

# CASE STUDY

## KASPER VCNC 1000 UPGRADE

### *Two Spindle, Four Axis Vertical Lathe Machine Retrofit*



Before

After

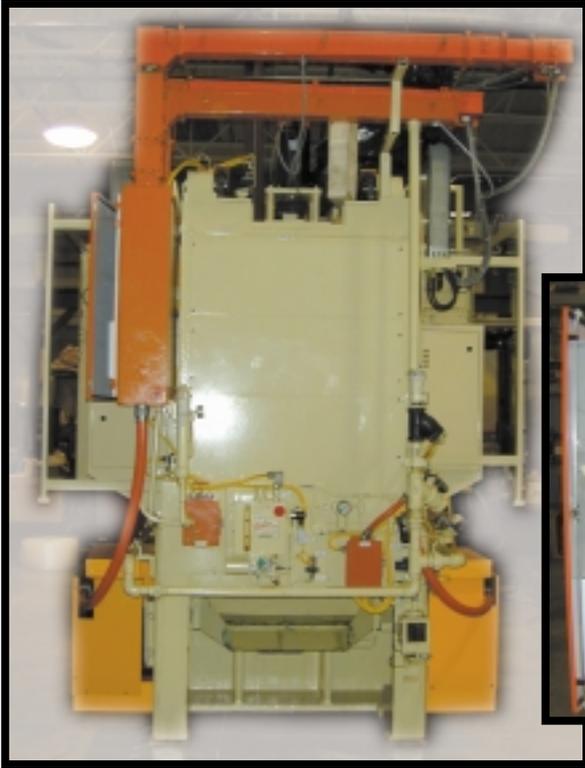
**Overview** Ford Motor Company's Livonia Transmission Plant wanted to update some of the CNC controls on their production machinery. The existing controls were Allen Bradley 8200 series - popular in the 1980's. Ford had experienced electrical failures at an increasing rate and realized that the control was no longer supported in the field. After years of 24/7 service, the machine's mechanical condition was questionable. The specialized computer, graphics screen and computer graphics software for viewing the part offsets were no longer supported by its manufacturer and the controls were obsolete.

The Kasper VCNC 1000, 2 spindle, 4 axis vertical lathe needed a complete overhaul — mechanical and electrical.

**Solution** After analyzing the system, Galco recommended rebuilding the machine mechanically in addition to updating its electrical system. The machine was totally reconditioned. Slides were ground and ball screws were reground and certified. The spindles were rebuilt and balanced for vibration and noise tolerances to Ford's specifications. In addition, the air system was replaced with ISO spec valves and regulators and the lube system was thoroughly checked and repaired. The control system was replaced with a GE Fanuc series 18I-TA CNC control - quickly becoming recognized as an industry standard. A completely new electrical enclosure and new operator control panels were supplied to complete the system built to Ford Motor Company's specifications. The final touch was designing and adding dry floor guarding to the retrofit.

# CASE STUDY

After



**Operation** Because of our past successes in supplying systems and service to Ford Motor Company, Galco was asked to supply a turnkey solution for the Kasper. The new system was completely programmed, tested and run-off for both endurance and capability at Galco's facility before being shipped to the customer. The new system was designed to minimize operator

retraining. The result was increased uptime, easier troubleshooting and maintenance.



Before

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