



**2-2 제어장치 사양 (Fanuc 32i)**
**2-2.1 표준기능 사양**

항 목	사 양
<b>Control Axes</b>	
Controlled axes setting	3 Axes (X, Z, C)
Controlled axes expansion	3 Axes
Simultaneously controllable axes	2 axes
Fine Acc/Dcc control	
Flexible feed gear	
HRV control	
Machine lock	All axes/Each axis
Interlock	All axes/Each axis
Mirror image	Each axis
Follow up	
Chamfering on / off	
<b>Input Programming</b>	
Least input increment	0.001mm/0.0001inch(X-diameter)
Least moving increment	X:0.005mm, Z:0.001mmC:0.001deg.
Max. programmable dimension	99999.999 mm / ±3937.0078 inch
Absolute/Incremental programming	G90/G91 (X, Z, C)
Decimal point programming/pocket calculator type decimal point programming	Parameter select
<b>Interpolation</b>	
Positioning	G00
Linear interpolation	G01
Circular interpolation	G02, G03
Dwell	G04
Skip	G31
Threading, synchronous cutting	
Threading retract	
Multiple threading	
Manual reference position return	

항 목	사 양
<b>Interpolation</b>	
Automatic reference return	G28
Reference point return check	G27
2nd Reference point return check	G30
<b>Feed Function</b>	
Cutting feed amount	0.00001 ~ 500.0000 mm/rev
Cutting feed	0.001 ~ 2000.00 mm/min
Feed per minute	G98 mm/min
Feed per revolution	G99 mm/rev
Thread cutting feed	G32 0.00001 ~ 500.0000 mm
Handle feed	MPG :1 0.001 / 0.01 / 0.1mm(deg)
Automatic acceleration/deceleration	Rapid traverse : linear Cutting feed : exponential
Rapid traverse rate	Max. 240m/min (machine : 6m/min)
Rapid override	F0, 25, 50, 100%
Feed rate override	0 ~ 150% (per 10%)
Cutting feed clamp	
Manual per revolution feed	
<b>Operation</b>	
Automatic operation(memory)	
MDI operation	
DNC operation	
Buffer register	1 Block
Dry run	Using manual feed
Single block	
Jog feed	
Optional stop	M01
Manual handle interruption	
Manual intervention and return	
<b>Program Input</b>	
Program code	EIA RS244 / ISO 840
Label skip	

항 목	사 양
<b>Program Input</b>	
Parity check	
Control In / Out	
Optional block skip	1 ea
Diameter / Radius programming	X axis
Plane selection	G17, G18, G19
Manual absolute On / Off	
G code system	C
Multiple repetitive cycle I	G70~G76
Sub program call	M98 / M99 : 4 folds nested
Chamfering / corner R	99999999 R
Circular interpolation by R programming	
Canned cycles	G90, G92, G94
Canned cycles for drilling	
Direct drawing dimension programming	
Multiple repetitive cycles II	
Custom macro B	G65, G66, G67
Addition of custom macro variable	#100 ~ #199, #500 ~ #699
Programmable data input	G10
<b>Coordinate System</b>	
Automatic coordinate system setting	
Coordinate system setting	
Coordinate system setting	
Work piece coordinate system	G52 ~ G59
Coordinate system shift	G50
Direct input of coordinate system shift	
<b>Data Input/Output</b>	
Reader/puncher interface A	
Modem card control	
Memory card input/output	
External message display	

항 목	사 양
<b>Data Input/Output</b>	
External key input	
External program input	
External work piece number search	O9999
<b>Setting And Display</b>	
LCD / MDI	15" Color TFT LCD
Clock function	
Position display	
Program display	
Parameter setting & display	
Alarm display	
Operation history display	
Help function	
Actual cutting federate display	
Operating monitor screen	
Servo setting screen display	
Displayed language	Korean / English / Japan
Graphic display	
Run hour and part count display	
<b>Program Editing(Operation)</b>	
Program storage length	640 m (512 KB)
Program editing	
Part program editing	
Program number search	O4 digit
Sequence number search	N5 digit
Number of register programs	63 EA
Program protect key	
Background editing	
<b>Accuracy Compensation Function</b>	
Backlash compensation	
Backlash compensation for each rapid traverse and cutting feed	

항 목	사 양
<b>Tool Function</b>	
Tool function	T6+2 digit
Tool offset pairs(offset number)	±6-digit 32
Tool offset	
Direct input of tool offset value measured	
Tool offset value counter input	
Tool nose radius compensation	
Tool geometry / wear compensation	
<b>Auxiliary/Spindle Function</b>	
Auxiliary function	M4-digit
Auxiliary function lock	
Spindle function	S4-digit
Spindle analog output	
Spindle speed override	50-120% (per 10%)
Constant surface speed control	G96 / G97
<b>Machine</b>	
Programmable controller(PMC)	Ladder language
PMC step	32,000 step
<b>Safety/Maintenance</b>	
Emergency stop	
Over travel	
Stored stroke check 1	
Self diagnosis function	
<b>Installation Condition</b>	
Structure	Shut-tight type
Power	AC 400 / 440V +10% ~ -15
Ambience condition	Ambient temperature : 0 ~ 45C Ambient relative humidity : 75(less)
<b>Servo System</b>	
Servo motor	AC Servo motor
Servo unit	Transistor PWM Control
Position feedback	Pulse encoder

**2-2.2 선택기능 사양**

항 목	사 양
Automatic corner override	
Additional optional block skip	9 EA
Actual spindle speed output	
Addition of work coordinate system pair	48 pairs
Cylindrical interpolation	
Continuous thread cutting	
Conversational automatic programming	Manual guide i Turning Cycle
Conversational programming with graphic function	
DNC1 control	
DNC2 control	
Extended part program editing	
Extended registered programs	250/500/1000/2000/4000 EA
External I/O device control	
FANUC handy file	
High speed skip function	G31 (with tool & work probe)
Helical interpolation	(Simultaneously controlled 3 axes need)
Inch / Metric conversion	
High speed cycle cutting	
Multi Language	France/German/Italia/Spanish/Chinese
Manual handle feed 2nd	with additional M.P.G 1EA
Play back	
Program restart	
Polygon turning	
Programmable data input	G10
Part program storage length	256 KB/512 KB/1MB/2MB/4MB/8MB
Remote buffer(RS 232C, RS 422)	
Reader / punch interface 2	
Remote diagnostic	
Stored stroke check 2, 3	

항 목	사 양
Stored pitch error compensation	with Linear scale type
Tape format for FANUC 15	
Tool offset value 7 digit	
Tool life management	
Tool compensation number	±6-digit 64/99/400/999 EA
Unexpected disturbance torque detect function	
Variable lead thread cutting	
Work coordinate system preset	
3rd / 4th reference point return	G30 P3



**2-3 부속품**
**2-3.1 표준부속품**

항 목	사 양	수 량
CNC 장치	FANUC 32i-A/B	1 세트
4본 단동척(테이블) * 유압척 선택시 제외	∅1250/1400/1600mm(125/140/160) (독립식 수동 4본 Jaw 포함)	1 세트
자동공구 교환장치	VTB : 12본 (Turning : 12)	1 세트
	VTC: 24본 (Turning :12, Milling :12)	
유압 Unit	AC 3.7 kW, 70 kgf/cm <sup>2</sup> -100ℓ	1 세트
절삭유 장치	AC 1.5 kW, 0.4 kgf/cm <sup>2</sup> -400ℓ	1 세트
Washer Coolant	-	1 세트
Through Tool Coolant	AC 0.75kW-4P, 5kgf/cm <sup>2</sup>	1 세트
Through Spindle Coolant	VTC 모델 적용	1 세트
테이블 윤활유 냉각장치	3.15kVA, AC 220/220V, 2700kcal/h	1 세트
안내면 자동 윤활장치	25W, 20 kgf/cm <sup>2</sup> 6ℓ	1 세트
테이블 윤활장치	0.75 kW, 5 kgf/cm <sup>2</sup> -100ℓ	1 세트
C축 스케일	VTC 모델 적용	1 세트
Splash Guard	-	1 세트
X축 안내면 보호 스틸 커버	-	1 세트
작업등, 경보 표시등	-	각 1 세트
칩 탱크	-	1 세트
레벨링 블록	-	1 세트
기초볼트 및 너트	-	1 세트
공구상자 및 보수용 공구	-	1 세트

**2-3.2 선택 부속품**

항 목	사 양
자동 공작물 교환장치 (APC)	2-Pallet / 3-Station
자동 Index Chuck(밸브가공용)	Base Jaw & Top Jaw 포함
유압 척 및 실린더	Soft Jaw, Hard Jaw 각 1세트 포함
칩 컨베이어 및 절삭유 탱크	0.4/0.75 kW-500ℓ
Tool Setter	-
Work Probe	-
X축 Linear Scale Feed Back	-
NC 전원 자동 차단장치	-
Transformer	380V/220V, 400V/220V
Square Tool 홀더	<input type="checkbox"/> 32×160, 200, 250
Square Tool 홀더 (Through Coolant 타입)	<input type="checkbox"/> 32×160, 200, 250
Boring Tool 홀더 (BA 타입)	<input type="checkbox"/> 20×200, 250, 300, 350 <input type="checkbox"/> 25×200, 250, 300, 350
Boring Tool 홀더 (BP 타입)	<input type="checkbox"/> 20×200, 250, 300, 350 <input type="checkbox"/> 25×200, 250, 300, 350
Boring Tool 홀더 (BF 타입)	<input type="checkbox"/> 20×200, 250, 300, 350 <input type="checkbox"/> 25×200, 250, 300, 350
Side Lock 홀더	∅25×110, ∅32×110 ∅40×160, ∅50×160
Mores Taper 홀더	MT No.5×110, 240 MT No.6×160, 290