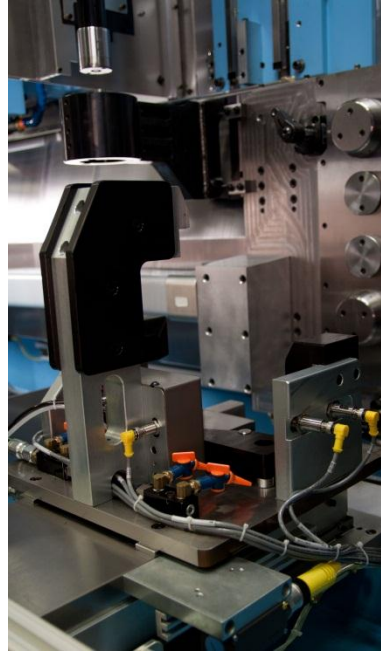
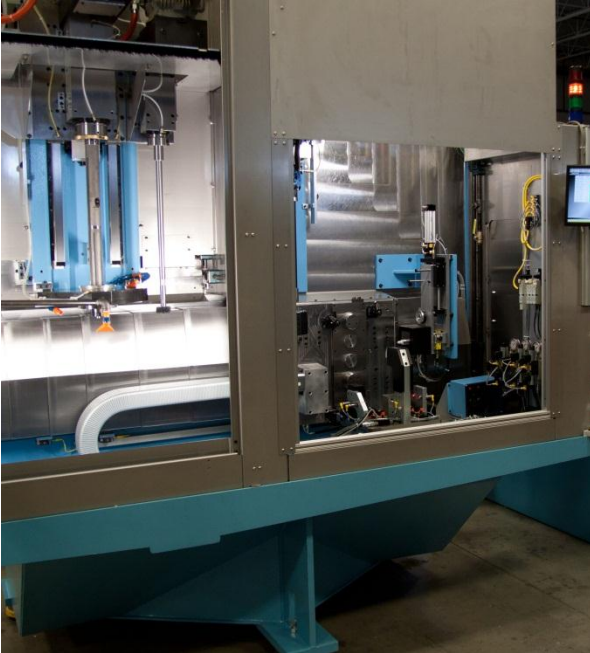


## Precision Machining



*Machining*  
*Automotive*  
*Industrial*

This automated system performs precision machining on large cast aluminum parts. All operations occur in a sealed enclosure. In preparation for machining, the system accurately fixtures the parts, then transfers them to the machining center, where they are bored to a precision tolerance. After machining, parts are transferred within the enclosure to gauging and engraving stations where they are inspected and then pin-stamped for tracking.

### **FEATURES**

- Positioning tolerance +/- 12 microns over 22 inches of travel; parallel to 25 microns
- Repeatability of 1.66 cpk
- 7 min cycle time (incl. 3 min. coolant bath)
- Coolant system keeps machine and components controlled to +/- 3 °F.
- Through-tool coolant allows for debris removal during machining.
- Inspection results stored in data file; parts marked with correlating ID code.
- Vision System inspects printed ID code to validate printing.

### **TECHNOLOGIES**

- Precision Motion Control
- Automatic Gauging
- Vision Inspection