

APPLICATION SOLUTION: Animatronics



Product Family: Pneumatic
Product Used: MXP Rodless Cylinder
Product Type: Standard

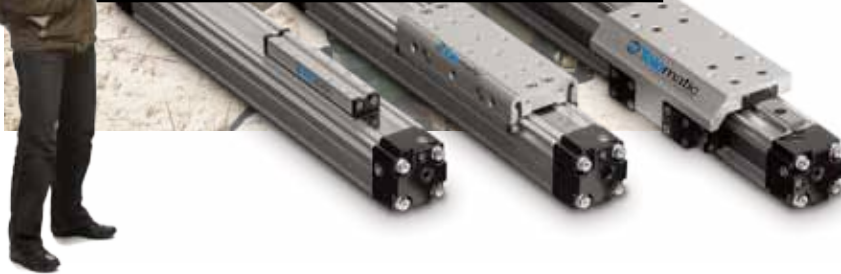
Application Requirements:

Stroke: 40, 50, 52, 72, 74 inches

Speed: 25 - 40 in/sec

Load: 20 - 50 lbs

Moments: 100 - 300 in-lbs



Application Description:

Soldier training with realistic automated targets.

Challenge:

To prepare soldiers for overseas duty, an automated, realistic combat environment needed to be created by an animatronics firm that would put soldiers through a rigorous regimen of events requiring targets and combatants to appear in a variety to positions at a moments notice. The actuators moving these objects would need to accommodate, various loads and bending moments along with multiple varying stroke lengths and speeds.

Tolomatic Solution:

Multiple MXP pneumatic rodless actuators with varying stroke lengths were chosen to move targets for this application. The actuator's solid bearing, profiled rail design with dual carrier options provided the necessary capacity for the loads and bending moments needed to move the targets into position. The rodless actuator design also worked best for some of the targets that were housed in confined spaces.

Customer Benefit:

- Standard cataloged product kept costs down
- Product stroke flexibility provided a one-style actuator solution for all animated targets reducing design time and components
- Realistic, varied motion provided a real-life training experience