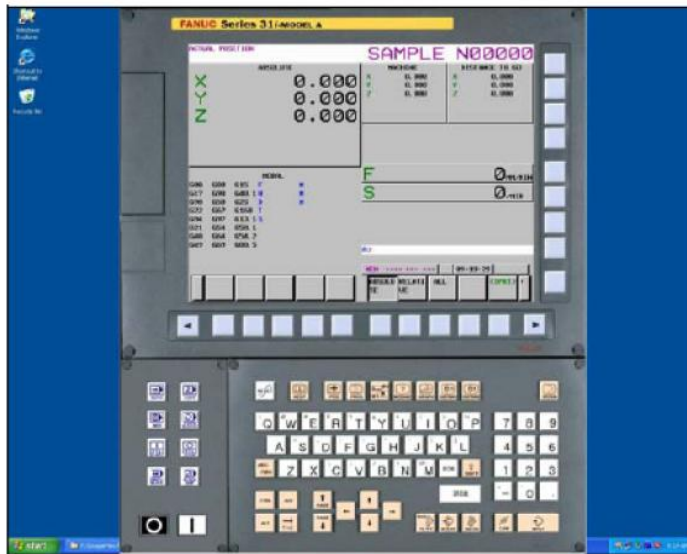


FANUC NC Guide Academic software

FANUC NC Guide is the software that enables the training of CNC operation without using CNC hardware on the personal computer. FANUC NC Guide academic package is appropriate for the educational environment.

CNC simulation function and MANUAL GUIDE I simulation function can be used. There are two packages for the purpose, Classroom package and Homework package.



This software provides realistic simulation of CNC which can be used for the training of operators and maintenance engineers. Part program can be created tested and check for the errors and corrected with out any damage to the man and machine. Manual guide I enables conversational programming for the operators and 3D simulation of the finished component.

The software can be used as developmental tool for the designers to create customized screens and PMC offline simulation and testing. No need of dedicated hardware and now you can have the FS0i-D/FS30i system on the PC itself.

NC Guide:

NC simulation

Manual Guide I simulation

For End users training

(1) Classroom package

NCGuide is executed on multi personal computers connected with network in the classroom. This package is suitable for the practice concerning the lecture of NC program and NC operations in the school or the educational institution.

- 1 network license key is appended.
- The license key is connected with the license server for the classroom.
- NCGuide can be used with the personal computer connected with the license server on the network.
- NCGuide can be used at the same time with maximum 16 personal computers.
- There is no expiration date of the license key.

	(1) Classroom Package
License number	16
License Key	1 Network license Key
Expiration date	Nothing
Composition	

Corresponding model

FS31i-MODEL A, FS0i-MODEL D

Specification

A machine composition that can be set and an executable NC program are as follows.

Table 1.1 (b) A 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	32Kbyte
Max. number of registerable programs	64

Option and Function

The following functions cannot be used.

- C language executor function
- Macro executor function
- FANUC PICTURE function
- PMC simulation function
- Machine signal simulation function

NC Guide CNC Simulation for the programming training

Enables basic CNC screen displays for 31i Model-A and 0i-D series.

Enables how to operate the 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



The options which can be used are as follows.

FS31i-MODEL A

The option that can be used by NCGuide of the regular version can be made effective excluding part.
 The basic options in the following table are set automatically effective by selecting the machining center system or the lathe system.

Option Name	Machining Center System	Lathe System
CONTROLLABLE AXES EXPANSION	●	●
SIMUL. CONTROL. AXES EXPAN.	●	●
AXIS CONTROL BY PMC	●	●
AXIS CONTROL DETACH	●	●
POSITION SWITCH	●	●
INCH/METRIC SELECTION	●	●
SEQUENCE NO. COLLAT. & STOP	●	●
INCREMENTAL SYSTEM C (1/10)	●	●
STORED STROKE LIMIT 2ND./3RD.	●	●
PRE-TRAVEL STROKE LIMIT CHECK	●	●
CHUCK/TAIL STOCK BARRIER		●
PROGRAM RESTART	●	●
EXPONENTIAL FUNCTION INTERPOLATION	●	●
POLAR COORDINATE INTERPOLA	●	●
CYLINDRICAL INTERPOLATION	●	●
HELICAL INTERPOLATION	●	●
INVOLUTE INTERPOLATION	●	●
CONICAL / SPIRAL INTERPOLATION	●	●
F1-DIGIT FEED	●	
INVERSE TIME FEED	●	
EXTERNAL DECELERATION	●	●
NORMAL DIRECTION CONTROL	●	
POLAR COODINATE COMMAND	●	
SINGLE DIRECTION POSITIONING	●	
3RD./4TH. REFERENCE RETURN	●	●
WORK COORDINATE SYSTEM	●	●
WORK COORDINATE SYSTEM PRESET	●	●
ADDITION OF WORKPIECE COORDINATE SYSTEM 48-PAIRS	●	●
DIRECT DRAWING DIMENSION		●
G CODE SYSTEM B/C		●
CHAMFERING/CORNER R		●
OPTIONAL ANGLE CHAMF./COR. R	●	
CUSTOM MACRO	●	●
ADD. COMMON MACRO VALUE	●	●
PATTERN DATA INPUT	●	●

Option Name	Machining Center System	Lathe System
MULTIPLE REPETITIVE CYCLE		●
MULTIPLE REPETITIVE CYCLES II		●
CANNED CYCLE FOR DRILLING	●	●
SCALING	●	●
AUTOMATIC CORNER OVERRIDE	●	
COORDINATE SYSTEM ROTATION	●	●
PROGRAMMABLE MIRROR IMAGE	●	●
FIGURE COPY	●	
2ND. AUXILIARY FUNCTION	●	●
TOOL OFFSET MEMORY 400 PAIRS	●	
TOOL OFFSET MEMORY C	●	
Y AXIS OFFSET		●
TOOL OFFSET	●	
TOOL RADIUS - TOOL NOSE RADIUS COMPENSATION	●	●
TOOL GEOMETRY/WEAR OFFSET		●
TOOL LIFE MANAGEMENT	●	●
BACKGROUND EDITING	●	●
MACHINE TIME STAMP	●	●
RUN HOUR AND PARTS COUNT	●	●
GRAPHIC DISPLAY	●	●
JAPANESE DISPLAY	●	●
ITALIAN DISPLAY	●	●
DUTCH DISPLAY	●	●
SWEDISH DISPLAY	●	●
SPANISH DISPLAY	●	●
CZECH DISPLAY	●	●
DANISH DISPLAY	●	●
GERMAN DISPLAY	●	●
MULTI-LANGUAGE DISPLAY TURKISH	●	●
HUNGARIAN DISPLAY	●	●
FRENCH DISPLAY	●	●
POLISH DISPLAY	●	●
PORTUGUESE DISPLAY	●	●
RUSSIAN DISPLAY	●	●
KOREAN DISPLAY	●	●
SIMPLIFIED CHINESE DISPLAY	●	●
CHINESE DISPLAY	●	●
EXTERNAL MESSAGE	●	●
EXTERNAL DATA INPUT	●	●
SERIAL SPINDLE INTERFACE	●	●

The options in the following table are not automatically set effective in the selection of the machining center system or the lathe system. However, these can be set effective with the option setting tool.

Option Name
BASIC OPERATION PACKAGE 2 FUNCTION
EXTENDED DRIVERS AND LIBRARIES FUNCTION
FLEXIBLE PATH AXIS ASSIGNMENT
INCREMENT SYSTEM D (1/100)
INCREMENTAL SYSTEM E (1/1000)
ROTARY AXIS CONTROL
CUTTING POINT INTERPOLATION FOR CYLINDRICAL INTERPOLATION
HYPOTHETICAL AXIS INTERPOLATION
CHOPPING
INTERFERENCE CHECK FOR ROTARY AREA
BUILT-IN 3D INTERFERENCE CHECK
DIAMETER AND RADIUS SETTING SWITCHING FUNCTION
ADDITION OF WORKPIECE COORDINATE SYSTEM 300-PAIRS
Real time custom macro
THREE-DIMENSIONAL COORDINATE CONVERSION
TILTED WORKING PLANE COMMAND WITH GUIDANCE
TAPE FORMAT FOR FS15
TOOL OFFSET MEMORY 64 PAIRS
TOOL OFFSET MEMORY 99 PAIRS
TOOL OFFSET MEMORY 200 PAIRS
TOOL OFFSET MEMORY 499 PAIRS
TOOL OFFSET MEMORY 999 PAIRS
TOOL OFFSET MEMORY 2000 PAIRS
TOOL OFFSET MEMORY B
2ND. GEOMETRY TOOL OFFSET
TOOL GEOMETRY SIZE DATA 100-PAIRS
TOOL GEOMETRY SIZE DATA 300-PAIRS
ADDITION OF TOOL PAIRS FOR TOOL LIFE MANAGEMENT
PROTECTION OF DATA AT 8 LEVELS
SELECTION OF FIVE OPTIONAL LANGUAGE
ROTARY TABLE DYNAMIC FIXTURE OFFSET

License for the NC Guide:

NCGuide is executed on multi personal computers connected with network in the classroom. This package is suitable for the practice concerning the lecture of NC program and NC operations in the school or the educational institution.

- 1 network license key is appended.
- The license key is connected with the license server for the classroom.
- NCGuide can be used with the personal computer connected with the license server on the network.
- NCGuide can be used at the same time with maximum 16 personal computers.
- There is no expiration date of the license key.

FS0i -MODEL D

In initialization, the option of the following packages 1 is effective according to the selection of the machining center system and the lathe system.

Package 1 or package 2 is selected with the option setting tool.

Option Name	Machining Center System		Lathe System	
	Package 1	Package 2	Package 1	Package 2
F1-DIGIT FEED	●	●		
G CODE SYSTEM B/C			●	●
Y AXIS OFFSET			●	●
INCH/METRIC SELECTION	●	●	●	●
INVERSE TIME FEED	●	●		
CUSTOM MACRO	●	●	●	●
ADD. COMMON MACRO VALUE	●	●	●	●
GRAPHIC DISPLAY	●	●	●	●
SEQUENCE NO. COLLAT. & STOP	●	●	●	●
SCALING	●	●		
STORED STROKE LIMIT 2ND./3RD.	●	●	●	●
CHUCK/TAIL STOCK BARRIER			●	●
PATTERN DATA INPUT	●	●	●	●
BACKGROUND EDITING	●	●	●	●
PROGRAMMABLE MIRROR IMAGE	●	●		
PROGRAM RESTART	●	●	●	●
HELICAL INTERPOLATION	●	●		
POSITION SWITCH	●	●	●	●
WORK COORDINATE SYSTEM	●	●	●	●
WORK COORDINATE SYSTEM PRESET	●	●	●	●
ADDITION OF WORKPIECE COORDINATE SYSTEM 48-PAIRS	●	●		
PRE-TRAVEL STROKE LIMIT CHECK	●	●	●	●
SINGLE DIRECTION POSITIONING	●	●		
CYLINDRICAL INTERPOLATION	●	●	●	●
RUN HOUR AND PARTS COUNT	●	●	●	●
EXTERNAL DATA INPUT	●	●	●	●
EXTERNAL MESSAGE	●	●	●	●
EXTERNAL DECELERATION	●	●	●	●
ITALIAN DISPLAY	●	●	●	●
DUTCH DISPLAY	●	●	●	●
SWEDISH DISPLAY	●	●	●	●
SPANISH DISPLAY	●	●	●	●
CZECH DISPLAY	●	●	●	●
DANISH DISPLAY	●	●	●	●
GERMAN DISPLAY	●	●	●	●

Option Name	Machining Center System		Lathe System	
	Package 1	Package 2	Package 1	Package 2
MULTI-LANGUAGE DISPLAY TURKISH	●	●	●	●
HUNGARIAN DISPLAY	●	●	●	●
FRENCH DISPLAY	●	●	●	●
POLISH DISPLAY	●	●	●	●
PORTUGUESE DISPLAY	●	●	●	●
RUSSIAN DISPLAY	●	●	●	●
KOREAN DISPLAY	●	●	●	●
SIMPLIFIED CHINESE DISPLAY	●	●	●	●
CHINESE DISPLAY	●	●	●	●
JAPANESE DISPLAY	●	●	●	●
POLAR COORDINATE INTERPOLA			●	●
POLAR COODINATE COMMAND	●	●		
CANNED CYCLE FOR DRILLING	●	●	●	●
TOOL OFFSET	●	●		
TOOL GEOMETRY/WEAR OFFSET			●	●
TOOL RADIUS - TOOL NOSE RADIUS COMPENSATION	●	●	●	●
TOOL LIFE MANAGEMENT	●	●	●	●
TOOL OFFSET MEMORY C	●	●		
TOOL OFFSET MEMORY 400 PAIRS	●	●		
COORDINATE SYSTEM ROTATION	●	●		
INCREMENTAL SYSTEM C (1/10)	●	●	●	●
AUTOMATIC CORNER OVERRIDE	●	●		
SERIAL SPINDLE INTERFACE	●	●	●	●
DIRECT DRAWING DIMENSION			●	●
CONTROLLABLE AXES EXPANSION	●	●	●	●
AXIS CONTROL DETACH	●	●	●	●
2ND. AUXILIARY FUNCTION	●	●	●	●
3RD./4TH. REFERENCE RETURN	●	●	●	●
SIMUL. CONTROL. AXES EXPAN.	●	●	●	●
MULTIPLE REPETITIVE CYCLE			●	●
MULTIPLE REPETITVE CYCLES II			●	●
CHAMFERING/CORNER R			●	●
OPTIONAL ANGLE CHAMF./COR. R	●	●		
NORMAL DIRECTION CONTROL	●	●		

The options in the following table can be set effective with the option setting tool.

Option Name
PROTECTION OF DATA AT 8 LEVELS
DYNAMIC GRAPHIC DISPLAY FUNCTION
TOUCH PANEL C

The options in the following table cannot be used in the educational package.
These cannot be set effective with the option setting tool.

Option Name
FANUC PICTURE FUNCTION
CUSTOM SOFTWARE SIZE 512K BYTE
CUSTOM SOFTWARE SIZE 1M BYTE
CUSTOM SOFTWARE SIZE 2M BYTE
CUSTOM SOFTWARE SIZE 3M BYTE
CUSTOM SOFTWARE SIZE 4M BYTE
CUSTOM SOFTWARE SIZE 5M BYTE
CUSTOM SOFTWARE SIZE 6M BYTE
CUSTOM SOFTWARE SIZE 8M BYTE
REGISTERED PROGRAMS EXPAN.1
PART PROGRAM STORAGE 320KBYTE
PART PROGRAM STORAGE 512KBYTE
PART PROGRAM STORAGE 1MBYTE
PART PROGRAM STORAGE 2MBYTE
MACRO EXECUTOR
MACRO EXECUTOR + C LANGUAGE EXECUTOR
BALANCED CUTTING
INTERFERENCE CHECK FOR EACH PATH
SIMPLE SYNCHRONOUS CONTROL
MIRROR IMAGE FOR DOUBLE TUR
TOOL OFFSET MEMORY 64 PAIRS
TOOL OFFSET MEMORY 128 PAIRS
TOOL OFFSET MEMORY 200 PAIRS

