FWW-002

APPLICATION SOLUTION:	Saw Mill

Product Family: Electric
Product Used: RSA64
Product Type: Standard

Application Requirements
Stroke: 42 in.
Speed: 42 in/sec
Load: 1,000 lbs

Application Description:
Moving saw blade for log cutting

Challenge:
A lumber processing equipment company needed to replace hydraulic cylinders used in a log cutting application in order to reduce the potential contamination from hydraulic fluid leakage. Because the lumber mill location was situated next to a natural environment that included water resources, governmental regulations made it increasingly difficult to justify the continued use of hydraulic cylinders. The company was looking for an environmental friendly solution to move the saw blades for cutting logs. Additionally, the lumber mill environment was wet, dusty and logs would routinely strike into nearby equipment requiring a robust solution that would resist shocks. In addition, low to high temperature fluctuations in the operation had created problems with hydraulic cylinders such as cold starting, premature seal wear and reduced performance.

Tolomatic Solution:
An RSA64 electric rod actuator with a ball screw and an IP67 rating was selected for this application. The ball screw provided efficient, high-speed motion in order to achieve the quick stroke required over the entire length of the electric cylinder. The IP67 rating kept the actuator safe from splashing water and other contaminants such as saw dust. The large, rugged exterior of the RSA64 electric actuator was capable of withstanding the rigors of the saw mill environment and the actuator was lubricated with a high/low temperature grease for consistent performance no matter what the temperature. With Tolomatic's Your Motor Here program, the customer was able to use their choice of servo motor and Tolomatic provided all necessary mounting plates and hardware with the actuator.

Customer Benefit:
- Eliminated the possibility of hydraulic contamination to environment
- Increased reliability of equipment and reduced maintenance
- Operation in low and high temperatures without cold startup or premature failure