APPLICATION BULLETIN

APPLICATION: High Cycle Stacking Crane

INDUSTRY: Laminated Wood and Plastic Manufacturing

PRODUCT: Posidyne Clutch/Brake
HIGH CYCLE STACKING CRANE

WHERE THEY ARE USED: Manufacturing of laminated wood and plastic

HOW THEY WORK: A high cycle stacking crane is used to stack steel plates in a press. The crane was positioned over Conveyor A, picked up a 3000 pound load of plates, moved to Conveyor B and lowered the plates. The transverse drive needed to be able to accelerate and decelerate the load quickly (4 complete cycles per minute) and position accurately over each stack.

PROBLEMS SOLVED: The traverse motion of the crane was powered by a very special 2-speed motor (1800/450) with a dry surface friction brake, class “H” insulation, and a separately powered cooling blower. The Posidyne eliminated the need for an expensive special motor, blower, brake etc. The Posidyne reduced downtime and eliminated costly maintenance of a special motor and brake. The controlled acceleration and deceleration of the Posidyne could be precisely positioned over the stacks while reducing shock loads on the traverse drive.

IMPORTANT FEATURES:

• Oil Shear design delivers long service life reducing costly downtime and repairs.

• Standard single speed motor can be used reducing electrical consumption and maintenance cost.

• High thermal rating of the Posidyne can operate continuously without overheating problems.

• Multiple disc Oil Shear design provides smooth precise stops and starts for accurate positioning.