

APPLICATION BULLETIN

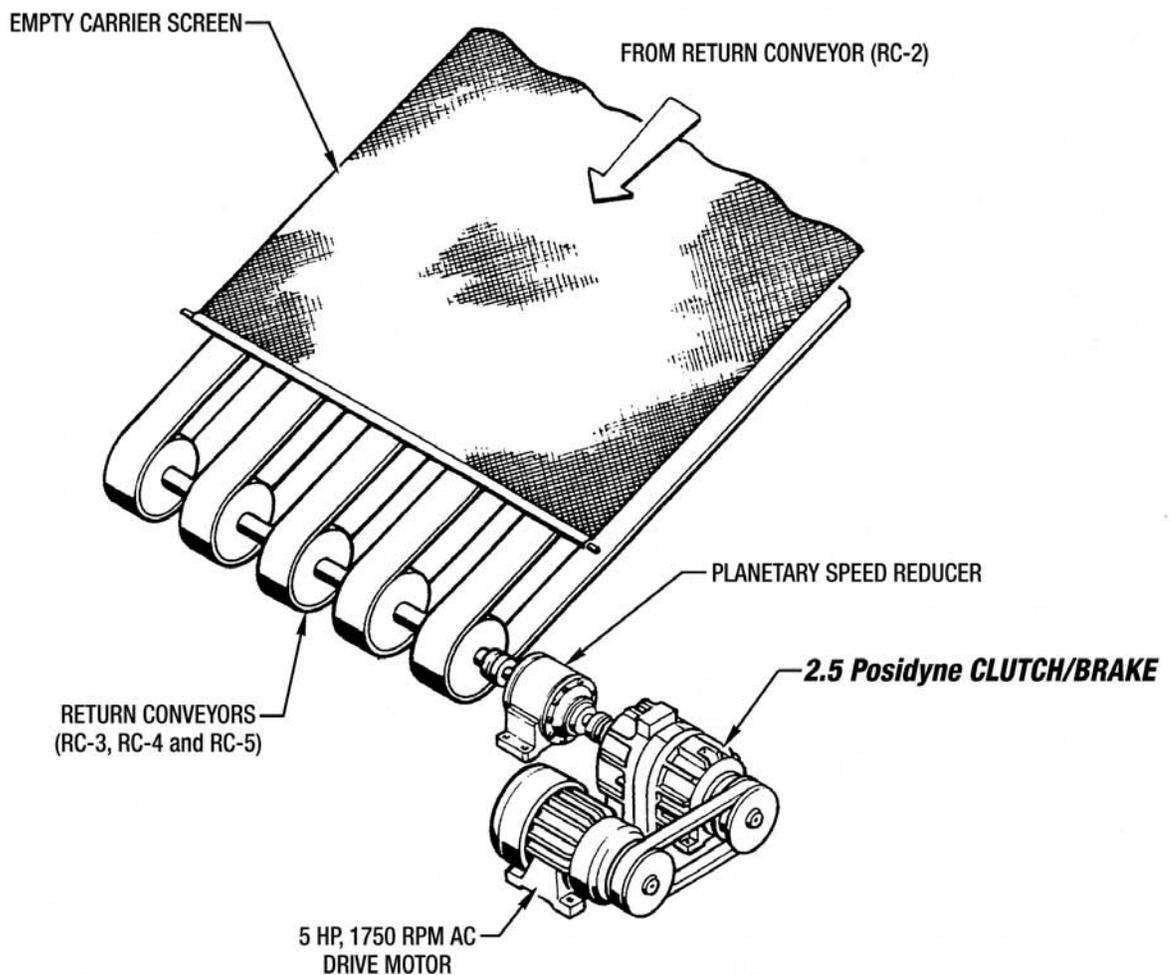


APPLICATION: Return Conveyors Drives (RC-3, RC-4 & RC-5)

INDUSTRY: (OSB) Oriented Strand Board Plants

PRODUCT: Oil Shear *Posidyne* Clutch/Brake

RETURN CONVEYORS (RC-3, RC-4 & RC-5)



RETURN CONVEYORS DRIVES (RC-3, RC-4 & RC-5)

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. The second set of RC's are typically horizontal conveyors (RC-3, RC-4, RC-5).

HOW THEY WORK: The Horizontal Return Conveyors (RC-3, RC-4, RC-5) all utilize the same drive train consisting of an AC motor with a brake mounted to the auxiliary end of the motor, or a Clutch/Brake as shown on this Application Bulletin.

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 Force Control **Posistop** Motor Brake and/or the **Posidyne** Clutch/Brake puts an end to the monthly maintenance of the motor brakes. The **Posistop** Brakes, and the **Posidyne** Clutch/Brakes make easy replacement for many of the dry friction brakes or clutch/brakes that are typically used throughout the industry. The **Oil Shear** design of the **Posistop** Brake and the **Posidyne** Clutch/Brake provides a totally enclosed unit 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 unit 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 **Posidyne** Clutch/Brake or **Posistop** Motor Brake extremely long life, as well as consistent stopping.
- The totally enclosed design provides a clutch/brake or brake that is not effected by harsh environments.
- Special model Clutch/Brakes provide drop in replacements for several of the commonly used dry friction brakes. See models 2.5-1S1-H5 or MB-210-S-045



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