APPLICATION SOLUTION: Auto Body Spot Welding



Product Family: Electric Product Used: GSWA ServoWeld® Actuator Product Type: Standard

Application Requirements: Force: 600 to 1500 lbf (2669 to 6672 N) 10,000,000 welds

Application Description:

Resistance spot welding (RSW) chassis

Challenge:

An automotive plant was using a rod-style servo actuator to operate a moveable electrode attached to an external guide mechanism used to perform spot welding. The guide mechanism is exposed to excessive contamination from weld expulsion which creates an extremely hot environment and expulsion from welds was migrating into the external guide mechanism resulting in premature wear and extended maintenance.

Tolomatic Solution:

Tolomatic provided a GSWA33 ServoWeld® Actuator with an internal side loading support and an anti-rotate functionality in a fully enclosed design. The actuator provided protection for the harsh welding environment with its enclosed design and its ability to provide high force repeatability resulting in reduced weld expulsion.

Customer Benefit:

- · Increased production from reduced downtime
- Improved weld quality resulting from high force repeatability
- Reduced MRO costs from eliminating repair/replacement of external guide mechanism
- · Reduced RSW chassis assembly time of separate external guide mechanism components