

## TOUCH 2200 FEATURES AND TECHNICAL DATA

### PROGRAMMING MODES

#### Graphical Conversational Programming:

- Simple fill-in-the-blank menus
- No G-Code knowledge needed
- Graphical help screens ease learning curve
- Simple adding, deleting or modifying of work steps
- Simultaneous verify draws each step as you program
- Multi-lingual menus standard

#### G-Code Programming:

- Large standard memory for lengthy programs
- Includes search, replace, cut, copy & paste functions
- Translator for Fanuc G-Code
- Merge both conversational & G-Code in the same program

#### Contour Programming:

- Automatic calculation of partially defined geometry
- Powerful contour calculator for creating contours on the peripheral surface of cylindrical work pieces
- True-to-scale representation of contours with up to 255 contour elements
- Import DXF files via an optional CAD reader

### MACHINING CYCLES

#### Milling:

- Machining of contour pockets with up to 12 islands
- Machining of contour bosses with up to 12 islands
- Automatic detection and follow-up machining of residual material
- Face milling cycle with safe zones
- Rectangular & circular pockets with different insertion methods
- Rectangular & circular bosses
- Linear & circular grooves
- Thread milling and engraving cycle

#### Drilling:

- Centering, reaming, boring
- Boring with chip break or pecking function
- Rigid tapping with chip break or pecking function

#### High-Speed Machining:

- Moldmaking cycle for the selection of the machining type & contour tolerance

#### Position Pattern:

- Position patterns such as a line, circle or grid
- Deselection of individual position in position patterns

#### Cylindrical Surface Machining:

- Drilling & milling operations on cylindrical surfaces
- Features conversational milling & drilling cycles on a live tool lathe

#### Swivel:

- Drilling & milling synchronized on swivel head machines
- Flexible input of swivel angle makes changing from vertical to horizontal or any angle in-between easy

### GRAPHIC VERIFY

- 3D solid model view
- Wire frame graphics view
- Special 3-side view with 3D elevation
- Verify both conversational & G-Code programs
- Run verify draws the part while machining in real time

### TOOL MANAGEMENT

- Tool table graphically shows tool type & geometry
- Workpiece count & tool-life monitoring with sister tools
- Tool radius compensations with approach & retract strategies
- 3D tool radius compensation
- Look-ahead detection of contour violations
- Tool management with extensive functionality such as empty location search & place positioning, tool loading/unloading, tool life & workpiece count
- Connection to RFID tool identification system - MOBY E

### SET-UP FUNCTIONS

- Graphic menu for setting tool lengths & diameters, milling & turning
- Simple menu for automatic tool setting with optional tool probe
- Menu driven part probe cycles

### AUTOMATIC FUNCTIONS

- Block search to an interrupted point in a program
- Block search to a specific point in a drilling pattern with all modal data automatically activated

### HIGH-SPEED MACHINING

- Velocity feed-forward reduces following error to near zero
- Jerk limitation for creating smooth ACC/DEC profiles
- Spline interpolation featuring on-line compressor
- Polynomial formatted programs can run directly without conversion to G-Code

### 5 AXIS MACHINING

- Inverse time function
- Spline interpolation for 5 axis
- Tool orientation programming using vector or RPY angles -- TRAORI function
- 3D tool nose radius compensation

### HARDWARE SPECIFICATIONS

- 15" color touch screen monitor
- High-speed CPU control up to 31 axes
- Profibus I/O expandable to 4,096 digital inputs/outputs
- Sinamics S120 modular digital drive system
- Regenerative drive system reduces electrical consumption
- USB port for standard memory stick
- High-speed Ethernet port -- wired or wireless
- Linux or Windows based platforms