

ENGINEERING  
TOMORROW

*Danfoss*

Brochure

# Airflex<sup>®</sup> Torque Limiting Couplings

Eliminate system overloads. Maximize mill uptime.

**VICKERS**  
by Danfoss

## Fast, reliable **driveline protection**

With grinding mill drivelines migrating from clutch-based drivelines to variable frequency drive (VFD) systems, a new generation of torque couplings answers the call to protect your equipment from damage during unexpected system overloads. Airflex Torque Limiting Couplings (TLC) are the latest advanced solution from Danfoss, a world leader in clutch-based drivetrains for grinding mills. This easy-to-use solution helps prevent damage to critical, high-value driveline components caused by system overloads.

### **The benefits of Airflex's TLC include:**

- Continuously monitors torque to prevent overload of the motor and damage to costly equipment
- Resets and restarts instantaneously, ensuring maximum uptime for your mill operation
- Increased torque capacity provides downsizing opportunities, potentially reducing your costs
- A simple design that extends wear part life further and delivers long-term durability



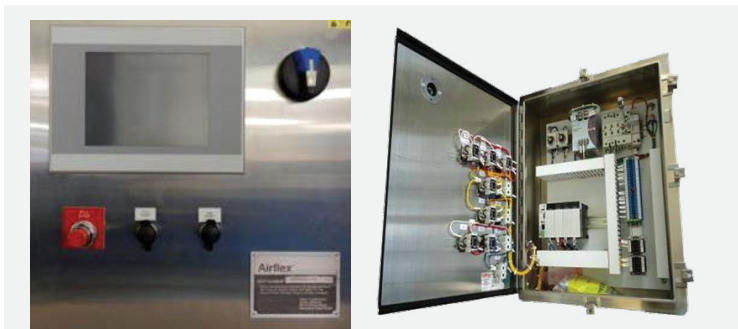
*Torque Limiting Coupling*



## Avoid the hassle and downtime of **system overloads**

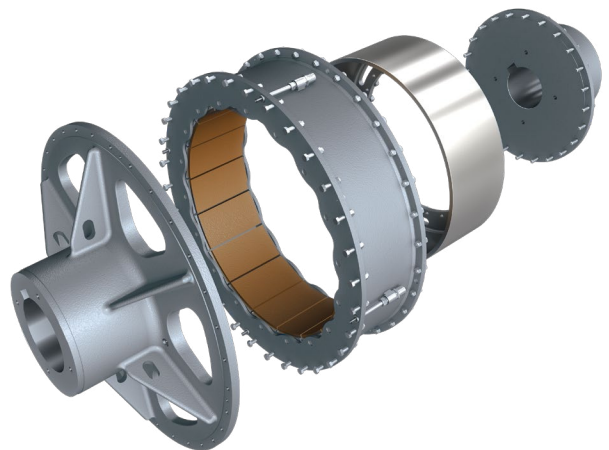
Conventional torque limiting systems are cumbersome, often requiring a complete mill shutdown and time-consuming mechanical operation to reset. The Airflex TLC features a pneumatic system that fills with air and is engaged at startup. Required air pressure is set as needed and monitored by the slip detection controls.

When a system overload is detected, the air is released and the TLC disengages automatically before damage to driveline components can occur. Reset is instantaneous by simply reapplying the required air pressure to the TLC system.

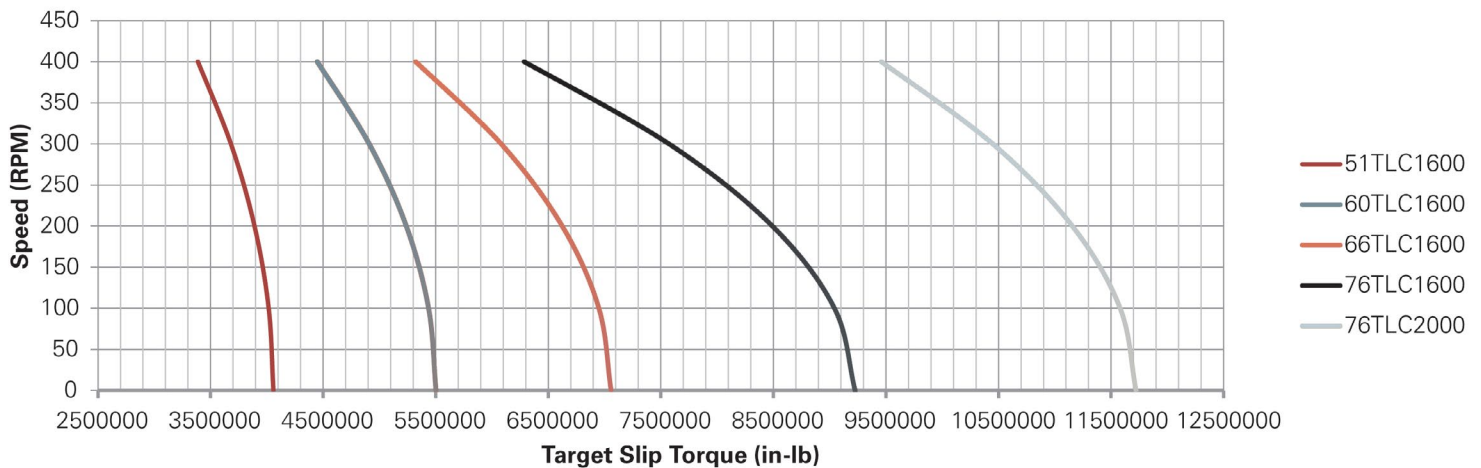


*Advanced Slip Detection Control*

Airflex slip detection control technology automatically disengages the TLC if slippage is detected between the motor and the pinion. It also detects fast starts and over-programmed starts, reducing equipment downtime and preventing driveline damage.



**Airflex Torque Limiting Coupling Selection Chart**



## The simple solution to **driveline protection**



Airflex has been the leader in grinding mill clutches for decades. Our torque limiting couplings represent the next generation of driveline protection, paving the way to the future of grinding mill technology.

Visit [danfoss.com](https://danfoss.com) to learn how the Airflex Torque Limiting Coupling will keep your mill up and running.



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