

**KOMATECH CO. Ltd.** [www.komatech.kr](http://www.komatech.kr)

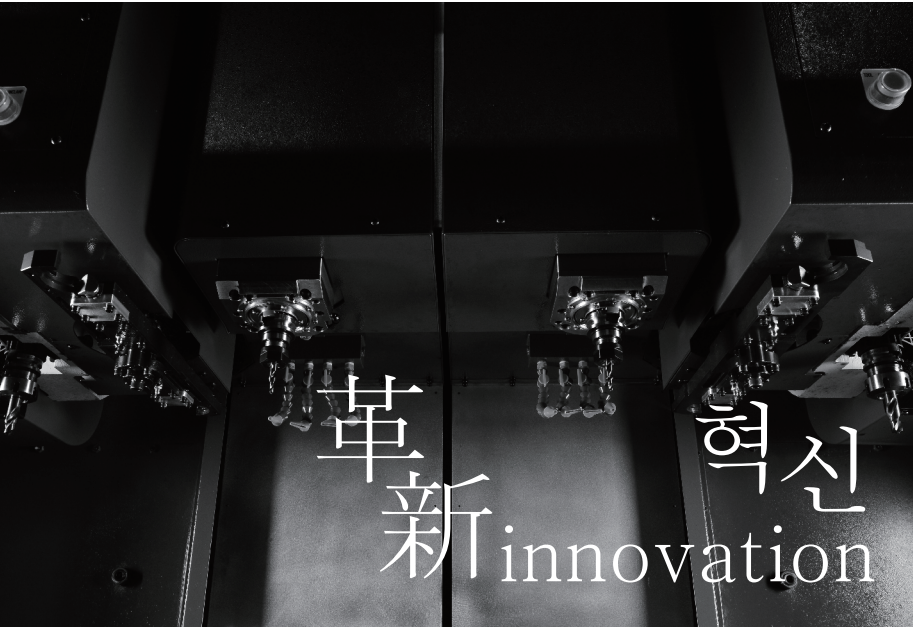
Head Office / Plant

221 Gukgasandan-daero 39-gil, Guji-myeon, Dalseong-gun, Daegu, Korea.

TEL : +82-53-614-7400

FAX : +82-53-614-7486

The specification of the catalog are subject to change without prior notice. 2022.05 / 00300



革新 혁신  
innovation



passion 熱情  
열정

SINCE 1975

# PRODUCT LINEUP



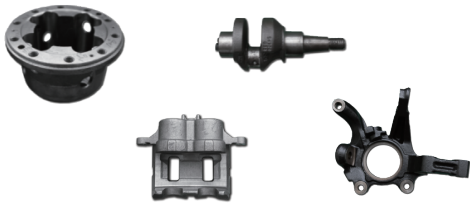
신뢰 信賴  
reliability

**KOMATECH**

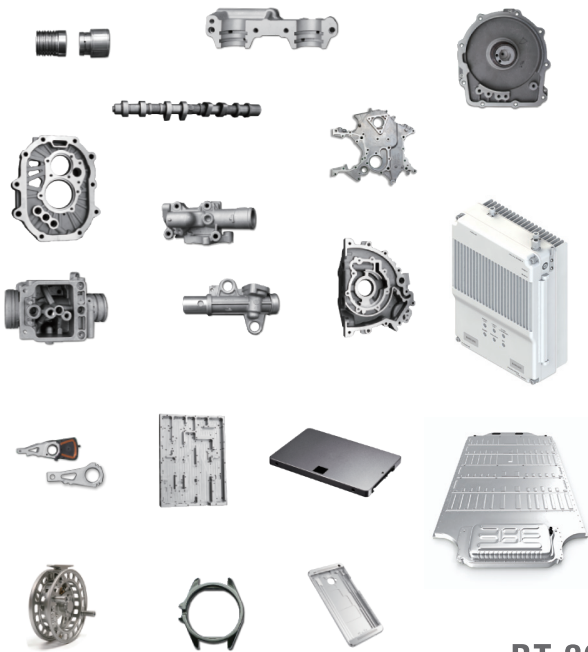
# KOMATECH

## MACHINE TOOLS LINE-UP

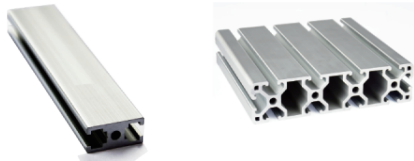
Examples of target workpieces  
IT, Automobile & General parts



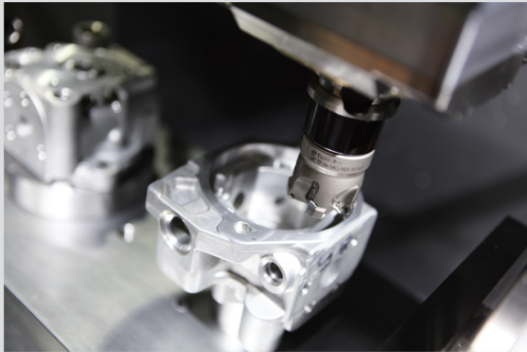
BT 40



BT 30



GMT 4000 / 6000



## HIGH SPEED TAPPING CENTER

KT 420



KT 420A



KT 420DH



KT 420L



KT 420AL



KT 360D



KT 500



KT 700



## CNC MACHINING CENTER

KM 430



KM 450D



KM 450DH



KM 500



## LONG TABLE MACHINING CENTER



GMT 4000

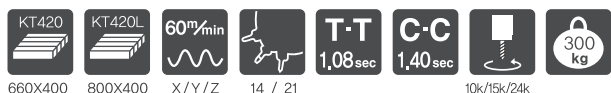


GMT 6000

# HIGH SPEED TAPPING CENTER

## KT 420(KT 420L)

Ultra-high speed tapping center with higher acceleration more than 1G and 60 m/min of rapids



Travels(X/Y/Z)	mm	560(700) / 420 / 300
Spindle speed	rpm	10,000 [15,000], [24,000], [High Torque 10,000]
Spindle power	kW	21.2/4.8 [21.2/4.8],[18.8/2.8],[20.9/8.5]
Spindle taper		ISO No.30 (7/24)
Tool storage	pcs	14 [21]
Rapids(X/Y/Z)	m/min	60 / 60 / 60 (50 / 50 / 60)

[ ] Opt



## KT 420A(KT 420AL)

Ultra-high speed tapping center with 60 m/min of rapids and max. 26 tool storage magazine to be available for various machining applications.

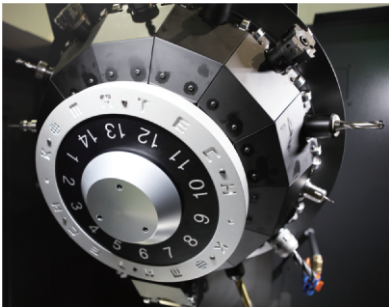


Travels(X/Y/Z)	mm	560(700) / 420 / 430
Spindle speed	rpm	10,000 [15,000], [24,000], [High Torque 10,000]
Spindle power	kW	21.2/4.8 [21.2/4.8],[18.8/2.8],[20.9/8.5]
Spindle taper		ISO No.30 (7/24)
Tool storage	pcs	20 [26]
Rapids(X/Y/Z)	m/min	60 / 60 / 60 (50 / 50 / 60)

[ ] Opt



## TURRET TYPE TOOL CHANGER KT420 / KT420L



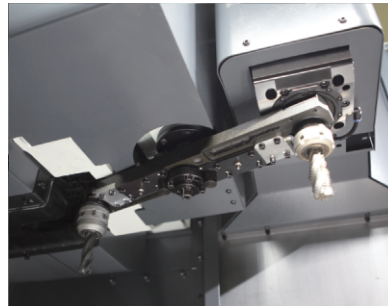
Tool to Tool  
**S** 1.08 sec    **M** 1.07 sec  
 Chip to Chip  
**S** 1.40 sec    **M** 1.36 sec

High durability and ultra-high speed tool change is possible with optimized structure by own develop servo motor driven type.

The farthest tool change time (T-T)  
 ex) From T1 to T8 : 1.6 sec



## TWIN ARM TYPE TOOL CHANGER KT420A / KT420AL

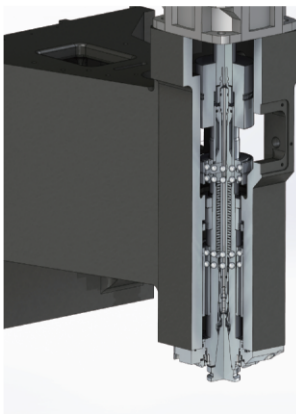


Tool to Tool  
**1.2 sec**  
 Chip to Chip  
**1.8 sec**

High-speed cam motor-driven type tool changer. The optimized tool change section ensures faster, more stable motion and high durability.

\*Tool storage capacity: 20 pcs **[Opt: 26 pcs]**

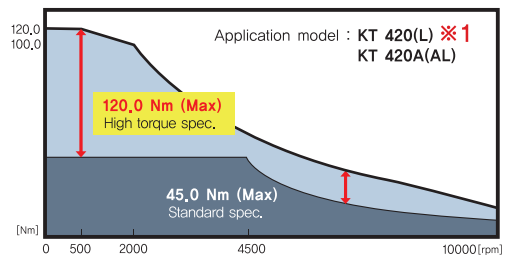
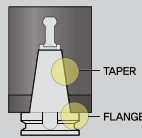
## HIGH PERFORMANCE SPINDLE



Ensure precise and stable cutting performance by high precision angular ball bearing, high tension spring and prevention of cutting oil inflow design are applied. And various machining applications are available with a wide spindle speed (10k/15k/24k rpm) specifications.  
 \*CTS is available in all spindle speed (Opt).

### BIG PLUS BBT (Opt.)

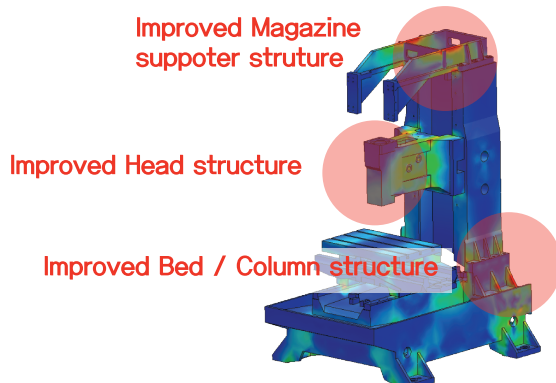
The 2-face locking tool system(Big plus) is available. It offers longer tool life, higher power and more precise machining by the dual contact both flange face and taper face.



Max. torque **120.0 Nm**    Max. power **20.9 kW**

It is possible to achieve over BT30 grade machining performance with Max. 120Nm high torque Spindle motor (Opt.)

## HIGH DURABILITY



Ensures high durability and stability with 25% improved base structure rigidity than the conventional model.

## AUTOMATION (BUILT-IN GANTRY LOADER)



Komatech designed high speed the built-in type gantry loader automation enables remarkable cost reduction and optimized investment.

# HIGH SPEED TAPPING CENTER

## KT 420DH

Overwhelming productivity dual spindle  
high rigidity tapping center



Travels(X/Y/Z)	mm	560 / 420 / 430
Spindle speed	rpm	10,000 [15,000] [24,000], [High Torque 10,000]
Spindle power	kW	21.2/4.8 [21.2/4.8], [18.8/2.8], [20.9/8.5]
Spindle taper		ISO No,30 (7/24)
Tool storage	pcs	20 X 2 [26 X 2]
Rapids(X/Y/Z)	m/min	48 / 48 / 56

[ ] Opt



## KM 450DH

High productivity dual spindle machining  
center with BT40 machining performance.



Travels(X/Y/Z)	mm	560 / 450 / 430
Spindle speed	rpm	8,000 [12,000]
Spindle power	kW	20.9 / 8.5 [20.9 / 8.5]
Spindle taper		ISO No,40
Tool storage	pcs	20 X 2 [30 X 2]
Rapids(X/Y/Z)	m/min	48 / 48 / 56

[ ] Opt



## DUAL HEAD STRUCTURE

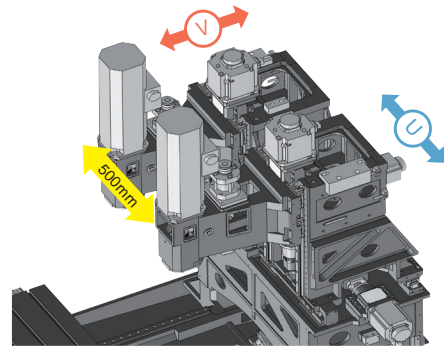
Ultra-high productivity base on 2 spindles simultaneous machining.

Minimize plant utility, floor space, optional devices.

Reduce total investment cost compared to 1 spindle machine.

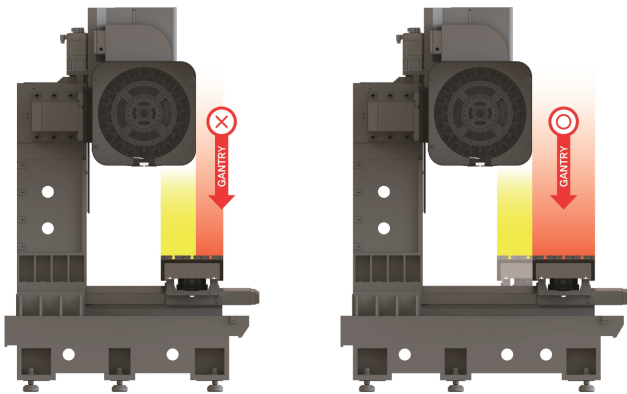
KT 420DH is optimized for same accuracy after simultaneous machining as two independent Z-axis and head structure. Convenient tool length and Z-axis work coordinate setup is available and various machining application is possible through separated motion when it is necessary.

## MICRO ADJUSTMENT OF SPINDLE DISTANCE (OPT)



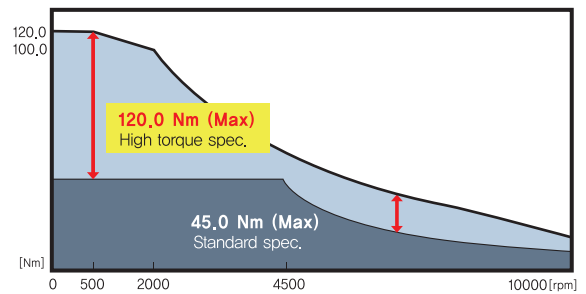
Optimal jig application for dual spindle can be applied with 500mm distance between spindles. U&V axes with  $\pm 2$ mm micro adjustment can flexibly cope with the restrict of jig and rotary table application.

## Y-AXIS EXPANSION (OPT)



Y-axis front part is extendable 200mm to the Gantry loader enters the machine inside without interference.

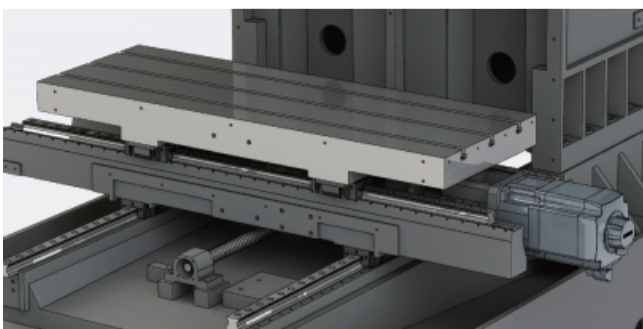
## HIGH TORQUE SPINDLE MOTOR (OPT)



Max. torque **120.0** Nm Max. power **20.9** kW

It is possible to achieve over BT30 grade machining performance with Max.120Nm high-torque spindle motor.

## SLIDEWAY



Achieve silent and fast traverse capability through high-precision LM guide, ball screw, and link-type slide cover application. And various jig fixtures are available with wide table size and travels.

## HIGH SPEED TOOL CHANGER



### KT 420DH

Tool to Tool **1.2** sec  
Chip to Chip **1.8** sec

### KM 450DH

Tool to Tool **1.7** sec  
Chip to Chip **2.3** sec

High-speed cam motor-driven type tool changer. The optimized tool change section ensures faster, more stable motion and high durability.

# HIGH SPEED TAPPING CENTER

## KT 360D

High productivity column moving type dual table tapping center.



650X900



14/21



1.08sec



1.40sec



10k/15k/24k

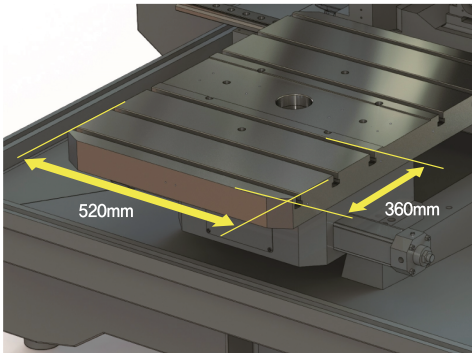


200 kg

200\*2

Travels(X/Y/Z)	mm	520 / 360 / 300
Spindle speed	rpm	10,000 [15,000],[24,000],[High-torque 10,000]
Spindle power	kW	21.2/4.8 [21.2/4.8], [18.8/2.8], [20.4/4.8]
Spindle taper		ISO No.30 (7/24)
Tool storage	pcs	14 [21]
Pallet change time	sec	4.5
Rapids(X/Y/Z)	m/min	50 / 50 / 60

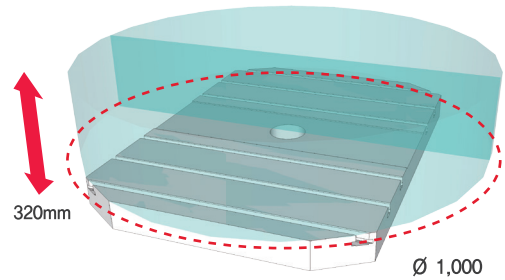
## HIGH RELIABLE DUAL TABLE



PALLET CHANGE TIME  
**4.5 sec**

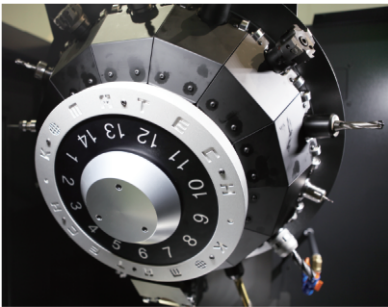
Hirth coupling gear type precision dual table is operated with oil pressure and performs positioning quickly and accurately without additional UP & DOWN operation.

## APPLICATION RANGE OF JIG



Turn diameter  $\varnothing$ 1,000  
Jig height **320 mm** ※1  
Loading weight **200kg x 2**

## HIGH SPEED SERVO MOTOR TYPE ATC



Tool to Tool  
**S** 1.08 sec **M** 1.07 sec  
Chip to Chip  
**S** 1.40 sec **M** 1.37 sec

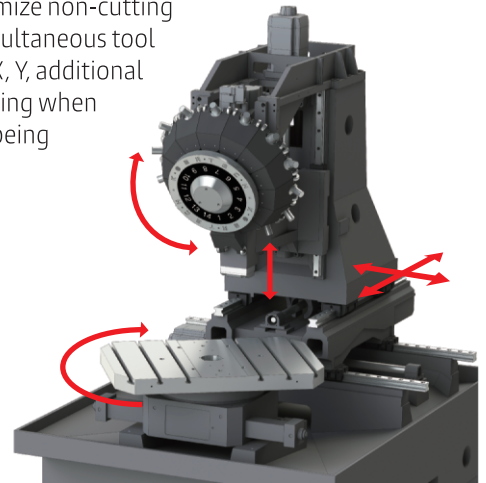
High durability and ultra-high speed tool change is possible with optimized structure by own develop servo motor driven type.

The farthest tool change time (T-T)  
ex) From T1 to T8 : 1.6 sec



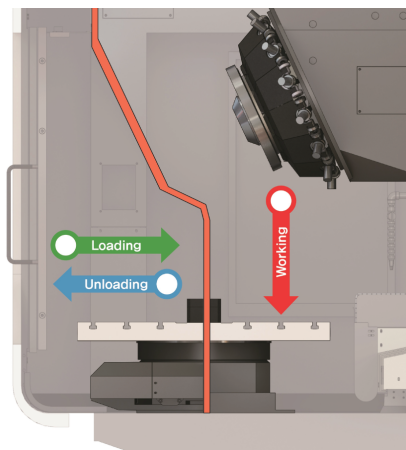
## SIMULTANEOUS MOTION CONTROL

It could minimize non-cutting time by a simultaneous tool change and X, Y, additional axes positioning when the pallet is being changed.



## MINIMIZE NON-CUTTING TIME

The workpiece can be exchanged during machining to minimize non-cutting time.



## PROCESS DUALIZATION

The application of the dual table and the 21-tool magazine can perform 2 processes in one machine and the line balance can be improved. And the user is an available optimized investment.



# HIGH SPEED TAPPING CENTER

## KT 500

High speed tapping center with Max. working area  
"1000 x 500 mm" in its class and 50 m/min of rapids



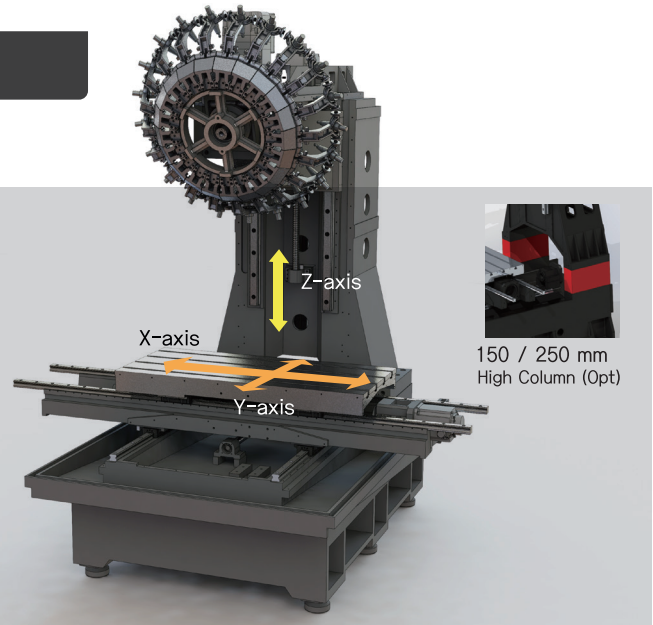
1100x500 14 / 21 1,2 sec 1,5 sec 10k/15k/24k 400 kg

Travels(X/Y/Z)	mm	1000 / 500 / 300
Spindle speed	rpm	10,000 / [15,000 / 24,000] [High Torque 10,000]
Spindle power	kW	21.2/4.8 [21.2/4.8], [18.8/2.8], [20.9/8.5]
Spindle taper		ISO No.30 (7/24)
Tool storage	pcs	14 [21]
Rapids(X/Y/Z)	m/min	50 / 50 / 50

## WIDE STROKE

It is possible to load large size workpiece and multiple small workpieces with a wide working area. (High column is available up to 250mm)

\* Travels  
X-axis 1,000mm / Y-axis 500mm / Z-axis 300 mm



## HIGH PERFORMANCE SPINDLE

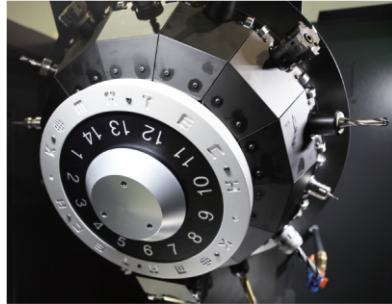


STD. **10,000** rpm  
OPT. **10,000** rpm [High Torque] ※1  
**15,000** rpm  
**24,000** rpm

※CTS is available in all spindle speed(Opt.)

A wide range spindle speed enables to variable workpiece application from high-speed machining to heavy-duty machining.

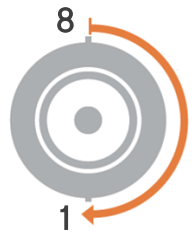
## TURRET TYPE TOOL CHANGER



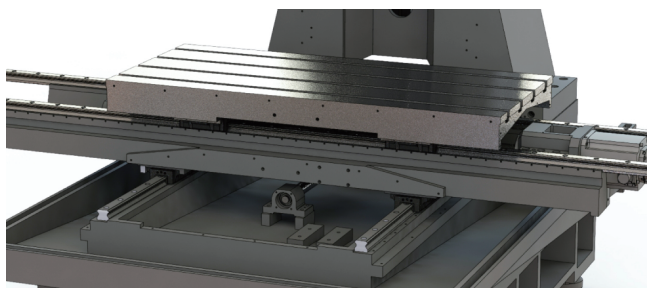
Tool to Tool **1.2** sec  
Chip to Chip **1.5** sec

High durability and ultra-high speed tool change is possible with optimized structure by own develop servo motor driven type.

The farthest tool change time (T-T ex) From T1 to T8 : 1,6 sec



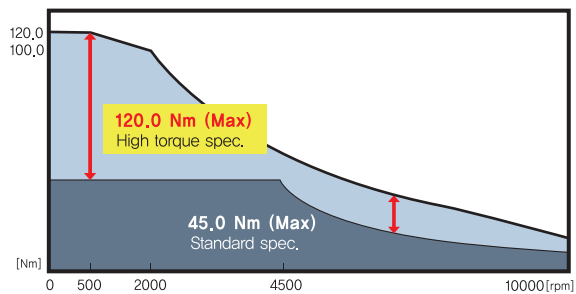
## SLIDEWAY



X/Y/Z Rapids **50 / 50 / 50** m/min

A high-performance feed motor with excellent response, high-precise L/M guide, and ball screw are used for silent and fast feed capability.

## HIGH TORQUE SPINDLE MOTOR (OPT)



Max. torque **120.0** Nm Max. power **20.9** kW

It is possible to achieve over BT30 grade machining performance with Max.120Nm high-torque spindle motor.

# HIGH SPEED TAPPING CENTER

## KT 700

Double column structure high rigidity high-speed tapping center of "800 x 700" wide stroke.



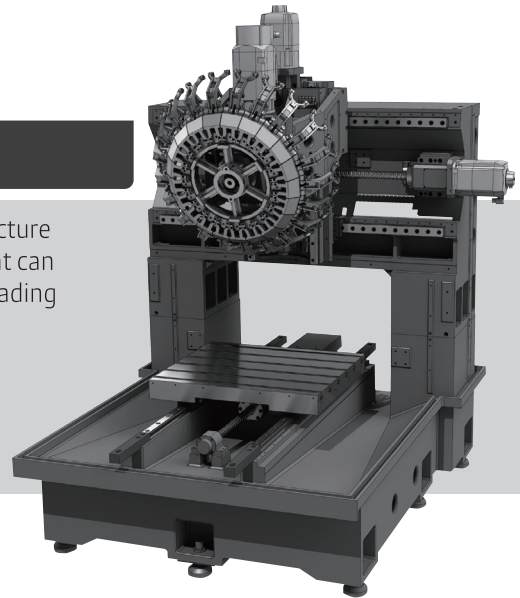
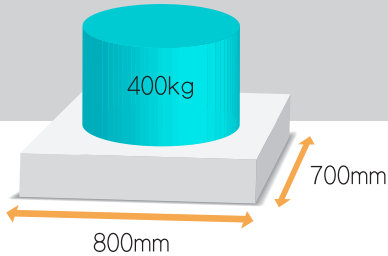
14 / 21

10k/15k/24k

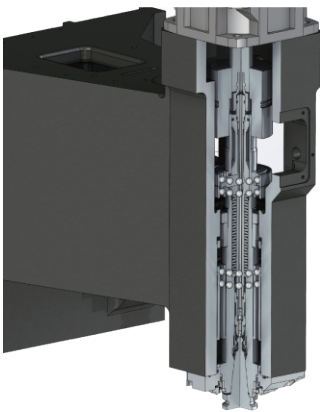
Travels(X/Y/Z)	mm	800 / 700 / 300
Spindle speed	rpm	10,000 / [15,000 / 24,000] [High Torque 10,000]
Spindle power	kW	21.2/4.8 [21.2/4.8],[18.8/2.8],[20.9/8.5]
Spindle taper		ISO No.30
Tool storage	pcs	14 [21]
Rapids(X/Y/Z)	m/min	48 / 48 / 60

## HIGH RIGIDITY DOUBLE COLUMN STRUCTURE

It is advantageous to high-precision machining in a separate travel structure of the X, Y-axis, and 800x700 wide-area stroke, and up to 400kg weight can be applied. As well as various jig and fixtures can be applied such as loading large workpieces and multiple small workpieces.



## HIGH PERFORMANCE SPINDLE



STD. **10,000** rpm  
 OPT. **10,000** rpm  
 [High Torque] ※1  
**15,000** rpm  
**24,000** rpm

※CTS is available in all spindle speed(Opt.)

A wide range spindle speed enables to variable workpiece application from high-speed machining to heavy-duty machining.

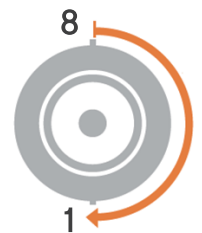
## TURRET TYPE TOOL CHANGER



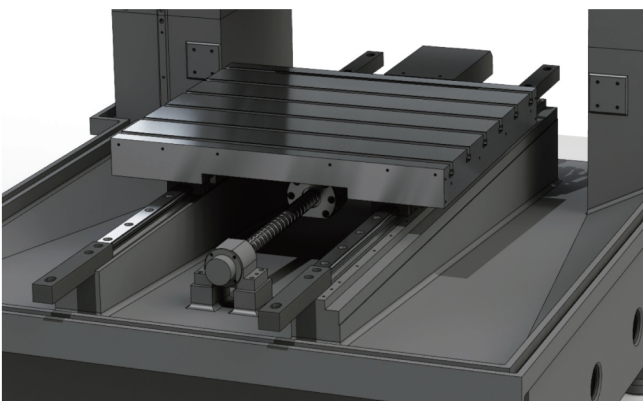
Tool to Tool  
**1.2** sec  
 Chip to Chip  
**1.5** sec

High durability and ultra-high speed tool change is possible with optimized structure by own develop servo motor driven type.

The farthest tool change time (T-T)  
 ex) From T1 to T8 : 1.6 sec

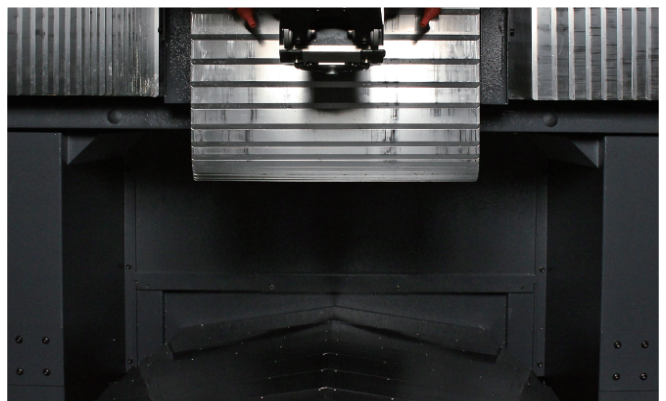


## SLIDEWAY



The separate transport structure of the X / Y axis minimizes the load on each axis Rapid feed speed and precise processing are possible, and a heavy-duty jig is installed.

## MULTI COVER



The travel area is sealed with a multi cover to prevent chips from the machining area, leading to improved travel area's durability and reliability.

## KM 430

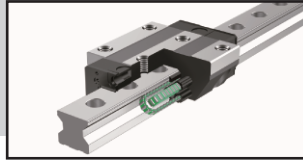
High speed machining center with 50m/min rapids and BT40 class machining capability.



900x430	20	1.4 sec	2.5 sec	8k/12k	350 kg
Travels(X/Y/Z)	mm	800 / 430 / 430			
Spindle speed	rpm	8,000 [12,000]			
Spindle power	kW	20,9 / 8,5 [20,9 / 8,5]			
Spindle taper		ISO No,40 (7/24)			
Tool storage	pcs	20			
Rapids(X/Y/Z)	m/min	50 / 50 / 50			

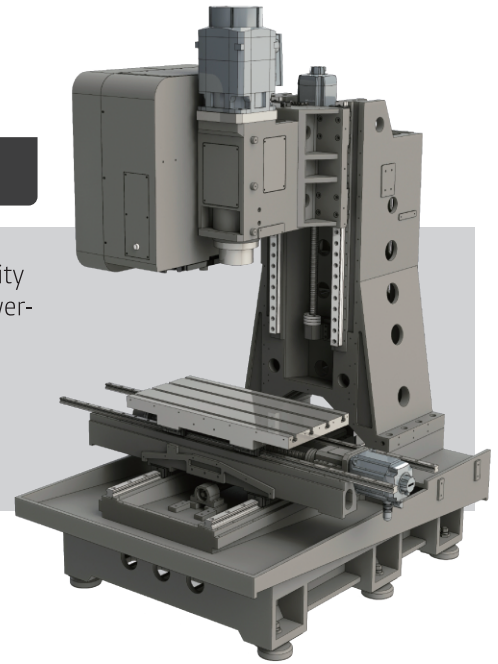
## High rigidity base structure

The optimal foundation design through structural analysis secures a high-rigidity foundation structure that minimizes vibration and deformation to support powerful and precise machining.

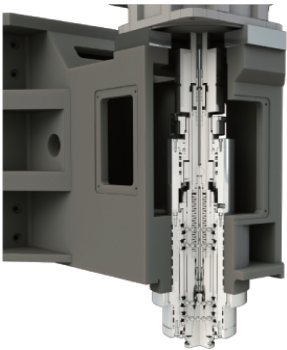


Roller type L/M guide is available to upgrade rigidity.

ROLLER TYPE L/M GUIDE (OPT)



## HIGH PERFORMANCE SPINDLE



Max. Speed  
 STD. **8,000**rpm  
 OPT. **12,000**rpm  
 Max. Torque  
**120.0** Nm

The direct driven spindle that is applied high-precision angular ball bearing, high-tension spring and design of cutting oil inflow prevention achieves high durability, precise and stable machining. And a wide machining application is available with optimized torque and acceleration depends on the low speed and high-speed section.

## TWIN ARM TYPE TOOL CHANGER



Tool to Tool  
**1.4** sec  
 Chip to Chip  
**2.5** sec

The tool changer is a cam motor driving type and optimized the tool change section for fast and stable tool change. Magazine port moves next tool position during machining to minimize non-cutting time.

## SLIDEWAY

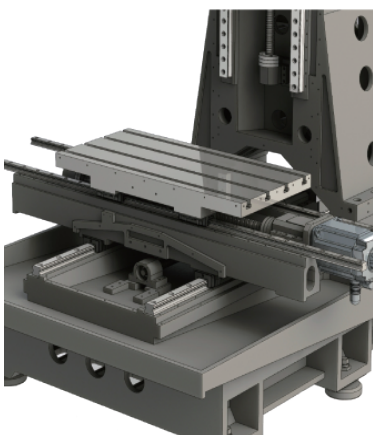
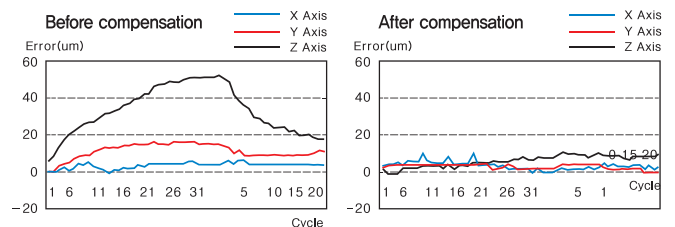


TABLE SIZE  
**900X430**mm

TRAVELS (X / Y / Z)  
**800 / 430 / 430** mm

RAPIDS (X / Y / Z)  
**50 / 50 / 50** m/min

## HIGH ACCURACY MACHING



Komatech's own test program (limitation test)

The optimized thermal deformation compensation system for Komatech's machine is realized by analyzing actual operation /non-operation hours. The differentiated positioning control function compares with others enables high precision machining.

## KM 450D

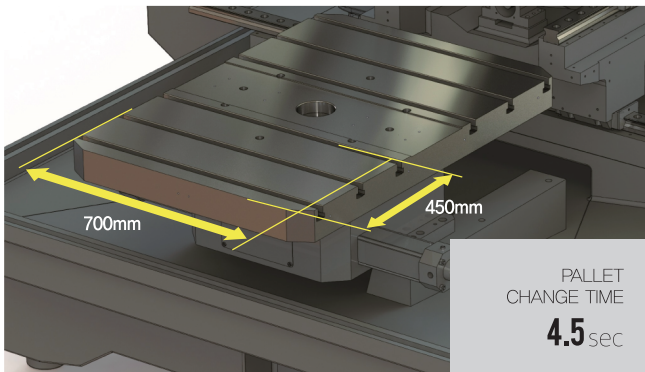
**HIGH PRODUCTIVITY DUAL TABLE MACHINING CENTER**

KM 450S (Flat Table Type) is selectable.



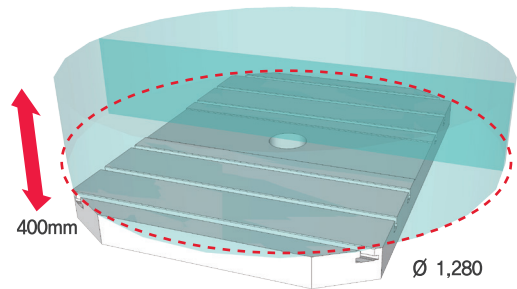
Travels(X/Y/Z)	mm	700 / 450 / 480 [700/450/420]
Spindle speed	rpm	8,000 [12,000]
Spindle power	kW	20,9 / 8,5 [20,9 / 8,5]
Spindle taper		ISO No.40
Tool storage	pcs	24 [30]
Rapids(X/Y/Z)	m/min	36 / 36 / 42

## HIGH RELIABILITY DUAL TABLE



Hirth coupling gear type precision dual table is operated with oil pressure and performs positioning quickly and accurately without additional UP & DOWN operation.

## APPLICATION RANGE OF JIG



Turn diameter Ø1,280  
Jig height 400 mm  
Loading weight 200kg x 2

※1

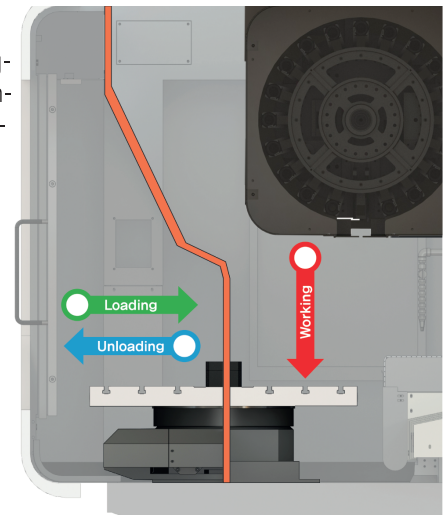
## FLAT TABLE (OPT)



High rigidity flat table is suitable to mount a jig without weight limitation and a large workpiece.

## REDUCTION NON-CUTTING TIME

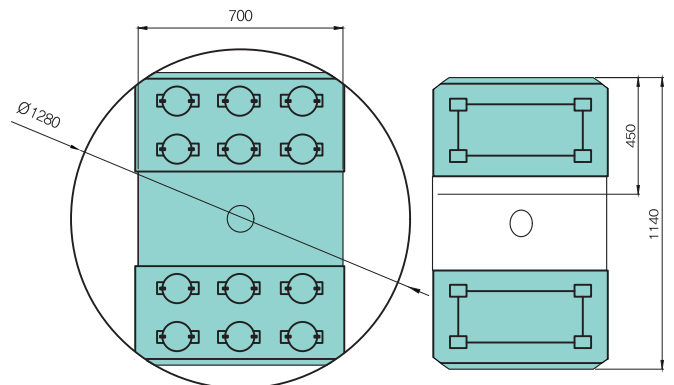
The workpiece can be exchanged during machining to minimize non-cutting time.



## PROCESS DUALIZATION



The application of the dual table and the max. 30-tool magazine can perform 2 processes in one machine and the line balance can be improved. And the user is an available optimized investment.



Example of jig application

※1 If tool length is longer than Jig&fixture height, the crush will occur when dual-table rotates.

## KM 500

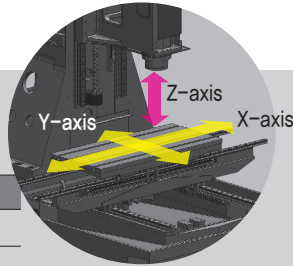
High performance machining center with strong and high accuracy machining capability



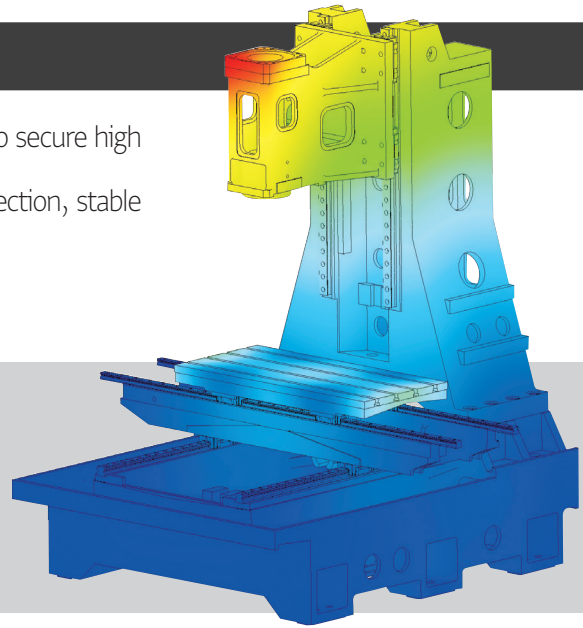
Travels(X/Y/Z)	mm	1,000 / 500 / 520
Spindle speed	rpm	8,000 [12,000]
Spindle power	kW	24,0/11,0 [24,0/11,0]
Spindle taper		ISO No.40 (7/24)
Tool storage	EA	24 [30]
Rapids(X/Y/Z)	m/min	36 / 36 / 30

## HIGH RIGIDITY BASE STRUCTURE

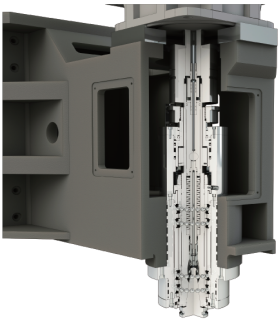
Base structure has been designed through structural analysis to secure high rigidity and suppresses defolmation and vibration. With the optimized Bed and Saddle design without overhang section, stable machining can be realized in the entire work area.



Travel Distance		
X-axis	Y-axis	Z-axis
1,000mm	500mm	520mm



## HIGH PERFORMANCE SPINDLE



Max. Speed  
 STD. **8,000**rpm  
 OPT. **12,000**rpm  
 Max. Torque  
**175.0** Nm

The direct driven spindle that is applied high-precision angular ball bearing, high-tension spring and design of cutting oil inflow prevention achieves high durability, precise and stable machining. And a wide machining application is available with optimized torque and acceleration depends on the low speed and high-speed section.

## HIGH SPEED TOOL CHANGER

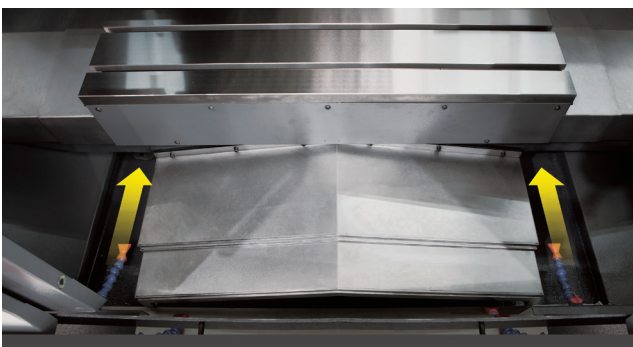


Tool to Tool  
**1.7** sec  
 Chip to Chip  
**3.4** sec

The tool changer is a cam motor driving type and optimized tool change section for fast and stable tool change. Magazine tool port moves next tool position during machining to reduce tool change time and various machining application is available with max. 30-tool storage magazine.

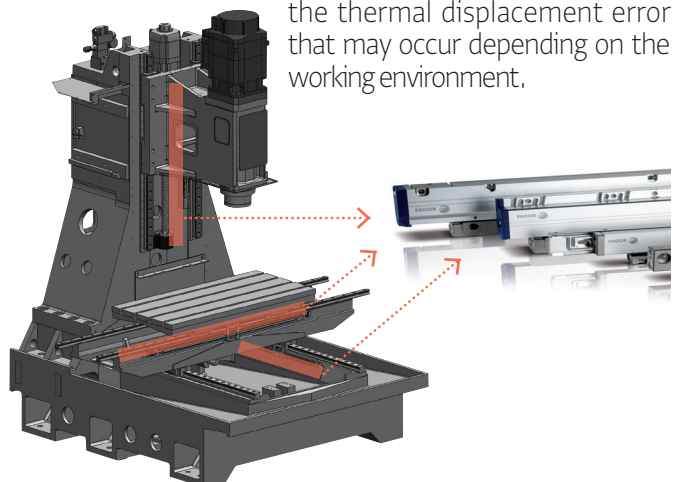
## CHIP DISPOSAL SYSTEM

Cutting chips are easily discharged by a slanted bed structure to the rear and a high-pressure coolant pump shower. The rear discharge structure of coolant oil and chips can minimize the installation area by reducing unnecessary discharge bypass paths. If a chip conveyor is not required, a coolant tank can be applied to minimize the investment.



## LINEAR SCALE (OPT)

Linear scales are available to all axes to enable higher-precision work by minimizing the thermal displacement error that may occur depending on the working environment.

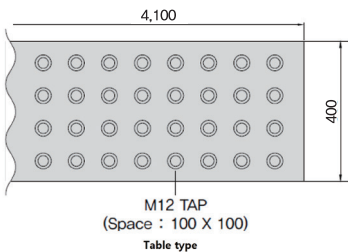
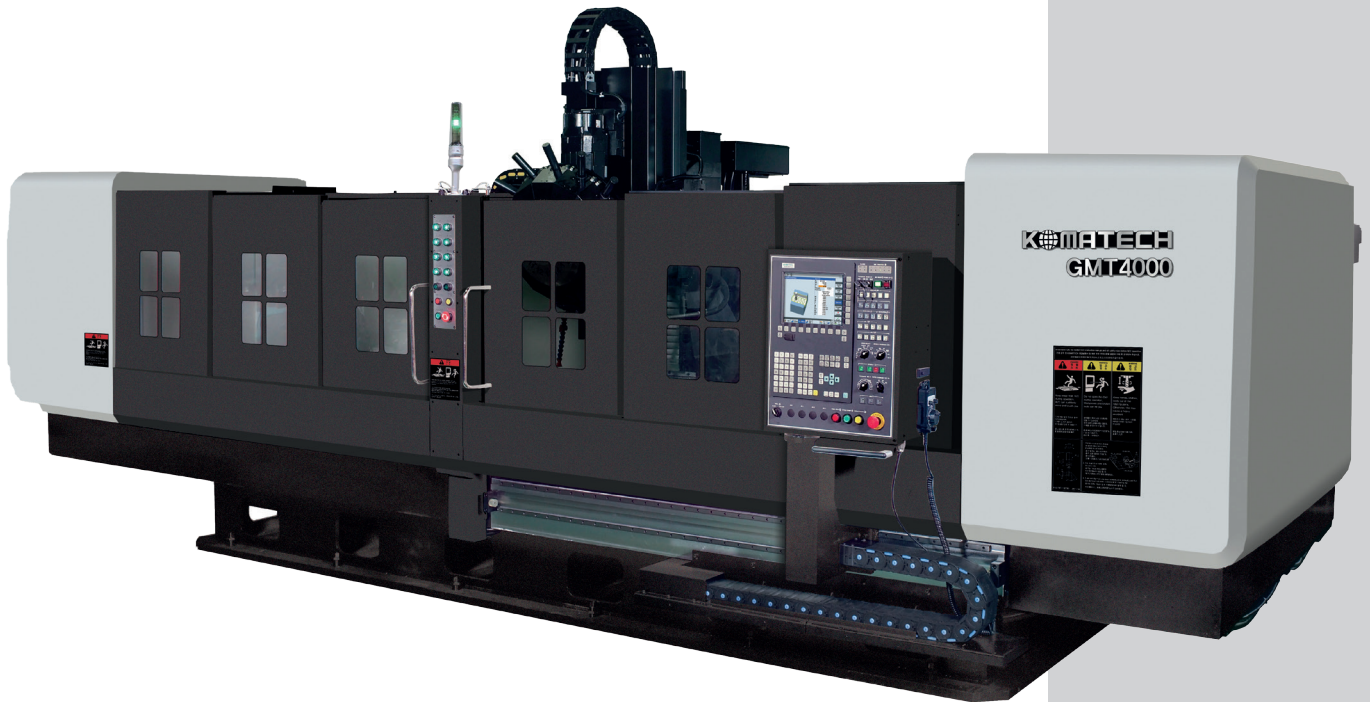


# LONG TABLE MACHINING CENTER

## GMT 4000

HIGH PRECISION LONG TABLE MACHINING CENTER WITH X, Y, Z AXES BALL SCREW TYPE OPTIMIZED FOR LARGE WORKPIECES MACHINING.

All-axes high-precision ball screws and L/M guides enable high-precision processing as well as contour processing.



GMT 4000

 4,100X400
  14
  T-T 1.1 sec
  C-C 1.9 sec
  10K / 15K

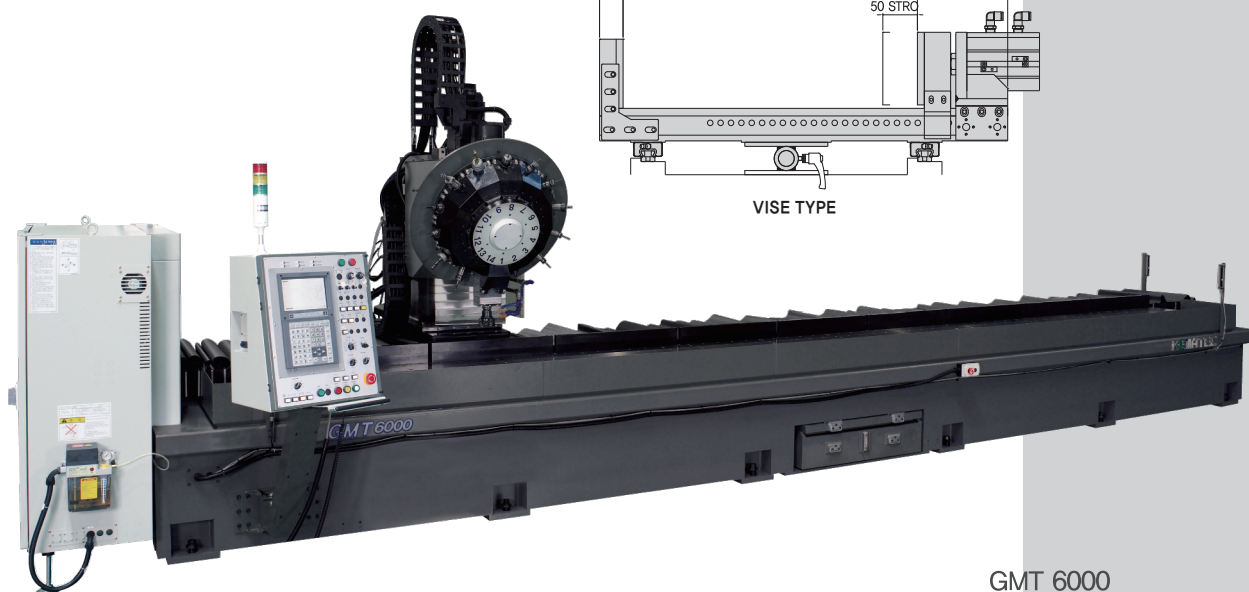
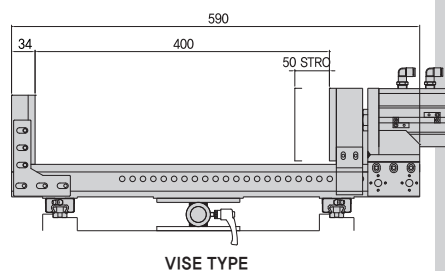
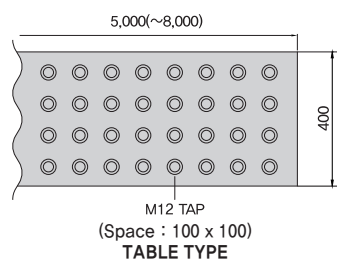
Item	Unit	GMT 4000
Table size	mm	4,100 x 400
Travels(X/Y/Z)	mm	4,000/380/300
Spindle taper	—	ISO No.30 (7/24)
Spindle speed	rpm	10,000 [15,000]
Spindle motor power (Max. / Cont.)	kW	21.2 / 4.8
Rapid feedrate (X/Y/Z)	m / min	30 / 36 / 60
Tool storage	pcs	14
Tool change time	T - T	1.1
	C - C	1.9

[ ] Opt.

## GMT 6000

**HIGH PRECISION CNC PROFILE MACHINING CENTER WITH 6,000mm STROKE**

Optimized a long aluminum profile machining.  
X-axis length is selectable from 5,000 mm to 8,000mm



GMT 6000

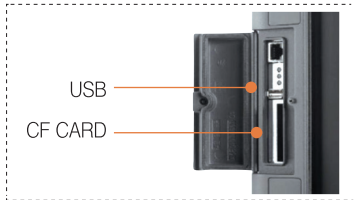


Item	Unit	GMT 5000	GMT 6000	GMT 7000	GMT 8000
Table size	mm		5,000~8,000 x 400		
Travels(X/Y/Z)	mm		5,000~8,000/360/300		
Spindle taper	—		ISO No.30 (7/24)		
Spindle speed	rpm		10,000 [15,000]		
Spindle motor power (Max. / Cont.)	kW		21.2 / 4.8		
Rapid feedrate (X/Y/Z)	m / min		36 / 36 / 60		
Tool storage	pcs		14		
Tool change time	T - T		1.1		
	C - C		1.9		

[ ] Opt.

# CONTROLLER

## Convenient Data Expandability



USB  
CF CARD

USB driver and CF memory card interface are standard for expansion of memory, easy for file copy & save.

## Administrator Edit Setting



NC Control lock function is applied to prevent operation mistake and lock level setting is available upon operator's level.

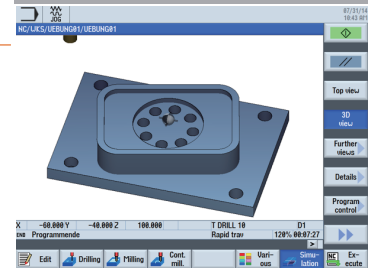
## Switch Panel



CL/UNCL, START, FEED HOLD, SINGLE BLOCK and EMERGENCY STOP buttons are separately configured on the SWITCH PANEL, ensuring ease of operation.



## Simple Programming



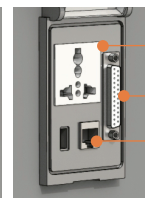
G-Code, M-Code and interactive program input mode (Shop Mill) are available including user friendly function, copy, cut, paste, search etc.

## User Friendly Centralized Control Panel



Rotary switch and On/Off buttons are added on each function for operator's convenience and common buttons are user friendly located for easy to operate and access.

## External communication interface



220V outlet  
RS232C ※1  
Ethernet port

Ethernet port, 220V outlet and 25-pin connector are installed for convenient external communication devices.

※1 RS232C is available with Mitsubishi M80 and Fanuc OiMF (OPT.)

# SIEMENS SINUMERIK 828D

## Easy Operation

**JOG functions**

Tool, spindle, M Commands without coding on JOG mode, saves your time

**Tool management**

Intuitive tool screen with icons. Tool life monitoring function is provided as a Standard.

**Mold making Quick view**

Quick and filtered view on mold & die details

**Online help**

Powerful online help system including user-friendly graphics

## Easy Programming

**ShopMill**

Interactive program input mode. Achieving shortest programming time.

**Program GUIDE**

Interactive Cycle provides convenient programming.

**ISO Dialect interpreter**

Maximum compatibility for operators familiar with ISO codes

**Simultaneous recording**

Program simulation test and Real time machining simulation are available.

# MITSUBISHI ELECTRIC M800/80

## Easy Programming

**Manual M,S,T,B command**

Easy command in manual mode.

**JIG weight selection**

Jig weight selection. According to the jig weight, setting with optimum acceleration & deceleration.

**Display all G/M code**

Interactive Programming

**Alarm guidance function**

Interactive Programming

## Interactive Programming

**Easy machining program creation support.**

**Supports machining program creation by inputting DXF file to NC.**

## Support Machining

**SELECTABLE MACHINING CONDITION**

**Corner smooth control by applying tolerance control**

Amount of tolerance

CSC(OFF) vs CSG(ON)

**Application of tolerance control by tool (Precision, Surface accuracy)**

TOOL	툴러런스	주도	100%	툴러런스	주도
T1	0.0003	0	136	0.0003	0
T2	0.0003	0	112	0.0003	0
T3	0.0003	0	118	0.0003	0
T4	0.0003	0	122	0.0003	0
T5	0.0003	0	120	0.0003	0
T6	0.0003	0	124	0.0003	0
T7	0.0003	0	126	0.0003	0
T8	0.0003	0	128	0.0003	0
T9	0.0003	0	128	0.0003	0
T10	0.0003	0	128	0.0003	0
T11	0.0003	0	128	0.0003	0
T12	0.0003	0	122	0.0003	0
T13	0.0003	0	128	0.0003	0
T14	0.0003	0	128	0.0003	0
T15	0.0003	0	130	0.0003	0

**Production information display (Calculated based on M code)**

현재 수량	100
목표 수량	350
달성률	35.0 %

# SIEMENS SINUMERIK 828D

- \* Controllable axes : 6 axes ( 8 axes )
- \* Simultaneous controlled axes : 4 axes
- \* Minimum setting unit : 0.0001mm  
0.00001 inch
- \* Absolute / Incremental
- \* Scailing / Rotating
- \* Background editing
- \* Mirror image
- \* Program guide
- \* Optional stop
- \* Tool dimension interpolation
- \* Tool life management
- \* JOG/MDI (Manual operation)
- \* Single block
- \* Dry run
- \* Linear interpolation
- \* Circular interpolation
- \* Synchro Tapping
- \* Auto servo tuning function
- \* Auto servo tuning function
- \* Emergency stop
- \* Thermal displacement compensation
- \* Inch / Metric
- \* Block search
- \* ISO program (G291)
- \* Display: 10.4" TFT COLOR
- \* User memory: 5MB [Extensible] ※1,2
- \* Program format : G/M code  
[Conversational program]
- \* Program stop
- \* Program test
- \* 2D simulation
- \* Max. work oset (100)
- \* Max.no of tools / cuttings (128/256)
- \* Ref.1,2 position
- \* Feed hold
- \* Block skip
- \* Helical interpolation
- \* Advanced surface
- \* Jerk limitation
- \* Feed forward control
- \* Tap return
- \* soft limit

### NC optional specification

- \* Shop mill
- \* 3D simulation
- \* Additional axis control
- \* Real time simulation
- \* Network drive



MITSUBISHI ELECTRIC

M800/80

- \* Controllable axes : 8 axes
- \* Simultaneous controlled axes : 4 axes
- \* Minimum setting unit : 0.0001mm  
0.00001 inch
- \* Absolute / Incremental
- \* Coordinate system rotating
- \* Background editing
- \* Mirror image
- \* Linear interpolation
- \* Circular interpolation
- \* High speed&accuracy control I
- \* SSS 4G control
- \* Tool dimension interpolation
- \* Tool offset pairs (400 pairs)
- \* JOG/MDI operation
- \* Single block
- \* Feed hold
- \* Rigid tapping
- \* Block skip
- \* Backlash compensation
- \* Emergency stop
- \* Inch / Metric
- \* Canned cycle
- \* Program stop
- \* Optional block skip
- \* Display : 10.4" Touch Screen
- \* User memory : 500kbyte [Extensible] ※3
- \* Program format : G/M code  
[Conversational program]
- \* Helical interpolation
- \* High accuracy control
- \* High speed&accuracy control II
- \* Tolerance control
- \* Tool length interpolation
- \* Rapid traverse block overlap
- \* Auto. Operation
- \* Dry run
- \* Tap return
- \* 3D program check
- \* Pitch error compensation
- \* Soft limit
- \* Interlock

### NC optional specification

- \* Navi mill
- \* Data server
- \* NC Visualizer
- \* Additional axis control

# FANUC Oi-MF PLUS

- \* Controllable axes : 6 axes
- \* Simultaneous controlled axes : 4 axes
- \* Minimum setting unit : 0.001mm  
0.0001 inch
- \* Absolute / Incremental
- \* Skip / High speed skip
- \* Mirror image
- \* Circular interpolation
- \* Tool life management
- \* Feed hold
- \* Tap return
- \* Stored stroke check I/II
- \* Inch / Metric
- \* Optional block skip
- \* Subprogram call
- \* Nano interpolation
- \* Tool length interpolation
- \* JOG/MDI operation
- \* Optional stop
- \* Backlash compensation
- \* Machine lock
- \* Program test
- \* Rigid tapping
- \* Emergency stop
- \* Display : 10.4" TFT COLOR
- \* User memory : 512kbyte [Extensible] ※1
- \* Program format : G/M code  
[Conversational program]
- \* Coordinate system rotating
- \* Background editing
- \* Linear interpolation
- \* Tool dimension interpolation
- \* Single block
- \* Dry run
- \* Pitch error compensation
- \* Interlock
- \* Canned cycle
- \* Program stop
- \* Helical interpolation
- \* AICCL (200 BLK)
- \* Tool offset pairs (400 pairs)

### NC optional specification

- \* Additional axis control
- \* Manual Guide i
- \* Look-ahead 400 blocks
- \* Data server (1GB / 2GB)

# KOMATECH MONITORING SYSTEM (OPT)



1. Machine's real-time monitoring
2. Display factory lay-out
3. Check the cumulative recorded utilization rate
4. Enter the reason for non-operation and express statistics

※1 Memory capacity is extensible with USB memory and CF card

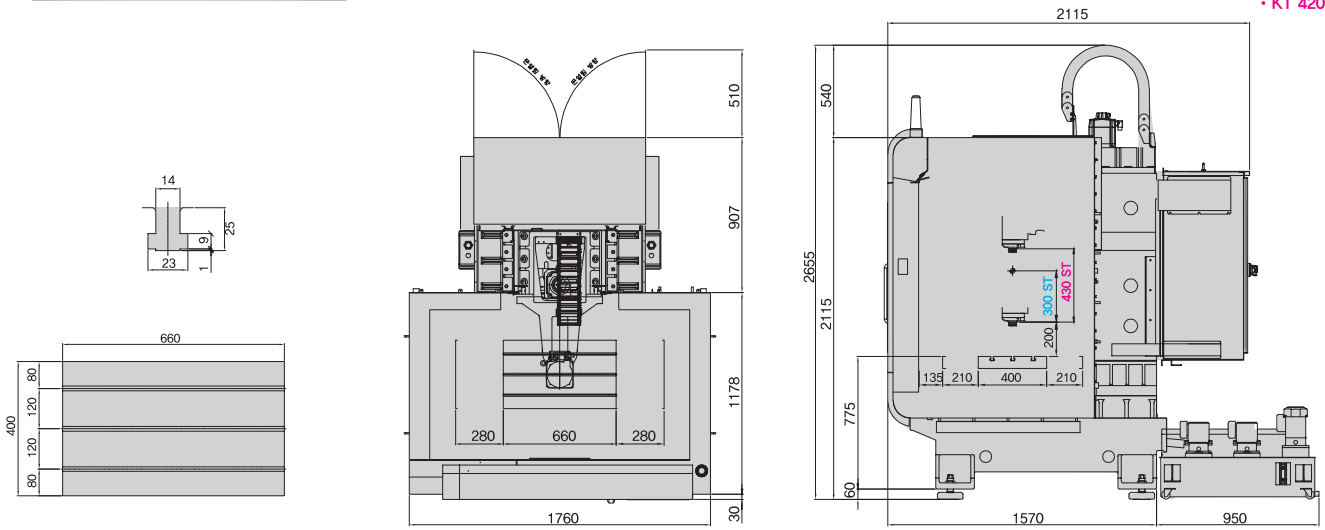
※2 The internal memory can be changed to 100MB.

※3 The capacity can be expanded up to 32GB through an SD memory card.

# MACHINE DIMENSIONS

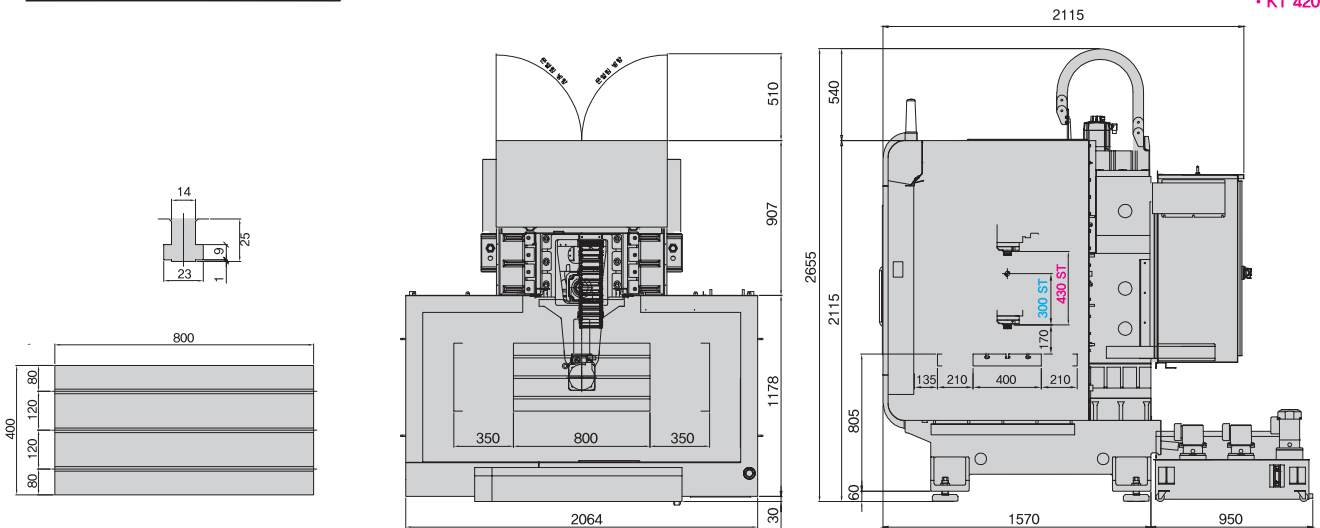
## KT 420(A)

- KT 420
- KT 420A

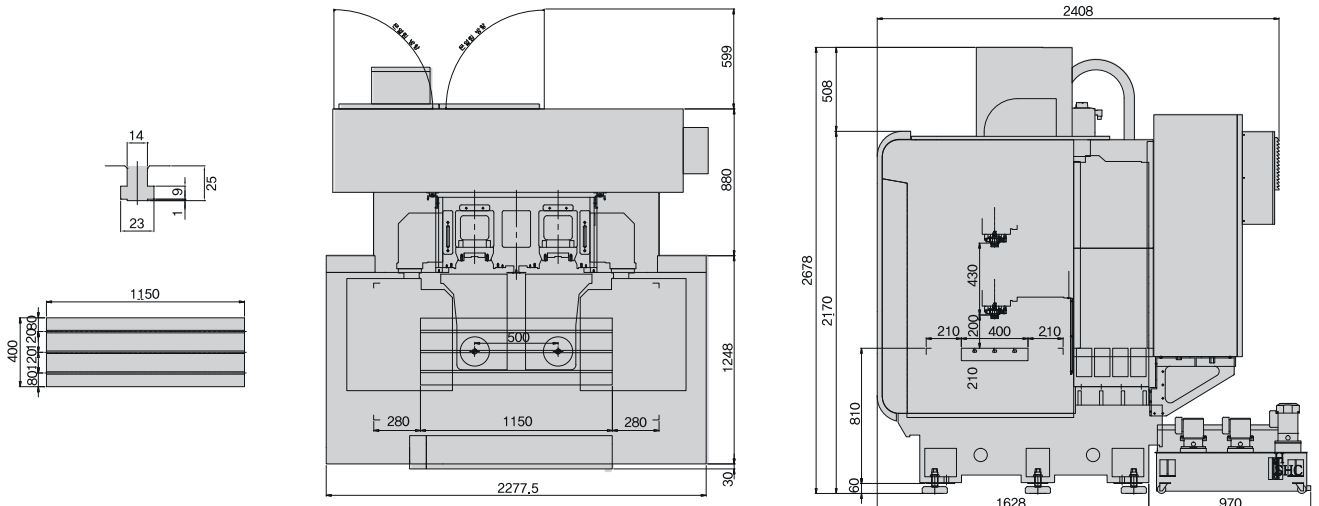


## KT 420L(AL)

- KT 420L
- KT 420AL

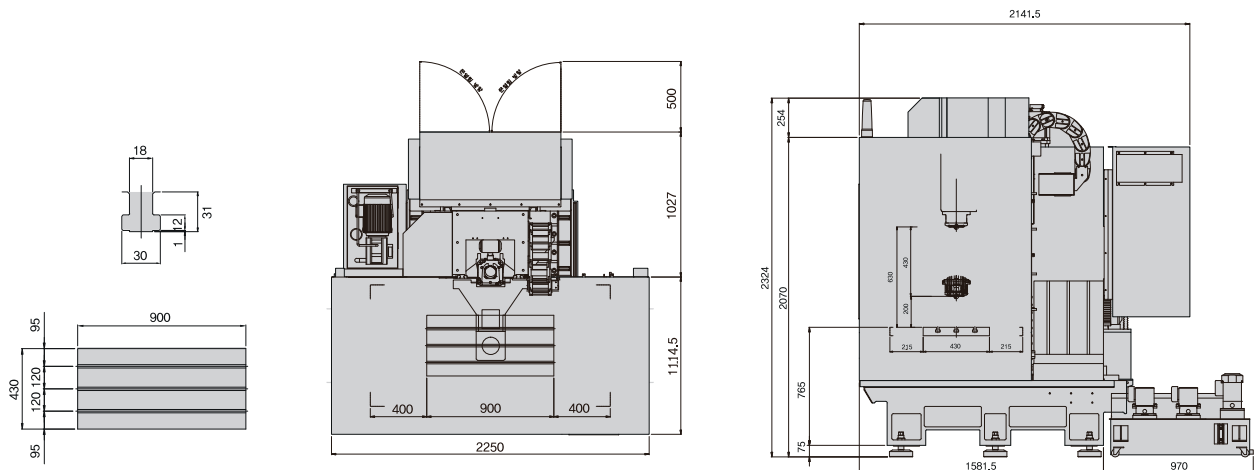


## KT 420 DH



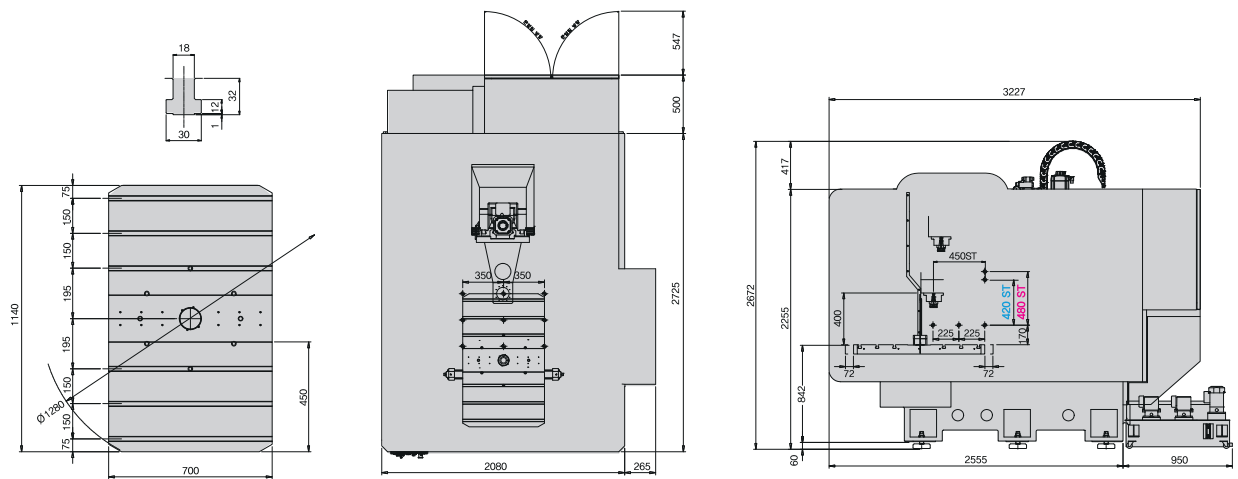


## KM 430

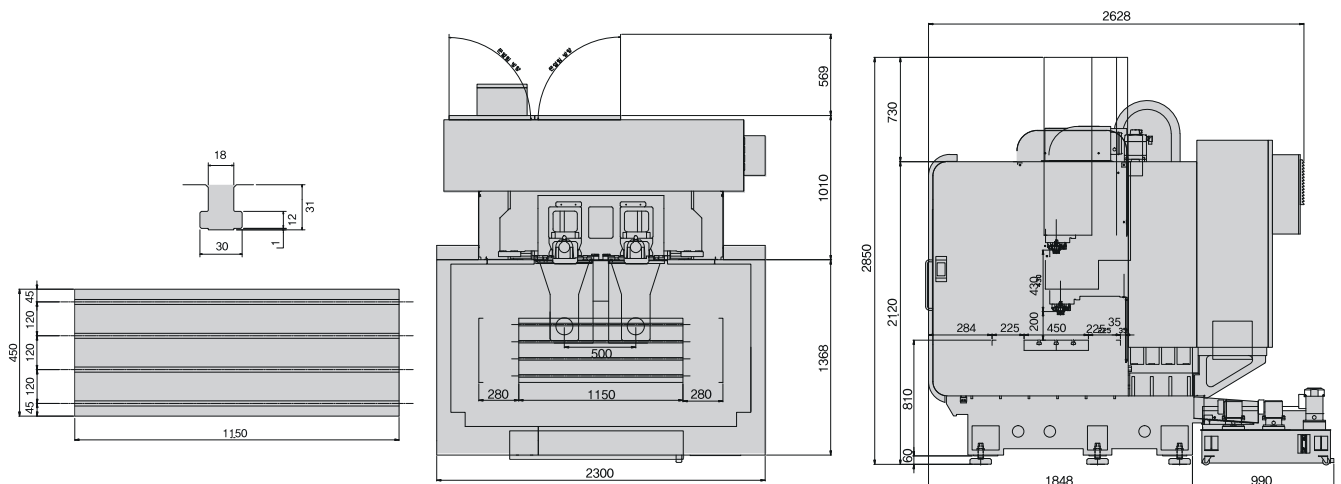


## KM 450D

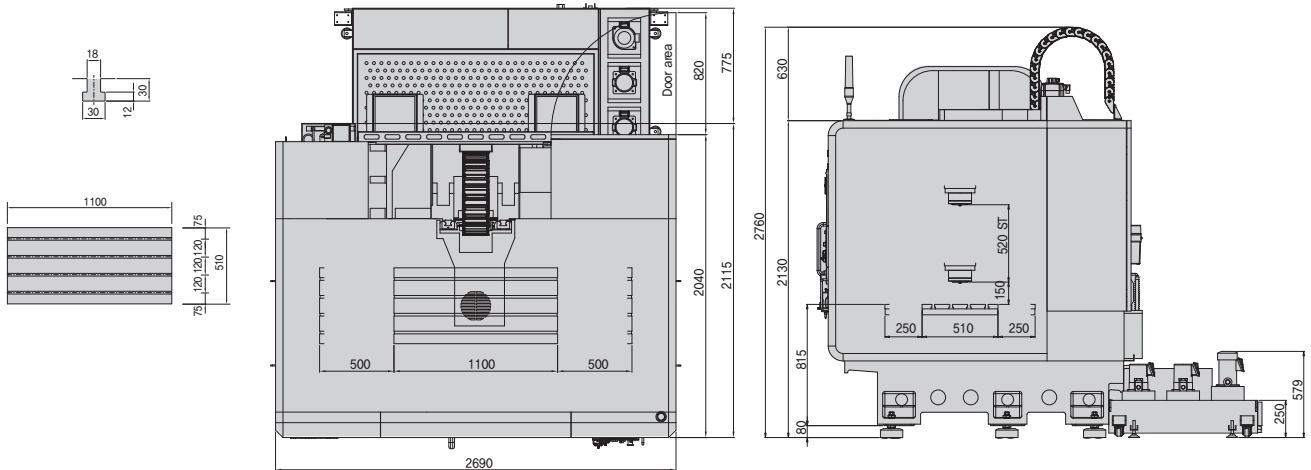
• 24 Tool  
• 30 Tool



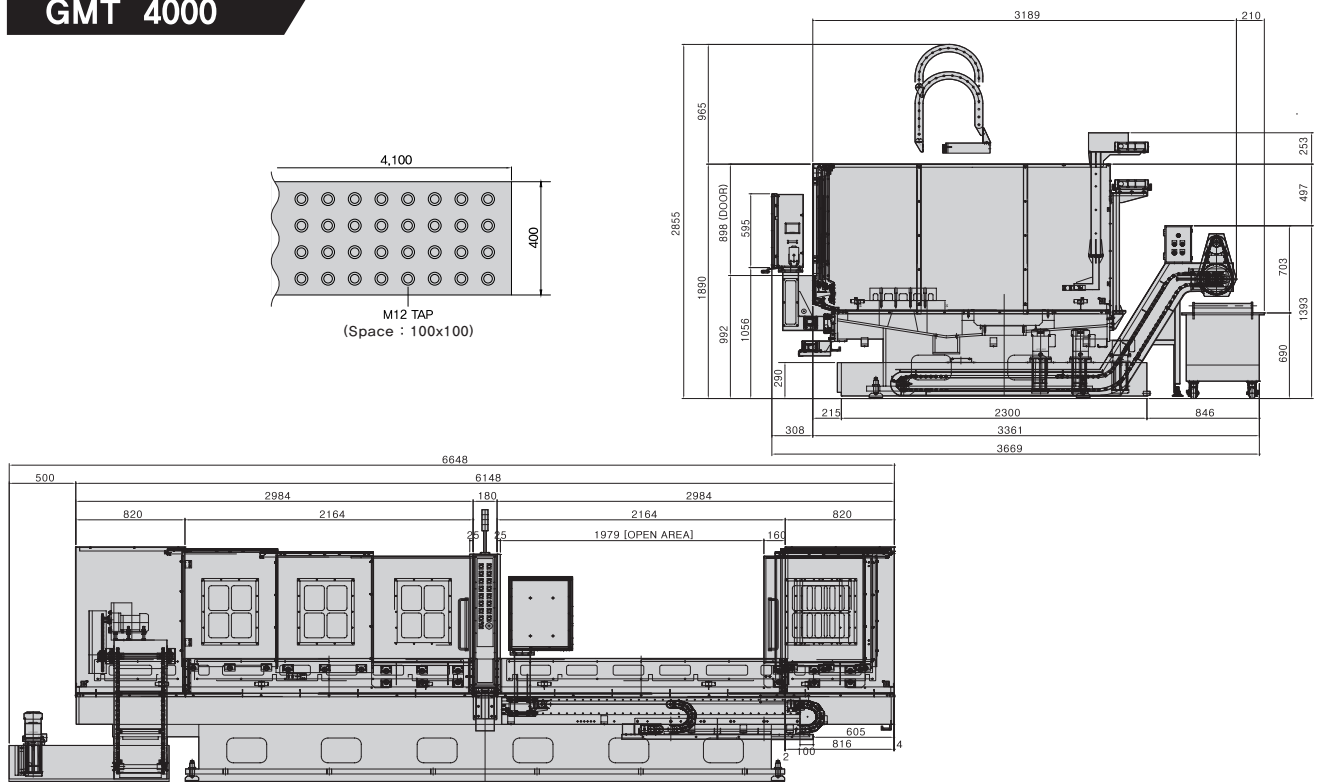
## KM 450DH



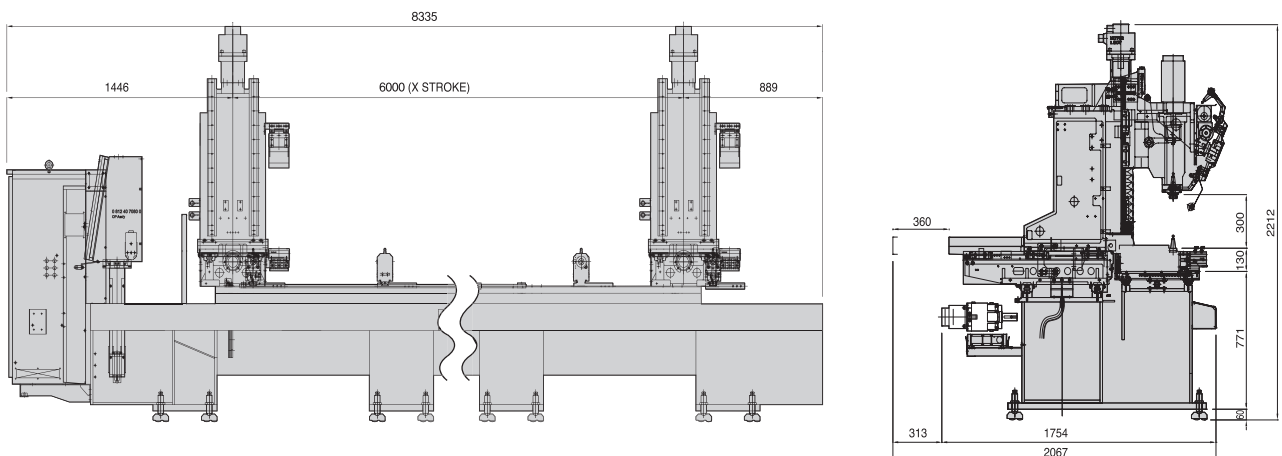
# KM 500



# GMT 4000



# GMT 6000



# MACHINE SPECIFICATIONS

ITEM		UNIT	KT 420 (420L)	KT 420 (BUILT-IN GANTRY LOADER)	
TABLE	SIZE	mm	660(800) x 400	660 x 400	
	Max. loading capacity	kg	250 [300] ※1	250	
	Pallet change time	sec.	—	—	
TRAVELS	X / Y / Z	mm	560(700) / 420 / 300	560 / 420+300 / 300	
	Distance from table surface to spindle nose		200~500 (170~470)	200~500	
SPINDLE	Spindle taper		ISO No.30 (7/24)	ISO No.30 (7/24)	
	Big-plus (BBT)		OPTIONAL	OPTIONAL	
	Distance between spindles		—	—	
	Max. speed	rpm	10,000 [High-torque 10,000 ※3], [15,000], [24,000]	10,000 [High-torque 10,000 ※3], [15,000], [24,000]	
	Spindle motor	Max. / Cont.	kW	10,000rpm:21.2/4.8 [High-torque10,000rpm:20.9/8.5 [15,000rpm: 21.2/4.8], [24,000rpm:18.8/2.8]	10,000rpm: 21.2/4.8, [24,000rpm:18.8/2.8]
FEED RATE	X / Y / Z	m/min	60 / 60 / 60 (50 / 50 / 60)	60 / 60 / 60	
ATC	Tool shank type		MAS403-BT30	MAS403-BT30	
	Pull stud type		MAS403-P30T-1	MAS403-P30T-1	
	Tool storage capacity	EA	14 [21]	14 [21]	
	Max. tool diameter	mm	100	100	
	Max. tool length		200	200	
	Max. tool weight	kg	3.0 (Total tool weight 14T:25kg / 21T:35kg)	3.0 (Total tool weight 14T:25kg / 21T:35kg)	
	Tool selection method		Turret (Fixed address)	Turret (Fixed address)	
	Tool chang time	T - T	sec	Ⓢ 1.08 Ⓜ 1.07	Ⓢ 1.08 Ⓜ 1.07
C - C		Ⓢ 1.40 Ⓜ 1.36		Ⓢ 1.40 Ⓜ 1.36	
POWER SOURCE	Power supply		AC380V±10%, 50Hz/60Hz	AC380V±10%, 50Hz/60Hz	
	Power capacity	kVA	25	25	
MACHINE DIMENSION	Size (Tank included)	W x L	mm	1,760(2,064)(W) x 2,520(L)	3,380(W) x 2,840(L)
	Height	H	mm	2,655	2,655
	Weight		kg	2300 (2,600)	2,800
NC UNIT	Model		Siemens 828D[Mitsubishi M80], [Fanuc 0iMF plus]	Siemens 828D [Mitsubishi M80], [Fanuc 0iMF plus]	
	Program format		G-code, M-code [Interactive]	G-code, M-code [Interactive]	
	Display	inch	10.4" TFT Color	10.4" TFT Color	

ITEM		UNIT	KT 420DH (U&V axes)	KM 450DH	
TABLE	SIZE	mm	1,150 x400	1,150 x 450	
	Max. loading capacity	kg	400	400	
	Pallet change time	sec.	—	—	
TRAVELS	X / Y / Z	mm	560 / 420 (U: ±2mm) / 430 (V: ±2mm)	560 / 450 / 430	
	Distance from table surface to spindle nose		200~630	200~630	
SPINDLE	Spindle taper		ISO No. 30(7/24)	ISO No.40 (7/24)	
	Big-plus (BBT)		Optional	OPTIONAL	
	Distance between spindles	mm	500	500	
	Max. speed	rpm	10,000 [High torque10,000], [15,000], [24,000]	8,000, [12,000]	
	Spindle motor	Max. / Cont.	kW	10,000rpm:21.2/4.8 [High-torque10,000rpm:20.9/8.5] [15,000rpm: 21.2/4.8], [24,000rpm:18.8/2.8]	8,000rpm : 20.9 / 8.5 [12,000rpm : 20.9 / 8.5]
FEED RATE	X / Y / Z	m/min	48 / 48 / 56	48 / 48 / 56	
ATC	Tool shank type		MAS403-BT30	MAS403-BT40	
	Pull stud type		MAS403-P30T-1	PS-805	
	Tool storage capacity	EA	20 x 2 [26 x 2]	20 x 2 [30 x 2]	
	Max. tool diameter	mm	80	80	
	Max. tool length		200	300	
	Max. tool weight	kg	3.0 (Total tool weight 40kg : each side)	7.0 (Total tool weight 100kg : each side)	
	Tool selection method		Twin arm (Random memory)	Twin Arm (Random memory)	
	Tool chang time	T - T	sec	1.2	1.7
C - C		1.8		2.3	
POWER SOURCE	Power supply		AC380V±10%, 50/60Hz	AC380V±10%, 50Hz/60Hz	
	Power capacity	kVA	25	26.2	
MACHINE DIMENSION	Size (Tank included)	W x L	mm	2,280 x 2,600 [2,800 ※2]	2,490(W) x 2,850(L)
	Height	H	mm	2,678	2,650
	Weight		kg	5,500	7,000
NC UNIT	Model		Siemens 828D [Mitsubishi M80], [Fanuc 0iMF plus]	Siemens 828D [Mitsubishi M80], [Fanuc 0iMF plus]	
	Program format		G-code, M-code [Interactive]	G-code, M-code [Interactive]	
	Display	inch	10.4" TFT Color	10.4" TFT Color	

※1 : Acceleration for X and Y axes must be adjusted.

※2 : Only the length of the Y axis front part is extended, no stroke change.

# MACHINE SPECIFICATIONS

KT 420A (420AL)	KT 360D	KT 500	KT 700
660(800) x 400	650 x 900	1,100 x 500	800 x 700
250 [300] ※1	200 x 2	400	400
—	4.5	—	—
560(700) / 420 / 430	520 / 360 / 300	1,000 / 500 / 300	800 / 700 / 300
200~630 (170~600)	200~500	170 ~ 470	270~570
ISO No.30 (7/24)	ISO No.30 (7/24)	ISO No.30 (7/24)	ISO No.30 (7/24)
OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
—	—	—	—
10,000 [High-torque 10,000] [15,000] [24,000]	10,000 [High-torque 10,000] [15,000] [24,000]	10,000 [High-torque 10,000 ※3] [15,000] [24,000]	10,000 [High-torque 10,000 ※3] [15,000] [24,000]
10,000rpm:21.2/4.8 [High-torque 10,000rpm:20.9/8.5]	10,000rpm:21.2/4.8 [High-torque 10,000rpm:20.4/4.8]	10,000rpm:21.2/4.8 [High-torque 10,000rpm:20.9/8.5]	10,000rpm:21.2/4.8 [High-torque 10,000rpm:20.9/8.5]
15,000rpm: 21.2/4.8, [24,000rpm:18.8/2.8]	[15,000rpm:21.2/4.8], [24,000rpm:18.8/2.8]	15,000rpm:21.2/4.8,[24,000rpm:18.8/2.8]	[15,000rpm: 21.2/4.8], [24,000rpm:18.8/2.8]
60 / 60 / 60 ( 50 / 50 / 60 )	50 / 50 / 60	50 / 50 / 50	48 / 48 / 60
MAS403-BT30	MAS403-BT30	MAS403-BT30	MAS403-BT30
MAS403-P30T-1	MAS403-P30T-1	MAS403-P30T-1	MAS403-P30T-1
20 [26]	14[21]	14[21]	14[21]
80 [64]	100	100	100
200	200	200	200
3.0 (Total tool weight 40kg)	3.0 (Total tool weight 25kg)	3.0 (Total tool weight 14T:25kg / 21T:35kg)	3.0 (Total tool weight 14T:25kg / 21T:35kg)
Twin Arm (Random memory)	Turret (Fixed address)	Turret (Fixed address)	Turret (Fixed address)
1.2	Ⓢ 1.08 Ⓜ 1.07	1.2	1.2
1.8	Ⓢ 1.40 Ⓜ 1.36	1.5	1.5
AC380V±10%, 50Hz/60Hz	AC380V±10%, 50Hz/60Hz	AC380V±10%, 50Hz/60Hz	AC380V±10%, 50Hz/60Hz
25	25	19	25
1,760(2,064)(W) x 2,520(L)	1,760(W) x 3,200(L)	2,548(W)x2,753(L)	2,164(W)x2,923(L)
2,655	2,715	2,600	2,533
2,500 (2,800)	4,300	4,300	6,000
Siemens 828D [Mitsubishi M80], [Fanuc 0iMF plus]	Siemens 828D [Mitsubishi M80], [Fanuc 0iMF plus]	Siemens 828D [Mitsubishi M80], [Fanuc 0iMF plus]	Siemens 828D [Mitsubishi M80], [Fanuc 0iMF plus]
G-code, M-code [Interactive]	G-code, M-code [Interactive]	G-code, M-code [Interactive]	G-code, M-code [Interactive]
10.4" TFT Color	10.4" TFT Color	10.4" TFT Color	10.4" TFT Color

KM 430	KM 450D (KM 450S)	KM 500	GMT 4000 (GMT 6000)
900 x 430	700 x 1,140 (1,200 x 540)	1,100 x 510	4,200 x 500 (6,000 x 425)
350	200 x 2	800	—
—	4.5 ※4	—	—
800 / 430 / 430	700 / 450 / 480 [30T: 700 / 450 / 420]	1,000 / 500 / 520	4,000/400/300 (6,000/350/300)
200~630	170~650 [ 30T: 170~590]	150 ~ 670	200~500 (130~430)
ISO No.40 (7/24)	ISO No.40 (7/24)	ISO No.40 (7/24)	ISO No.30 (7/24)
OPTIONAL	OPTIONAL	Optional	Optional
—	—	—	—
8,000[12,000]	8,000 [12,000]	8,000 [12,000]	10,000 [15,000]
8,000rpm : 20.9 / 8.5	8,000rpm : 20.9 / 8.5	24.0 / 11.0	10,000rpm: 21.2/4.8
[12,000rpm : 20.9 / 8.5]	[12,000rpm : 20.9 / 8.5]	[24.0 / 11.0]	[15,000rpm: 21.2/4.8]
50 / 50 / 50	36 / 36 / 42	36 / 36 / 30	30 / 36 / 60
MAS403-BT40	MAS403-BT40	MAS403-BT40	MAS403-BT30
PS-805	PS-805	PS-805	MAS403-P30T-1
20	24 [30]	24 [30]	14
80	80	80	80
300	300	300	300
7.0 (Total tool weight 100kg)	7.0 (Total tool weight 24T:120kg / 30T:150kg)	7.0 (Total tool weight 24T:120kg/30T:150kg)	3.0 (Total tool weight 25kg)
Twin Arm (Random memory)	Twin Arm (Random memory)	Twin arm (Random memory)	Turret (Fixed address)
1.4	1.4	1.7	1.1
2.5	3.4	3.4	1.9
AC380V±10%, 50Hz/60Hz	AC380V±10%, 50Hz/60Hz	AC380V±10%, 50/60Hz	AC380V±10%, 50/60Hz
26.2	36	35	35
2,290(W) x 2,560(L)	2,408(W) x 3,435(L) / 2,400(W) x 3,070(L)	2,690(W) x 2,890(L)	6,648x3,669 (8,335x1,745)
2,630	2,943	2488	2,855 (2,700)
4,000	6,500 (5,300)	4500	10,000 (12,000)
Siemens 828D [Mitsubishi M80], [Fanuc 0iMF plus]	Siemens 828D [Mitsubishi M80], [Fanuc 0iMF plus]	Siemens 828D [Mitsubishi M80], [Fanuc 0iMF plus]	Siemens 828D [Mitsubishi M80 / Fanuc 0iMF plus]
G-code, M-code [Interactive]	G-code, M-code [Interactive]	G-code, M-code [Interactive]	G-code, M-code [Interactive]
10.4" TFT Color	10.4" TFT Color	10.4" TFT Color	10.4" TFT Color

[ ] : OPT

※3 High torque 10,000 rpm is only available in 21 tool magazine ※4 KM450S does not use pallet changer

# STD & OPT SPECIFICATIONS

		KT 420(L)	KT 420A(L)	KT 360D	KT 500	KT 700	KT 420DH	KM 430	KM 450D	KM 450DH	KM 500	GMT 4000	GMT 6000
<b>Basic machine component</b>													
Splash guard		●	●	●	●	●	●	●	●	●	●	●	●
Coolant tank		●	●	●	●	●	●	●	●	●	●	●	●
Work light		●	●	●	●	●	●	●	●	●	●	●	●
Indicator light		●	●	●	●	●	●	●	●	●	●	●	●
Leveling bolt and Nut		●	●	●	●	●	●	●	●	●	●	●	●
Instruction manual		●	●	●	●	●	●	●	●	●	●	●	●
Fixed MPG handle		●	●	×	●	×	●	●	×	●	●	×	×
Portable MPG handle ※1		○	○	●	○	●	○	○	●	○	○	●	●
<b>Jig interperance prevention</b>													
High column	150mm	○	○	×	○	○	○	○	×	○	○	×	×
	250mm	○	○	×	○	○	○	○	×	○	○	×	×
<b>Deep hole and roughness improvement</b>													
Coolant through spindle	20bar	○	○	○	○	○	○	○	○	○	○	○	×
	30bar	○	○	○	○	○	○	○	○	○	○	○	×
	70bar	○	○	○	○	○	○	○	○	○	○	○	×
<b>Cleaning device</b>													
Bed Shower		○	○	○	○	○	○	○	○	○	○	○	○
Spindle taper washing system		○	○	○	○	○	○	○	○	○	○	○	○
Coolant gun / Air gun		○	○	○	○	○	○	○	○	○	○	○	○
<b>Chip disposal</b>													
Chip conveyor	Scraper Type	○	○	○	○	○	○	○	○	○	○	○	○
	Hinge Type	○	○	○	○	○	○	○	○	○	○	○	○
	Drum Filter Type	○	○	○	○	○	○	○	○	○	○	○	○
Chip bucket	Fixed Type	○	○	○	○	○	○	○	○	○	○	○	○
	Swing Type	○	○	○	○	○	○	○	○	○	○	○	○
<b>Automation</b>													
Auto door		○	○	○	○	○	○	○	○	○	○	○	○
Interface for Gantry Loader		○	○	○	○	○	○	○	○	○	○	○	○
Interface for multi-Joint robot		○	○	○	○	○	○	○	○	○	○	○	○
Auto power off		○	○	○	○	○	○	○	○	○	○	○	○
<b>Working environment</b>													
Oil mist cleaner		○	○	○	○	○	○	○	○	○	○	○	○
Oil Skimmer		○	○	○	○	○	○	○	○	○	○	○	○
MQL(Minimum Quantity Lubrication)		○	○	○	○	○	○	○	○	○	○	○	○
Air conditioner in main box ※2		○	○	○	○	○	○	○	○	○	○	○	○
TOP COVER		○	○	○	○	○	○	○	○	○	○	○	×
<b>Jig interface</b>													
Rotary table		○	○	○	○	○	○	○	○	○	○	○	○
Additional axis		○	○	○	○	○	○	○	○	○	○	○	○
Hydraulic Jig interface		○	○	○	○	○	○	○	○	○	○	○	○
Pnumatic Jig interface		○	○	○	○	○	○	○	○	○	○	○	○
Air confirm		○	○	○	○	○	○	○	○	○	○	○	○
Air blow		○	○	○	○	○	○	○	○	○	○	○	○
<b>Measurement</b>													
Tool Presetter		○	○	○	○	○	○	○	○	○	○	○	○
Broken tool detector		○	○	○	○	○	○	○	○	○	○	○	○
Workpeice probe		○	○	○	○	○	○	○	○	○	○	○	○
Tool monitoring system		○	○	○	○	○	○	○	○	○	○	○	○
<b>Assist device</b>													
Spindle cooler unit ※3		○	○	○	○	○	○	○	○	○	○	○	○
Hydro Unit		○	●	●	○	○	●	●	●	●	●	○	○
<b>Soft Ware</b>													
Heat expansion compensation		●	●	×	●	●	●	●	×	●	●	×	×
Tool counter / Work counter		●	●	●	●	●	●	●	●	●	●	●	●
Tool life management		●	●	●	●	●	●	●	●	●	●	●	●
Memory expansion / Conversation program		○	○	○	○	○	○	○	○	○	○	○	○
<b>Safety device</b>													
Interlock		●	●	●	●	●	●	●	●	●	●	●	●
Door lock		○	○	○	○	○	○	○	○	○	○	○	○

※1 When equipped with a movable MPG handle, the seat of the fixed MPG handle can be blocked at the request of the customer, ● : STD ○ : OPT × : Not available  
 ※2 Air-conditioner specification is subject to change according to NC specifications.  
 ※3 If the maximum spindle speed is over 12,000 (BT40) / 15,000 (BT30) rpm, a spindle cooling device is required.