APPLICATION BULLETIN

APPLICATION: Plywood Panel Turnover

INDUSTRY: Plywood/Veneer Plants

PRODUCT: Oil Shear Posidyne Clutch/Brake

PLYWOOD PANEL TURNOVER

7 RPM TURNOVER

PLYWOOD PANELS

INFEED CONVEYOR

CONSTANT SPEED EXIT CONVEYOR

No. 1.5 Posidyne CLUTCH/ BRAKE
(C-FACED LONG COUPLED ON OUTPUT)

87:1 INLINE GEAR REDUCER

2:1 BELT DRIVE

1-1/2 HP, 1200 RPM DRIVE MOTOR

1-1/2 HP, 1200 RPM DRIVE MOTOR
WHERE THEY ARE USED: The Plywood Panel Turnover Drive is used in Plywood Plants to turn over finished sheets of plywood for inspection and packaging.

HOW THEY WORK: The Turnover consists of a series of spoked wheels located between two indexing conveyors. The sheet of plywood is indexed into the spokes. The Turnover is then indexed one index which will lift the sheet of plywood. Another sheet is fed into the Turnover, and it is indexed again. This time the first sheet flips over center and falls onto the opposing spoke. On the next index it will be laid down on the out-feed conveyor upside down. The bottom side can now be inspected.

The drive consists of a Posidyne Clutch/Brake, with a gear reducer C-faced with a long coupled adapter to reduce keyway problems.

PROBLEM SOLVED:

Longevity - Employing a standard motor that is allowed to run constantly and a Posidyne Clutch/Brake to provide a smooth controlled drive engagement is a key strategy to ensure long, maintenance free life in all high cycle drive components. The Posidyne’s totally enclosed housing and patented oil cooling techniques ensure reliable service in hot, dirty, wet and generally hostile environments.

Consistent Accuracy - It is important that the index is accurate or the spokes could be in a position, which would jam when the next sheet is fed into the turnover. The Posidyne exhibits negligible torque changes throughout its life, or during cold-to-hot phase shift. The result of this is consistently accurate stops and starts with no adjustments required. For even more accuracy the CLPC Series II Closed Loop Positioning Control could be used in conjunction with the Posidyne Clutch/Brake.

IMPORTANT FEATURES:

• Totally enclosed, oil cooled unit for long service life with low maintenance in the harshest environments.

• Oil Shear Technology and innovative friction material provide smooth controlled torque for quick, smooth acceleration.

• Consistently accurate starts and stops with no adjustment required.

• Continuously running standard motor for long service life and lower energy consumption.

FORCE CONTROL INDUSTRIES, INC.

3660 Dixie Highway  Fairfield, Ohio 45014
Phone: 513-868-0900  Fax: 513-868-2105
E-Mail: info@forcecontrol.com  Web: www.forcecontrol.com