

Relco – Replace Pneumatic Actuators with Electric in Cap Closing Application

Application Challenge: This cap closing application has previously been performed with a pneumatic cylinder and also with a ballscrew. Relco desired more precise control and found that by replacing the pneumatic cylinder with Exlar's Tritex actuator, not only did they achieve more precision, but at a lower cost and in a smaller space.



Cycle rates were increased using the high speed capability of Exlar's linear actuators - speeds as high as 40 linear inches/second, and with the control benefits of servo technology. This flexibility allowed Relco to adjust position and speed without setting any switches or changing offsets. They simply entered a new setting in the operator interface panel.

Replacing a ball screw with a roller screw can offer several advantages for your machine's performance. Exlar's planetary roller screw designs provide many more contact points than possible on comparably sized ball screws, see diagram right. This means that the roller screws have higher load carrying capacities, improved stiffness, are more compact and offer longer travel life. A roller screw offers an expected service life 15 times longer than a ball screw.

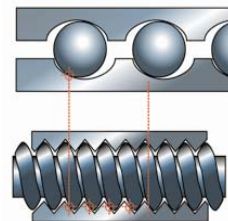
One of Exlar's latest developments, the Tritex Series, offers additional advantages. This series integrates the controller, motor and actuator into one compact package resulting in a compact self-contained linear motion solution. No more bulky servo drives or control cabinets, saving even more space and money!

Exlar Solution: Tritex TLM20 linear actuator with embedded electronics. Experience the benefits of the Tritex Series of actuators such as:

- Millions of cycles without maintenance
- Less energy consumption than pneumatics
- Accurate and repeatable positioning
- High cycle rates for higher speed
- No need for separately mounted servo drive and associated cables
- Less noise than pneumatic cylinders
- Extended lifetime of roller screw actuator over ball screw



Tritex Series Actuator combining servo motor, linear actuator, position controller and servo drive.



Notice many more contact points on the roller screw compared to the ball screw. This results in higher load-carrying capacity and improved stiffness.

Call us today at 952-368-3434 to learn of ways to optimize your application. Visit us at www.exlar.com for complete product information on all of Exlar's electric actuation solutions. If you prefer, you may also email us at info@exlar.com. We look forward to providing a solution to your next application.