APPLICATION SOLUTION: Inline Filling Machine



Product Family: Rod-Style Screw-Drive

Electric Actuator

Product Used: IMA-ST Hygienic Motor/Actuator

Product Type: Standard

Application Requirements **Stroke**: 8.7 in (220 mm) Speed: 4 in/sec (102 mm/sec)

Application Description

Filling machine that requires frequent container changes and wash-down

Challenge

For speed and flexibility to accommodate various sizes and shapes of containers, an electric actuator was needed to replace mechanical cams on an inline filling machine. The electric actuator must move the filling unit 10 mm above the product container and moves down 20 mm within 0.5 seconds to dip 10 mm into the product container. The remaining stroke of 200 mm is used to move to the cleaning position and to cover the different heights of the product containers. The entire machine is subjected to intensive wash-down.

Tolomatic Solution

The all-in-one design of the IMA-ST33 hygienic motor/actuator was a great fit for this application. The IMA-ST33 are built-to-order with stroke lengths up to 18" (457 mm) and speeds up to 20"/sec (500 mm/sec) so the application requirements were easily accommodated. Since the actuator is positioned vertically an integrated brake was built into the IMA-ST for additional safety.

Customer Benefit

- Hygienic design for wash-down protection
- Integrated motor for compact size
- Integrated brake for operator safety
- Fast product change-over, no need to change mechanical cams and stops