

# FAGOR AUTOMATION

## Ordering Handbook CNC 8058 *elite* M/T

Ref.2210

Original instructions



## CNC 8058elite M/T

**Full Name**

|  |                  |
|--|------------------|
| Type of CNC<br>CNC (LCD and Central Unit)<br>U. Central cabinet                        | QC-C58<br>QC-U58 |
| Monitor type (only for CNC)<br>10" LCD + Keyboard<br>U. Central cabinet<br>Without LCD | 10K<br>--        |
| Type of function<br>Milling machines & Centers<br>Lathes and Turning Centers           | M<br>T           |
| Processor<br>Basic Processor   | B                |
| Flash memory<br>15 GB  | 15               |
| Interface<br>Sercos 3  | S3               |
| Windows<br>Windows 10  | 10               |
| Axes   | From 3 to 5      |
| Spindles   | From 1 to 2      |

**Software options (1)**

- a Conversational (IIP)
- c HSSA I Machining System
- f FFC (Fagor Feed Control)
- G Probe
- H C Axis
- i i4.0 Conectivity Pack
- I Tandem Axes
- m FMC (Fagor Machining Calculator)
- P Third party DRIVES
- r Third party IOs
- S HD Graphics
- U Conversational User Cycles
- Y CNC Program translator
- z Operating Terms

**Channels** 1

**Magazines** 1

(1) *Depends on the type of function*

The Full Name of the CNC has a variable length and can exceed 40 characters. But the label allows only up to 40 characters for that field. Therefore, the label will show a "Reduced Name", where the data related to 'Axes', 'Spindles', 'Magazines', 'Channels', 'Software options' and 'Advanced software' are replaced by a 4-digit code as in the following example:

QC - C58 - 10K - M - B 15 S3 10 - **4 - 1 1 1 GHI** - 09    -->    QC - C58 - 10K - M - B 15 S3 10 - **S010** - 09

The label will display the replaced characters on a lower line.

## CONFIGURATION

### CENTRAL UNIT



#### 8058 CNC with 10.4" LCD and Operator Panel

| Code     | Model           | Description  |     |
|----------|-----------------|--|-----|
| 83580105 | 8058elite-M-ICU | <i>elite</i> integrate Central Unit with EtherCAT for Milling machines | (1) |
| 83580106 | 8058elite T-ICU | <i>elite</i> integrate Central Unit with EtherCAT for Lathes           |     |

(1) Choose one of them

#### Central Unit components

| Code     | Model       | Description           |     |
|----------|-------------|-----------------------|-----|
| 83600206 | MP-BASIC-e  | elite Basic Processor | (1) |
| 83700250 | MOD-4GB-RAM | 4 GB RAM module       | (1) |
| 83581125 | FM-15GB     | 15 GB Flash memory    | (1) |
| 83600057 | SERCOS-3    | Sercos 3 module       | (1) |

(1) Required always

#### Operating System

| Code     | Model           | Description         |     |
|----------|-----------------|---------------------|-----|
| 83740098 | SOFT WINDOWS 10 | WINDOWS 10 software | (1) |

(1) Required always

### MONITOR & OPERATOR PANEL



#### 10.4" LCD and Operator Panel

| Code     | Model              | Description                         |
|----------|--------------------|-------------------------------------|
| 83600007 | MONITOR-LCD-10K-JG | 10" LCD Monitor + Generic JOG Panel |

## CONFIGURATION

### CENTRAL UNIT



| Code     | Model           | Description  |     |
|----------|-----------------|--|-----|
| 83580107 | 8058elite-M-MCU | <i>elite</i> modular Central Unit with EtherCAT for Milling machines | (1) |
| 83580108 | 8058elite-T-MCU | <i>elite</i> modular Central Unit with EtherCAT for Lathes           |     |

(1) Choose one of them

| Code     | Model       | Description                  |     |
|----------|-------------|------------------------------|-----|
| 83600206 | MP-BASIC-e  | <i>elite</i> Basic Processor | (1) |
| 83700250 | MOD-4GB-RAM | 4 GB RAM module              | (1) |
| 83581125 | FM-15GB     | 15 GB Flash memory           | (1) |
| 83600057 | SERCOS-3    | Sercos 3 module              | (1) |

(1) Required always

| Code     | Model           | Description         |     |
|----------|-----------------|---------------------|-----|
| 83740098 | SOFT WINDOWS 10 | WINDOWS 10 software | (1) |

(1) Required always

### Monitor 18W and 21W (for Modular Central Unit)



(1)

#### Monitor 18W and 21W (choose one of them)

| Code     | Model                         | Description                               |     |
|----------|-------------------------------|---|-----|
| 83700067 | MONITOR-18W MULTITOUCH        | 18" Widescreen LCD monitor                | (1) |
| 83700057 | MONITOR-21W MULTITOUCH        | 21" Widescreen LCD monitor                |     |
| 83700058 | MONITOR-21W MULTITOUCH NEUTRO | 21" Widescreen LCD monitor (without logo) |     |



(2)

#### Keyboard (choose one of them)

| Code     | Model                        | Description  |     |
|----------|------------------------------|--|-----|
| 83760019 | HORIZONTAL KEYB 2.0+TOUCHPAD | 2.0 Horizontal Qwerty keyboard with touchpad mouse                     | (2) |
| 83760028 | HORIZONTAL KEYB 2.0-A        | 2.0-A Horizontal Qwerty keyboard with touchpad mouse with thin profile |     |
| 83760020 | HORIZONTAL KEYB              | Horizontal Qwerty keyboard   |     |



(3)

#### Operator Panel (choose one of them)

| Code     | Model                | Description                                       |     |
|----------|----------------------|---|-----|
| 83760024 | OP PANEL             | JOG Panel   | (3) |
| 83760025 | OP PANEL+SPDL RATE   | JOG Panel with Spindle override                   |     |
| 83760029 | OP PANEL-A           | JOG Panel with thin profile                       |     |
| 83760030 | OP PANEL+SPDL RATE-A | JOG Panel with Spindle override with thin profile |     |

## MODELS & SOFTWARE OPTIONS

|          |                      |                               | 8058elite M/T |        |
|----------|----------------------|-------------------------------|---------------|--------|
|          |                      |                               | M             | T      |
|          | AXES                 | (min.-max.)                   | 3 .. 5        | 3 .. 5 |
|          | INTERPOLATED AXES    | (max.)                        | 4             | 4      |
|          | SPINDLES             | (min.-max.)                   | 1 .. 2        | 1 .. 2 |
|          | MAGAZINES            | (min.-max.)                   | 1             | 1      |
|          | CHANNELS             | (min.-max.)                   | 1             | 1      |
|          | Max. AXES + SPINDLES |                               | 6             | 6      |
| 83740030 |                      | SOFT ADDIT AXES               | ( )           | ( )    |
| 83740031 |                      | SOFT ADDIT SPINDLES           | ( )           | ( )    |
|          |                      | SOFT TOOL RADIUS COMP         | ( A )         | ( A )  |
|          |                      | SOFT EDIT/SIMUL               | ( A )         | ( A )  |
|          |                      | SOFT PROFILE EDITOR           | ( A )         | ( A )  |
|          |                      | SOFT DIGITAL SERCOS           | ( A )         | ( A )  |
| 83600101 | c                    | SOFT HSSA I MACHINING SYSTEM  | ( )           | ( )    |
| 83740007 | G                    | SOFT PROBE                    | ( )           | ( )    |
| 83740010 | H                    | SOFT C AXIS                   | ( - )         | ( )    |
| 83740034 | I                    | SOFT TANDEM AXES              | ( )           | ( )    |
| 83740042 | P                    | SOFT THIRD PARTY DRIVES       | ( )           | ( )    |
| 83740065 | r                    | SOFT THIRD PARTY IOS          | ( )           | ( )    |
| 83740077 | a                    | SOFT IIP CONVERSATIONAL       | ( )           | ( )    |
| 83740072 | U                    | SOFT CONVERS USER CYCLES      | ( )           | ( )    |
| 83740076 | S                    | SOFT HD GRAPHICS              | ( )           | ( )    |
| 83740075 | Y                    | SOFT PPTRANS                  | ( )           | ( )    |
| 83740056 | m                    | SOFT FMC                      | ( )           | ( )    |
| 83740057 | f                    | SOFT FFC                      | ( )           | ( )    |
| 83740045 | i                    | SOFT i4.0 CONNECTIVITY PACK   | ( )           | ( )    |
| 83740068 | z                    | SOFT 60/65/70 OPERATING TERMS | ( )           | ( )    |

  

|       |                  |
|-------|------------------|
| ( - ) | Not available    |
| ( )   | Optional Feature |
| ( A ) | Standard feature |

## SOFTWARE DESCRIPTIONS

### SOFT TOOL RADIUS COMP (Standard on all models)

Tool compensation allows programming the contour to be machined based on part dimensions and without taking into account the dimensions of the tool that will be used later on. This avoids having to calculate and define the tool path depending on the radius of the tool.

### SOFT EDIT/SIMUL (Standard on all models)

It allows editing, modifying and simulating a part-program.

### SOFT PROFILE EDITOR (Standard on all models)

It allows editing part profiles graphically and importing DXF files.

### SOFT DIGITAL SERCOS (Standard on all models)

Sercos drive system bus.

### SOFT HSSA MACHINING SYSTEM (HSSA I)

The acronym "HSSA" means High Speed Surface Accuracy. It is the new improved version of HSC (High Speed Cutting).

HSSA algorithm calculations make it possible to optimize high speed machining. This achieves higher cutting speeds, smoother contours, better surface finish and higher accuracy.

This system is now offered in two levels, according to the CNC models, providing a choice between the **HSSA I** system in the CNC 8058 and the **HSSA II** system in the CNC 8060 and 8065, which has more resources for faster speed.

### SOFT PROBE

The CNC may have two probes; usually a tabletop probe to calibrate tools and a measuring probe to measure the part.

It also offers functions G100, G103 and G104 for programming probing moves.

This feature activates the probing canned cycles that help measuring part surfaces and calibrating tools updating their dimensions.

### SOFT C AXIS

It activates the kinematics for working with C axis and their associated machining cycles.

### SOFT TANDEM AXES

A tandem axis consists in two motors mechanically coupled (slaved) and making up a single transmission system (axis or spindle). This system is normally used to move the axes on large machines.

The CNC configuration contemplates both axes of the tandem. Only an axis is programmed (the master tandem). The other one (the slave tandem) cannot be programmed, but it is controlled by the CNC.

When activating this feature, it must be borne in mind that for each Tandem axis of the machine, another axis must be added to the whole configuration of the machine. For example, on a large 3-axis lathe (XZ and tailstock), if the tailstock is a Tandem axis, the final purchase order for the machine must indicate 4 axes.

### SOFT THIRD PARTY DRIVES

Enables the use of non-Fagor drive modules.

### SOFT THIRD PARTY IOs

Enables the use of non-Fagor IO modules.

### SOFT IIP (Interactive Icon-based Pages) CONVERSATIONAL

This programming system is a conversational language, especially designed for people with no prior programming knowledge or not familiarized with Fagor CNC's. Therefore, an operator of a conventional machine can start working on Fagor CNC in a couple of hours.

Working in conversational mode is easier than in ISO mode. It ensures proper data entry and minimizes the number of operations to be defined. There is no need to work with part-programs.

### SOFT CONVERS USER CYCLES

Allows to integrate user cycles in conversational mode.

### SOFT HD GRAPHICS

It offers high definition 3D graphics during the execution and simulation of the machining operation.

While machining, a high definition 3D graphic simulation shows the tool removing material from the part. This is a real time graphic representation that shows the status of the part at all times. The image may be turned, rotated, enlarged or reduced, and even 2 or 4 views of the part may be displayed.

### SOFT PPTRANS

Part-program translator.

### SOFT FMC (Fagor Machining Calculator)

The FMC application consists of a database of materials to be machined and machining operations (milling and turning) with an interface to choose suitable cutting conditions for these operations.

### SOFT FFC (Fagor Feed Control)

During the execution of a canned cycle of the editor, the FFC function makes it possible to replace the feedrate and speed programmed in the cycle with the active values of the execution, which are acted upon by the feed override and speed override.

## **SOFTWARE DESCRIPTIONS**

### **SOFT i4.0 CONNECTIVITY PACK**

Software feature defined to enable access to API8070, the library for the development of applications to communicate with the Fagor CNC.

### **SOFT 60/65/70 OPERATING TERMS**

The "Operating Terms" option allows activating a temporary use license in the CNC, valid until a date determined by the OEM.

## MANUALS

The manuals of the CNC may be downloaded from our FAGOR corporate website.  
**<http://www.fagorautomation.com>**

Fagor Automation shall not be held responsible for any printing or transcribing errors in the Ordering Handbook and reserves the right to make any changes to the characteristics of its products without prior notice. You must always compare the data with that appearing in the manual.