



## Product

## Application

## Highlights

- 2,250 lb.ft. (3060 Nm) torque capacity
- Require no adjustments or controls
- Prevents fan windmilling
- Bore range: 0.93 to 2.25 in. (23.8 to 57 mm)



## Model FSO Backstopping Clutches

## Rope Shovel Ventilation Fans

A major manufacturer of fans and blowers needed a high-torque clutch solution for installation on mine shovel ventilation fans. The fans are used to control the temperature inside the shovel's diesel engine compartment. Extremely high temperatures are created from the heat generated by the numerous electric drive motors that operate the shovel's hoist, swing, and propel movements. The fans prevent equipment overheating by improving cooling and ventilation.

The backstopping clutches, mounted to each individual fan shaft, prevent reverse rotation (windmilling) that is caused by air flow from the environment when the ventilation fans are turned off. Significant damage to the motor and drive belts can occur if the fan is windmilling during startup.

Formsprag Model FSO-600 clutches with a 2250 lb.ft. (3060 Nm) torque capacity met the customer's application requirements. Low-maintenance FSO automatic backstopping clutches feature a high-torque density and require no adjustments or controls, reducing operating costs.

US (Application Assistance)  
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