APPLICATION BULLETIN

APPLICATION: Plywood Press Loader/Unloader

INDUSTRY: Plywood/Veneer Plants

PRODUCT: Oil Shear Posidyne Clutch/Brake (Long Coupled)
PLYWOOD PRESS LOADER/UNLOADER

WHERE THEY ARE USED: The Plywood Press Loader is used in Plywood plants to load the plywood into the press for curing. The Plywood Press Unloader is located on the opposite side of the press and is used to unload the press.

HOW THEY WORK: Layers of veneer and adhesive have been laid up on the lay up line to form a plywood sheet. These sheets come off the lay up line and are stacked. This stack is then moved (usually by fork lift) to and loaded the press loader. The loader then raises to the top and lowers one layer at a time (approximately 5”) and stops. The top layer is pushed (mechanically or by hand) into the press opening. The loader then indexes down one more layer, and the next sheet is pushed into the press. This continues until the entire stack is loaded into the press. Dogs are located at each press opening which trip a limit switch causing the Loader/Unloader to stop.

Opposite the press loader is an unloader. It is similar in construction to the loader. The unloader stops opposite the opening the loader is loading. When an uncured sheet is fed in it pushes the finished sheet out onto the unloader. The unloader then indexes down to the next opening.

PROBLEMS SOLVED:

Accuracy - It is important that when the limit switch is tripped the brake stop the loader/unloader in a consistent time to line up with the press opening. If not aligned the system will have to be jogged up or down wasting valuable time. Also the board could jam if not properly aligned.

Longevity - The Oil Shear technology reduces the change in torque between cold start to hot run improving accuracy. The minimal amount of wear incurred over a life time, eliminates the need for adjustment. Heat is generated both from the high cycling of the heavy loads and the heat of the press itself. Therefore in addition to fan cooling, many press loader drives are water cooled, especially in hot climates. The medium spring set brake in the “SA” units is especially helpful in case of power failure, or other problems where the air set brake may not work. The spring set brake comes on slowing or stopping the load to safe conditions.

IMPORTANT FEATURES:

• Totally enclosed housing eliminating problems caused by dust, dirt, moisture etc. common around a plywood press.

• Oil shear technology and innovative friction materials provide smooth consistent starts and stops.

• Medium spring set brake with air assist for adjustable accurate stop in position, with the advantage of spring set brake to eliminate free fall in case of power failure.

• Water cooling option for high ambient temperatures of the plywood press plus high load carrying capacity.