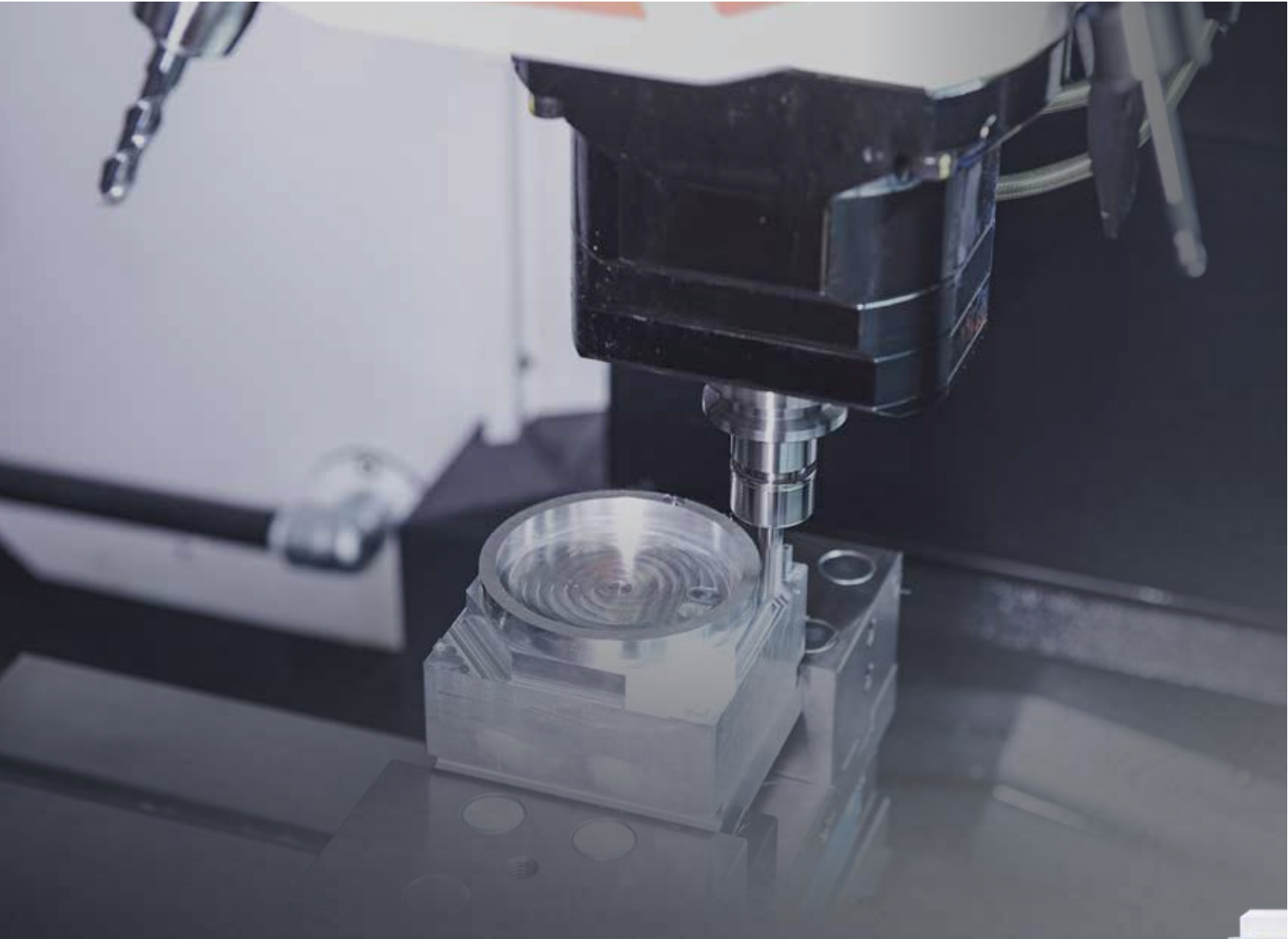


# i-CUT Series

i-CUT400T/400M/450T/400TD

HYUNDAI WIA Tapping Center



# Technical Leader

The tapping center i-CUT Series, designed by Hyundai WIA with years of expertise and the latest technology, maximizes productivity while maintaining rigidity and accuracy.

ITEM	Spindle						ATC & Magazine		Table		
	HYUNDAI-iTROL			FANUC	BBT30	BBT40	Turret Type	Twin Arm	650×400 (mm)	850×450 (mm)	Dual Type
	Direct 12,000	Direct 15,000	Built-in 24,000	Direct 12,000							
i-CUT400T	●	○		○	●	○	●	○	●		
i-CUT400M			●		●		●		●		
i-CUT450T	●	○		○	●		●	○		●	
i-CUT400TD	●	○		○	●		●	○	●		●

●: Standard ○: Option

EXPERIENCE THE NEW TECHNOLOGY

# i-CUT Series

New Leader of Tapping Center

- Max. 24,000rpm direct connection high-speed main spindle application (i-CUT400M)
- Rigid tapping of 6,000rpm ensures optimum tapping capability
- Servo motor is applied on the ATC to reduce tool change time
- Z-axis Roller LM Guide applies travel safety improvement
- Best-in-class all axis 56m/min(2,205 ipm) rapid traverse rate
- Machining area expanded to best-in-class 450mm (17.7)" Y-axis travel (i-CUT450T)
- Latest HYUNDAI-iTROL & FANUC controls with user convenience improvement





# APPLICATIONS & PARTS

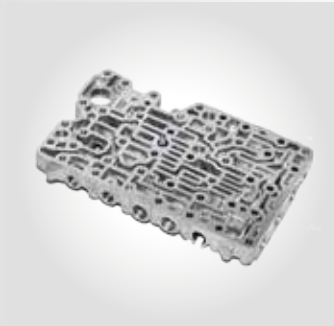
OIL PUMP HOUSING



## Reduced Machining Time by HYUNDAI WIA's Technique

i-CUT Series has been designed with robust structure of bed, spindle and travel system, maximizing precision and minimizing thermal displacement when process the products.

VALVE  
BODY



FLANGE



T/M  
HOUSING



ELECTRONIC  
CASES



# 01 i-CUT400M | 400T | 450T

High Speed, Productivity & Compact Design – Tapping Center

## High Precision Spindle

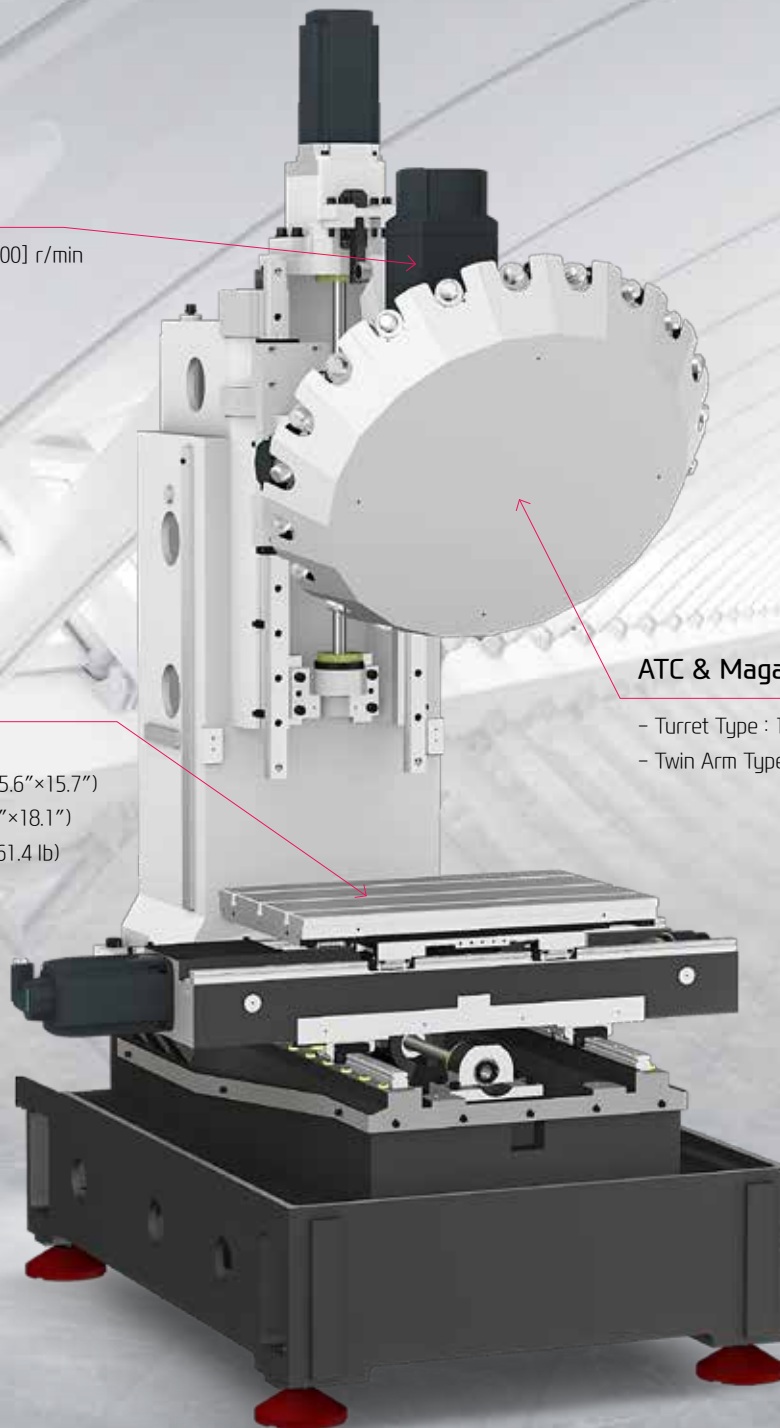
- Direct Sp. : 12,000 [15,000/24,000] r/min
- Rigid Tapping : 6,000 r/min
- Standard BBT #30
- i-CUT400T [Option : BBT #40 ]

## Table

- Table Size (L×W)
  - i-CUT400T/M : 650×400 mm (25.6"×15.7")
  - i-CUT450T : 850×460 mm (33.5"×18.1")
- Max. Load Capacity : 300 kg (661.4 lb)

## ATC & Magazine

- Turret Type : 14 [21] EA
- Twin Arm Type : 24 [20] EA



# REDUCTION OF NON-CUTTING TIME BY FAST RAPID SPEED

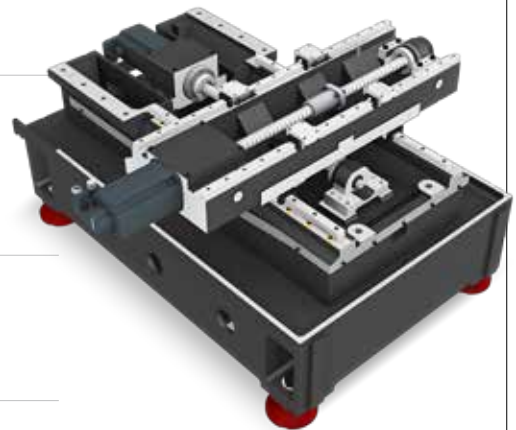
## COMPACT DESIGN

### Weight Lightening by Structural Analysis

Compared to the previous model, structural rigidity has increased while the machine's weight has been lightened simultaneously through Hyundai WIA's unique technique.

### High Column (i-CUT400T/450T)

As an option, high columns with 150mm(5.9") and 300mm(11.8") is provided.



## SLIDEWAY



### LM Guideway

High speed axis movement is achieved by the use of LM guideways. This reduces non-cutting time and decreases machining time for greater productivity.

(Z-Axis : Roller LM Guide)



### Ball Screw

The double anchored and pretensioned design provides outstanding positioning and repeatability with minimal thermal growth. Ball screws are connected directly to the servo motor to eliminate backlash.

### Travel (X/Y/Z)

i-CUT400M

**500/400/330** mm  
(19.7"/15.7"/13")

i-CUT400T

**500/400/330** mm  
(19.7"/15.7"/13")  
[Twin Arm : 520/400/480 mm]  
[20.5"/15.7"/18.9"]

i-CUT450T

**700/450/330** mm  
(27.6"/17.7"/13")  
[Twin Arm : 700/450/460 mm]  
[27.6"/17.7"/18.1"]

### Rapid Traverse Rate (X/Y/Z)

**56/56/56** m/min (2,205/2,205/2,205 ipm)

i-CUT400T

[BBT40 : 48/48/48 m/min (1,890/1,890/1,890 ipm)]

# 02 i-CUT400TD

High Speed, Productivity & Compact Design – Tapping Center

## ATC & Magazine

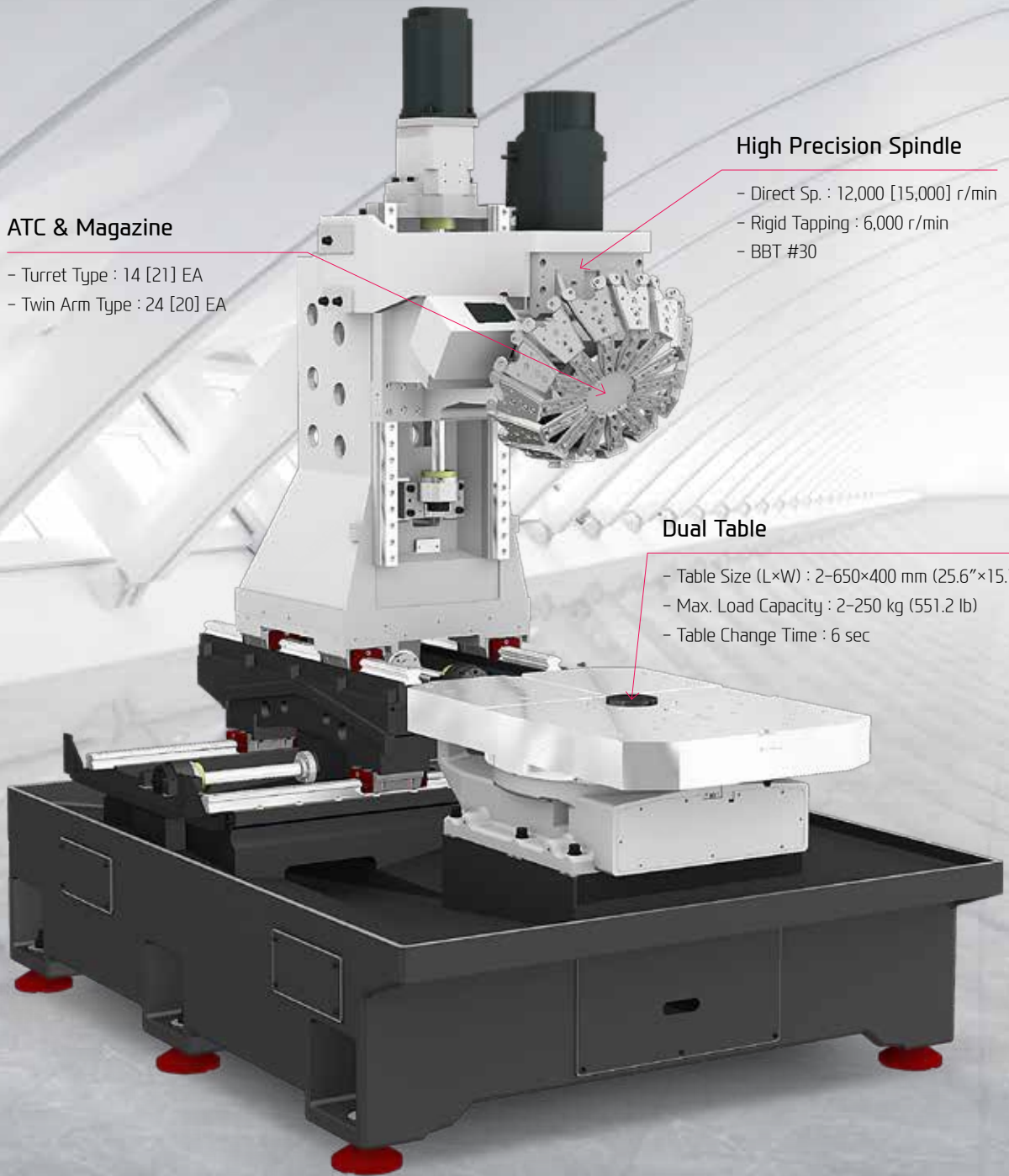
- Turret Type : 14 [21] EA
- Twin Arm Type : 24 [20] EA

## High Precision Spindle

- Direct Sp. : 12,000 [15,000] r/min
- Rigid Tapping : 6,000 r/min
- BBT #30

## Dual Table

- Table Size (L×W) : 2-650×400 mm (25.6"×15.7")
- Max. Load Capacity : 2-250 kg (551.2 lb)
- Table Change Time : 6 sec





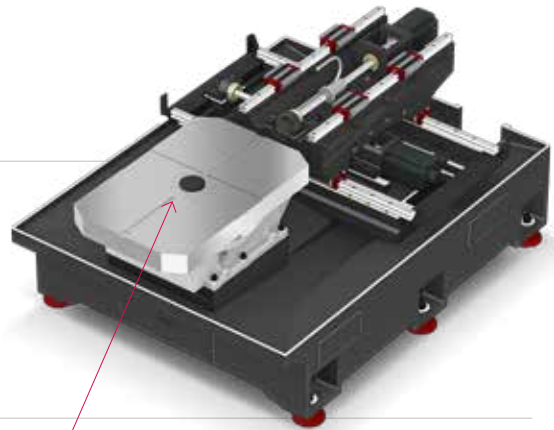
# REDUCTION OF NON-CUTTING TIME BY FAST RAPID SPEED

## COMPACT DESIGN

### Column Moving Type

In order to utilize the dual table, column moving structure is adopted.

Also, extended column width and symmetrical heat behavior column structure allows accurate processing and minimized thermal displacement.



### Dual Table Type Tapping Center

High productivity is achieved by the dual table which enables workers to setup a new workpiece while the machine is processing. Especially, the rotary table is designed for the simpler positioning by the location pin due to the application of hydraulic methods.

## SLIDEWAY



### LM Guideway

High speed axis movement is achieved by the use of LM guideways. This reduces non-cutting time and decreases machining time for greater productivity.

(Z-Axis : Roller LM Guide)



### Ball Screw

The double anchored and pretensioned design provides outstanding positioning and repeatability with minimal thermal growth. Ball screws are connected directly to the servo motor to eliminate backlash.

### Travel (X/Y/Z)

**520/400/330** mm (20.5"/15.7"/13") [Twin Arm : 520/400/460 mm (20.5"/15.7"/18.1")]

### Rapid Traverse Rate (X/Y/Z)

**56/56/56** m/min (2,205/2,205/2,205 ipm)

[Twin Arm : 48/48/56 m/min (1,890/1,890/2,205 ipm)]  
[FANUC : 48/48/48 m/min (1,890/1,890/1,890 ipm)]

# 03 HIGH PRECISION SPINDLE

Long Lasting, High Accuracy &  
Excellent Performance Tapping Center

## Spindle Specifications

ITEM	Speed r/min	Motor (Max./Cont.)	Torque (Max./Cont.)	Type
HYUNDAI-ITROL	12,000 rpm	14.1/4.1 kW (18.9/5.5 HP)	45/21 N·m	Direct
	15,000 rpm	14.1/4.1 kW (18.9/5.5 HP)	45/21 N·m	
	24,000 rpm	22.6/3.5 kW (30.3/4.7 HP)	24/3.7 N·m	
HYUNDAI WIA FAPUC SMART PLUS	12,000 rpm	13/3.7 kW (17.4/5 HP)	82.8/23.6 N·m	
	12,000 rpm (BBT40)	18.5/11 kW (25/8 HP)	117/52.5 N·m	

# HIGH-PERFORMANCE, DIRECT DRIVEN SPINDLE

## SPINDLE

### Direct Spindle

The spindle is designed with angular contact ball bearings to increase rigidity, prevent thermal displacement.

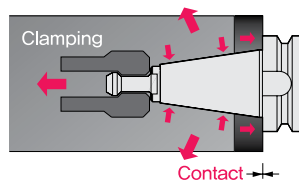
Due to the maximum spindle speed of 24,000rpm (i-CUT400M), various type of machining is possible. While in reverse rotation, Double Speed Return function reduces processing time.

### Rigid Tapping

The rigid tapping function enables quick and accurate tapping. Also enhances precision and tool life.

### Spindle Thru Coolant **OPTION**

Through Spindle Coolant is exceedingly useful when drilling deep holes. It helps increase the lifetime of the tool, while decreasing cycle time.



### Dual Contact Spindle

The Big Plus spindle system (BBT #30) provides dual contact between the spindle face and the flange face of the tool holder. This greatly increases tool rigidity, reduces run out and adds significant productivity to machining applications.



## BBT40 SPINDLE FOR VARIOUS MACHINING CAPABILITIES

### BBT40 Spindle (i-CUT400T)

has maximum speed of 12,000rpm. It is designed with ball bearings where the spindle is directly connected with the motor to reduce acc/ deceleration time.

<The spindle cooling system : Pneumatic Tool Lock>

# 04 ATC & MAGAZINE

High Productivity Achieved with High Rigidity, Accuracy Machining

Max. Tool Length

**200** mm (7.9")

Max. Tool Weight

**3** kg (6.6 lb) [BBT40 : **5** kg (11 lb)]

Tool Shank

**BBT30** [i-CUT400T : **BBT40**]

Max. Tool Dia. (W.T/W.O)

TURRET **Ø80/Ø80** [BBT40 : **Ø90/Ø150**] mm  
 (Ø3.1"/Ø3.1" [BBT40 : (Ø3.5"/Ø5.9")])

TWINARM **20T : Ø80/Ø125** [24T : **Ø67/Ø125**] mm  
 (20T : Ø3.1"/Ø4.9" [24T : Ø2.6"/Ø4.9"])

[ ] : Option

# HIGH RIGIDITY, TOOL CHANGE SYSTEM

## ATC & MAGAZINE

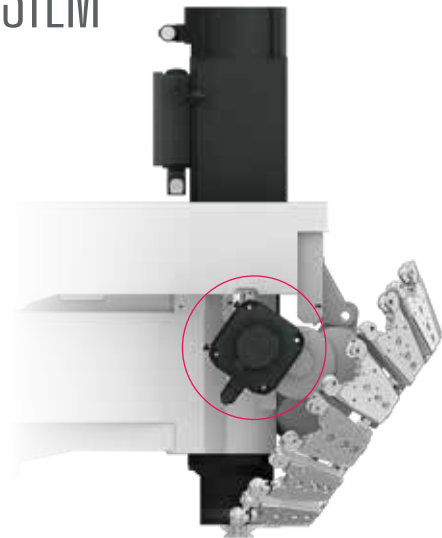
### Magazine



The 14 Tool Turret Type magazine is provided as standard and 21 Tool Turret Type magazine is provided as an option.

Due to the decrease of tool change time, non-cutting time is minimized. (1.06 sec for Tool to Tool and 1.6 sec for Chip to Chip).

### Servo ATC

Servo motor is applied on the ATC to reduce tool change time. Also, accurate tool positioning control increases cutting stability.

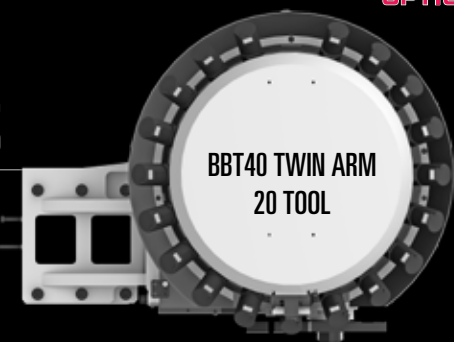


	<p><b>Turret Type</b> (All Machine)</p>	<ul style="list-style-type: none"> <li>⦿ No. of Tools : 14 [21] EA</li> <li>⦿ Tool Selection Method : Fixed Address</li> </ul>
	<p><b>OPTION</b> <b>Twin Arm Type</b> (Except i-CUT400M)</p>	<ul style="list-style-type: none"> <li>⦿ No. of Tools : 24 [20] EA</li> <li>⦿ Tool Selection Method : Random</li> </ul>

## BBT40 ATC & MAGAZINE FOR VARIOUS MACHINING CAPABILITIES

### BBT40 Twin Arm ATC (i-CUT400T)

Twin Arm ATC is equipped for the high-speed and precise control of ATC. Moreover, installation area has minimized due to the mounting design of 45 degree angle.



- ⦿ Sp. Clamping Method : Pneumatic Cylinder + Pneumatic Lever
- ⦿ No. of Tools : 20 EA

OPTION

# 05 USER CONVENIENCE

Various Devices for User Friendly

## CHIP DISPOSAL SOLUTION & COOLANT UNIT



Spindle Nozzle & Cutting Air Blow



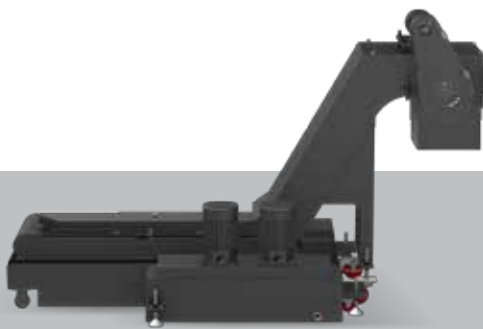
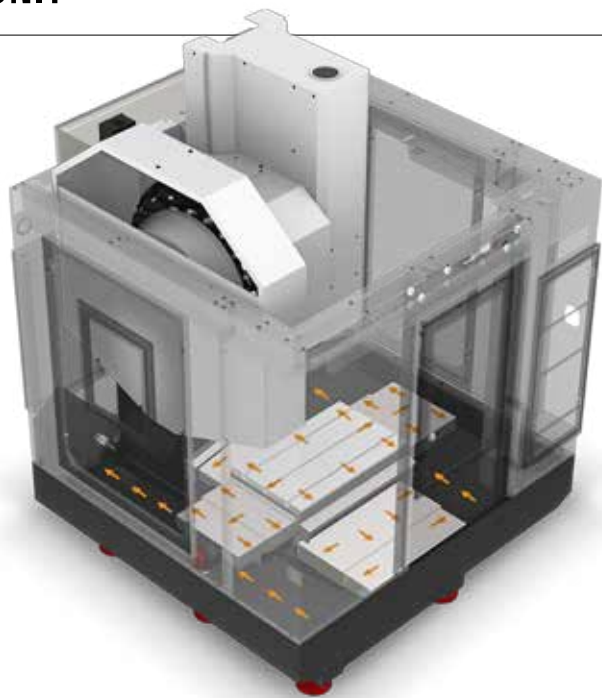
Bed Flushing Coolant



Gun Coolant



Air Gun



### Chip Conveyor

Timely and effective disposal of chips will enhance productivity as well as the working environment.

Hinge	Chip Type : Roughing Chip, Long Chip, Chip complex	Material : SS41, 45C, Cast Steel	Side / Rear Direction
	Highly efficient when disposing a lot of chips. Capable of handling stringy chips..		
Scraper	Chip Type : Finely broken chip blown out	Material : cast Iron, Nonferrous	
	Convenient for shortly cut chips.		
❖ Drum Filter	Chip Type : Powder, Micro Chip	Material : AL	
	Advantageous in precision, as the chips do not flow in to the coolant nozzle.		

❖ When ordering a screw or drum filter chip conveyor, prior consult with hyundai wia's sales person.

## PRECISION & ECO SYSTEM



### Linear Scale

Linear scales increase positioning accuracy and reduce distortion caused by thermal growth, thus ensuring a more accurate finished part



### Touch Sensor

Workpiece coordinate values can be set automatically using the optional spindle probe.



### TLM (Laser & Touch)

Tool lengths and diameters can be set automatically using the optional tool setter. This can also be used to monitor attrition and detect broken tools.



### NC Rotary Table

Additional axis machining is possible with the installation of NCRT.



### Hydraulic Supply Unit

Instead of the standard hydraulic supply unit, an optional fixture unit can bring the pressure up to 100 bar (1,450 bar) maximizing the clamping force on the fixture.



### Economy Lubrication System

By applying lubricant only when the machines axis are moving lubrication consumption is reduced by compared to standard systems.



### Mist Collector

Mist Collector reduces the amount of smoke and oil mist in the air. This helps build a safe and comfortable working environment and improve durability.



### Oil Skimmer

Linear scale helps process highly accurate products through precise positioning.



### MQL (Minimal Quantity Lubrication)

The goal of this system is to spray only the amount of lubricant required to prevent heat and chip build up at the cutting tool or work piece face.

# 06 HYUNDAI WIA FANUC – SMART PLUS

The Compatible All-round Control



## FANUC Oi Plus Series

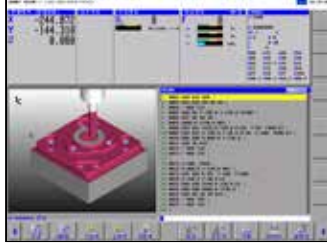
- The FANUC Oi-F Plus series CNC provides a straightforward, cost optimised solution for most general machining applications.
- Ready to use, it boasts latest-generation hardware and a complete package of standard software for most turning and milling processes.
- Customization functions are already included and offer an easy way to create HMI screens that are tailored to the application.
- The Oi-F Plus series is also completely compatible with older FANUC 0 and Oi CNCs and shares the same programming as more advanced FANUC controls.
- The advantage being that existing programs can be used immediately and that new programs can be developed without the need for costly redundancies.
- Providing the high-performance offered by FANUC servo technology, this CNC also offers the same user-friendly convenience over the complete range.

## 10.4" Monitor as a standard

	Fast Cycle Time Technology
Smart Machine Control	Fine Surface Technology
	Smart Servo Control Technology
AI Contour Control	AICC-2 (200 Blocks)
Smooth Tolerance Control	0.1µm command and specify tolerance
Jerk Control	Diminished vibration by controlling acceleration speed
Machining Condition Selection	Designated machining level based on speed & quality
Machining Quality Control Function	Smooth Tolerance+ integrated support
Part Program Storage	5120M (2MB)
No. of Registerable Programs	1000 EA

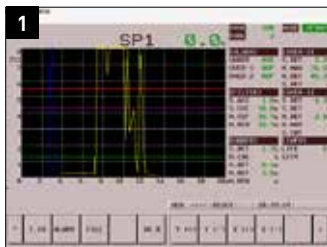


# SMART SOFTWARE



## DIALOGUE PROGRAM (Smart Guide-i)

This software offers maximum user convenience through a dialogue program from setup to machining. This includes writing machining programs and simulation checks.



## High-quality Machining S/W

### 1. Tool Monitoring (HW-TM) **OPTION**

This tool status monitoring software monitors and protects workpiece, tools, and equipment through real-time monitoring of the motor load from machining.

### 2. Adaptive Feed Control (HW-AFC)

This software improves the lifetime and productivity of tools by automatically controlling the feed to maintain an even machining load.



### 3. Thermal Displacement Compensation (HW-TDC) **OPTION**

This software improves machining precision by minimizing thermal deformation from changes in external environments and machining.

### 4. Machining Condition Selection (HW-MCS)

This software automatically optimizes rapid transfer parameters for cutting transfers and workpiece weights depending on the machining type (based on rate/precision /quality)



## Machining Support S/W

### 1. Machine Guidance (HW-MCG)

This software offers various user convenience functions such as tool manipulation, maintenance, tool monitoring, and a pop-up/status window

### 2. Tool/Workpiece Measurement (Renishaw GUI) **OPTION**

This user convenience GUI software measures material coordinate systems, tool lengths/diameters/damage to tools (included in Renishaw H/W set)



### 3. LAUNCHER

This software offers shortcuts for quick access to specialized features and frequently used features.

### 4. Premium Tool Operation

This software offers premium graphic functions for more intuitive tool operation.



### 5. Manual Viewer

This software enables users to view electronic manuals right from the tool.

### 6. Scheduling

This software enables viewing/setting up directly from the tool. This allows such actions as managing customer's tool schedules and schedule notification.

# 07 HYUNDAI-iTROL

The Powerful CNC Platform for Machine Tools

## HYUNDAI INTELLIGENT CONTROL



### COMMUNICATION FUNCTION

RJ 45 Ethernet

USB 2.0

Compact Flash Card



Easy input/output of programs is possible with the use of USB memory card, CF memory card and LAN.

Combination of HYUNDAI-iTROL with Siemens servo drive and motor offers the optimum machine tool solution



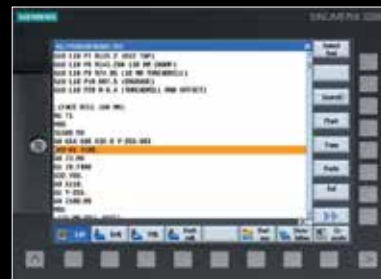
#### Shop Mill **OPTION**

- Dialogue-type programming, simple and convenient
- Effective specifications for small quantitybatch production
- Step-by-step operation possible without knowledge of the DIN/ISO code



#### 3D Simulation **OPTION**

- 3D confirmation of the completed processing configuration of the NC program is possible.
- Offers standards for 2D simulation.
- Possible to confirm the simulation of the NC program during processing.



#### ISO Code Programming

If the ISO Dialect (G291) is ordered, JIS-based G-code programs can be used. (Standard)



Energy Saving & ECO System



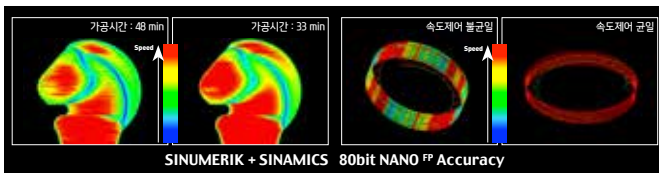
### SUPPORTS SHORTCUTS

The energy-saving mode and optimization function can be used right away.



### SIEMENS Advanced Surface

Intelligent path control With advanced surfaces and top surfaces, Siemens provides the optimum workpiece surface at the highest machining speed.



## SMART SOFTWARE

### 1. Tool Monitoring, AFC

- The same tool monitoring function as the Fanuc HW-TM + new AFC
- Automatic transfer speed control
  - Expected benefits : Tool monitoring possible even when machining molds and prototype products, etc. Shortens the cycle time and protects the machine through an active control function

### 2. Measuring System

- Simplified UI by removing unnecessary screens
- Compatible with the standard Renishaw/Marposs as well as third-party TLM (the measuring program needs to be converted into TLM, SPF)
- Continuous measuring function to measure 10 tools at a time
- Tool data comparison (before and after measuring) and enhanced animation function

### 3. Coordinate System Setting

- Quicker setting of coordinate system enabled by an improved UI (using the top-left coordinate system value)
- Parameter change process has been changed to "enter all and apply later" type to prevent the worker's erroneous entry
- Pre-defined coordinate value displayed in the bottom bed image for easier identification
- A 'Spindle rotation' button added for easier spindle rotation

### 4. Engraving Setting

- Ability to engrave model name/serial number in mass production
- Available in the program edit window
- Text, quantity of work, working date, working time can be engraved and ordered
- Easily and quickly apply the engraved functions of Siemens CYCLE

### 5. Monitoring of Operating Ratio

- Intuitive display uses distinctive colors to indicate the 4 stages of alarm, cycle, setup, and inactivity.
- Displays current activated status as "Activated".
- Options to export 10-day operation history as an PC file or to CF card (MS Excel compatible format)

### 6. Warming-up

- The mode selection path simplified with an improved UI
- Except Tool, Spindle RPM, Time, Program, the parameters not used frequently have been moved to 'Settings' screen.
- Messages for the current progress (%) and remaining time displayed at the top of the screen

# SPECIFICATIONS

## Standard & Optional

Spindle		i-CUT400T	i-CUT400M
12,000rpm : 14.1kW (19HP)	iTROL	●	-
15,000rpm : 14.1kW (19HP)	iTROL	○	-
12,000rpm : 13kW (17.4HP)	FANUC	○	-
12,000rpm : 18.5kW (25HP)	FANUC (BBT40)	○	-
24,000rpm : 22.6kW (30HP)	iTROL	-	●
Spindle Cooling System (Fan Cooler)		-	●
ATC			
ATC Extension	14 (Turret)	●	●
	21 (Turret)	○	○
	24 (Twin Arm)	○	-
	20 (Twin Arm/BBT40)	○	-
Tool Shank Type	BBT30	●	●
	BBT40	○	-
U-Center	D'andrea	-	-
Pull Stud	45°	●	●
Table & Column			
Tap Type Pallet		-	-
T-Slote Pallet		●	●
NC Rotary Table		☆	☆
High Column	150mm (5.9")	○	-
	300mm (11.8")	○	-
Coolant System			
Std. Coolant (Nozzle)		●	●
Bed Flushing Coolant		●	●
Through Spindle Coolant*	20bar (290 psi)	○	○
	30bar (435 psi)	○	○
Top Cover		●	●
Shower Coolant		○	○
Gun Coolant		○	○
Air Gun		○	○
Cutting Air Blow		○	○
Tool Measuring Air Blow (Only for TLM)		○	○
Air Blow for Automation		☆	☆
Thru MQL Device (Without MQL)		☆	☆
Coolant Chiller		☆	☆
Power Coolant System (For Automation)		☆	☆
Chip Disposal			
Coolant Tank	200ℓ (52.8 gal)	●	●
Cabin Screw Chip Conveyor		-	-
Chip Conveyor (Hinge/Scraper)	Rear (Left)	○	○
	Rear (Right)	○	○
	Rear (Rear)	○	○
Special Chip Conveyor (Drum Filter)		☆	☆
Chip Wagon	Standard (180ℓ [47.5 gal])	○	○
	Swing (200ℓ [52.8 gal])	○	○
	Large Swing (290ℓ [76.6 gal])	○	○
	Large Size (330ℓ [87.2 gal])	○	○
	Customized	☆	☆
S/W			
Conversational Program	Smart Guide-i	●	●
	HW-DPRO	○	○
Tool Monitoring (HW-TM) : FANUC/iTROL		○/●	●
Adaptive Feed Control (HW-AFC)		●	●
Spindle Heat Distortion Compensation (HW-TDC)		○	○
Machining Condition Selection (HW-MCS)		●	●
Machine Guidance (HW-MCG)		●	●
RENISHAW GUI		○	○
DNC Software (HW-eDNC)		○	○
Spindle Warm up Function (HW-WARMUP)		●	●
Energy Saving System (HW-ESS)		●	●
Machine Monitoring System (HW-MMS)		○	○
Premium Tool Operation		●	●
Manual Viewer		●	●
Scheduling		●	●
Operation Memo		●	●

● : Standard ○ : Option ☆ : Prior Consultation - : Non Applicable

Electric Device		i-CUT400T	i-CUT400M
Call Light	1 Color : ●	○	○
Call Light	2 Color : ●●	●	●
Call Light	3 Color : ●●●	○	○
Call Light & Buzzer	3 Color : ●●● B	○	○
Work Light		●	●
Electric Cabinet Light		○	○
Remote MPG		-	-
Work Counter	Digital	○	○
Total Counter	Digital	○	○
Tool Counter	Digital	○	○
Multi Tool Counter	6 EA	○	○
	9 EA	○	○
Electric Circuit Breaker		○	○
AVR (Auto Voltage Regulator)		☆	☆
Transformer (380V : 20kVA)	FANUC	○	○
Transformer (220V : 25kVA)	FANUC (BBT40)	○	-
Transformer (220V : 25kVA)	iTROL	○	-
Transformer (220V : 35kVA)		-	○
Auto Power Off		○	○
Measuring Device			
Air Zero	TACO	☆	☆
	SMC	☆	☆
Work Measuring Device		☆	☆
TLM	Touch	○	○
(Marposh/Renishaw/Blum)	Laser	○	○
Tool Broken Detective Device		☆	☆
Coolant Level Sensor (Only for Chip Conveyor, Bladder Type)		☆	☆
Enviornment			
Air Conditioner		○	○
Dehumidifier		○	○
Oil Mist Collector		☆	☆
Oil Skimmer (Only for Chip Conveyor)		○	○
MQL (Minimal Quantity Lubrication)		☆	☆
Fixture & Automation			
Auto Door		○	○
Sub O/P		☆	☆
NC Rotary Table/F	Single	○	○
	Channel	☆	☆
Control of Additional Axis	1Axis	○	○
External M Code 4ea		○	○
Automation Interface		☆	☆
I/O Extension (In & Out)	16 Contact	○	○
	32 Contact	○	○
Hyd. Device			
Std. Hyd. Unit	45bar (652.7 psi) / 30ℓ (7.9 gal)	-	-
Center Hyd. Supply Device	2x3 (6Port)	-	-
	2x5 (10Port)	-	-
Hyd. Unit for Fixture	45bar (652.7 psi)	☆	☆
	70bar (1,015 psi)	☆	☆
	100bar (1,450 psi)	☆	☆
	Customized	☆	☆
ETC			
Tool Box		●	●
Customized Color	Need for Munsel No.	☆	☆
CAD&CAM Software		☆	☆

\*Through Spindle Coolant : Please check the filter types with sales representative.  
Specifications are subject to change without notice for improvement.

# SPECIFICATIONS

## Standard & Optional

● : Standard ○ : Option ☆ : Prior Consultation - : Non Applicable

Spindle		i-CUT450T	i-CUT400TD
12,000rpm (iTROL)	Direct	●	●
15,000rpm (iTROL)	Direct	○	○
12,000rpm (FANUC)	Direct	○	-
Spindle Cooling System (Fan Cooler)			
		-	-
ATC			
ATC Extension	14 (Turret)	●	●
	21 (Turret)	○	○
	20 (Twin Arm)	○	○
	24 (Twin Arm)	○	○
Tool Shank Type	BBT30	●	●
	BBT40	-	-
U-Center	D'andrea	-	-
Pull Stud	45°	●	●
Table & Column			
Tap Type Pallet		-	●
T-Slote Pallet		●	○
NC Rotary Table		☆	☆
High Column	150mm (5.9")	○	-
	300mm (11.8")	○	-
Coolant System			
Std. Coolant (Nozzle)		●	●
Bed Flushing Coolant		●	●
Through Spindle Coolant*	20bar (290 psi)	○	○
	30bar (435 psi)	○	○
Top Cover		○	○
Shower Coolant		○	○
Gun Coolant		○	○
Air Gun		○	○
Cutting Air Blow		○	○
Tool Measuring Air Blow (Only for TLM)		○	○
Air Blow for Automation		☆	☆
Thru MQL Device (Without MQL)		☆	☆
Coolant Chiller		☆	☆
Power Coolant System (For Automation)		☆	☆
Chip Disposal			
Coolant Tank	200 ℓ (52.8 gal)	-	●
	240 ℓ (63.4 gal)	●	-
Cabin Screw Chip Conveyor		-	-
Chip Conveyor (Hinge/Scraper)	Rear (Left)	○	○
	Rear (Right)	○	○
	Rear (Rear)	○	○
Special Chip Conveyor (Drum Filter)		☆	☆
Chip Wagon	Standard (180 ℓ [47.5 gal])	○	○
	Swing (200 ℓ [52.8 gal])	○	○
	Large Swing (290 ℓ [76.6 gal])	○	○
	Large Size (330 ℓ [87.2 gal])	○	○
	Customized	☆	☆
S/W			
Spindle Monitoring : iTROL		●	●
ATC Maintenance : iTROL		●	●
Soft MCP : iTROL		●	●
Multiple Functions such as Working Ration/Work Monitoring : iTROL		●	●
Thermal Displacement Compensation(HW-TDC)		○	○
Tool Monitoring (HW-TM)		○/●	○/●
DNIC Software (HW-eDNC)		○	○
Spindle Warm up Function (HW-WARMUP)		●	●
Energy Saving System (HW-ESS)		●	●
Machine Monitoring System (HW-MMS)		○	○
RENISHAW GUI		○	○
Machining Condition Selection (HW-MCS)		●	●
Adaptive Feed Control (HW-AFC)		●	●
Machine Guidance (HW-MCG)		●	●
Conversational program	SmartGuide-i	●	●
	HW-DPRO	○	○

Electric Device		i-CUT450T	i-CUT400TD
Call Light	1 Color : ●	○	○
Call Light	2 Color : ●●	●	●
Call Light	3 Color : ●●●	○	○
Call Light & Buzzer	3 Color : ●●● B	○	○
Work Light		●	●
Electric Cabinet Light		○	○
Remote MPG		●	●
Work Counter	Digital	○	○
Total Counter	Digital	○	○
Tool Counter	Digital	○	○
Multi Tool Counter	6 EA	○	○
	9 EA	○	○
Electric Circuit Breaker		○	○
AVR (Auto Voltage Regulator)		☆	☆
Transformer (380V : 20kVA)	FANUC	○	-
Transformer (380V : 25kVA)		-	○
Transformer (220V : 25kVA)	iTROL	○	○
Auto Power Off		○	○
Measuring Device			
Air Zero	TACO	☆	☆
	SMC	☆	☆
Work Measuring Device		☆	☆
TLM (Marposs/Renishaw/Blum)	*Touch Laser	○	○
Tool Broken Detective Device		☆	☆
Coolant Level Sensor (Only for Chip Conveyor, Bladder Type)		☆	☆
Environment			
Air Conditioner		○	○
Dehumidifier		○	○
Oil Mist Collector		☆	☆
Oil Skimmer (Only for Chip Conveyor)		○	○
MQL (Minimal Quantity Lubrication)		☆	☆
Fixture & Automation			
Auto Door		○	○
Sub O/P		☆	☆
NC Rotary Table/F	Single Channel	○	○
		☆	☆
Control of Additional Axis	1Axis	○	○
External M Code 4ea		○	○
Automation Interface		☆	☆
I/O Extension (In & Out)	16 Contact	○	○
	32 Contact	○	○
Hyd. Device			
Std. Hyd. Unit	45bar (652.7 psi) / 30 ℓ (7.9 gal)	-	●
Center Hyd. Supply Device	2x3 (6Port)	-	○
	2x5 (10Port)	-	○
Compact Center Hyd. Supply Device	2x4 (8Port)	-	○
Hyd. Unit for Fixture	45bar (652.7 psi)	☆	☆
	70bar (1,015 psi)	☆	☆
	100bar (1,450 psi)	☆	☆
	Customized	☆	☆
ETC			
Tool Box		●	●
Customized Color	Need for Munsel No.	☆	☆
CAD&CAM Software		☆	☆

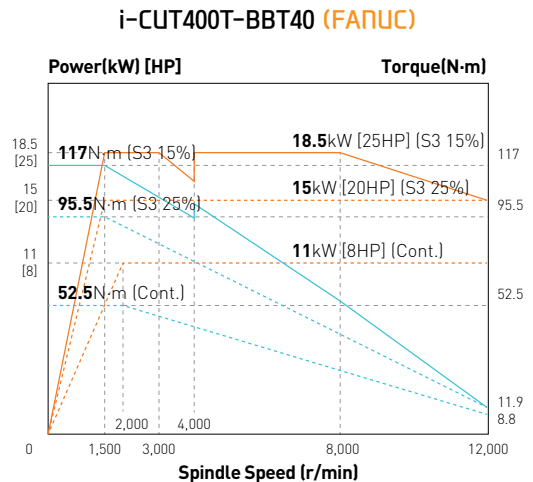
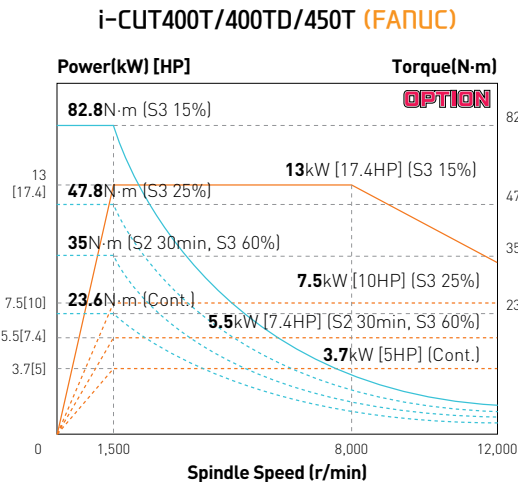
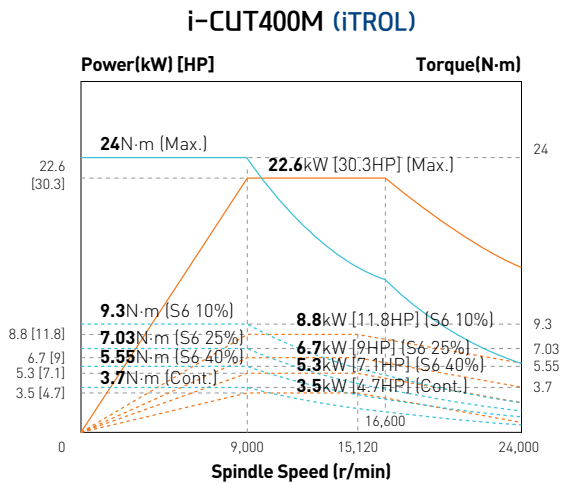
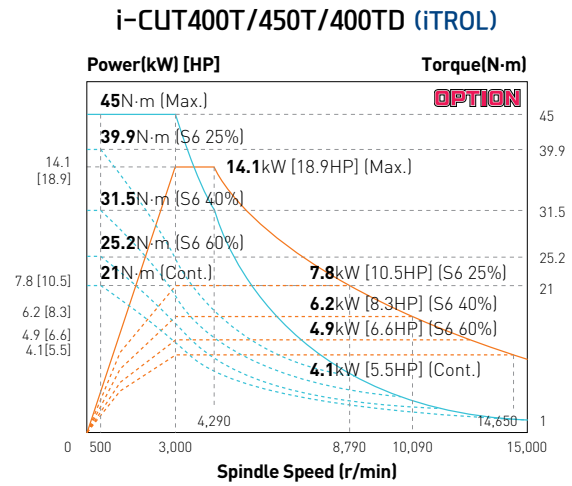
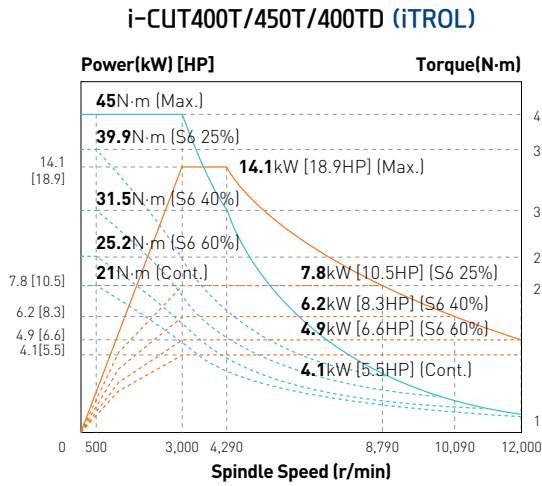
\*Through Spindle Coolant : Please check the filter types with sales representative.

\*TLM-Touch : Technical consultation needed if there is a requirement of tool radius measurement in i-CUT400TD.

Specifications are subject to change without notice for improvement.

# SPECIFICATIONS

## Spindle Output/Torque Diagram



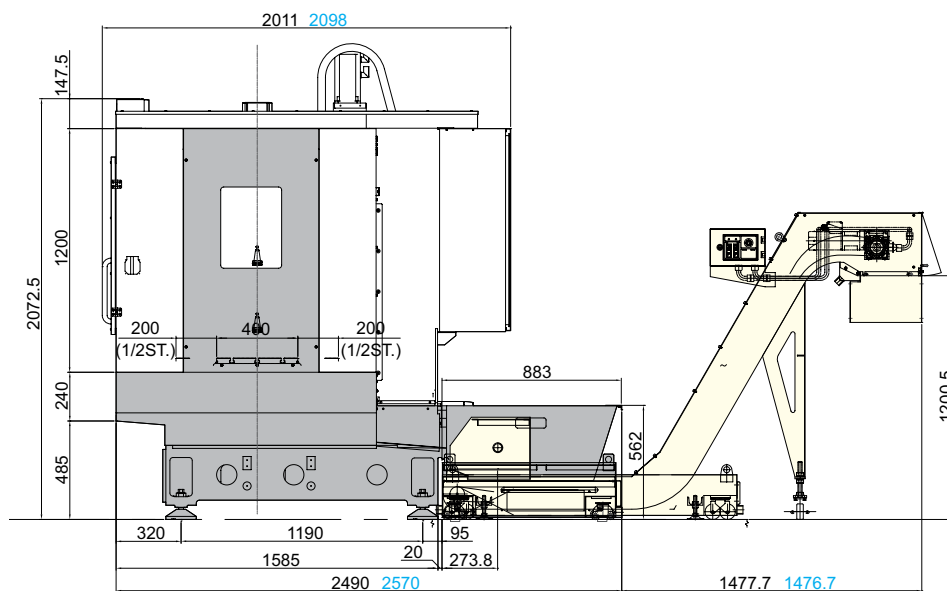
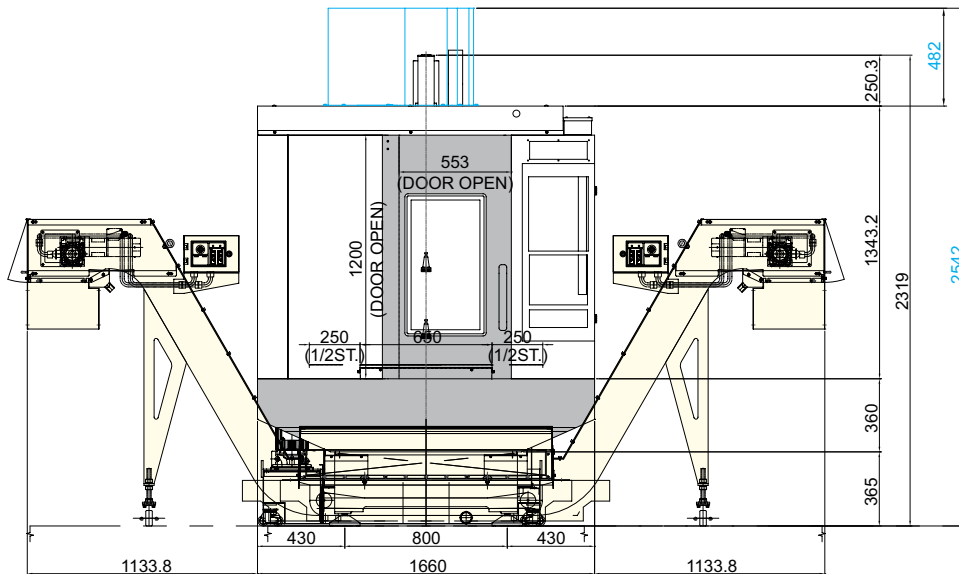


# SPECIFICATIONS

## External Dimensions

unit : mm(in)

### i-CUT400M/T TwinArm Type (i-CUT400T)







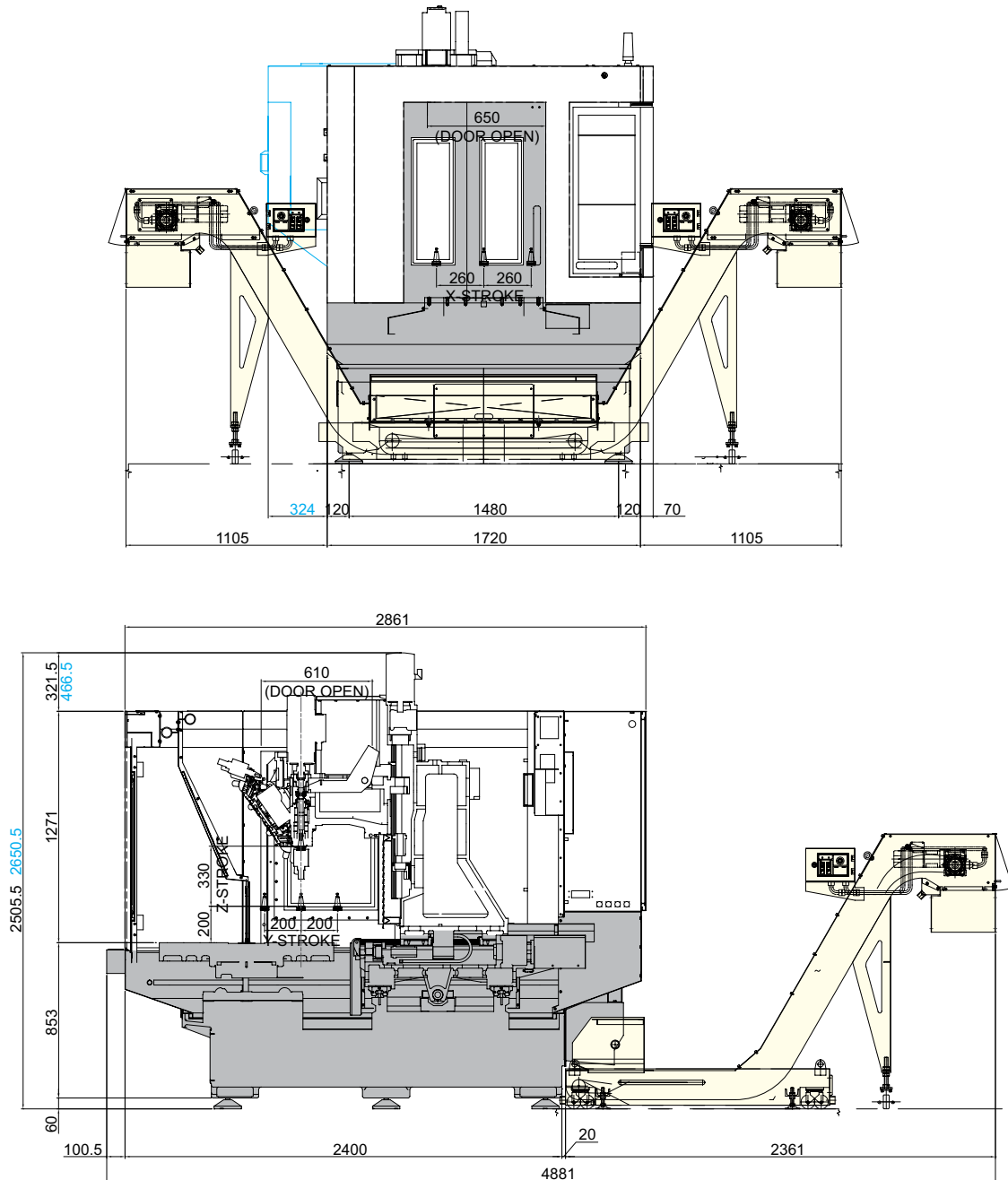


# SPECIFICATIONS

## External Dimensions

unit : mm(in)

### i-CUT400TD TwinArm Type

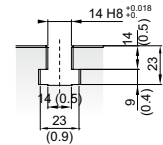
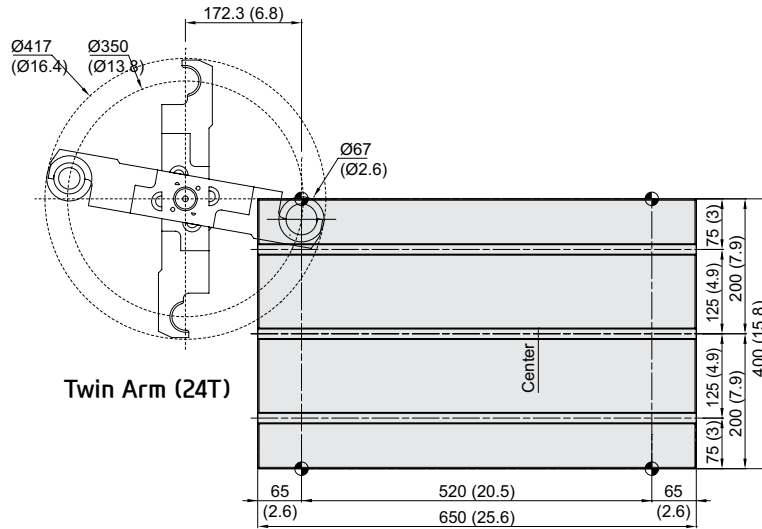


# SPECIFICATIONS

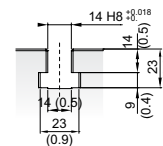
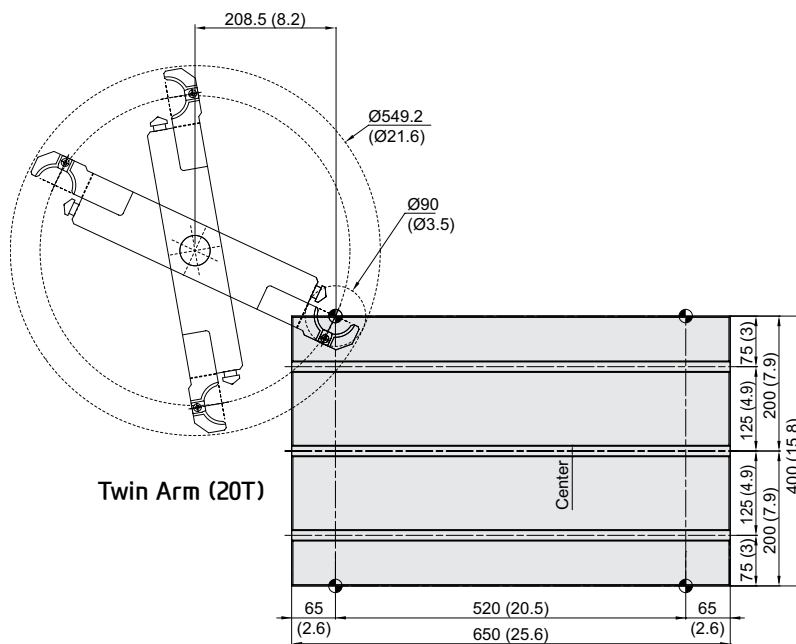
Table Dimensions

unit : mm(in)

i-CUT400T  
i-CUT400M



i-CUT400T-BBT40

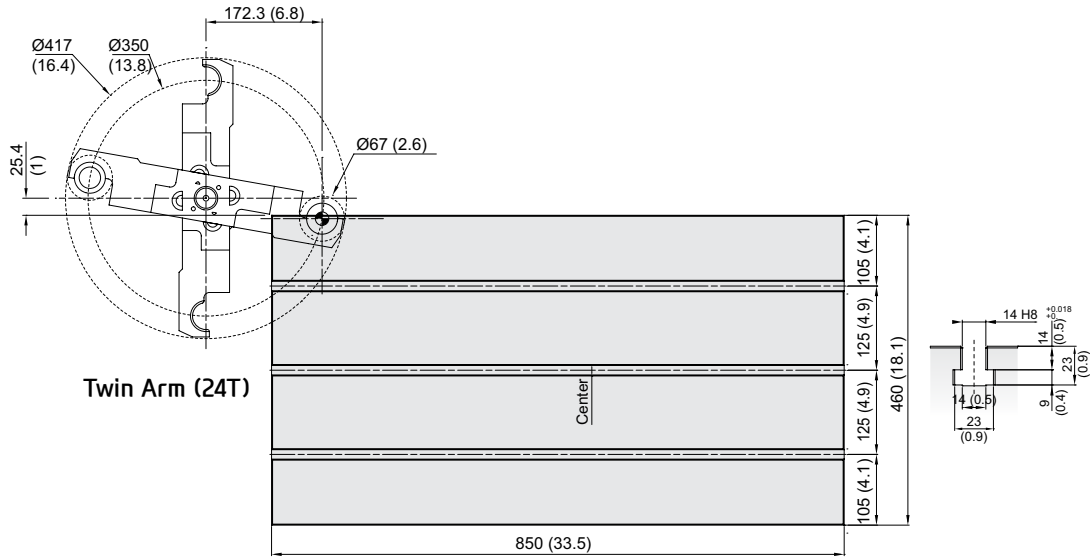


# SPECIFICATIONS

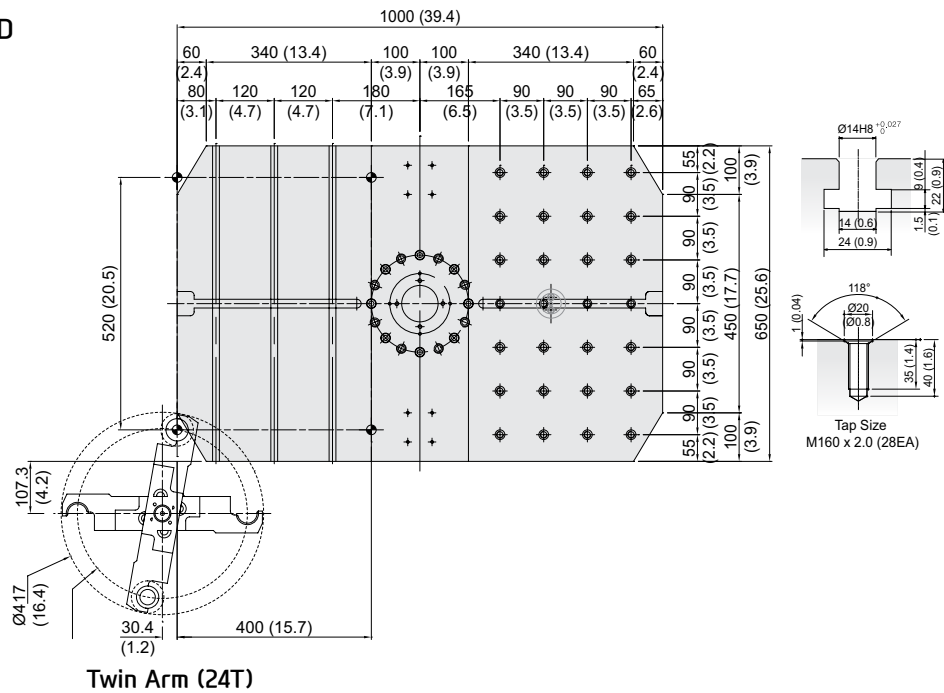
## Table Dimensions

unit : mm(in)

### i-CUT450T



### i-CUT400TD



# SPECIFICATIONS

## Specifications

[ ] : Option ■ : Twin Arm

ITEM			i-CUT400T (iTROL)	i-CUT400T (FANUC)	i-CUT400T/BBT40	
TABLE	Table Size	mm(in)	650×400 (25.6"×15.7")			
	Maximum Load Capacity	kg(lb)	300 (661.4)			
	Table Change Time	sec	-			
	Change Method	-	-			
	Table Driving Method	-	-			
SPINDLE	Spindle Taper	-	BBT30		BBT40	
	Spindle RPM	r/min	12,000 [15,000]	12,000	12,000	
	Spindle Power Output (Max./Cont.)	kW(HP)	14.1/4.1 (18.9/5.5) [14.1/4.1 (18.9/5.5)]	13/3.7 (17.4/5)	18.5/11 (25/8)	
	Spindle Torque (Max./Cont.)	N·m(lbf·ft)	45/21 (33.2/15.5) [45/21 (33.2/15.5)]	82.8/23.6 (61/17.4)	117/52.5 (86.3/38.7)	
	Spindle Driving Method	-	DIRECT			
FEED	Travel (X/Y/Z)	mm(in)	500/400/330 (19.7"/15.7"/13") [520/400/480 (20.5"/15.7"/18.9")]		520/400/480 (20.5"/15.7"/18.9")	
	Distance from Table Top to SP. Nose	mm(in)	150 ~ 480 (5.9"~18.9") [150 ~ 630 (5.9"~24.8")]		150 ~ 630 (5.9"~24.8")	
	Distance from Column to SP. center	mm(in)	484 (19")			
	Rapid Traverse Rate (X/Y/Z)	m/min(ipm)	56/56/56 (2,205/2,205/2,205)		48/48/48 (1,890/1,890/1,890)	
	Slide Type	-	X/Y-Axis : LM GUIDE, Z-Axis : ROLLER LM GUIDE			
ATC	Tool Shank	-	BBT30		BBT40	
	Max. Tool Dia. (W.T / W.O)	mm(in)	Ø80/Ø80(Ø3.1"/Ø3.1") [20T : Ø80/125 (Ø3.1"/Ø4.9")] [24T : Ø67/125 (Ø2.6"/Ø4.9")]		Ø90/Ø150 (Ø3.5"/Ø5.9")	
	Max. Tool Length	mm(in)	200 (7.9")			
	Max. Tool Weight	kg(lb)	3 (6.6)		5 (11)	
TURRET TYPE	Number of Tools	EA	14 [21]		-	
	Tool Selection Method	-	FIXED ADDRESS		-	
	Tool Change Time	T-T	sec	1.06		-
		C-C	sec	1.6 [21Tool :1.8]		-
	TWINARM (Option)	Number of Tools	EA	[20, 24]		20
		Tool Selection Method	-	[Random]		Random
Tool Change Time		T-T	sec	[1.0]		1.3
	C-C	sec	[2.5]		2.9	
TANK CAPACITY	Coolant Tank	ℓ (gal)	200 (52.8)			
	Lubricating Tank	ℓ (gal)	2 (0.5)			
	Air Consumption (0.5MPa)	ℓ / min(gal)	200 (52.8)			
	Cutting Air Blow Air onsumption* (0.5MPa)	ℓ / min(gal)	[300 (79.3)]			
POWER SUPPLY	Electric Power Supply	KVA	20	16	21	
	Thickness of Power Cable	Sq	Over 25			
	Voltage	V/Hz	380/60(50*)	220/60(50*)		
MACHINE	Floor Space (L×W)	mm(in)	1,660×2,011 (65.4"×79.2") [1,660×2,130 (65.4"×83.9")]	1,660×2,570 (65.4"×101.2")		
	Height	mm(in)	2,319 (91.3") [2,542 (100.1")]	2,650 (104.3")		
	Weight	kg(lb)	2,200 (4,850)			
PC	Controller	-	HYUNDAI-iTROL	HW FANUC i Series		

Cutting Air Blow Air Consumption\* : Option

\*) Using 50Hz voltage instead of 60Hz may lower the output of motors. (excluding servo motors and inverter motors)  
Specifications are subject to change without notice for improvement.

# SPECIFICATIONS

## Specifications

[ ] : Option ■ : Twin Arm

ITEM			i-CUT400M	i-CUT450T (iTROL)	i-CUT450T (FANUC)	
TABLE	Table Size	mm(in)	650×400 (25.6"×15.7")	850×460 (33.5"×18.1")		
	Maximum Load Capacity	kg(lb)	300 (661.4)			
	Table Change Time	sec	-			
	Change Method	-	-			
	Table Driving Method	-	-			
SPINDLE	Spindle Taper	-	BBT30			
	Spindle RPM	r/min	24,000	12,000 [15,000]	12,000	
	Spindle Power Output (Max./Cont.)	kW(HP)	22.6/3.5 (30.3/4.7)	14.1/4.1(18.9/5.5) [14.1/4.1(18.9/5.5)]	13/3.7 (17.4/5)	
	Spindle Torque (Max./Cont.)	N·m(lbf·ft)	24/3.7 (17.7/2.7)	45/21 (33.2/15.5) [45/21 (33.2/15.5)]	82.8/23.6 (61/17.4)	
	Spindle Driving Method	-	DIRECT			
FEED	Travel (X/Y/Z)	mm(in)	500/400/330 (19.7"/15.7"/13")	700/450/330 (27.6"/17.7"/13") [Z-Axis : 460 (18.1")]		
	Distance from Table Top to SP. Nose	mm(in)	150 ~ 480 (5.9"~18.9") [150 ~ 610 (5.9"~24")]			
	Distance from Column to SP. center	mm(in)	484 (19")			
	Rapid Traverse Rate (X/Y/Z)	m/min(ipm)	56/56/56 (2,205/2,205/2,205)			
	Slide Type	-	X/Y-Axis : LM GUIDE, Z-Axis : ROLLER LM GUIDE			
ATC	Tool Shank	-	BBT30			
	Max. Tool Dia. (W.T / W.O)	mm(in)	Ø80/Ø80(Ø3.1"/Ø3.1")	Ø80/Ø80(Ø3.1"/Ø3.1") [20T : Ø80/125 (Ø3.1"/Ø4.9")] [24T : Ø67/125 (Ø2.6"/Ø4.9")]		
	Max. Tool Length	mm(in)	200 (7.9")			
	Max. Tool Weight	kg(lb)	3 (6.6)			
TURRET TYPE	Number of Tools	EA	14 [21]			
	Tool Selection Method	-	FIXED ADDRESS			
	Tool Change Time	T-T	sec	1.06		1.4
		C-C	sec	1.6 [21Tool :1.8]		1.8 [21Tool : 2.1]
	TWINARM (Option)	Number of Tools	EA	-	[20, 24]	
Tool Selection Method		-	-	[Random]		
Tool Change Time		T-T	sec	[1.0]		
		C-C	sec	[2.5]		
TANK CAPACITY	Coolant Tank	ℓ (gal)	200 (52.8)	240 (52.8)		
	Lubricating Tank	ℓ (gal)	2 (0.5)			
	Air Consumption (0.5MPa)	ℓ /min(gal)	200 (52.8)			
	Cutting Air Blow Air onsumption* (0.5MPa)	ℓ /min(gal)	[300 (79.3)]			
POWER SUPPLY	Electric Power Supply	KVA	20		16	
	Thickness of Power Cable	Sq	Over 25			
	Voltage	V/Hz	380/60(50*)		220/60(50*)	
MACHINE	Floor Space (L×W)	mm(in)	1,660×2,011 (65.4"×79.2")	2,140×2,246 (84.3"×88.4")		
	Height	mm(in)	2,319 (91.3")	2,392 (94.2")		
	Weight	kg(lb)	2,200 (4,850)	3,800 (8,377.5)		
PC	Controller	-	HYUNDAI-iTROL		HW FANUC i Series	

Cutting Air Blow Air Consumption\* : Option

\*) Using 50Hz voltage instead of 60Hz may lower the output of motors. (excluding servo motors and inverter motors)  
Specifications are subject to change without notice for improvement.

# SPECIFICATIONS

## Specifications

[ ] : Option ■ : Twin Arm

ITEM			i-CUT400TD (iTROL)	i-CUT400TD (FANUC)	
TABLE	Table Size	mm(in)	2-650×400 (25.6"×15.7")		
	Maximum Load Capacity	kg(lb)	2-250 (551.2)		
	Table Change Time	sec	6		
	Change Method	-	ROTARY TURN		
	Table Driving Method	-	ROTARY CYLINDER		
SPINDLE	Spindle Taper	-	BBT30		
	Spindle RPM	r/min	12,000 [15,000]	12,000	
	Spindle Power Output (Max./Cont.)	kW(HP)	14.1/4.1(18.9/5.5) [14.1/4.1(18.9/5.5)]	13/3.7 (17.4/5)	
	Spindle Torque (Max./Cont.)	N·m(lbf·ft)	45/21 (33.2/15.5) [45/21 (33.2/15.5)]	82.8/23.6 (61/17.4)	
	Spindle Driving Method	-	DIRECT		
FEED	Travel (X/Y/Z)	mm(in)	520/400/330 (20.5"/15.7"/13") [Z-Axis : 460 (18.1")]		
	Distance from Table Top to SP. Nose	mm(in)	200 ~ 530 (7.9"~20.9") [200~660 (7.9"~26")]		
	Distance from Column to SP. center	mm(in)	484 (19")		
	Rapid Traverse Rate (X/Y/Z)	m/min(ipm)	56/56/56 (2,205/2,205/2,205) [48/48/56 (1,890/1,890/2,205)] [FANUC : 48/48/48 (1,890/1,890/1,890)]		
	Slide Type	-	X/Y-Axis : LM GUIDE, Z-Axis : ROLLER LM GUIDE		
ATC	Tool Shank	-	BBT30		
	Max. Tool Dia. (W.T / W.O)	mm(in)	Ø80/Ø80(Ø3.1"/Ø3.1") [20T : Ø80/125 (Ø3.1"/Ø4.9")] [24T : Ø67/125 (Ø2.6"/Ø4.9")]		
	Max. Tool Length	mm(in)	200 (7.9")		
	Max. Tool Weight	kg(lb)	3 (6.6)		
TURRET TYPE	Number of Tools	EA	14 [21]		
	Tool Selection Method	-	FIXED ADDRESS		
	Tool Change Time	T-T	sec	1.06	1.4
		C-C	sec	1.6 [21Tool : 1.8]	1.8 [21Tool : 2.1]
TWINARM (Option)	Number of Tools	EA	[20, 24]		
	Tool Selection Method	-	[Random]		
	Tool Change Time	T-T	sec	[0.98]	
		C-C	sec	[2.5]	
TANK CAPACITY	Coolant Tank	ℓ (gal)	210 (55.5)		
	Lubricating Tank	ℓ (gal)	2 (0.5)		
	Air Consumption (0.5MPa)	ℓ /min(gal)	200 (52.8)		
	Cutting Air Blow Air onsumption* (0.5MPa)	ℓ /min(gal)	[300 (79.3)]		
POWER SUPPLY	Electric Power Supply	KVA	20	18	
	Thickness of Power Cable	Sq	Over 25		
	Voltage	V/Hz	380/60(50*)	220/60(50*)	
MACHINE	Floor Space (L×W)	mm(in)	1,720×2,960 (67.7"×116.5") [2,114×2,861 (83.2"×112.6")]		
	Height	mm(in)	2,446 (96.3") [2,650 (104.3")]		
	Weight	kg(lb)	4,800 (10,582)		
PC	Controller	-	HYUNDAI-iTROL	HW FANUC i Series	

Cutting Air Blow Air Consumption\* : Option

\*) Using 50Hz voltage instead of 60Hz may lower the output of motors. (excluding servo motors and inverter motors)

Specifications are subject to change without notice for improvement.



# CONTROLLER

## HYUNDAI-iTROL

<b>Control &amp; Composition</b>	
Number of axis/Spindles	3 axis (X, Y, Z)
Number of axis/Spindles, max.	6 axis (Axis + Spindle)
Color display	TFT 10.4" Color (800 x 600)
Keyboard	QWERTY Full Keyboard
Part program	1MB, 3MB, 5MB
Addition of part program on CF card	
<b>Transfer Function</b>	
Feedrate override	0% ~ 200%
Transfer value input range	± 999999999
Unlimited rotation of rotation axis	
Acc./Dec. with jerk limitation	
Measuring systems 1 and 2, selectable	
Travel to fixed stop	
Auto servo drive tuning	
<b>Spindle Function</b>	
Spindle override	0% ~ 150%
Spindle speed, max. programmable value ange	1000000 ~ 0.0001
Automatic gear stage selection	
Spindle orientation	
Spindle speed limitation	
Rigid tapping	
<b>Interpolation</b>	
Linear interpolation axis, max.	4 axis
Circle via center point and end point	
Circle via interpolation point	
Helical interpolation	
Non-uniform rational B splines	
Compressor for 3-axis machining	
Advanced surface	
<b>Program Function</b>	
Subroutine levels, max.	11
Interrupt routines, max.	4
Number of levels for skip blocks	2
Polar Coordinates	
Dimensions inch/metric, changeover manually or via program	
Dynamic preprocessing memory FIFO	
Look ahead	50, 100, 150
Absolute/Incremental command	G90 / G91
Scaling/Rotation	
Read/Write system variables	
Block search	
Edit background	
Processing program number, max.	750
Using of CF Card, USB	
Basic coordinate number, max.	1
Work coordinate number, max.	100
Basic/Work coordinate programming change	
Scratching function	
Global and Local user data (GUD/LUD)	
Global program user data	
Interactive cycle program	
<b>Tool Function</b>	
Tool radius compensations	
Tool offset selection via T/D numbers	
Tools / Cutting edges in tool list	80/160, 128/256, 256/512
<b>Monitoring Function</b>	
Working area limit	
Software and Hardware limit	
Zero-speed/Clamping monitoring	
2D/3D protection zones	
Contour monitoring	
<b>Compensation</b>	
Backlash compensation	
Leadscrew error compensation	
Measuring system error compensation	
Feedforward control (Speed control)	
<b>Safety Function</b>	
Safe torque off (STO)	
Safe brake control (SBC)	
Safe stop 1 (SS1)	
<b>Diagnostic Function</b>	
Alarm/Message, Alarm log	
PLC status/LAD online display	
PLC remote connection (Ethernet)	
<b>Automation Support Function</b>	
Actual velocity display	
Tool life management	As time / As amount
Work counter/Cycle time	Embedded
2D simulation	
<b>Manual Operation</b>	
Manual handle/Jog transfer	
Manual measurement of workpiece / tool offset	
Automatic tool/Workpiece measurement	
Automatic/Program reference approach	
<b>Automatic Operation</b>	
Program run as using CF card/USB	
Program control/modification	
Block search	
Reposition	
Preset (Set actual value)	
<b>Data Transmission</b>	
Ethernet network	
USB memory stick & CF card	
<b>Convenience Function</b>	
Processing setting	Coordinate setting, Auto tool length measurement
Processing support	Tool Monitoring, Spindle overload monitoring
Maintenance	Turret Guidance, I/O monitoring, Manual
Maintenance / Management	Soft MCP, Spindle warming-up M/G code list
SMART machining	
Energy saving function (ECO)	
Machine Monitoring System (MMS Lite)	
<b>Language</b>	
Standard support language	Chinese Simplified, English, Korean
<b>Option</b>	
Maximum skip block number	10
DRF offset	
MDI program save/load	
Teach-In mode	
3D simulation	Except for working area/Collision check
Real time simulation	
Shop Mill	Conversational Program
Spline interpolation	
Program remote control in network	
Language	Chinese Traditional, French, German, Italian, Portuguese, Spanish

Figures in inch are converted from metric values.  
Specifications are subject to change without notice for improvement.

# CONTROLLER

## HYUNDAI WIA FANUC – SMART PLUS

[ ] : Option ☆ Needed technical consultation

Controlled axis / Display / Accuracy Compensation	
Control axes	3 axes (X, Y, Z) 4 axes (X, Y, Z, B)
Simultaneously controlled axes	3 axes [Max. 4 axes]
Least setting Unit	X, Y, Z axes : 0.001 mm (0.0001 inch) B axes : 1 deg [0.001] deg
Least input increment	X, Y, Z axes : 0.001 mm (0.0001 inch) B axes : 1 deg [0.001] deg
Inch / Metric conversion	
High response vector control	
Interlock	All axes / Each axis
Machine lock	All axes
Backlash compensation	± 0 ~ 9999 pulses (Rapid traverse / Cutting feed)
Position switch	
LCD / MDI	10.4 inch color LCD
Feedback	Absolute motor feedback
Stored stroke check 1	Over travel
Stored stroke check 2, 3	
Stored pitch error compensation	
Operation	
Automatic operation (Memory)	
MDI operation	
DNC operation	Needed DNC software / CF card
Program restart	
Wrong operation prevention	
Program check function	Dry run, Program check, Z axis Machine lock Stored limit check before move
Single block	
Search function	Program Number / Sequence Number
Handle interruption	
Interpolation functions	
Nano interpolation	
Positioning	G00
Linear interpolation	G01
Circular interpolation	G02, G03
Exact stop mode	Single : G09, Continuous : G61
Dwell	G04, 0 ~ 9999.9999 sec
Skip	G31
Reference position return	1st reference, G28 / 2nd reference, G30 Ref. position check, G27
Single direction positioning	G60
Thread synchronous cutting	G33
Helical interpolation	Circular + Linear 2 axes (Max.)
Feed function / Acc. & Dec. control	
Manual feed	Rapid traverse Jog : 0~2,000mm/min (79 ipm) Manual handle : x1, x10, x100 pulses Reference position return
Cutting Feed command	Direct input F code
Feedrate override	0 ~ 200% (10% Unit)
Rapid traverse override	1%, 25%, 50%, 100%
Override cancel	
Feed per minute	G94
Feed per revolution	G95
Cylindrical interpolation	G07.1
Inverse time feed	G93
Look-ahead block	200 blocks (AI APC)
Program input	
Tape Code	EIA / ISO
Optional block skip	1 ea
Absolute / Incremental program	G90 / G91
Program stop / end	M00, M01 / M02, M30
Maximum command unit	± 999,999,999 mm (± 99,999,9999 inch)
Plane selection	X-Y, G17 / Z-X, G18 / Y-Z, G19
Workpiece coordinate system	G52, G53, 48 pairs (G54.1 P1 ~ 48)
Manual absolute	Fixed ON
Programmable data input	G10
Sub program call	10 folds nested
Custom macro	#100 ~ #199, #500 ~ #999
Programmable mirror image	G51.1, G50.1
G code preventing buffering	G4.1
Optional chamfering corner R	

Program input	
Polar coordinate command	G15, G16
Canned cycle	G73, G74, G76, G80 ~ G89
Scaling	G50, G51
Coordinate system rotation	G68, G69
Conversational Program	SmartGuide-i
Auxiliary function / Spindle speed function	
Level-up M Code	Multi / Bypass M code
Spindle speed function	S & 5 digit , Binary output
Spindle override	0% ~ 150% (10% Unit)
Spindle orientation	M19
Retraction for rigid tapping	
FSSB high speed rigid tapping	
Tool function / Tool compensation	
Tool function	Max. T8 digit
Tool life management	
Tool offset pairs	400 pairs
Tool nose / radius compensation	G40, G41, G42
Tool length offset	G43, G44, G49
Tool offset memory C	Tool geometry and wear (Cutter and tool length)
Tool length measurement	Z axis Input C
Editing function	
Part program storage size	5,120m (2MB)
No. of registerable programs	1,000 ea
Program protect	
Background editing	
Extended part program editing	Copy, move and change of NC program
Memory card program edit	
Data input / output & Interface	
I/O interface	CF card, USB memory Embedded Ethernet interface
Screen hard copy	
External message	
External key input	
External workpiece number search	
Automatic data backup	
Setting, display and diagnosis	
Self-diagnosis function	
History display & Operation	Alarm & Operator message & Operation
Run hour / Parts count display	
Maintenance information	
Actual cutting feedrate display	
Display of spindle speed / T code	
Graphic display	
Operating monitor screen	Spindle / Servo load etc.
Power consumption monitoring	Spindle & Servo
Spindle / Servo setting screen	
Multi language display	Support 24 languages
Display language switching	Selection of 5 optional Languages
LCD Screen Saver	Screen saver

Option	
Additional optional block skip	9 ea ☆
Fast ethernet	Needed option board
Data server	Needed option board
Protection of data at 8 levels	
Additional Axis	
Manual handle feed	2/3 units #100 ~ #199, #500 ~ #999, #98000 ~ #98499
Add. Workpiece	Max. 300 pairs (G54.1 P1 ~ P300)
AICC II	400 blocks ☆

Figures in inch are converted from metric values.

The FANUC controller specifications are subject to change based on the policy of company CNC supplying.

# GLOBAL NETWORK



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i-CUT400T  
(Complex Shape)



i-CUT400M  
(Headlamp Mold)



i-CUT400TD  
(Handphone Case)



i-CUT450T  
(Valve Body)



i-CUT400M  
(3D Movie)

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