degrade under stress, leading to wear, backlash, and timing irregularities. To ensure long-term performance and safety, the plastic extrusion process necessitates a shaft-to-hub connection that is reliable, resists harsh environments, and maintains structural integrity.

Climax provides a comprehensive range of Keyless Locking Devices (KLDs) engineered to deliver a robust 360° mechanical interference fit, ideal for high-torque extrusion applications. KLDs establish a secure backlash free connection between the shaft and hub, reducing the risk of slippage, misalignment, and timing errors. By maintaining consistent torque transmission, KLDs help prevent material flow irregularities and ensure uniform product quality. KLDs can reduce maintenance related downtime and enhance overall efficiency. Keyless locking devices can be disassembled and reinstalled onsite using standard hand tools.

Climax Metal Products can tailor products to fit precise application needs. Our experienced in-house engineers are ready to work side-by-side with you, designing a custom solution that fits your exact application needs.

Contact us today to discover how Climax can provide you with a tailored Engineered Shaft Locking Solution™.

