APPLICATION BULLETIN

APPLICATION: Reject, Speed-Up, Storage, Preload & Ejector Conveyors

INDUSTRY: (OSB) Oriented Strand Board Plants

PRODUCT: Oil Shear Posistop Motor Brake
REJECT, SPEED-UP, STORAGE, PRELOAD & EJECTOR CONVEYORS

WHERE THEY ARE USED: The Reject, Speed-Up, and Pre-Load conveyors are part of the Forming line area in the Oriented Strand Board (OSB) plants. The actual Forming Line includes all conveyors from the hoppers to the loaders. These conveyors typically follow the Forming Line Conveyors.

HOW THEY WORK: The conveyors are driven by a DC motor with a brake and tachometer connected to auxiliary end of the motor. The motor speed is varied to maintain the proper gaps, or maintain proper timing. 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.

Reject Conveyor: is used to return the rejected screens to the front of the Forming Line Conveyor. This conveyor is mostly used during start up to discard bad material or inconsistent drops from the hoppers.

Speed Up Conveyors: Are used to create a gap between the screens after the flakes are removed from the screen heads by the flying saw. Speed-Up Conveyor #1 creates the initial gap. Speed Up Conveyor #2 increases the gap created by Speed Up Conveyor #1.

Pre-Load Conveyor: Is used to transfer screens from the Speed-Up Conveyor to the Loader Elevator.

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.