

APPLICATION BULLETIN

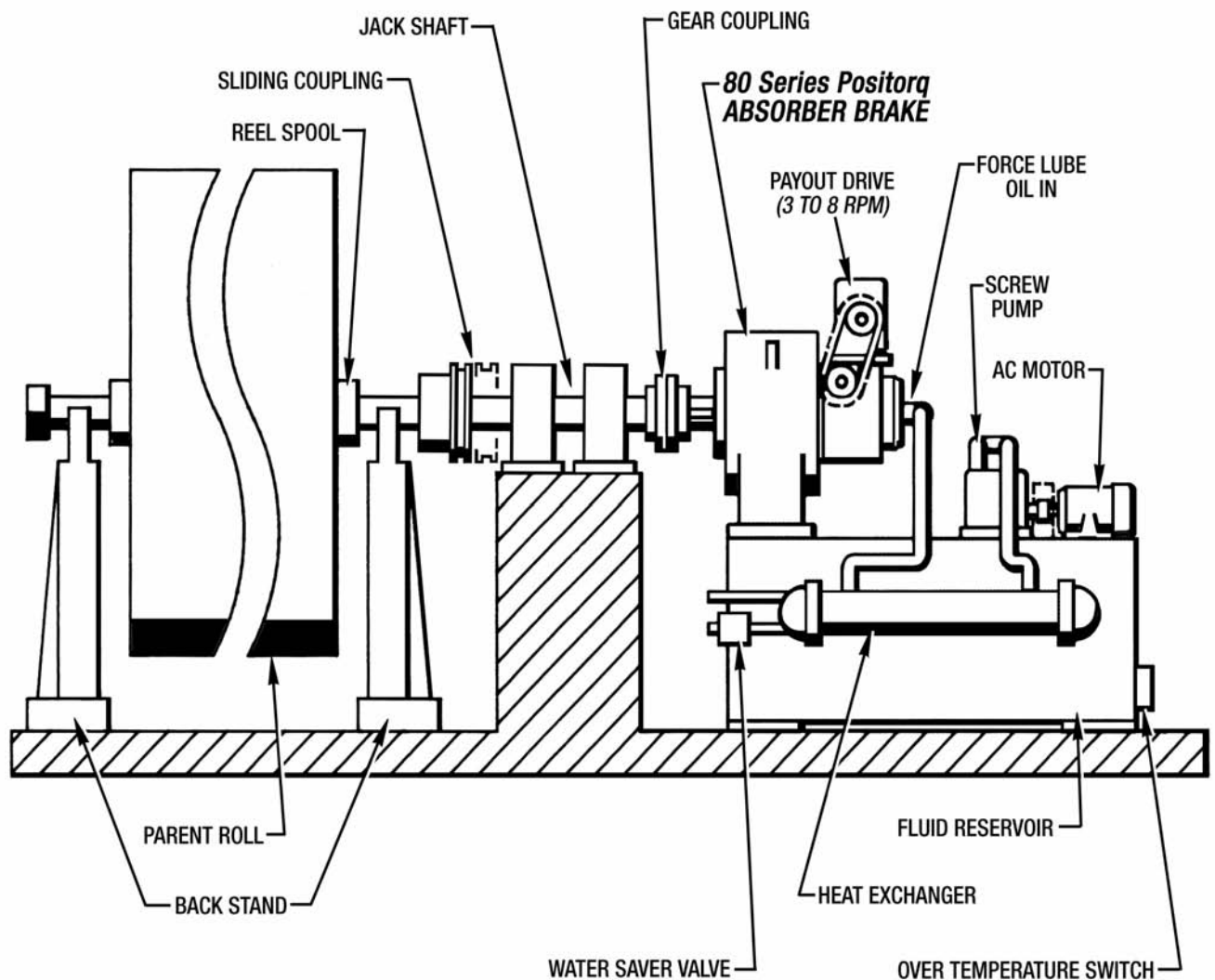


APPLICATION: Tension Control Winder Brake

INDUSTRY: Paper Mill

PRODUCT: 80 Series *Positorq* & Force Lube Cooling Unit

TENSION CONTROL WINDER BRAKE



TENSION CONTROL WINDER BRAKE

WHERE THEY ARE USED: Making of Paper, Steel, Textile, Wire, Foil, Felt and Film. This bulletin deals with the Winder Brake in a Primary Paper Mill application.

HOW THEY WORK: The winder or slitter machine is used to convert the large rolls of paper into smaller rolls slit to the customers width. The **Positorq Winder Brake** provides hold back torque to the large parent roll of paper that has been produced on the paper machine. A sliding coupling is used to connect the reel spools to a jack shaft connected to the brake unit. The parent rolls range from 90" to 108" inches in diameter and 120" up to 300" wide depending upon the type of paper being produced and the age of the mill. Processing speeds of 5,000 FPM are common with some as high as 8,000 FPM. Adjustable air pressure is used to engage the brake and apply the proper amount of torque needed to develop the correct tension in the web.

An optional payout drive clutch arrangement is also available to provide low speed rotation of the reel for threading the winder at the beginning of the slitting process.

PROBLEMS SOLVED: 1) Longer Life, Less maintenance - Frequent changing of brake shoes and cast iron drums is replaced with an annual oil change. Existing **Positorq** installations are experiencing years of service life between over hauls. 2) Non-asbestos friction materials are used in side the brake. Smoke and fumes associated with dry friction brakes are eliminated. 3) Quiet operation - The **Oil Shear** design of the **Positorq** provides chatter free smooth operation. 4) higher processing speeds possible - The **Positorq** may be operated at much higher operating speeds than dry friction brakes. The brake is no longer the element limiting the top operating speed of the winder when a **Positorq** is used.

IMPORTANT FEATURES:

- **Oil Shear** design provides high thermal capacity and smooth torque control in a compact unit.
- Recirculation of the cooling and lubricating fluid through the brake stack and heat exchangers effectively removes the heat of engagement.
- Advanced friction material used in combination with cooling fluid develops smooth chatter free torque control.
- **Positorq 80 Series** units feature an external wear indicator to easily determine the allowable wear remaining without disassembly.



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