P175 C-Axis Grinder
Case Study, April, 2007

**Customer:** Aerospace Fastener Manufacturer  
**Application:** Bolt Head Grind  
*(Inconel 718)*

**Configuration:**
- Straight wheel, ALOX
- 5C Collet chuck, pneumatic
- 6-axis robot with dual gripper configuration and horizontal pallet station
- Automatic lateral locator
- Workhead mounted ring dresser
- Programmable Workhead (C-Axis)

**Process:**
- Non-round head shape grind in C-Axis mode, fully automatic cycle; load/unload; lateral positioning; automatic dress routine; multi-surface head grind

**Notable:**
- Weldon turnkey of machine, tooling, process, integration of robot, safety guarding, and pallet station

**Featuring:**
- Schunk gripper tooling, FANUC 6-axis robot, GE Fanuc 21i CNC control, Renishaw lateral probe, Dittel acoustic sensor

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**Six axis FANUC robot, machine mounted. Dual pallet part presentation and exit chute.**

**Automatic processing of a wide variety of aerospace grade head bolts.**

**Dual gripper assembly for load/unload; Renishaw probe for lateral positioning; 5C collet workholding.**