

APPLICATION BULLETIN

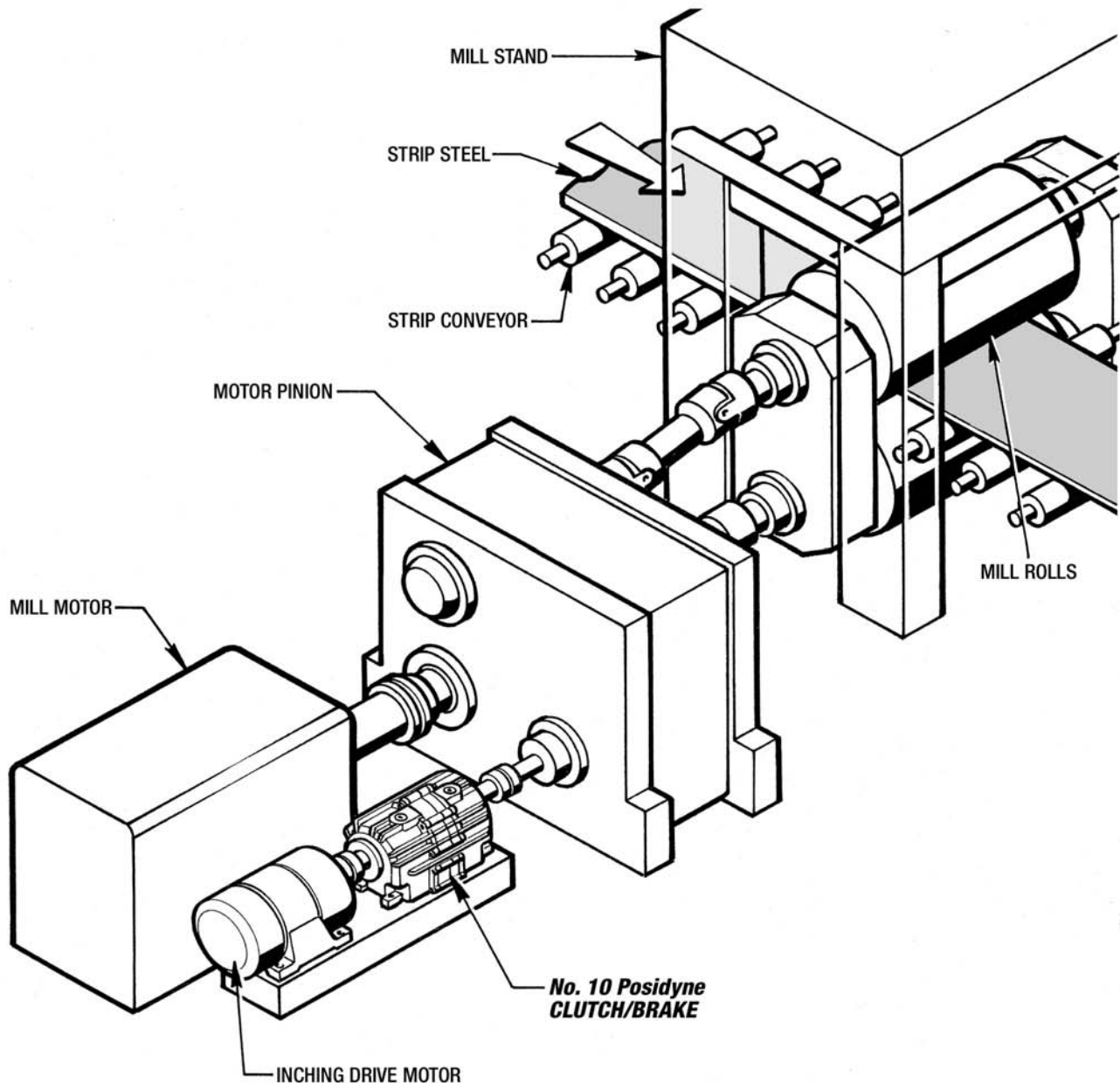


APPLICATION: Inching Drive For Mill Motors

INDUSTRY: Hot Strip Steel Mill

PRODUCT: Oil Shear *Posidyne* Clutch/Brake

INCHING DRIVE FOR MILL MOTORS



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WHERE THEY ARE USED: All steel industry strip mills consist of many rough and finish rolling mills to produce a final product. There are extremely large motors used to drive the rolling mills. During changeover or maintenance work, it is necessary to inch the large motor and drive package. A smaller motor with reducer and clutch/brake package is engaged and disengaged to perform this operation. This is where the Force Control **Posidyne** Clutch/Brake package can be used with successful operation.

HOW THEY WORK: The inching drive for the mill motor consists of a small motor with reducer and clutch/brake package. During normal operation, the clutch/brake is disengaged. However, if for some reason it becomes necessary to turn the motor slowly, or inch the motor, the main motor is stopped and the clutch is engaged on the inching package. Using the inching drive package, the main motor now can be turned at a much slower rate, or inched. This task is accomplished by having the inching package supply a pulsing feature to provide rotational movement through the motor pinion to the main motor drive. To return to the main motor, the clutch is disengaged and the main motor is energized.

PROBLEM SOLVED: The inching package for the main motor provides a method to turn the motor and drive package at a much slower rpm. Without this package, set up and maintenance work on this unit is very difficult and unsafe. The inching package solves this problem.

During maintenance and set-up, time and safety are critical. Therefore, the clutch/brake package must have reliable and dependable operational and safety features. The clutch/brake actuation design of the Force Control unit offers both reliability and safety in its unique design. The totally enclosed design of the Force Control **Posidyne** Clutch/Brake performs very well in this application and the oil shear technology cools and lubricates the friction surfaces for long life.

IMPORTANT FEATURES:

- Actuation design of the Posidyne Clutch/Brake provides reliable operation
- The totally enclosed, sealed design eliminates problems associated with dust and dirt.
- Long life with little maintenance and adjustment.



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