

Force Control Industries, Inc. 3660 Dixie Highway Fairfield, Ohio 45014 USA Phone: 513-868-0900 Fax: 513-868-2105

## **Force Control Hazardous Duty Clutches & Brakes**

## Applications Include Coal, Grain, Sugar, Dynamite, Gun Powder, Chemicals, Paint

Force Control Industries, Inc. manufacturers hazardous Duty Clutches and Brakes for many conditions including wet, dusty, or explosive environments, and low temperature (-40C) applications.

Clutches and Clutch Brakes: Force Control manufactures clutches that are actuated either by pneumatic pressure or hydraulic pressure. For air actuated units air pressure from outside is regulated and controlled via solenoid valve to actuate the clutch and or brake. In some cases the clutch and brake are in the same unit known as a clutch brake. The totally enclosed sealed housing, make the Force Control Posidyne Clutch brake and Posistop brakes ready for many hazardous applications including dusty, dirty, and wet environments. Special modifications are made for severe wash down, or marine duty which include stainless steel fittings, nickel plated shafts, and special Steel It coating.

For explosion proof applications the units can be operated with air motors, or explosion proof electric motors. With explosion proof solenoid valves the units can be used in many explosive environments including Class I, II, and III.



**Brakes:** Force Control manufacturers brakes that can be actuated via air, hydraulic, or electric. The air and hydraulic actuated units can be pressure set spring release, or spring set and pressure release. With explosion proof valves the air and hydraulic actuated units are good for Class I, II, III. Electric release spring set motor brakes are being certified and should be available summer of 2012.

**Sizes:** Clutches and brakes are available in sizes from 1 horsepower to 2000 horsepower and torque rating up to 200,000 Lb. Ft. (271,000 NM).

**Industries:** Force Control Industries clutches and brakes are used in many industries including coal mining, transporting, loading docks, ports, grain handling, marine, and oil and gas drilling.

**Applications:** include winches, cranes, trippers, conveyors, mooring and anchor winches, drawworks auxiliary brakes, car spotters, barge positioning, and many more.

Oil Shear Technology: The heart of Force Control products is oil shear technology. Flowing transmission fluid



through the center hub out through the friction stack both transmits torque without physical wear on the friction discs, and removes the heat of engagement to the housing for dissipation. This nearly eliminates friction disc wear, requires no adjustment, and last with minimal service (check fluid level and change annually) for many years.

