

**APPLICATION SOLUTION: Air Bag Production**



**Product Family:** Electric

**Product Used:** RSX Extreme Force Electric  
Linear Actuator

**Product Type:** Standard

**Application Requirements:**

**Stroke:** 300 mm (12 in)

**Application Description:**

Assembling cartridges for air bag deployment.

**Challenge:**

An OEM of automotive air bags wanted to replace hydraulic cylinders on a pressing application to improve process control, reduce energy consumption and eliminate hydraulic fluid leakage. Although the hydraulic system provided the necessary force, the operators had to continually monitor and adjust the hydraulic system to get the desired performance and process control. These continual adjustments resulted in inconsistencies in the process which resulted in lost production time and also scrapped parts. Additionally, the hydraulic power unit had to continuously run to keep up with production and consumed a high amount of energy.

**Tolomatic Solution:**

Tolomatic's RSX extreme force electric actuator provided consistent, repeatable force which eliminated the need for operator intervention and production downtime. With a precise servo controlled electric actuator system, the OEM was able to completely eliminate defective parts from the pressing operation. The servo system provided efficiencies around 80% compared to about 40-50% for the hydraulic system, which significantly reduced energy consumption.

**Customer Benefit:**

- Improved process control eliminated defective parts
- Elimination of messy hydraulic system leaks
- Utility cost savings with the higher efficiency electric system