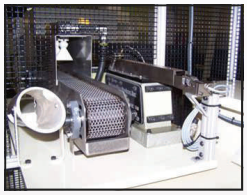
AGN4 Straight Wheelhead Grinder
Case Study, January, 2008

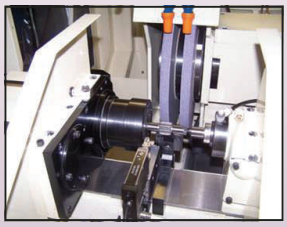
Post grind conveyor through parts washer.



Part presentation via vibratory bowl feeder. Final discharge to water basket.

Fanuc 21*i* CNC control; Marposs P7 Gage amplifier; Fanuc Robotics teach pendant.

Dual OD wheel stack; custom auto-driver to engage square end; in-process sizing gage.



Customer:	Dorma Architectural Hardware Reamstown, PA	*Application:*	Pinion Grind (58-62Rc)

Configuration:

Straight wheel, ALOX
Custom automatic driver, spring loaded
6-axis robot with dual gripper configuration
In-process sizing gage
Pneumatic operated tailstock
Vibratory bowl feeder
Pass through part washer

Process:

Two diameter, single plunge grind cycle
Dress every ten (10) parts
150 parts per hour capability

Attributes:

Diameter tolerance	+/- .00025”	(1.33 CPk)
Surface finish	16 to 24 Ra	

Notable:

1. Weldon turnkey of machine, tooling, and process; Integration of 6 axis robot, bowl feeder and part washer.

2. In-process gage arranged to monitor journal run-out and abort cycle on parts with over .007” R/O.

Featuring:

Schunk gripper tooling, Fanuc 6-axis robot, Fanuc 21*i* CNC control, Marposs in-process gage, Automation Devices, Inc. bowl feeder.