

APPLICATION BULLETIN

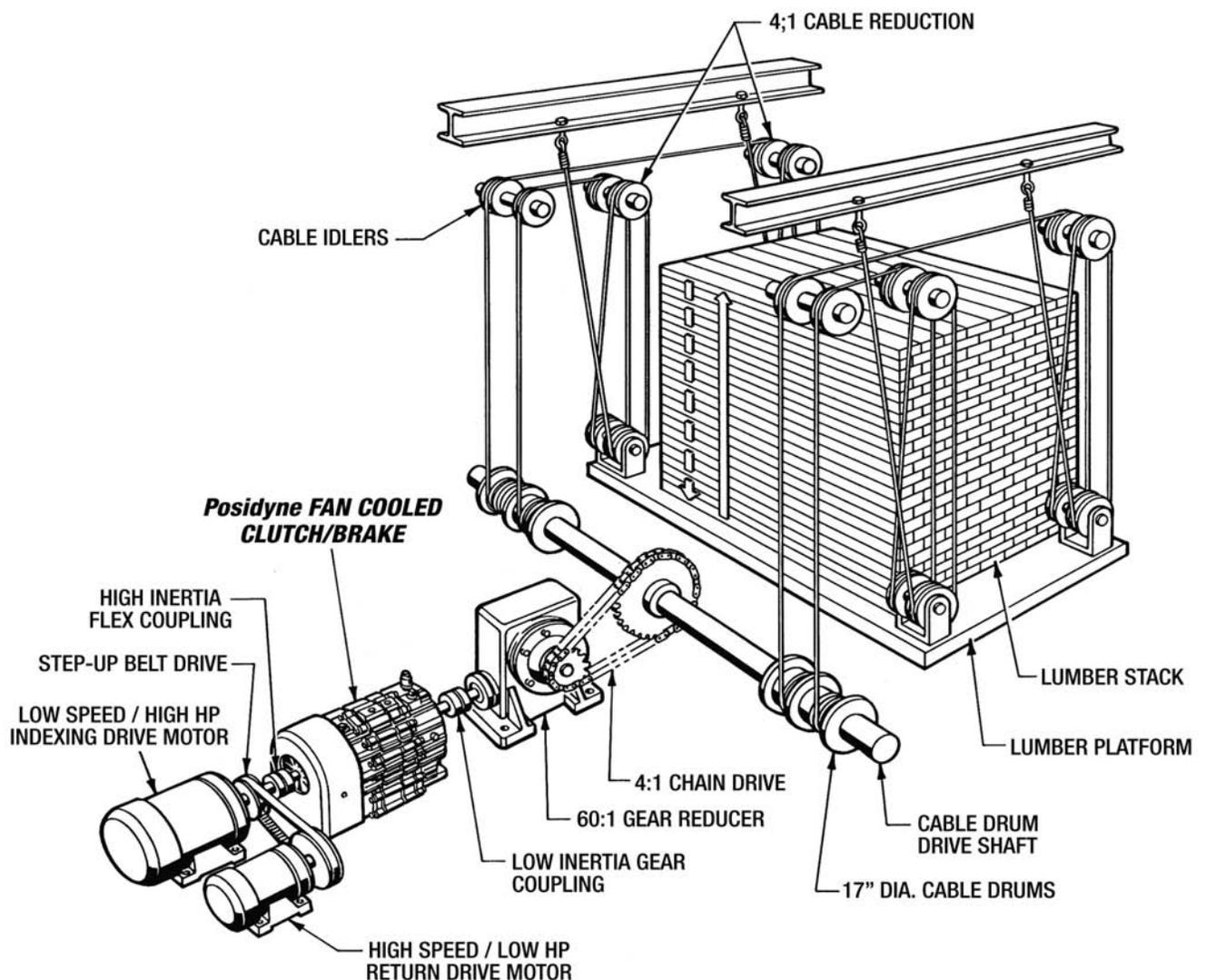


APPLICATION: Lumber Stacker Hoist

INDUSTRY: Dimension Lumber Mills

PRODUCT: Oil Shear *Posidyne* Clutch/Brake

LUMBER STACKER HOIST



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WHERE THEY ARE USED: The lumber stacker hoist is used in dimension lumber mills to stack green or undried lumber for drying.

HOW THEY WORK: On a green lumber stacker a platform is raised to the upper position. A layer of boards is pushed onto the hoist, and several sticks (small spacer strips) are laid on the top to provide a space for air circulation during drying. The platform is then lowered one layer, and the process is repeated until a full stack is made.

A continuously running motor is connected to the input side of a fan cooled "SA" logic **Posidyne** Clutch/Brake. On demand the medium spring set, air assist brake is released as the clutch is engaged. Driving through a gear reducer, chain drive and cable drum arrangement, the hoist is indexed down. Often a high-speed return motor is connected by to the main drive through a 2: 1 increaser belt drive. This way the empty platform can be returned quickly, ready to start a new stack.

PROBLEMS SOLVED: The motor runs continuously permitting use of standard design B motors rather than special design D brake motors or complicated electronic soft start controllers. The soft start of the oil shear **Posidyne** Clutch/Brake reduces damage to motors, brakes, reducers, chain drives etc. by engaging the clutch rather the shock of across the line starting of the motor.

Longevity - The Oil Shear **Posidyne** Clutch/Brake is designed to start heavy loads smoothly, and with very little wear on the friction surfaces. The sealed design seals out dust, dirt, and moisture.

Consistent Accuracy - The oil shear system makes the **Posidyne** Clutch/Brake consistent over cold start to hot run, and day to day making it easy for the operator to control.

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.
- "SA" logic provides spring set brake for safety and air assist for brake torque adjustment for positioning.



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