APPLICATION BULLETIN

APPLICATION: Return Conveyors (RC-1 & RC-2)

INDUSTRY: (OSB) Oriented Strand Board Plants

PRODUCT: Oil Shear Posistop Motor Brake with Tachometer

RETURN CONVEYOR DRIVES (RC-1 & RC-2)

EMPTY CARRIER SCREEN

FROM TRIANGLE CONVEYOR

RETURN CONVEYORS (RC-1 AND RC-2)

DC DRIVE MOTOR

Posistop MOTOR BRAKE

PLANETARY SPEED REDUCER

TACHOMETER
RETURN CONVEYOR DRIVES (RC-1 & RC-2)

WHERE THEY ARE USED: The Return Conveyor System starts just after the Triangle Conveyor area in the OSB plants. The Purpose of the Return Conveyors (RC’s) is to return the empty screen to the front of the Forming Line. The first two conveyors (RC-1 and RC-2) are typically decline conveyors.

HOW THEY WORK: The Decline Return Conveyors (RC-1 and RC-2) all utilize the same drive train consisting of a DC motor with a brake and a tachometer mounted to the auxiliary end of the motor.

Once the screen leaves the Triangle conveyor and onto RC-1, all of the RC drives must be indexed properly to synchronized proper spacing between each screen. The screens are stopped on each RC as they return to the forming line conveyor. Consistent stopping is critical to the timing and spacing of the 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 Oil Shear design of the Posistop 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 model MB-210-458 and MB-210-473.