APPLICATION BULLETIN
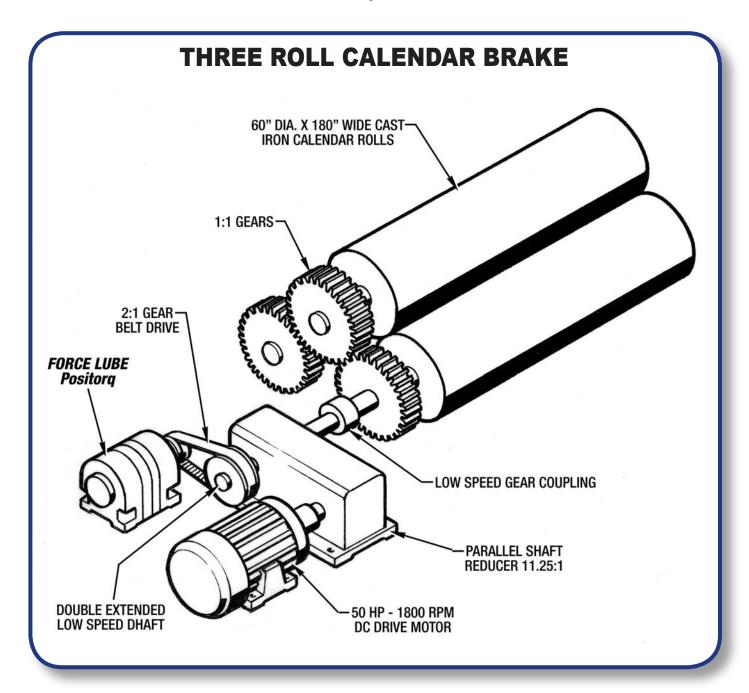
APPLICATION: **Three Roll Calendar Brake**

INDUSTRY: **Paper Mills**

PRODUCT: **Forced Lube *Positorq* Absorber Brake**

THREE ROLL CALENDAR BRAKE

60" DIA. X 180" WIDE CAST IRON CALENDAR ROLLS

1:1 GEARS

2:1 GEAR BELT DRIVE

FORCE LUBE *Positorq*

LOW SPEED GEAR COUPLING

PARALLEL SHAFT REDUCER 11.25:1

DOUBLE EXTENDED LOW SPEED DHAFT

50 HP - 1800 RPM DC DRIVE MOTOR

THREE ROLL CALENDAR BRAKE

WHERE THEY ARE USED: Primary Paper Machines manufactured in the late 60's are often equipped with a set of large diameter cast iron rolls at the finishing end just before the winding of the parent rolls. They are used to squeeze or iron the paper for better finish qualities. This section of the machine is referred to as the calendar section. Several late 60's vintage machines are found to have three rolls geared together that are driven with a separate D.C. motor. The drive trains are not usually equipped with a brake.

HOW THEY WORK: The 5 ft. diameter heavy cast iron rolls need to rotate at a nominal speed of 160 RPM to match a machine speed of 2,500 FPM. If other problems require a shut down of the machine the very large diameter rolls take approximately 15 minutes to come to rest. The addition of a force lubricated *Positorq* Absorber Brake permits stopping of the rolls in less than 2 minutes saving valuable production time.

PROBLEM SOLVED: The *Positorq* Absorber Brake reduces the amount of time needed to stop the rolls thus allowing work to be done on the line more quickly. The obvious safety problem of a rapidly turning roll after the mill has been shut down for some time is also greatly reduced. This same situation would also apply to many of the idler or non-geared rolls on the paper machine.

IMPORTANT FEATURES:

- High energy absorption capability with forced oil lubrication.

- High torque capacity in a small package with multiple disc plate design.

- Foot or shaft mounted designs available for flexible mounting arrangements.

- Spring Set - Pressure Release or Pressure Set control logics available.

- Lubricated and cooled friction surfaces provide long