

# CASE STUDY

## OLOFSSON 1275L UPDATE

### *Two Spindle Vertical Lathe Machine Overhaul*



*Before machining*



*After machining*

**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. In addition, after years of 24/7 service, the machine's mechanical condition was questionable.

The Olofsson 1275L, 2 spindle 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.

**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 Olofsson. 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, and the system was successfully brought on-line very quickly in the plant. The result was more accurate parts, increased uptime, easier troubleshooting and maintenance and a capability of 1.33 cpk was achieved.

**GALCO**  
INDUSTRIAL ELECTRONICS



**800/575-5562**

2601 Pinehurst Drive • Madison Heights, Michigan 48071  
Emergency Number: (248) 542-9090 • Fax: (248) 542-8031  
[www.galco.com](http://www.galco.com)

SY122801  
(orig.-12/28/01)