



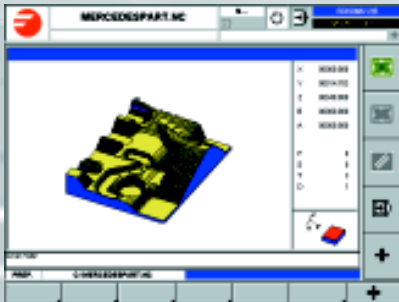
FAGOR 8070 CNC

For high speed machining



High Speed

The FAGOR 8070 CNC can execute each instruction extremely fast without jeopardizing machining precision.. Its high calculating power provides block processing time under 1 ms. and a PLC execution time of 1 ms/K (1000 instructions / 1 ms.)



- Advanced path control algorithms
- Jerk control to prevent jerky movements.
- N-blocks horizon to avoid tool collision.
- HSC function/ Spline interpolation: It has a number of algorithms for precise high speed machining.
- Post-interpolation filters to eliminate resonance.
- Gains and adjustments controllable via part-program.

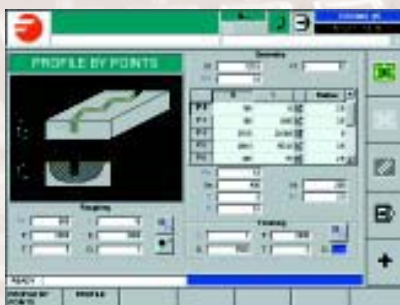
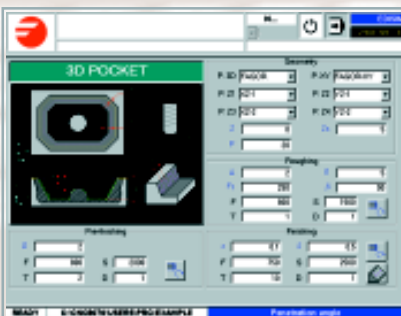
Programming Ease

The FAGOR 8070 CNC offers very simple, intuitive programming while answering all programming needs such as G-code and high level language as well as a full-fledged **conversational editor**.

Conversational editor

This editor is based on the conversational editor of the 8055 CNC using typical mill/lathe type operations. This makes it possible to machine single parts immediately. With this option, programming knowledge is not required, thus drastically reducing operator training time while taking full advantage of the high technology of this powerful CNC.

Editing and Simulation are totally independent from execution. This allows editing and verifying a part to improve machining time by graphically simulating it even while executing another part program.



The FAGOR 8070 CNC is a state-of-the-art CNC that offers high technology features with maximum operating versatility. This powerful CNC has been designed combining FAGOR technology and international PC standards.

The FAGOR 8070 is a PC-compatible CNC system with the latest Pentium® microprocessor. Its block processing time is lower than 1 ms. This CNC also offers the possibility to use a wide range of applications for PC (both under Windows and MS-DOS).

Telediagnosis

The FAGOR 8070 CNC lets you telediagnose through an off-the-shelf software application selected by the manufacturer.

This makes preventive maintenance possible.

PC-Based Open System

The FAGOR 8070 is a CNC based on Windows®. This lets the CNC operate with multiple tools for maximum customizing. Through ETHERNET, this CNC may send and receive an incredible amount of data stored in its hard disk of more than 4 Gb.

Modular System Open Architecture

The FAGOR 8070 CNC consists of a CPU unit combined with a flat 12" and 10.4" TFT screen that offers high quality images. The stackable remote I/O modules (analog, digital and feedback) may be combined for optimum configuration. These modules, controlled by CAN, may be grouped at different locations of the machine depending on the manufacturer's requirements.



CPU

CNC

The FAGOR 8070 CNC may control up to 16 axes and 1 spindle

PLC

RESOURCES

- Up to 1024 digital outputs and 1024 digital inputs
- Up to 8192 marks
- Up to 1024 registers
- 256 timers
- 256 counters
- Unlimited number of symbols

PROGRAMMING

- Modules in equations and C language
- Syntax analyzer
- Logic analyzer
- Monitoring of programming variables and the PLC program
- Execution time < 0.1 ms / 1000 instructions



Digital Interface

SERCOS

- Digital field bus (CNC ↔ drives)
- Transmission speed (baudrate): 4 Mbaud
- Plastic fiber optics (max. 50m)



CAN

- Standard field bus for distributed I/O
- Transmission baudrate of 1 Mbaud
- Control of up to 32 nodes and 16 modules per node
- Remote modules with:
 - Digital inputs and outputs
 - Analog inputs and outputs
 - 4 feedback inputs
 - Keyboard



Programming

- ISO
- High level
- Program editing:
 - Program editor with syntax check
 - Teach-in
 - Intelligent profile editor
 - Conversational editor
 - Background simulation and editing (while executing)
 - Macros
- Canned cycles
- MDI / MDA
- Tables:
 - Part zeros
 - Tool offsets
 - Parameters



Customizing Tools

- INI files
- FGUIM visual tool
- Visual Basic, Visual C++, etc.
- Internal databases in Access®
- OPC compatible interface
- Friendly machine parameter editor



Simulation / Execution

- Graphics
- Solid graphics and top view
- Execution time estimate estimate for optimizing production



Monitoring and Diagnosis

- Error management
- Logic analyzer
- Oscilloscope function
- Used resources, cross references and statistics
- Tele-diagnosis



Communications

- Ethernet (standard)
- RS-232 (standard)

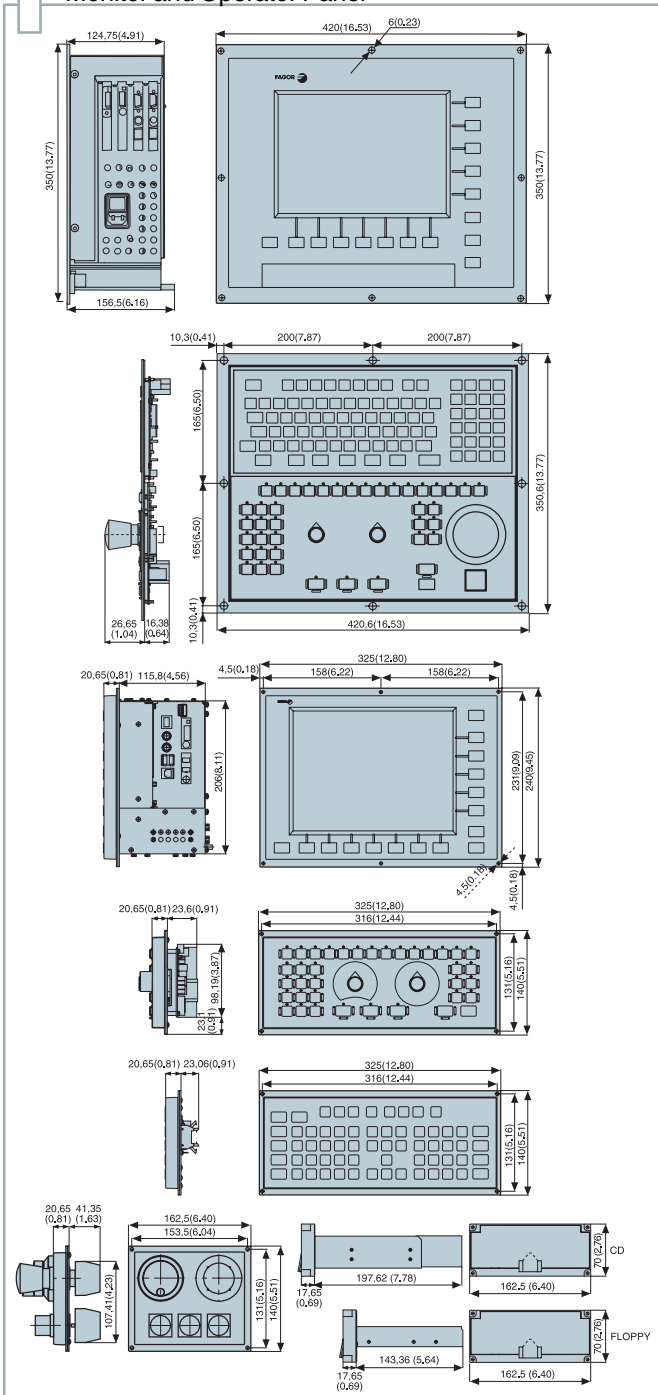
Other Features

- Axis slaving
- 3D rotation
- Tool management
- Tool life monitoring
- 5 axis transformations and RTCP
- Work in incline planes
- Parallel kinetics support (Tripod, Pentapod, etc.)
- Axis parking
- Hirth axis
- Gantry axes
- Cross compensation
- Feedrate as an inverted function of time

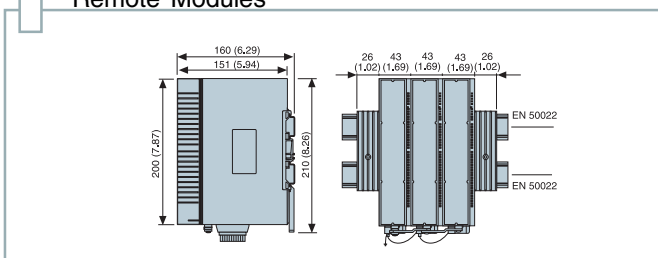


Dimensions in mm. (inches)
and configuration

Monitor and Operator Panel



Remote Modules



Fagor Automation S. Coop. (Mondragón)
B° San Andrés, s/n - Apdo. 144
E-20500 Arrasate-Mondragón, Spain
Tel. 34 943 719 200
34 943 039 800
Fax: 34 943 791 712
E-mail: info@fagorautomation.es
www.fagorautomation.com



ISO 9001



Fagor Automation S. Coop. (Usurbil)
B° San Esteban, s/n - Txoko Alde
E-20170 Usurbil, Spain
Tel. 34 943 000 690
Fax: 34 943 360 527
E-mail: usurbil@fagorautomation.es

Fagor Automation Catalunya (Barcelona-Spain)
Tel. 34 934 744 375 Fax: 34 934 744 327

Fagor Industriecommerz GmbH (Göppingen-Germany)
Tel. 49 7161 15 685-0 Fax: 49 7161 15 685 79

Fagor Italia S.R.L. (Milano-Italy)
Tel. 39 0295 301 290 Fax: 39 0295 301 298

Fagor Automation Ltda. (Leça da Palmeira-Portugal)
Tel. 351 229 968 865 Fax: 351 229 960 719

Fagor Automation UK Ltd. (West Midlands-United Kingdom)
Tel. 44 1327 300 067 Fax: 44 1327 300 880

Fagor Automation Suisse S.à.r.l. (Renan-Switzerland)
Tel. 41 329 631 863 Fax: 41 329 631 864

Fagor Automation France S.à.r.l. (Clermont Ferrand-France)
Tel. 33 473 277 916 Fax: 33 473 150 289

Fagor Automation (Asia) Ltd. (Hong Kong)
Tel. 852 23 89 16 63 Fax: 852 23 89 50 86

Fagor Automation (Asia) Ltd., Twn Branch (H.K.) (Taichung-Taiwan)
Tel. 886 4-2 327 12 82 Fax: 886 4-2 327 12 83

Fagor Automation (S) Pte. Ltd. (Singapore)
Tel. 65 841 73 45 Fax: 65 841 73 48

Beijing Fagor Automation Equipment Co., Ltd. (Beijing-China)
Tel. 86 10 64 64 19 51 Fax: 86 10 64 64 19 54

Beijing Fagor Automation Equipment Ltd. (Nanjing-China)
Tel. 86 25 332 82 59 Fax: 86 25 332 82 60

Beijing Fagor Automation Equipment Co., Ltd. (Guangzhou Rep.-China)
Tel. 86 20 86 55 31 24 Fax: 86 20 86 55 31 24

Fagor Automation Korea, Ltd. (Seoul-Korea)
Tel. 82 236 652 923 Fax: 82 236652 925

Fagor Automation do Brasil Com. Imp. Exp. Ltda. (São Paulo-Brasil)
Tel. 55 11 56 94 08 22 Fax: 55 11 56 81 62 71

Fagor Automation Corp. (Chicago-USA)
Tel. 1 847 98 11 500 Fax: 1 847 98 11 311

Fagor Automation West Coast (California-USA)
Tel. 1 714 957 98 85 Fax: 1 714 957 98 91

Fagor Automation East Coast (New Jersey-USA)
Tel. 1 973 773 35 25 Fax: 1 973 773 35 26

Fagor Automation South East (Florida-USA)
Tel. 1 813 654 45 99

Fagor Automation Ontario (Mississauga-Canada)
Tel. 1 905 670 74 48 Fax: 1 905 670 74 49

Fagor Automation Quebec (Montreal-Canada)
Tel. 1 450 227 05 88 Fax: 1 450 227 61 32

Fagor Automation Windsor (Canada)
Tel. 1 519 944 56 74 Fax: 1 519 944 23 69

Fagor Automation holds the ISO 9001 Quality System Certificate and the CE Certificate for all its products.



Worldwide reliability.

FAGOR AUTOMATION shall not be held responsible for any printing or transcribing errors in this catalog and reserves the right to make any changes to the characteristics of its products without prior notice.