Automation has a name.

FANUC

# INTELLIGENT SIMULATOR SOFTWARE

## CNC GUIDE | CNC GUIDE 2



### Efficient gains in productivity using PC simulation

Simple and efficient. The 2 keywords FANUC had in mind when designing a product for familiarisation with CNC controls. PC systems, an integral part of any workplace are the obvious choice for our simulation software. The CNC Guide simulates CNC operator environments for programming and operation and includes the FANUC MANUAL GUIDE *i*. FANUC development tools as used by machine builders and OEMs can be also handled in the simulation environment. CNC GUIDE runs on standard PC equipment with no need for additional hardware.

### PC simulation: Feature, advantage, benefit

- The simulation emulates the CNC exactly, meaning that programs can be written, tested and optimised on the PC bringing productivity gains by working off the machine.
- CNC GUIDE fits to a classroom situation making both educational and industrial training easily implementable and resulting in better trained staff.

# CNC GUIDE FUNCTIONALITIES FOR OPERATORS

The CNC GUIDE can simulate standard FANUC CNC configurations as well as CNC configurations used on real machine tools.

The shopfloor programming software MANUAL GUIDE *i* can be selected, allowing users to generate even complex parts away from the machine and where appropriate, under the guidance of a tutor. If CNC GUIDE is properly configured then the programs created can be transferred to a suitable machine tool for practical testing and demonstration.

The four different display sizes used with series 30*i*/31*i*/32*i* are selectable in CNC GUIDE (8.4", 10.4", 15" or 19"). Three different display sizes used with series 0*i*-F are selectable in CNC GUIDE (8.4",10.4" or 15").
All the standard operator screens for diagnostics and data input (tool tables, offsets, parameters, macro variables, etc) are included in the software.

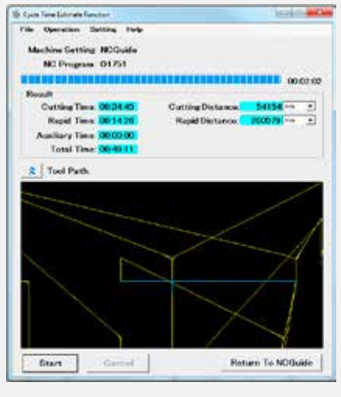



### FANUC *i*HMI

FANUC *i*HMI has been designed to be extremely easy to use. Intuitive menu icons, high-visibility design and animated features take the head-scratching out of complex machining operations, making accessing even the most sophisticated programs and functionalities straightforward. Despite its more intuitive layout, users will nevertheless find that it provides a familiar FANUC user experience.

### Cycle time estimate function

As add-on to CNC GUIDE, the Cycle Time Estimate Function calculates cycle time of a NC program on a PC in a short time. The function can estimate cycle time of NC programs for milling machines with high accuracy without execution on an actual machine.




### CNC GUIDE 2

To help minimise downtime and simplify operations you can take advantage of the fast simulation capabilities (using a servo mechanical model) within CNC GUIDE 2.

The servo mechanical model includes characteristics for each axis, facilitating accurate simulation of your machine.

- reduces trial cutting through surface estimation (just like actual on-machine cutting)
- provides execution speeds more than 10 times that of CNC (depending on machining program and/or CNC options)
- highly effective for the verification of programs requiring long machining times



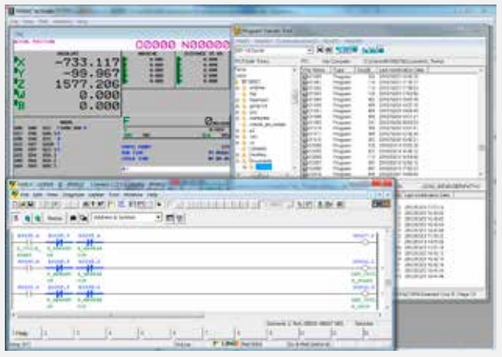
### MOP Simulator for CNC GUIDE

By using the Machine Operator's Panel (MOP) Simulator for CNC GUIDE you can impart training with the same feeling of operation as that experienced when using an actual machine, but without any of the associated drawbacks, such as occupying capacity, the potential for collisions and the high use of energy.

- simple connection between PC and desktop operator's panel for CNC GUIDE using one USB cable
- customisable keyboard for operator's panel to align with your machines and provide familiarity for trainees integration

# CNC GUIDE FUNCTIONALITIES FOR OEMS

CNC GUIDE provides all the features of operation and control as well as the ability to run and simulate the Programmable Machine Controller (PMC), to develop and debug C Language Executor, Macro Executor and FANUC PICTURE programs and integrate the features of FOCAS2 applications.



A virtual control panel reflects the status of input and output signals, which when used with the PMC programming software, FANUC LADDER III, means an engineer may write and test machine logic sequences at their desk.

It is possible to interface CNC GUIDE to other FANUC PC software such as: Program Transfer Tool, CNC Setting Tool and FANUC Built-in 3D Interference Check Setting Tool.

CNC GUIDE 2 supports a Parameter Adjustment Tool, that automatically finds optimal parameter settings for acceleration and deceleration. It reduces parameter adjustment time and allows tuning without occupying a real machine.

# TWO TYPES OF CNC GUIDE

### PC with network license

CNC GUIDE is available with single or multi-seat licences (10, 20 users and unlimited useres with a site license). Workstations (PCs) can run CNC GUIDE whilst connected to a license server. This is the ideal solution for a dedicated training room or development team.

### CNC GUIDE Academic Package

The CNC GUIDE Academic Package is a special PC simulator software for schools and universities. It's the ideal tool for individual or group training.

Note: It is not possible to run FOCAS2 applications with CNC GUIDE Academic Package

| Product name | | Note |
|---|---|---|
| CNC GUIDE | 1 user | |
| | 10 users | Possible for up to 10 people to use at the same time |
| | 20 users | Possible for up to 20 people to use at the same time |
| | Site license | It can be used on business premises |
| | Update | |
| CNC GUIDE Education Package | Classroom/for 16 people | Possible for up to 16 people to use at the same time |
| | Classroom/for 32 people | Possible for up to 32 people to use at the same time |
| | Self-study at home/1 year | Usage period is 1 year (1 user) |
| | Self-study at home/3 year | Usage period is 3 year (1 user |
| | Update | |

# SPECIFICATION LIST CNC GUIDE

| Item | | Specification | |
|---|---|---|---|
| Applicable devices | | 30*i* series | Series 30*i* - MODEL B *2), Series 30*i* - MODEL B Plus<br>Series 31*i* - MODEL B, Series 31*i* - MODEL B Plus<br>Series 31*i* - MODEL B5, Series 31*i* - MODEL B5 Plus<br>Series 32*i* - MODEL B, Series 32*i* - MODEL B Plus<br>Series 31*i* - MODEL A |
| | | 0*i* series | Series 0*i* - TD / MD<br>Series 0*i* - TF / MF, Series 0*i* - TF / MF Plus<br>Series 0*i* - LF Plus |
| | | Laser / punch press / wire cut | Series 31*i* - LB / PB / WB<br>Series 30*i* - MODEL LB, Series 30*i* - MODE L LB Plus<br>Series 31*i* - MODEL LB Plus |
| | | CNC for transfer line | Series 35*i* - MODEL B |
| | | CNC for motion control | Power Motion *i* - MODEL A |
| Display device type | | 8.4" / 10.4" / 15" / 19" | |
| MDI key | | QWERTY / ONG | |
| Display mode | Picture mode | Displays actual CNC appearance | |
| | Window mode | CNC screen, MDI Key, Operators panel, and more at each separate window | |
| Display mode | CNC operation screen section *1) | 24 languages ( English, Japanese, German, French, Spanish, Italian, Chinese (Traditional), Chinese (Simplified), Korean, Portuguese, Dutch, Danish, Swedish, Hungarian, Czech, Polish, Russian, Turkish, Romanian, Bulgarian, Slovak, Finnish, Vietnamese, Indonesian | |
| | Application operation section | 2 languages (English, Japanese) | |

| Item | CNC GUIDE | CNC GUIDE Education Package |
|---|---|---|
| System | Lathe / Machining | |
| Maximum number of paths | 15 paths | 1 path |
| Maximum number of control axes | 72 axes | 4 axes |
| Maximum spindle number | 16 spindles | 1 spindle |
| Maximum program capacity | 8Mbytes | 32Kbytes |
| Maximum program number | 4000 | 63 |

*1) will vary depending on the model. Series 30*i* - when you select model B. *2) including *i*HMI

# PC REQUIREMENTS

| | |
|---|---|
| **OS** | Microsoft Windows 8.1 Professional (32bit, 64bit), Windows 10 (32 bit, 64 bit), .NET Framework 3.5 |
| **CPU** | Pentium® 4, 2.8GHz or more, Intel Core Duo 1.83GHz or higher (Core 2 Duo, Core i3,<br>Core i5, Core i7 in case of Cycle Time Estimate Function) |
| **Main memory** | 2 GB RAM or more |
| **Hard disk** | 8 GB or more |
| **Screen resolution** | 1280 x 1024 (or higher)<br>1920 x 1080 recommended |
| **DVD drive** | √ |
| **USB port** | √ |

**CNC GUIDE - Parallel simulation of CNC and PMC**



Find more about
FANUC software tools
for development
**fanuc.eu/software**

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