

DOUBLE COLUMN 5 AXIS AND VERTICAL TURNING
MULTITASKING MACHINING CENTER

FTU-1200



5 AXIS MILLING AND VERTICAL TURNING FTU-1200



Combination table with rotary table and fixed table.

Table size

- Rotary table 1,000 x 1,000mm
- Rotary table and fixed table 2,000 x 1,000mm

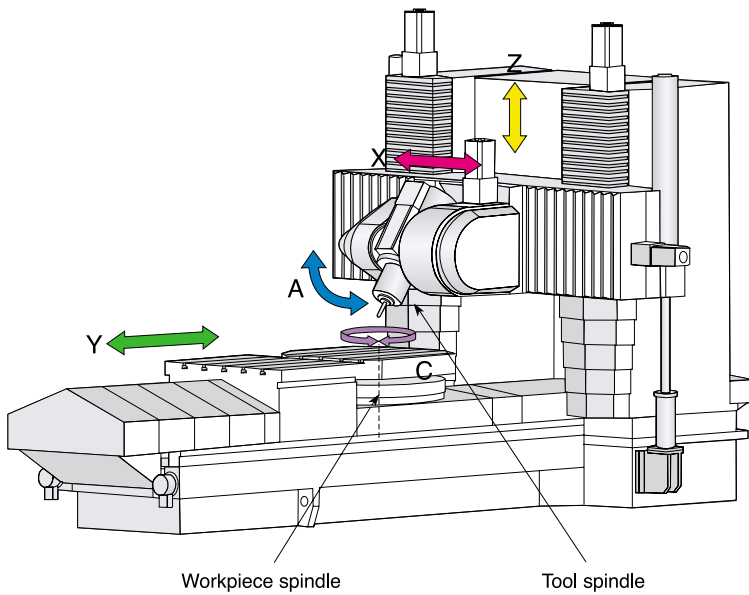


Multitasking machining center with 5 face + 5 axis
+ vertical turning enhance the productivity.



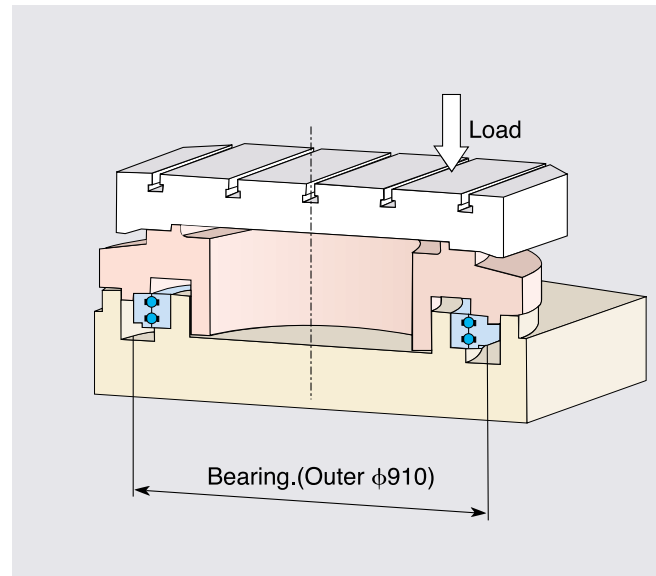
Axis

- 5 axis : X, Y, Z, A, C
- Tool spindle
- Workpiece spindle



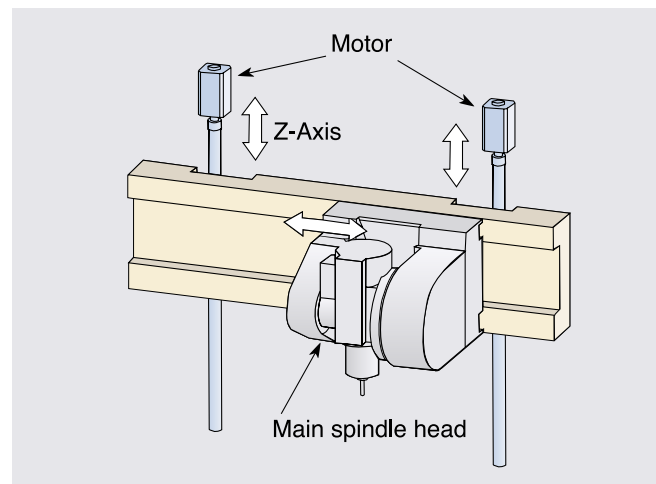
Table

- Outer diameter 910mm roller bearing support the rotary table strongly to keep the high precision.



Z-axis

- Z axis, which is composed of two motor, two ball screw, two linear scale, two hydraulic cylinder for balancing enables both heavy duty cutting and high precision cutting.



Hydraulic clamping of A and C axis enables heavy duty cutting.

Tool shank : BBT50 dual contact.

Linear scale for three(X, Y, Z)axis.

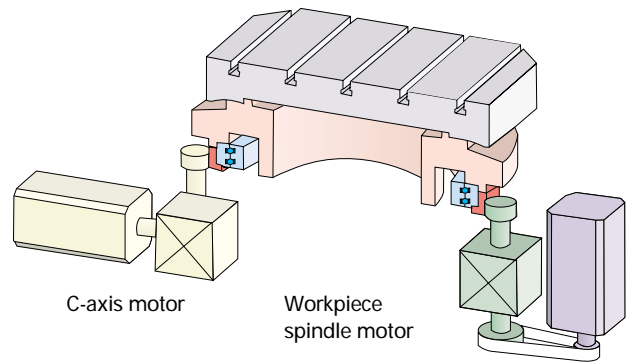
Rotary encoder fitted on the main shaft for two(A, C) axis.



C axis and workpiece spindle motor.

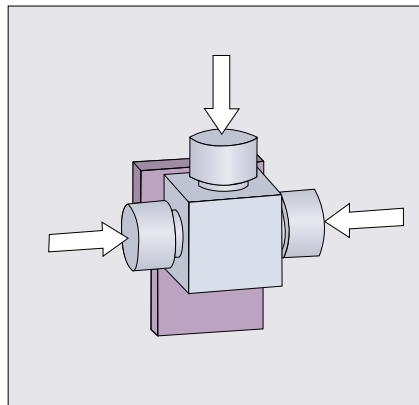
Two motors enable milling and turning efficiently.

- One motor for C axis
- One motor for workpiece spindle
- 7700 Nm C axis torque guarantee strong and high precision milling.
- 37 Kw / 30 Kw workpiece spindle motor guarantee strong and high precision turning.



Tool edge checking sensor (OP)

Tool edge checking sensor on three direction.



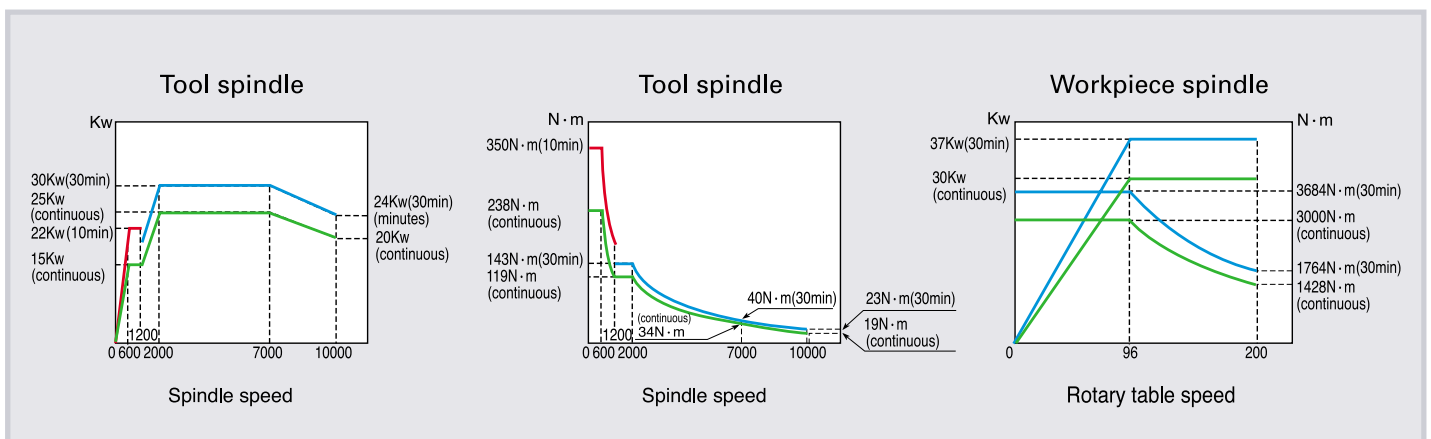
Inspection by laser measuring device.

Y-axis straightness measurement. Actual measurement.

- X, Y face 0.005/1,000mm
- Y, Z face 0.005/1,000mm



Tool spindle / Work piece spindle.



DOUBLE COLUMN 5 AXIS AND VERTICAL TURNING MULTITASKING MACHINING CENTER

MACHINE SPECIFICATION

Description		FTU-1200
Distance		1,260mm
X-axis travel		1,200mm
Y-axis travel		2,000mm
Z-axis travel		1,200mm [1,450mm]
A axis (spindle) tilting angle		130, (90, ± 20,)
C axis (table) rotating angle		360,
Table		
Working surface	rotary table size	1,000mm × 1,000mm
	rotary table + fixed table	2,000mm × 1,000mm
Max. permissible load	rotary table (center)	3,000kg
	rotary table + fixed table	4,000kg
Height from floor to table surface		1,290mm
Tool spindle (built in spindle)		
Spindle speed		10,000min ⁻¹
Spindle nose		BBT150 dual contact
Workpiece spindle		
Spindle speed		200min ⁻¹
Feed rate		
Rapid traverse	X, Y, Z	30m/min
	A, C	17min ⁻¹ , 7min ⁻¹
Feed rate	X, Y, Z	1 ~ 30m/min
	A, C	1 ~ 17min ⁻¹ , 1 ~ 7min ⁻¹
Motor		
Tool spindle (built in motor)		High speed 30 Kw / 25 Kw (30min / Continuous) Low speed 22 Kw / 15 Kw (10min / Continuous)
Workpiece spindle		37 Kw / 30 Kw (30min / Continuous)
Automatic tool change		
Retention knob (nominal size, No.)		MAS P50T-1 (45,)
Tool storage capacity		60
Max. tool diameter (without adjacent tools)		φ250mm
Max. tool length		550mm
Max. tool weight		25kg
CNC		FANUC series 31i (10.4 collar with LCD)
Floor space		5,400mm × 7,050mm × 4,050mm (4,500mm)
Mass of machine		33,000kg (33,500kg)

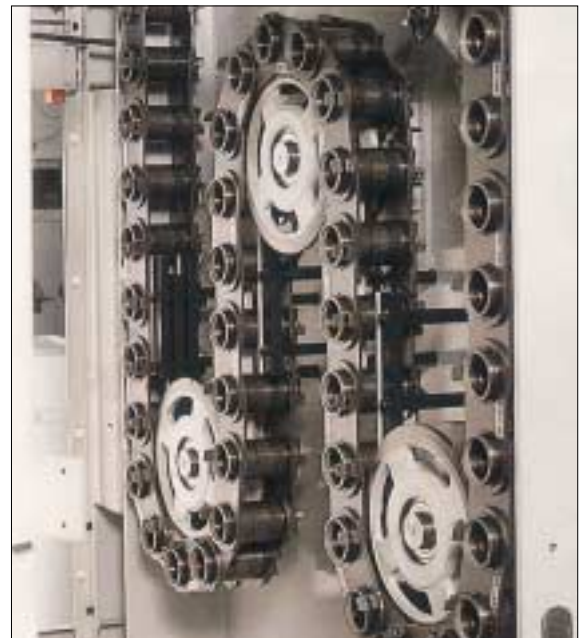
[] : High column

Standard

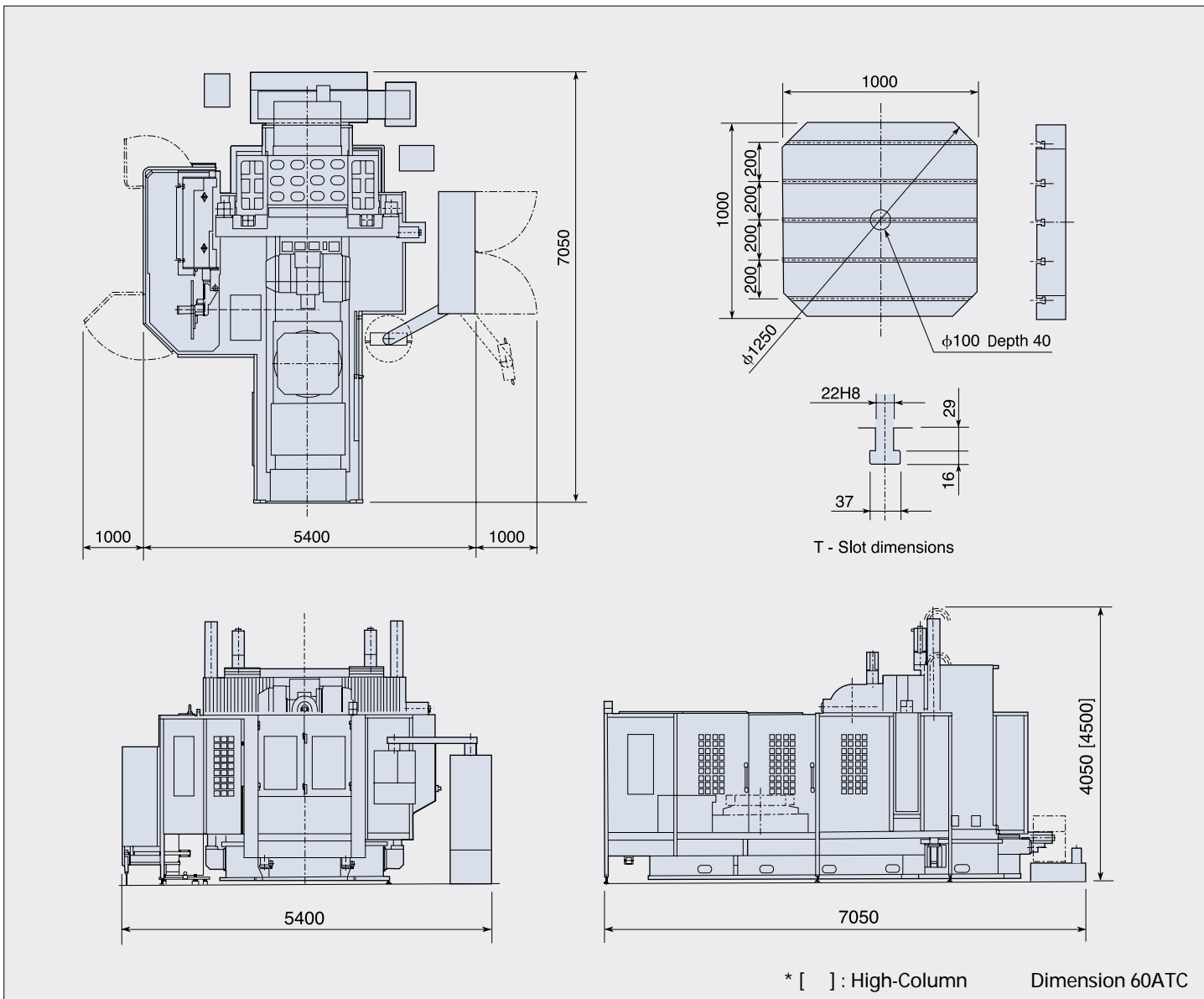
- X, Y, Z axis linear scale
- B, C axis rotary encoder fitted on the main shaft
- Oil cooler
- Flood coolant system with tank
- Splash guard
- Pat-light
- Work light
- Chip box

Optional

- High column for vertical travel 1,450mm
- Coolant through spindle
- Automatic tool changer : 90, 120, 180, 240 tools
- Air blow
- Chip conveyor
- Automatic coolant water temperature regulator
- Tool edge checking sensor
- Tool damage detection sensor
- Automatic workpiece measurer
- Coolant water splash gun



DIMENSION



(株) 起興機械
KIHEUNG MACHINERY CO.LTD

43 - 1 43-1 Moon Pyung-Dong, Dae Deog-Ku, Taejeon, Korea

TEL: 042-933-5500
 FAX: 042-933-5505
 Web: <http://www.kiheung.com>
 E-mail: kiheung@kiheung.com
mkchang@kiheung.com

TEL: 82-42-933-5500
 FAX: 82-42-933-5505
 Web: <http://www.kiheung.com>
 E-mail: kiheung@kiheung.com
mkchang@kiheung.com

2165 - 2
 () 1 108
 TEL: 031-507-5500
 FAX: 031-507-5501
 E-mail: nurione@hanafos.com