**APPLICATION BULLETIN**

**APPLICATION:** Wet End Transfer Conveyor

**INDUSTRY:** Gypsum Board/Drywall Plants

**PRODUCT:** Oil Shear *Posidyne* Clutch/Brake

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**WET END TRANSFER BELT DRIVE**

- Infeed Spacing Conveyor
- Gypsum Board/Dry Wall (Brown Side Up)
- Wet End Transfer Conveyor
- Ref. Gypsum Board Wet End Turn-Over (See AB 0305)
- Gypsum Board/Dry Wall (White Side Up)
- Boards to Drying Oven
- Wet End Transfer Conveyor
- Gear Reducer
- 03S or 05S Posidyne Clutch/Brake Unit with Piggy-Back Mounted Motor

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**WHERE THEY ARE USED:** To index the conveyor belts which move the gypsum board from the initial air drying section to the drying oven. There are often (2) Wet End Transfer Conveyors. The first indexes the board from the wet end drying section to a turn over device. The second indexes the board to an in-line conveyor going to the drying oven.

**HOW THEY WORK:** The first conveyor indexes the board, which is white side down, at 90 degrees to the drying conveyor, into a turn-over device. The turn-over then rolls the board over, laying it down on the second transfer conveyor white side up. It is then indexed the proper distance to allow another board on the conveyor. The second board is indexed into the turn-over, rolled over, and laid on the second transfer conveyor next to the first. The two boards are then indexed to the oven conveyor. The number and size of boards can vary from line to line.

**PROBLEMS SOLVED:** Positioning accuracy, adjustable accel and decel rate, and extended service life. It is critical that the board be stopped in the proper position coming into the turnover device so that it is fully into the turnover, without hitting the base. If not fully into the turnover, when it is rolled up it will drop to the bottom causing damage to the side of the board. If driven in too far, again damage can occur to the side of the board. When the first board is indexed out of the turnover it must move far enough to allow the second board to lay down without hitting the edge. It must be close enough to allow the two boards to fit into the oven. Accel and decel must be controllable in order to start and stop the board accurately on the belt without slippage. Adjusting the air pressure will enable a smooth precise start or stop. It can be adjusted for changes in belt surface friction. The fine gypsum dust is extremely hard on the open dry type clutches. The totally enclosed Posidyne Clutch/Brake works very well in this dirty, dusty environment. The *Oil Shear Technology* cools and lubricates the friction surfaces for long life.

**IMPORTANT FEATURES:**

- *Oil Shear Technology* and innovative friction materials provide consistent, accurate starts and stops.

- Totally enclosed, sealed design eliminates problems associated with dust and dirt.

- Adjustable acceleration and deceleration rate allows maximum start/stop without slipping on the belt.

- Long service life with little maintenance and no adjustment.