

APPLICATION SOLUTION: Pulp & Paper Process: Brush Roll



Product Family: Electric
Product Used: MXB-S Belt Drive Actuator
Product Type: Standard

Application Requirements

Stroke: 108 in.
Speed: 6 in/sec
Load: 20 lbs

Application Description:

Brush cleaning the rollers in a pulp and paper processing machine.

Challenge:

A pulp and paper manufacturer used brushes moved by pneumatic rodless actuators to clean the rolls on either side of the machine. Because of the high amount of pulp particulates in the environment the pneumatic actuators were accumulating pulp internally and in the air lines resulting in early seal failures and high maintenance costs. Actuators with external rail designs were dismissed because they would clog up with pulp.

Tolomatic Solution:

A pair of Tolomatic MXB-S solid bearing electric belt drive actuators were used in this application. The solid bearing design is self-cleaning as it slides on the outside of the actuator. Each end of the belt actuator is open allowing the pulp to be pushed away. Because of the wet nature of the pulp the actuator was powered by a stainless steel gearbox and a stainless steel servo motor.

Customer Benefit:

- Significantly increased actuator life with the self-cleaning bearing system
- Lowered maintenance requirements as the electric actuator did not need any air supply maintenance