

Southwestern Industries, Inc.

# ProtoTRAK EMX Retrofit

## ProtoTRAK EMX CNC

### Control Hardware Specifications

- Digital Servo Amplifiers – custom designed for ProtoTRAK operation
- D.C. Servo Motors – rated at 280 in-oz. continuous torque is twice that required
- Precision Ball Screws – in the table and saddle
- Modular Design – simplifies service and maximized uptime
- 115V/60HZ/8 amps
- Feedrate Override of programmed feedrate and rapid
- Polycarbonate Sealed Membrane Keypad to lock out contamination
- 7.0" Color LCD with adjustable contrast
- On board IDR flash memory storage for part programs
- USB port for interface with a storage device
- Rugged Industrial PC
- Glass Scale on quill for Z-axis readout

### Software

- Diameter Cutter Compensation – allows programming of the part rather than the center of the tool path
- Circular interpolation – makes arcs and any size hole easy to do with standard tools
- Linear Interpolation – to machine lines at any angle
- Conrad – provides automatic corner radius programming with one data input
- Incremental and Absolute – programming can even be mixed within an event
- Error Messages – to identify programming mistakes
- Fault Messages – for system self-diagnostics
- Parts Graphics display
- Look – a single button press to view graphics during programming
- Math Help – for finding points in a prompted format with graphical representation of prompts
- Machine Tool Error Compensation and Backlash Compensation custom set on mill after installation
- Selectable Inch/mm measurement readout
- Jog of X and Y from 1 to 100 inches per minute
- Continue Mill to eliminate repetitive data inputs while programming
- Context help information provides explanations of ProtoTRAK EMX operations
- CAM file run
- Teach
- Free Offline programming available for download from our web site

### Programmed Canned Cycles

- Posn/Drill – single point
- Bolt Hole – series of points evenly spaced around a circle
- Mill – straight line in any direction
- Arc – any portion of a circle
- Pocket – a rectangle or circle and all the material inside, includes finish cut

- Frame – a perimeter of a rectangle or circle, includes finish cut
- Repeat – of programmed events with or without offset
- Rotate – rotation of programmed geometry

## **Service**

- The SWI Customer Service Group provides after-sale support over the telephone via a toll-free service number - (800) 367-3165.
- Machine design makes self-service easy for when the customer is able to resolve the problem.
- Express Exchange program in which nearly all electronic and mechanical sub-assemblies are in stock. In response to a problem, any parts you need may be shipped to arrive the next day.

## **Available Options/Accessories**

- Off-line Programming for running the ProtoTRAK software on the PC
- Remote Stop/Go (RSG) switch
- Power Drawbar
- Halogen Worklamp
- Chip Pan
- Coolant Pump
- Kurt Vise
- Thumb Drive