Servo Weld Gun Actuators

Eliminate Inaccuracies, Improve Quality
If the positioning axis of your welding machine uses ball screws or pneumatics, the performance could be significantly improved with an Exlar electric linear actuator solution.

A patented Exlar servo-controlled actuator using roller screw technology allows you to drive to a particular force and accurately set the proper position for welding. This provides accurate weld tip force without the need and expense of load cells. The superior control characteristics of Exlar’s integrated design compared to conventional air cylinders or conventional screw actuators provides improved accuracy and weld quality in a more compact, lighter package.

Exlar Solution Improves Overall Welding Quality
Replace the oversized electric actuators or air cylinders in your servo weld gun with an Exlar all-electric actuator and you will see precise, simple positioning in the most compact package.

More importantly, the flexibility offered by the servo-based Exlar actuator allows you to manipulate position and speed immediately without setting any switches or changing the offsets. Changes are simple - just enter a new setting in the operator interface panel or have the robot controller do the work.

The unique and patented roller screw design of the GSX Series delivers very high speeds, high force ratings, low maintenance and long life in a compact, integrated package.

The Exlar Linear Actuator Advantage
Planetary Roller Screw Technology
• Millions of weld cycles without re-lubrication or maintenance
• Available in standard sizes offering continuous forces from 1,000 to 12,000 pounds
• More compact and lighter than other servo weld gun actuators
• 15 times the life of ball screw actuators with roller screw technology
• Less noise than other motion technologies
• Less energy consumption (electric vs pneumatics)
• Accurate and repeatable force sensing without load cells
• Accurate and repeatable positioning
• Wide variety of mounting styles
• High cycle rates for more welds per minute
• Operation with nearly any servo amplifier or robot controller
• Multiple stroke lengths and sizes to fit your application
• Higher stiffness due to integrated design