

APPLICATION BULLETIN

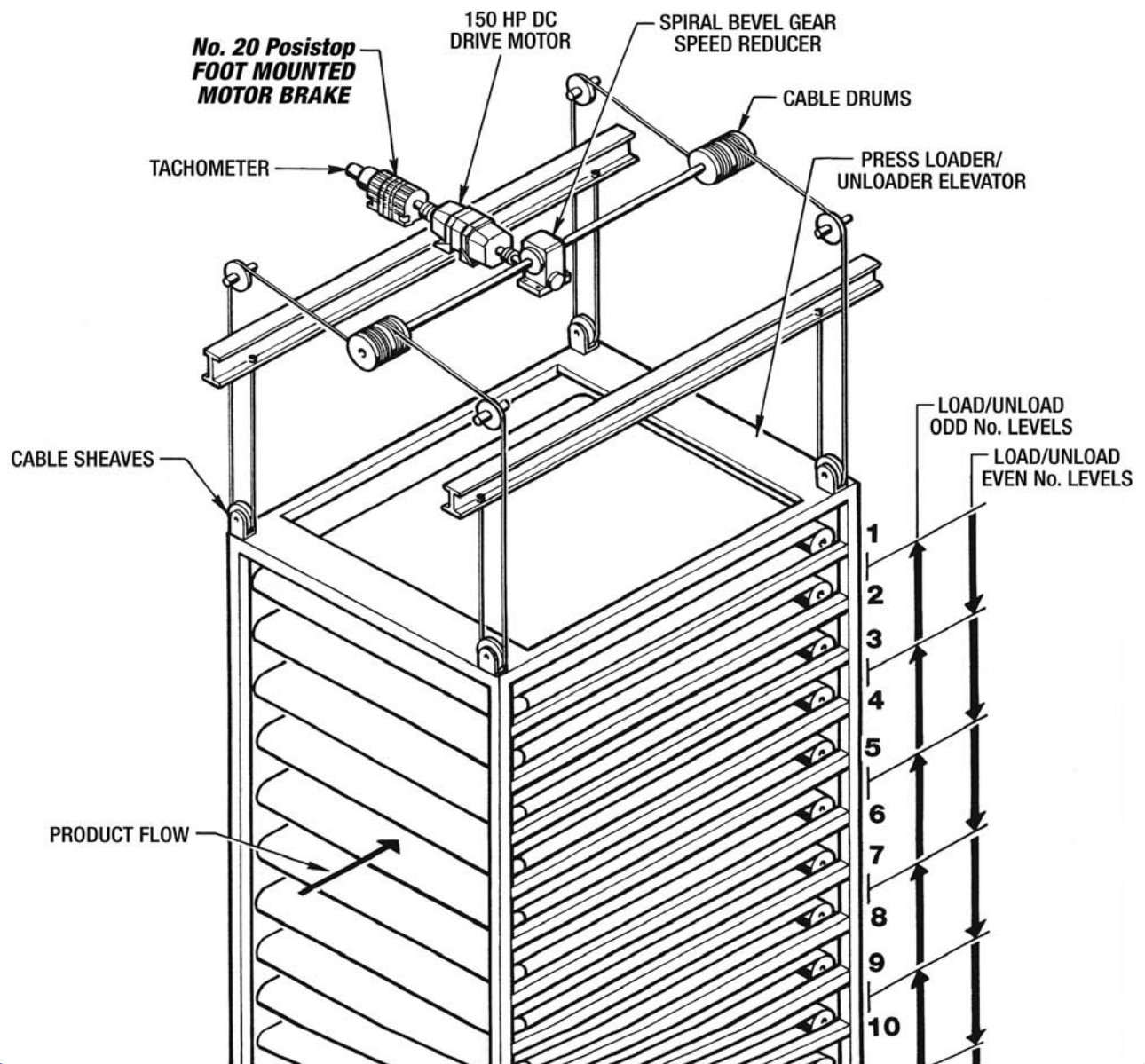


APPLICATION: Press Loader & Unloader Elevator Drive

INDUSTRY: (OSB) Oriented Strand Board Plants

PRODUCT: Oil Shear *Posistop* Motor Brake with Tachometer

PRESS LOADER & UNLOADER ELEVATOR DRIVE



PRESS LOADER & UNLOADER ELEVATOR DRIVE

WHERE THEY ARE USED: The *Press Loader Lug Chain Conveyor* and the *Press Lug Chain Drive* are located in the Press area of the OSB plants. The Press Loader Lug Chain Conveyor is the first conveyor of the Press section, followed by the Press Lug Chain Drive.

HOW THEY WORK: The conveyors are driven by a DC motor with a brake and tachometer connected to auxiliary end of the motor.

Press Loader Lug Chain Conveyor: Is used to load the screens onto the Press Loader. Each time a screen exits the Pre-Load conveyor onto the Press Loader, the Press Loader Lug Chain Conveyor pulls the screen into the Loader. Then the Loader indexes to the next level to accept the next screen. There is one Press Loader Lug Chain Conveyor Drive on either side of the Press Loader. One is for the “even” levels, and one is for the “odd” levels. Since the drives are mounted to the foundation, and the loader moves up and down, the drive is not directly attached to the Loader. They transfer the torque via a crank type mechanism that is engaged each time the Loader is Indexed up or down.

Press Lug Chain Drive: Is used to Load the screens into the press. This only takes place after all levels of the loader are full. When the press opens up, the Press Lug Chain Drive pulls all of the screens into the press and at the same time the Un-loader Boom pulls out all the pressed boards from the press.

PROBLEMS SOLVED: The main problem with the dry friction brakes is they mechanically fail frequently. The atmosphere around the forming line and throughout the plant is damp. The repetitive cycling of the brakes causes frequent failures. The brake and tachometer combination makes repair of the brakes difficult.

The Force Control *Posistop* Motor Brake puts an end to the monthly maintenance of the motor brakes. The *Posistop* Brakes are drop in replacement for many of the dry friction brakes that are typically used throughout the industry. The totally enclosed oil shear design of the *Posistop* Brake provides a totally enclosed brake that is immune to the damp atmosphere and there are no flimsy mechanical linkages to fail due to repetitive use.

The end result is a brake that will easily install to replace the typical dry friction electric brake to provide a very reliable, long life, brake with no maintenance other than an annual oil change.

IMPORTANT FEATURES:

- **Oil Shear Technology** gives the *Posistop* motor brake extremely long life, as well as consistent stopping.
- The totally enclosed design provides a brake that is not effected by harsh environments.
- Special model brakes provide drop in replacements for several of the commonly used dry friction brakes. See model FB-20-709.



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