EASON TECHNOLOGY

Precision Two-Axis Grinder

Application Note #32 **Eason 3100 Cut and Grind**

APPLICATION

A customer doing a two-axis grind and cut application needed a machine control work station that would allow the operator to select parts from a database of part information, or add parts from his mechanical drawings at the interface station. The grinding machine has a two-axis servo controller to control the cut and grind motion axis, along with 72 points of digital I/O for machine control.

OPERATOR INTERFACE

The bright color display on the 3100 allowed the operator to select a part from the database, or to add a new part to the database at the interface using terminology he is familiar with. (Not CNC programming.) The Eason 3100 maintains the thousands of parts on a database and can be synchronized and backed up onto a PC. The interface then coordinates this part information with the servo controller, as well as relaying information on screen about machine operation to the operator.

SERVO CONTROL

The Eason 3100 is interfaced with a servo motion controller that controls the two grinding axis. Once the operator selects the part they wish to run, the 3100 downloads this information to the servo drive. The servo drive then executes the prescribed moves.

SOFT LOGIC

This machine has 72 points of digital I/O monitored by the Eason for machine control. The 3100 utilizes SoftLogic to perform deterministic ladder scans to monitor these points, including the safety light curtain to activate an E-Stop for operator safety.