

APPLICATION SOLUTION: Small Engine Assembly



Product Family: Electric
Product Used: JVL Servo Motor and
RSA actuator
Product Type: Modified

Application Requirements:
Stroke: 18 inches
Speed: 2 in/sec
Load: 20 lb
Thrust: 20 lbf

Application Description:

Indexing piston rings during engine assembly process

Challenge:

A manufacturer of small engines was using a series of pneumatically operated actuators to index piston rings in position for the engine assembly process. The pneumatic actuators and components were inefficient to operate, were aging and becoming increasingly difficult to replace. The manufacturer was looking to replace their pneumatic operation with electric for increased control, efficiency, and reduced cross-over time between different product runs.

Tolomatic Solution:

A JVL Servo Motor with Integrated Drive and RSA actuator were chosen as a complete all-in-one actuation solution. The Tolomatic solution increased control and communication flexibility through the onboard drive and its indexing software allowing easy retrofit replacement of the customer's pneumatic actuators. The JVL Servo motor is able to communicate over a variety of Ethernet Protocols in addition to digital and analog I/O allowing for easy integration of the complete actuation solution with the customers controls system. The JVL and RSA solution allowed for the customer to reduce the time needed for product changeovers.

Customer Benefit:

- Fast, efficient performance with an up-to-date communication system.
- Increased production with reduced change-over times
- Easy program selection for multiple product assembly procedures