



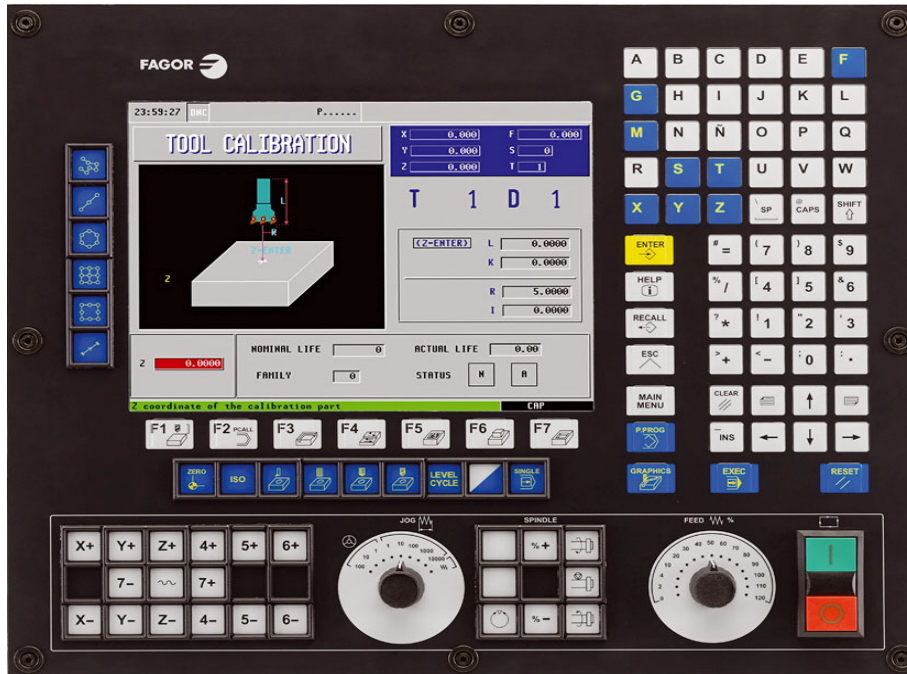
Application:

3 axes CNC Knee Mill and or CNC Bed Milling Machines.

Fagor Automation 3 axes Turnkey Package

Customer link - - - Fagorusa.com - - -

www.fagorautomation.com/en/



Fagor CNC 8055 iA MC Control System Operators Panel

The **Fagor 8055 i-A CNC** control combines value & reliability with a featured packed compact control. This control was built for the shop environment with a rugged sealed keyboard and enclosed design. Fagor Builds controls which are designed for both Milling or turning operations, and has designed specific software to facilitate fast, accurate, and reliable machining in both applications. The unique and very powerful operating system consists of 2 systems within 1 control. Utilizing both a very easy to program Icon Key based conversational programming system or a Conventional ISO FANUC style G-code programming system within the same control.

You may toggle between the two operating systems at any time. Some of the many benefits is the ability of the control to adapt to the operator/programmers ability, also you have a Machine that is not only ideal at complex large run production parts, but also perfect for quick set-up of small lot production jobs.

The Fagor "Icon Key" programming method greatly simplifies the programming process even compared to more conventional conversational systems. Graphic assist is utilized within all programming screens, thus enabling "true" fill in the blank programming.

This control can adapt to the operator/programmers ability, and you have a Machine that is not only ideal at complex large run production parts, but also perfect for quick set-up small lot production.

MAIN LAYOUT

- Fully alpha-numeric keyboard
- RS 232 serial port
- Compact Design
- Spindle speed override
- 512 MB flash memory
- Integrated powerful PLC w. logic analyzer
- Automatic input voltage sensing with range from 85VAC to 265VAC single phase
- 4 axis control
- RS 422 port
- Manual feedrate override
- Cycle start and stop keys
- Graphic coprocessor
- USB port for easy program uploading
- 8 feedback ports
- 11" Color flat screen monitor
- Digital probe input
- Spindle start and stop keys

OPERATING MODES

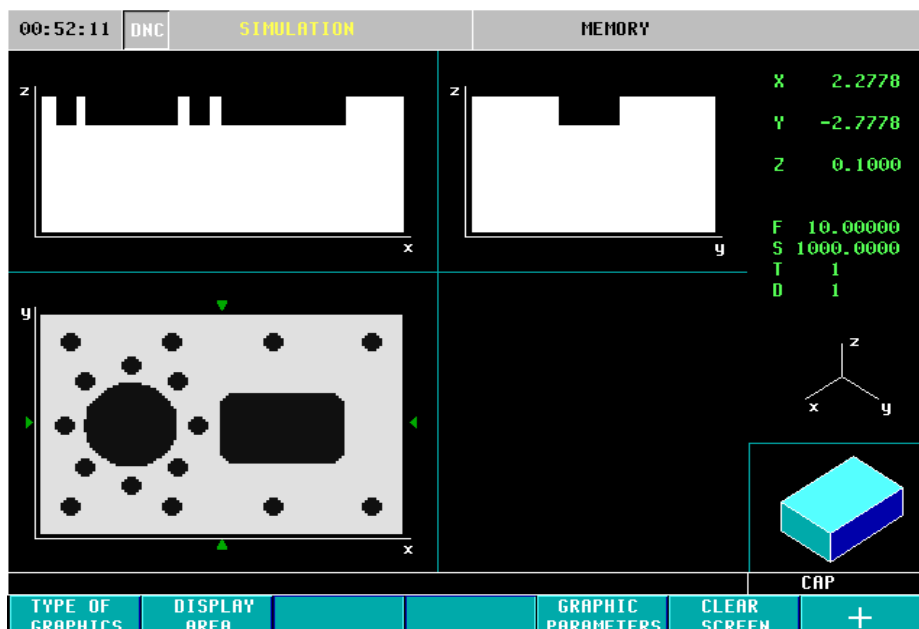
- Execution mode
- Jog/Manual mode
- Edit mode with graphic assist
- Tool Inspection mode
- Tool offset mode
- Graphic Editor mode (cycle customization)
- Single block mode
- Communications mode
- Simulation mode
- Parameter mode
- Utilities mode
- MDI/Teach-In mode
- Conversational mode
- Background editing mode
- Diagnostics mode
- Graphic Display with zoom mode

CANNED CYCLES

- Drilling cycles
- Irregular pocket cycles
- Tapping cycles
- Custom easy to use cycles
- Circular pocket cycles
- Peck drilling
- Graph sequence bolt hole cycles
- Rectangular pocket cycles
- Deep hole drilling cycles
- Bolt-hole cycles
- Reaming cycles
- Digitizing & probing cycles

DOCUMENTATION

- Programming manual
- LAN manual
- New features manual
- Installation manual
- Operators manual
- CD-ROM w/all manuals & brochures

Fagor Color Graphic displays

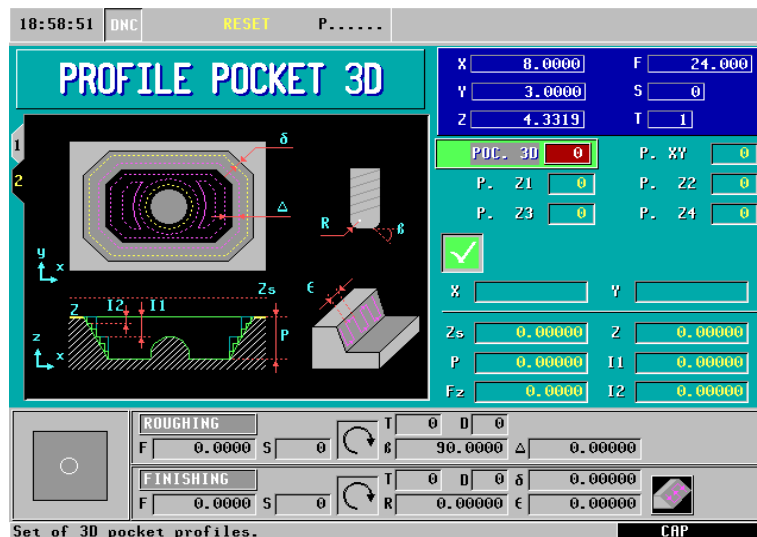
8055 solid sectional multi-view graphics is a standard feature

- 4 axis CNC + spindle
- 256k Ram Memory
- USB port for easy program uploading
- Gantry axes capability
- Advanced block look ahead
- On board PLC I/O Logic Analyzer
- DNC capability
- WinDNC offline software program
- Linear, Circular and Helical Interpolation
- Simulation with time estimate
- Jog Mode
- Parameter management Mode
- 3 simultaneous graphic views w/ simulation
- Machining canned cycles
 - Rectangular & Round Boss, Rectangular Pocket, Circular Pocket, Profile Pocked 2D & 3D, Slot Milling, Profile Milling, Multiple Drilling cycles, Boring, Reaming, Arc bolt hole, Random position, & Grid Pattern position cycles.
- High Speed integrated PLC w/ 16 inputs / 8 outputs
- Digital Servo communication capability or conventional analog drive communication
- High Speed RS 232 serial port communication (115 K baud rate)

4 axis simultaneous interpolation
500 MB Flash memory
10.4" High Resolution LCD color monitor
Axis coupling via PLC capability

Feed Forward
Simulation dry run mode
M19 Spindle Orientation
Tool Radius & Length compensation

MDI Mode
Tool offset and Zero offset tables



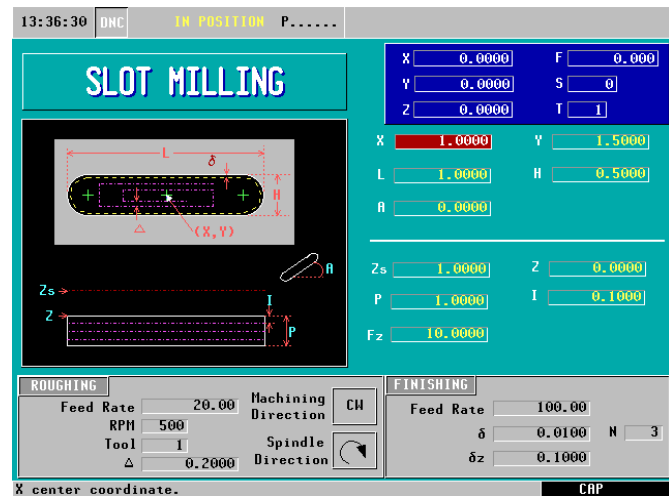
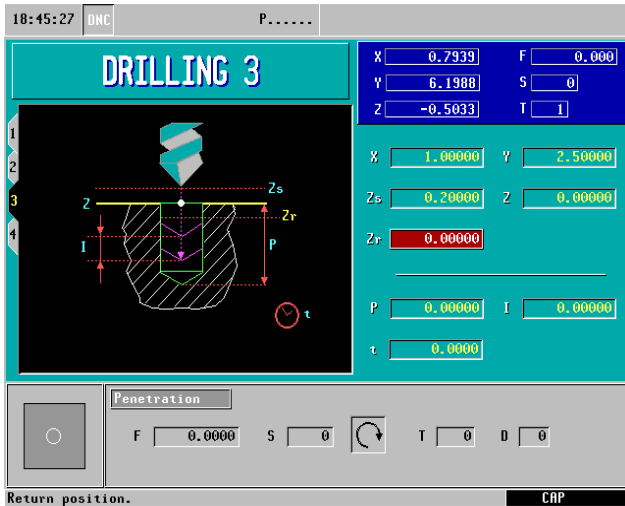
Advanced Canned Cycles are a standard feature of the 8055iA

- All I/O, Power and Feedback connectors
- Full documentation with installation & start-up, Operating & Programming manuals.
- Arc tangent to previous path
- Tangential entry and exit
- Arc defined by three points
- Part Scaling (in part or whole)
- Main plane selection
- Definition of lower work area limits
- Zero offsets and auto-deletion of offsets referencing
- Mirror Imaging
- Automatic chamfer blending
- Automatic radius blending
- Programming in absolute arc center coordinates
- Individual plane selections
- Probing cycles (option)

- Digitizing cycles (option)
- Preset of coordinate values

Automatic machine home sequence
Preset of polar origin

Canned cycles are made simple with a graphic assist screen and fill in the blank programming. Canned Cycles that make sense for everyday operation are standard affair with the 8055iA.



Programming

- DNC (RS232)
- Execution mode
- Teach-in mode
- Single block mode
- Background editing mode
- Tool inspection mode with auto-return
- Programmable spindle speed
- Number of nesting levels: 15
- Zero offsets
- Machining canned cycles in all planes
- On board graphic editor
- Editing in CNC language (ISO), High-Level, Profile Editor and Interactive Editor & Icon key driven conversational editor.
- Assisted help mode for all programming commands
- Number of repetitions of standard, parametric and modal subroutines: 9999
- Parametric programming for: mathematical operations, conditional jumps and unconditional jumps. Includes 200 global parameters plus 27 local parameters times 7 levels.

Geometric help

MDI mode (Manual Data Input)

Play back mode

Manual mode

Automatic tool calibration mode

Mid program start

Number of main programs: 999,999 *3

Repeat of sections of program

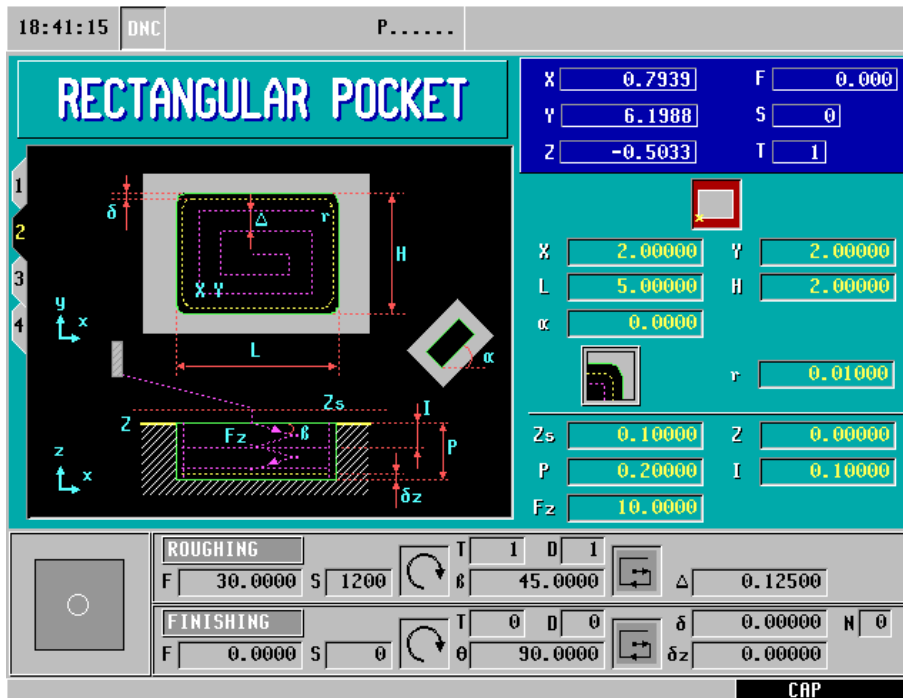
Feedrate: 0.00001 to 7900 inches/min.

User defined canned cycles

Override control for feedrate and spindle

Tables

- Unlimited zero offsets utilizing parametric parameters
 - Leadscrew error compensation tables
 - Global and arithmetic parameter tables
 - Machining parameters and tables are stored in non-volatile memory
- Tool and tool magazine tables(100)



All data needed to machine an operation is shown on a single conversational screen including: roughing & finishing pass data

LCD Display

- 10.4" high res Color LCD monitor
- Display of execution time
- Hour and date with battery backup
- Single block/Continuous cycle
- Parts simulation graphics with 3D, zoom, and up to four simultaneous views.
- Comments included in the part program and name
- Open software commands allow for the customization of specific applications, by creating intelligent editors, custom screens and utilizing the on-board graphic editor which allows creation of pages, symbols and windows.
- 10 languages loaded, including English, Spanish, French, Italian, German, Dutch, Portuguese and more.

Solid graphics w/ zoom & rotation (opt)

Display of parts counter

Display of parameter values

Position and following error (axis lag)

Diagnostics

- Over temperature alarms
- Software travel limits
- Individual program travel limits
- Programmable program error
- Interface errors (feedback, servo system, external emergencies, etc.)
- Transmission errors with peripherals (such as PC, floppy disk drives, etc.)

Complete hardware fault alarms

Complete software fault alarm diagnostics

Input/output status

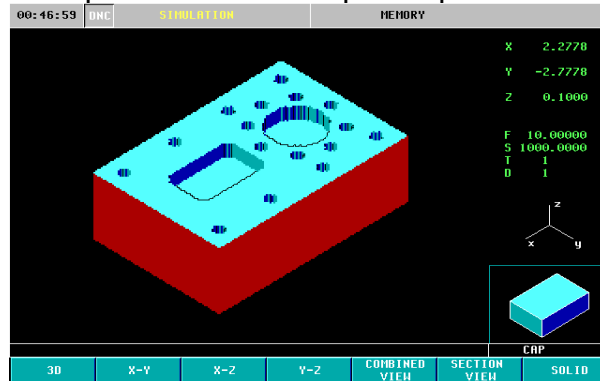
Programmable PLC messages

Compensation:

- Lead screw error compensation (up to 255 points per axis)

Solid Graphics:

Solid Graphics allows the Operator to define the stock dimensions, then the Operator can see the stock being cut to the finished part in a Solid Graphic representation.



(Screen shot of Solid Graphics. Different colors can be assigned for different operations within the graphic. You may view or zoom the graphic from any angle)

Fagor Intelligent Profile Editor (On-board mini CAD/CAM System)

Blueprints do not always show the starting and ending points of each section or shape. With the Fagor Intelligent Profile Editor no calculations are required, simply enter the known data into the CNC and the CNC automatically calculates the Solution. When there is more than solution, all possible solutions are shown graphically so that you may choose the correct one.

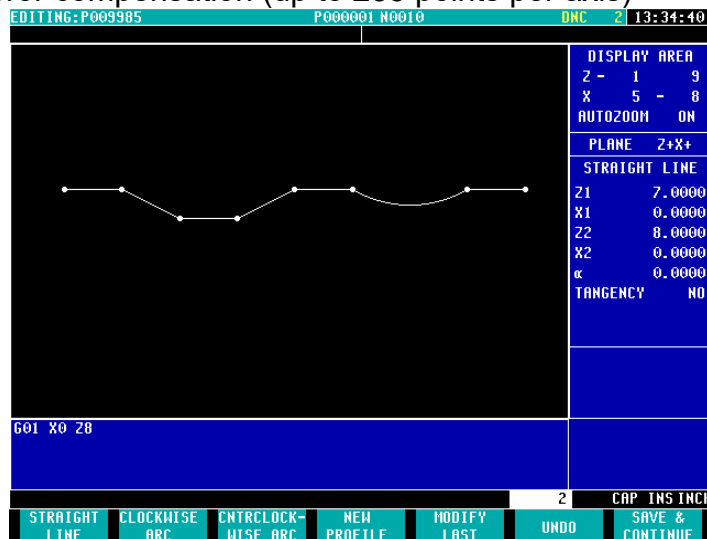
WINDNC Software:

DNC software is a Windows based program that allows for the following capability:

- Upload programs
- Infinite Length program execution (Drip Feed mode)
- Offline tool and zero offset table management
- Complete part program editor with syntax checking
- Download programs
- Offline parameter management
- Monitoring of CNC variables

Compensation:

- Lead screw error compensation (up to 255 points per axis)



(Profile Editor screen shot showing shop floor blueprint programming capability)

Servo System:

Glentek DC 3 axes System includes Power Supply, Axes cards, sealed motors with TTL rotary encoders with MS connectors. System loop is closed and fully functional upon arrival.

So choosing and having us install a Fagor control onto your new Remedy machine is a valuable option for you. Keeping the same singular control brand in your shop allows you to keep training costs down and then all of your employees can the ability to operate all of your machine tools.

We have many customers who love their Fagor controlled Mills and lathes !

Come and Join the Remedy family of machine tool owners.