



# **Fanuc Educational Products**

## Authorised Distributors for FANUC Products is Educational Sector

We are proud to announce that we; M/S Hytech Educational Equipment have signed an agreement with Fanuc India to become an authorized distributor for their following products:

- 1. Academic version of Fanuc NC Guide Software
- 2. Academic version of Fanuc Roboguide Software
- 3. Fanuc CNC Education Simulator
- 4. Home-Work version of Fanuc NC Guide Software

Fanuc India Limited have agreed to sell to Hytech the contract products on outright sales terms. Hytech can sell these products to Educational Institutes or Training Institutes in India as well as abroad.

Purpose of this agreement is to ensure availability of FANUC make academic versions of NC Guide and Robo Guide software to educational and training institute in India at reasonable price, a price that has been decided by Fanuc India Limited as a maximum selling price, so that the institutes can afford these software.

NC Guide Academic version will be sold in a package of 16 licenses whereas NC Guide Homework version and Roboguide academic version will be sold in a package of 1 license each.

We are proud to be the first organization in Educational industry who are now officially collaborated with one of the biggest manufacturers of CNC controllers such as Fanuc.

In a market such as India, CNC controller market is predominantly dominated by Fanuc, we truly believe that it is a necessity to provide students with a hands on experience on Fanuc controller. In an era, where we are thriving to become a manufacturing hub, it is a necessity to imbibe thorough knowledge of Industrial CNC controllers to future technocrats and technicians.

Fanuc NC Guide is designed and developed and also marketed with similar mindset.

## 1.0 Fanuc NC Guide Software

FANUC NC Guide is the software that enables the training of Fanuc CNC operation without using CNC hardware on the personal computer.

This software is an exact replica of Fanuc controller. Fanuc NC Guide academic package is an ideal solution for Educational Environment.

In India, about 60% of the industrial CNC Controller market is captured by Fanuc controllers. AT the same time, it is very difficult for educational or training institutes to purchase a CNC machine with Fanuc controller due to budget constraints. In such scenario, Fanuc NC Guide software will give hands on experience to students on FANUC CNC Controllers. It will make them familiar to Fanuc controller commands.

Hence, when students join industries after their courses, they will be familiar to Industrial CNC Controllers.

Fanuc NC Guide software provides realistic simulation of CNC which can be used for the training of CNC operators as well as maintenance engineers. Part program can be created and tested on this software. It will also avoid any damage to the operator as well as machine. 3D simulation of the finished parts will give an exact idea to the operators.



### Features of Fanuc NC Guide Software

- What you see on Fanuc Controller can be seen in NC Guide software on your personal computer
- Enables basic CNC screen displays for 31i Model-A and 0i-D series
- Enables how to operate the Fanuc CNC
- Creation and editing of Part Programs Tool offset and work offset entering and edit.
- Running and testing of program for syntax errors
- Entering and editing of Macro variables Editing of parameters
- Reviewing and clearing of messages and alarms
- Creation of part programs for lathe, machining centre and compound machines
- Tool Path graphic display
- Display of finished component
- Cycle time estimation with simulation of programs
- Automatic conversion of conversational programs into conventional Gcode programs
- Hands on experience on Fanuc CNC systems
- Simulation of all Fanuc CNC controllers including Horizontal as well as Vertical machining Centers
- 3D Simulation of Finished / Programmed Component
- Automatic ISO Code generation
- Cycle time estimation
- 16 User License specially designed for Educational Purpose
- Programs from NC Guide software can be directly imported and executed on any Fanuc controller based machine



Machine Composition that can be set and an Executable NC Program:

Max Controlled Axes	4 Axes
Max Control Paths	1 Path
Max Part Program Storage Size	32 K Byte
Max Number of Registerable Programs	64.00

## 2.0 Fanuc RoboGuide Software:



Roboguide is a robot system animation tool specifically developed for the production and maintenance of Fanuc robot systems. It can be used both in offices and on the factory floor. In Educational sector, this software gives students hands on experience of robotic applications which are being used in the industry.

Students can imports various industrial Fanuc robots from library and create an environment exactly similar to industrial applications. They can program the robo and create a movie in avi format which will show the exact process that will be carried out on the Fanuc Robo (Hardware).

The programming is carried out in the same way as that in the Fanuc robo. In a nutshell, Fanuc Roboguide software gives students hands on experience of working on a Fanuc Robo without investing substantial amount required for a Fanuc Robo (Hardware).

Various videos which are created with the help of Roboguide software can be found out on our website: http://www.hytecheducation.in/index.php?dp=videos The program created with the help of Roboguide software can be directly executed on the Fanuc Robo.

#### Features of Fanuc RoboGuide Software

- Cell Calibration And User Frame
- Collision Detection
- Easy Programming Of Standard
- ROBOGUIDE allows powerful programming with an intuitive and easy-to-use interface
- Cell Layout and Cycle Time can be tested Offline
- Virtual controller technology for true cycle times and reach
- All robot models can be simulated. Arc Tool, Spot Tool and Handling Tool application software can be selected and configured.
- Cycle time profiler, collision detection & work envelop display
- Motion trace displayed as node map; AVI video file output
- Import of work pieces, tools, fixtures and obstacles in IGES format
- Graphical And Video Display Of Robot Programs
- Import Of CAD Data In IGES Format
- Programs from Robo Guide software can be directly imported and executed on any Fanuc controller based machine

#### 3.0 FANUC CNC Education Simulator

#### Affordable and portable training solution on 'real' FANUC hardware

The FANUC CNC simulator is a perfect addition to the classroom and an essential component to gain maximum exposure to FANUC CNC controls when actual machine time is limited. Based on the FANUC 0iF platform, the simulator will allow you at power on to switch between milling and turning configurations to teach programming, navigation and operation on the world's most popular CNC control. Simple

configurations make it easy to learn how to operate and edit data on a modern FANUC control. FANUC's MGi conversational interface allows user to graphically generate programs that can be simulated in 3D, prior to being converted back to conventional NC programs to be used on machine tools using FANUC controls. Uploading and downloading (read and punch) functions are facilitated by means of the standard Flash ATA interface and USB interface, and DNC functions are supported by Ethernet and Flash ATA card.



#### Features of Fanuc Simulator:

- Switchable mill and lathe system in one simulator
- 3 axis milling / 2 axis turning system + 1 spindle
- Manual Guide i installed for conversational program creation and 3D simulation
- Inch / metric switchable
- 512kb part program storage, with 400 registered programs
- 32 Tool offset pairs
- Work piece coordinates G52 G59 + 48 additional on mill
- ⊙ 10.4" Color LCD
- Full QWERTY keyboard
- USB, Flash ATA and Ethernet connectivity
- Optional I/O link I and RS232 serial interface
- Power: AC 100 240, 0.8A 0.4A, 50 60Hz
- Power consumption 80w
- Weight: Approx. 26.4lb (12KG)
- Dimensions: Approx. 16.5" x 7.5" x 23.3" (421mm x 190mm x 592mm)



