

# The Fagor 8055i/A-TC CNCLathe Control

The **Fagor 8055 i/A-TC CNC** control combines value and 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 and/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 include 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.



The control language is conversational or G-code, with on-screen menus and prompts to make programming virtually foolproof. The Fagor control offers a teach in mode. Moving the machine to produce the part manually and then with a few simple key strokes the control stores these movements as a machining sequence and creates the part program for use. At a later time, retrieve the program, enter the number of parts to be produced, and your Fagor control does the rest.

Fagor controls use conversational icon based prompts with easy to use fill in the blank operations or conventional G-code programming with Fanuc code format

These control features and hand wheels enable you to use a single machine for one-off or prototype production; in a semi-automatic mode for small production lots; and also it has fully automatic mode for medium length production runs. The combination of CNC technology and manual capability, in a well made heavy weight machine tool design, makes Remedy lathes a value leader in turning value.

The dual handwheels make it easy to do manual machining operations.

Fagor Controls have been designed for growing companies evolving from manual lathe operations to CNC and more sophisticated users who would like a simple, easy to use machine.

The Fagor 8055 control is equipped with multiple ports for connection to off-line programming systems for more advanced users.

Fagor 8055TC CNC Control Features:

Communications RS 232 C Serial Com Line USB

Full range of canned cycles Turning (2 levels) Facing (2 levels) Taper Turning (2 levels)

Rounding (2 levels) Threading (3 levels) with library Grooving (5 levels) Positioning (2 levels)

Drilling Tapping ISO Programs (G-Code)

Storage up to 5 MB (expandable up to 48 MB)

Inch/metric switchable

11" Color LCD with full alphanumeric keypad

Solid graphics with zoom

Edit in ISO or teach mode with background editing

Axis jog via pushbutton or handwheels

Constant surface speed

**Versatility:** It is a DRO when working manually It is a motion controller when performing semi-automatic operations It is a full powered CNC control for automatic operation

**Ease of operation:** Operations defined by symbol keys Interactive graphic data entry Fully automatic operating modes

**Profitability:** Minimum set-up time 256 tool magazine Tool data back-up while CNC off Part operation sequence storage Automatic part repetition for lot work

**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
- 2-3 axis control
- RS 422 port
- Manual feedrate override
- Cycle start and stop keys
- Graphic coprocessor
- 8 feedback ports
- 11" Color flat screen monitor
- Digital probe input
- Spindle start and stop keys
- USB port for easy program uploading

**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**

Turning (2 levels) Facing (2 levels) Taper Turning (2 levels)  
 Rounding (2 levels) Threading (3 levels) with library Grooving (5 levels) Positioning (2 levels)  
 Drilling Tapping ISO Programs (G-Code)

**DOCUMENTATION**

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

**FAGOR 8055i/A-TC**

- 2-3 axis CNC + spindle
- 256k Ram Memory
- USB port for easy program uploading
- 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
- 2 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)
- 2 axis simultaneous interpolation
- 500 MB Flash memory
- 10.4" High Resolution LCD color monitor
- 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



- 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.

### **Diagnostics**

- |   |   |
|---|---|
| • Over temperature alarms   | Complete hardware fault alarms            |
| • Software travel limits  | Complete software fault alarm diagnostics |
| • Individual program travel limits  | Input/output status                       |
| • Programmable program error  | Programmable PLC messages                 |
| • Interface errors (feedback, servo system, external emergencies, etc.)       |   |
| • Transmission errors with peripherals (such as PC, floppy disk drives, etc.) |   |

### **Tele-diagnosis**

The CNC offers tele-diagnosis software as standard allowing the OEM to connect to the machine user via internet to inspect, troubleshoot, and repair the machine tool. This feature allows the machine builder to provide quick technical assistance without having to send a technician to user's site hence eliminating unnecessary and expensive travel in many cases.

### **Compensation:**

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

### **Solid Graphics:**

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

### **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.

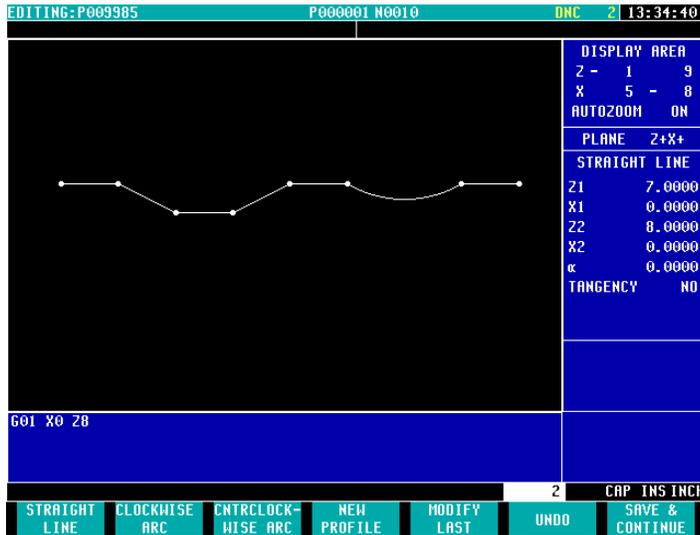
### **WINDNC Software:**

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

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

**Compensation:**

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

**Servo System:**

Glentek DC 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.

**Integrated documentation** FAGOR provides the operating and programming manuals in the language selected by the user. By simply pressing the HELP key, the CNC automatically displays the chapter related to the operation being carried out at the time. Once inside the manuals, it is possible to consult any other information by browsing through the various chapters. Having the manuals available at the CNC saves time and space, is more environmentally sustainable, makes accessing the information faster and avoids having to utilize paper documents around the machine.

**Programming features (Lathe)**

Many turning cycles  
 Wide selection of drilling and threading cycles  
 Wide selection of threading cycles  
 Profile cycle along the X axis  
 Pocket cycles in the XC, ZC planes  
 Multiple pocket cycles  
 Clock & parts counter  
 Simulation in selected planes  
 HD Graphic simulation

Many facing cycles  
 Constant-pitch and variable-pitch threading  
 Many grooving cycles  
 Profile cycle along the Z axis  
 Pocket cycles in the XY, YZ planes  
 2D pockets for user-defined shapes  
 Machining time estimate  
 3D simulation  
 Zoom in simulation

We have many customers who love their Fagor controlled Mills and lathes !  
 Come and Join the Remedy