

APPLICATION SOLUTION: Aseptic Plastic Injection Molding



Product Family: Electric
Product Used: IMA Integrated Motor Actuator
Product Type: Standard

Application Description:

Precise positioning of product, blowers, sealers, welders, and more.

Challenge:

An OEM of plastic injection molding machines for pharmaceutical and medical industries needed to build its equipment without hydraulics to eliminate contamination risk. Although hydraulics are compact and deliver power-dense force, they posed significant contamination risk to aseptic part manufacturing. The OEM required a clean, electric solution to fit in tight spaces previously occupied by hydraulics and provide the necessary force for the various applications. Finally, the actuator had to be compatible with the existing PLC and motion control package.

Tolomatic Solution:

Tolomatic's IMA linear servo actuator with integrated servo motor was recommended to create a very compact, high-performing electric actuator solution compared to traditional rod-style actuators. With four different size selections and choices of ball or roller screws, the OEM was able to accommodate the variety of size, force and budget requirements of their machine design. The IMA was also configured with an absolute encoder and industry standard connectors for smooth integration with their servo drive. Because the IMA was able to provide multiple options for connectors, encoder wiring and feedback devices, standard servo drive cables could be used for simplified installation.

Customer Benefit:

- Integrated servo motor design met space requirements
- Accurate control of positioning
- Ability to swap PLC/servo drive controls without changing motor/mechanical design