

Climax Provides the Recycling Industry a Reliable Connection for Vibrating Applications

Climax Keyless Locking Devices offer a superior solution to traditional keyed connections in screeners and vibrating conveyor applications commonly found in recycling facilities.



The KLD Advantage:

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

The recycling industry relies on heavy machinery, such as vibrating conveyors and screeners, to transport and sort materials. These machines require a strong shaft/hub connection capable of handling high torque due to constant motion and vibration. Vibratory machines often use keyed connections, which can reduce shaft strength by up to 30%, making the shaft more vulnerable to torsional and bending stresses. Additionally, when set screws are used to secure components on a shaft, marring can occur. The small oscillatory movements and vibrations make these machines susceptible to keyway fretting, causing gradual erosion over time.

Climax Keyless Locking Devices provide a high-capacity connection transmitting torque, bending, and thrust while offering zero backlash. KLDs attach sheaves or sprockets to the drive shaft ensuring a secure connection, reducing the risk of slippage and improving the overall efficiency of recycling machinery. Conveyor applications that incorporate a shaft/hub connection result in a zero-kickback connection, reducing wear while increasing the lifespan of the machinery. Climax C405-Series Heavy-Duty Locking Assemblies create a 360° mechanical interference fit eliminating backlash and offers an advantage for vibrating applications that require high torque transfers.

Keyless locking devices can be serviced on-site with basic hand tools and offer simple installation and disassembly when needed.

Manufacturing tailored products to fit your precise application needs, our in-house team of engineers will help customize a solution for your recycling production process. Contact us today to discover how Climax can provide you with a tailored **Engineered Shaft Locking Solution™**.

