

APPLICATION SOLUTION: Rubber Cutting



Product Family: Electric

Product Used: MXB Belt-Drive Electric
Rodless Actuators

Product Type: Standard

Application Requirements:

Stroke: 1.83 m (72 in)

Speed: Peak speed 3.6 m/sec (140 in/sec)

Load: 11.8 kg (26 lb)

Moments: Guided

Application Description:

Rubber cutting in automotive tire manufacturing.

Challenge:

A leading manufacturer of automotive tires set a goal of reducing energy consumption by 20% in their rubber cutting operation. They were using a pneumatically operated process that was consuming considerable amounts of compressed air and required monthly replacement of shock absorbers on the actuators affecting both overall efficiency and part quality.

Tolomatic Solution:

An MXB belt drive actuator replaced the pneumatic actuator in the rubber cutting process. The speed of the belt drive was more than adequate to accommodate their 3.6 m/sec (140 in/sec) requirement. Using electric, rather than pneumatic motion, the smooth consistent motion improved the process and helped achieve their energy reduction goal.

Customer Benefit:

- Saved ~\$2500 per year per machine in electric utility costs
- Saved ~\$1500 per year per machine in replacement component costs
- Reduced maintenance labor time on machines