# **APPLICATION SOLUTION:** Conveyor Case Packer Automation



Product Family: Electric
Products Used: RSA Rod-Style Screw Drive Actuator
B3W Rodless Belt Drive Actuators
B3S Rodless Screw Drive Actuator
Product Type: Standard & Modified Standard

### **Application Requirements**

Strokes: 20 in (25.4 mm) to 38 in (965 mm) Speeds: 12 in/sec (305 mm/sec) to 72 in/sec (1.8 m/sec) Thrusts: 22 lbf (98 N) to 340 lbf (1.5 kN)

## **Application Description:**

Convert the conveyor packer, located at the end of the conveyor, from pneumatic cylinders to electric actuators. Motions required include: several high-speed push operations, a centering operation, a tipping operation, and a container lift operation.

## **Challenge:**

An industrial conveyor manufacturer wanted a cost-effective electric alternative to the current highmaintenance pneumatic system. Frequent downtime and maintenance exposed the high long-term cost of ownership of the pneumatic system. The manufacturer wanted the inferior system replaced by the electric solution ASAP to maximize productivity.

#### **Tolomatic Solution:**

Tolomatic, the local distributor, and the manufacturer collaborated to target 5 axes for electric actuation. *Two high-speed push operations:* B3W10 long stroke belt drive actuators; *Centering:* As the cases are loaded into a container, two B3W dual carrier belt drive actuators are used to quickly and accurately center the cases within the container; *Tipping:* A RSA rod-style actuator with a pivoting rear & front mount, with custom motor mount; *Container lift:* B3S15 rodless screw drive actuator vertically lifts the container filled with cases.

#### **Customer Benefit:**

- Higher speed and accuracy for increased throughput
- Standard products with built-to-order stroke lengths were quickly manufactured and easily adapted into the existing framework
- Tolomatic quickly designed and built the custom motor mount required for the RSA rod-style electric actuator
- Tolomatic's fast delivery kept the project within the manufacturer's tight schedule
- Decreased maintenance downtime using Tolomatic electric actuators instead of pneumatic cylinders