APPLICATION BULLETIN

APPLICATION: Forming Line Conveyor

INDUSTRY: (OSB) Oriented Strand Board Plants

PRODUCT: Oil Shear Posistop Motor Brake
FORMING LINE CONVEYOR

WHERE THEY ARE USED: The forming line is the area in the Oriented Strand Board (OSB) Plants where the boards are formed from wooden wafers or chips that have been treated with special adhesives. The actual forming line includes all conveyors from the hoppers to the loaders. The Forming Line Conveyor is the first conveyor of the forming line section of the plant. The conveyors that follow are: Reject Conveyor, Speed-Up Conveyors, Storage Conveyors and in some cases the Tipple Conveyors.

HOW THEY WORK: The Forming Line Conveyor is a long, continuous conveyor that carries screens under the hoppers that orient and drop the wafers onto the screens. There are typically 3 hoppers. Each hopper orients the wafers opposite the previous layer to form an overlapping bond between layers. The conveyor is driven by a DC motor with a Motor Brake and tachometer connected to auxiliary end of the motor. The motor speed is varied to attain the proper thickness of wafers that are dropped onto the screens. The brake is critical in maintaining position of the conveyor when the line is stopped. Failure to hold position could scrap one or several screens.

PROBLEMS SOLVED: The main problem with the dry friction brakes is they mechanically fail frequently. The atmosphere around the forming line and throughout the plant is damp. The repetitive cycling of the brakes causes frequent failures. The brake and tachometer combination makes repair of the brakes difficult.

The Force Control Posistop Motor Brake puts an end to the monthly maintenance of the motor brakes. The Posistop brakes are drop in replacement for many of the dry friction brakes that are typically used throughout the industry. The totally enclosed Oil Shear Design of the Posistop Motor Brake provides a totally enclosed brake that is immune to the damp atmosphere and there are no flimsy mechanical linkages to fail due to repetitive use.

The end result is a brake that will easily install to replace the typical dry friction electric brake to provide a very reliable, long life, brake with no maintenance other than an annual oil change.

IMPORTANT FEATURES:

• Oil Shear Technology gives the Posistop motor brake extremely long life, as well as consistent stopping.

• The totally enclosed design provides a brake that is not effected by harsh environments.

• Special model brakes provide drop in replacements for several of the commonly used dry friction brakes. See models MB-210-458, MB-210-473 and M8-250-210.