

GMT-4000

SERIES

MULTI-TASKING MACHINE



THE ULTIMATE MACHINING POWER
WOODWAY

THE BEST SOLUTION OF BIG SIZE AND COMPLEX TYPE WORKPIECE

8 axes control with simultaneous 5 axes milling capability

Meeting all machining needs with once clamping operation

To have a differentiated competitive edge and maximizing the reduction of labor costs in the rapidly changing market will be crucial elements for gaining profits. Undoubtedly the GOODWAY GMT-4000 is the best choice to correspondence this challenge.

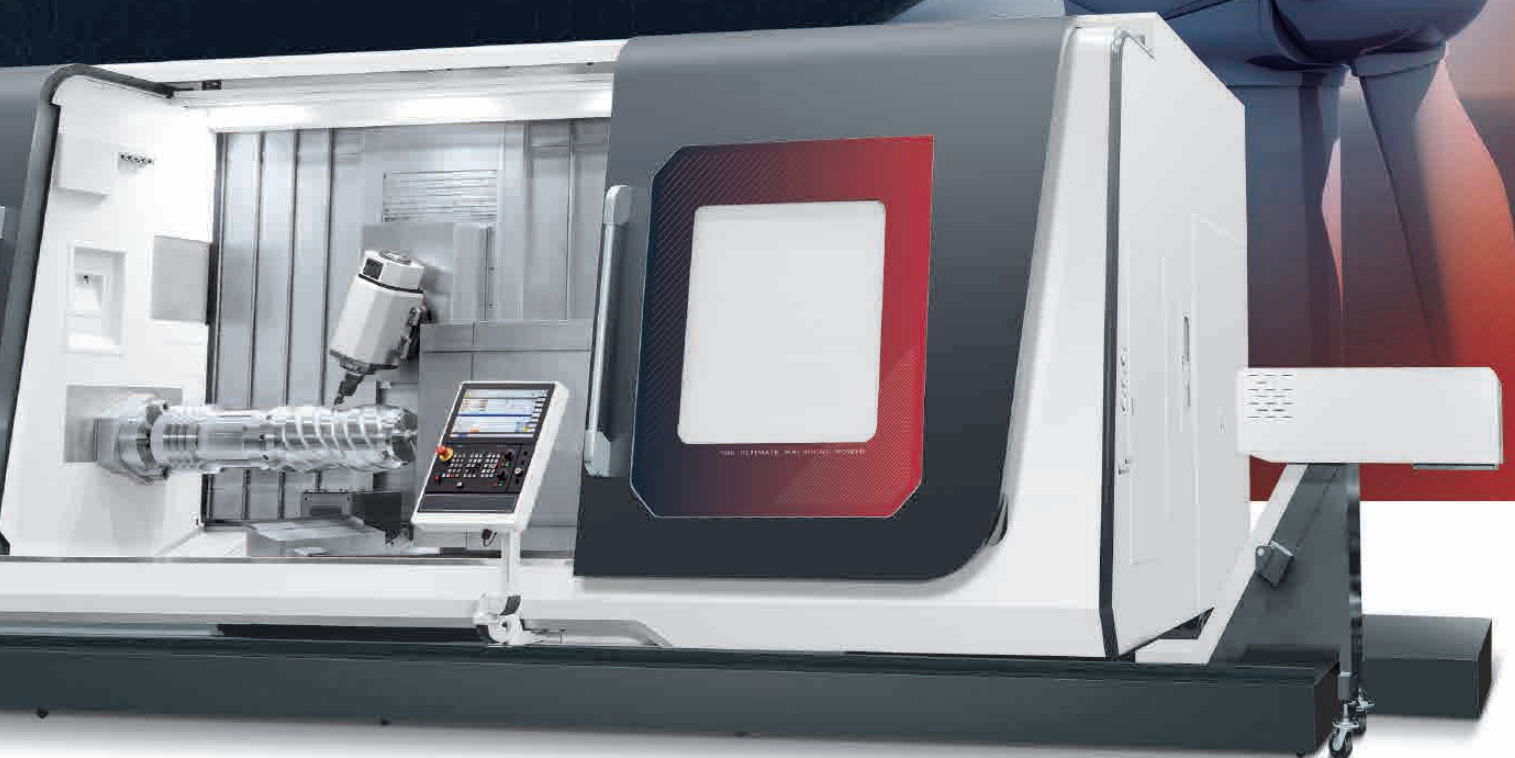
This series features 8 axes control and the ability for interpolation of B、C、X、Y、Z axes. It can achieve the comprehensive process such as turning, milling, drilling, gear hobbing and gearing skiving and auto workpiece measuring by single machine, as well as handle the complex geometric contour machining with high accuracy. One GMT-4000 series machine can replace most equipment in production lines and bring you an unprecedented machining experience.





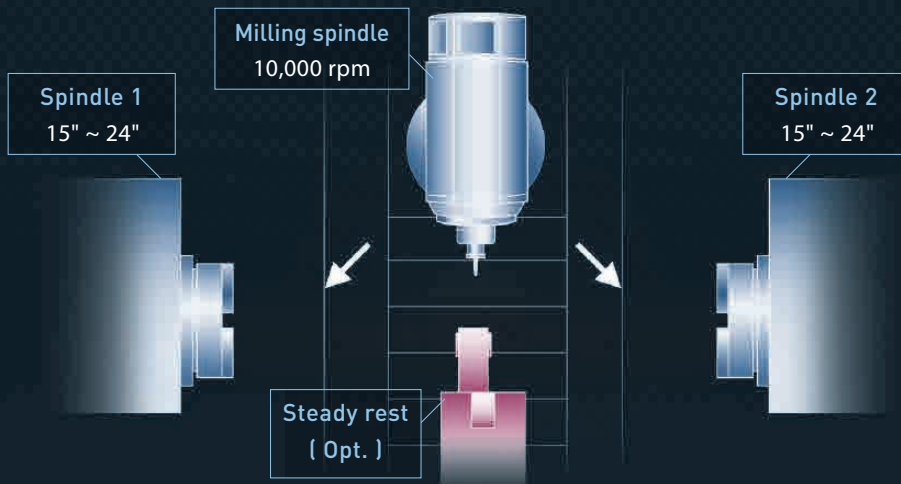
GMT-4000

MULTI-TASKING MACHINE



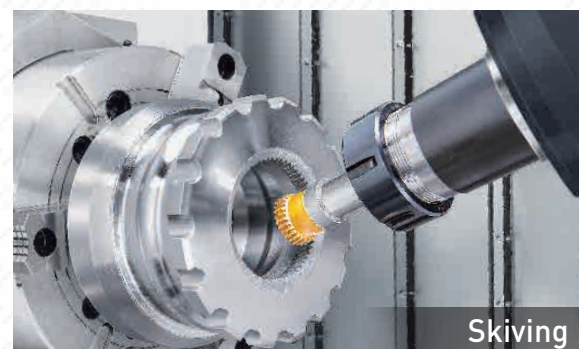
AN EXTREMELY LARGE PROCESSING RANGE

The GMT-4000 series, designed for the large workpiece, feature 500 mm (± 250 mm) stroke on Y-axis and available continuous indexing positioning on high precision B-axis. The complex processes that typically required multiple machines can be integrated and completed directly by single GMT-4000.

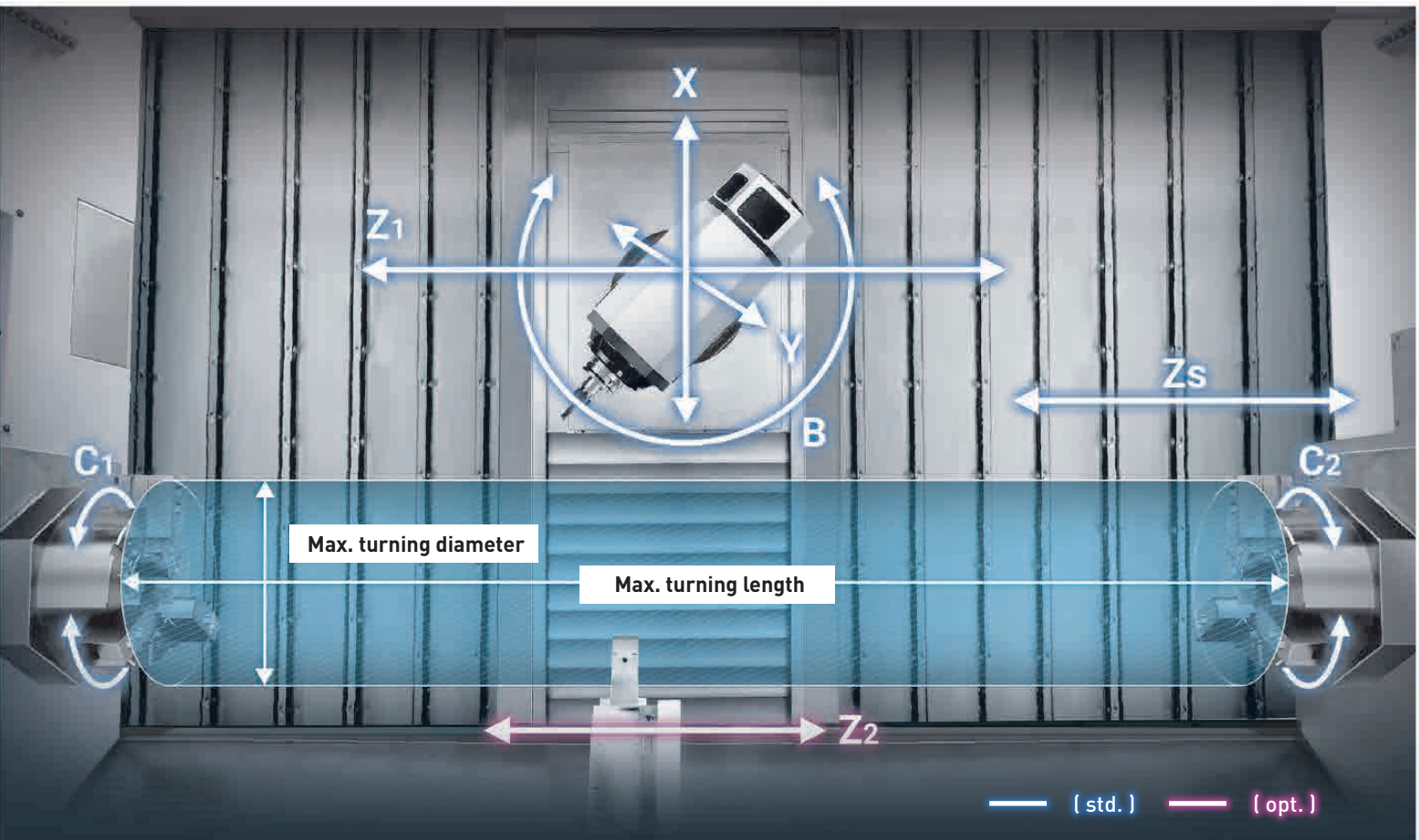


Model	GMT-4000
Max. turning length	3,055 mm
Max. swing diameter	Ø 820 mm
Max. turning diameter	Ø 820 mm
Milling spindle	●
Spindle 1	●
Spindle 2	●
Steady rest	○

● : Standard ○ : Option

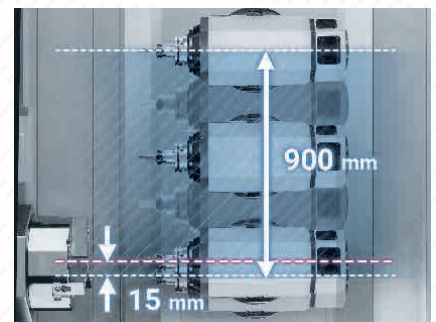


* The processing modes listed above may be an option functions, please contact GOODWAY for more information.



Significant Production Efficiency

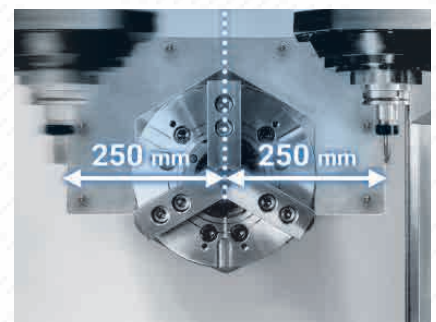
- Since the maximum stroke of the X-axis can exceed the centerline of the spindle by 15 mm, and the maximum stroke of the Y-axis is ± 250 mm from spindle center, the GMT-4000 series can perform high-precision contour milling and drilling even if it is not controlled by the C-axis, and the processing is more efficient.
- X, Y, and Z axes are directly driven by a high-load servo motor with a rapid feed rate of up to 40 / 40 / 40 m/min.



X-axis travel

Sufficient Processing Range

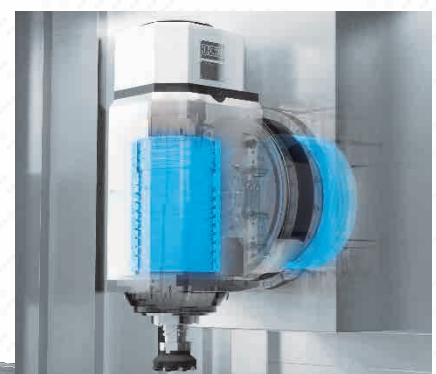
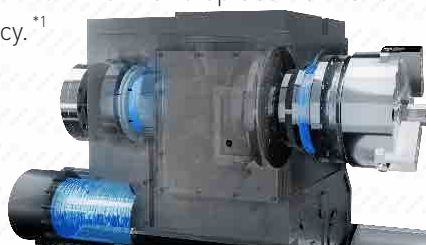
- $\varnothing 820$ mm max. swing diameter can satisfy the various big size workpiece machining requirement.
- Servo motor drive steady rest can ensure the support rigidity on long type workpiece ; therefore, the max. turning length will reaches up to 3,055 mm
- A chain type tool magazine with up to 120 tools (max.) can be installed to easily overcome any complex cutting tasks.



Y-axis travel

High-precision Countermeasures

- The spindle, milling spindle and feed system are equipped with cooling circuit design, which can effectively inhibit thermal displacement and ensure the ultimate machining accuracy.*1
- B-axis standard high-resolution rotating linear scale.
- Optional milling spindle thermal compensation system.



Cooling Technology

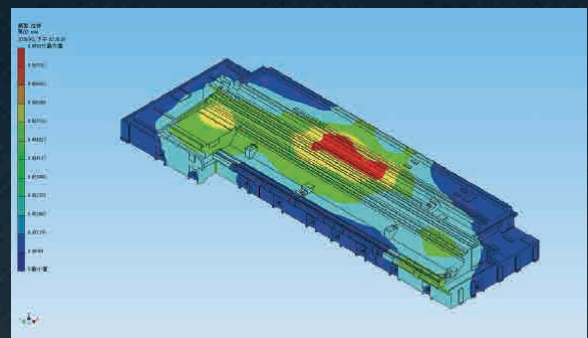
*1 : Hollow ball screws are optional accessories

MAXIMUM STRENGTH CONSTRUCTION

For large and high performance machine like GMT-4000 series, the factors such as structure rigidity and the compatibility of key components will extreme impact the performance of machining precision. Therefore, the casting structure of GMT-4000 series undergoes final machining process in GOODWAY factory. In addition, the core component such as the spindle and gearbox are assembled and performance verified in house. The self-made key component can allow us to strict control product quality, ensuring that machine performance is used to the most extent.

High Rigidity Machine Base

The base with high-performance ribs is not only integrally cast but also made with high-tensile Meehanite cast iron, with heat flow balance design to meet the needs of long-term processing. Because Meehanite cast iron can provide greater damping and reduce deformation, the machine is not only durable but also ensure outstanding performance.



Low Gravity, Lightweight Column

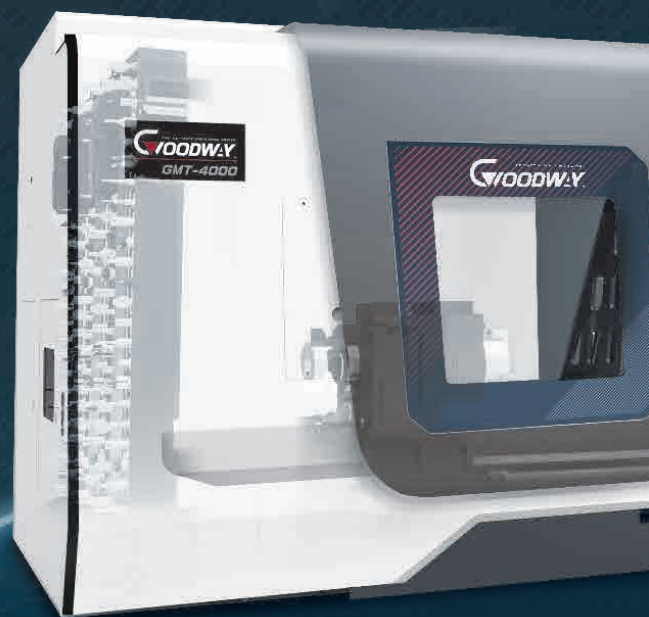
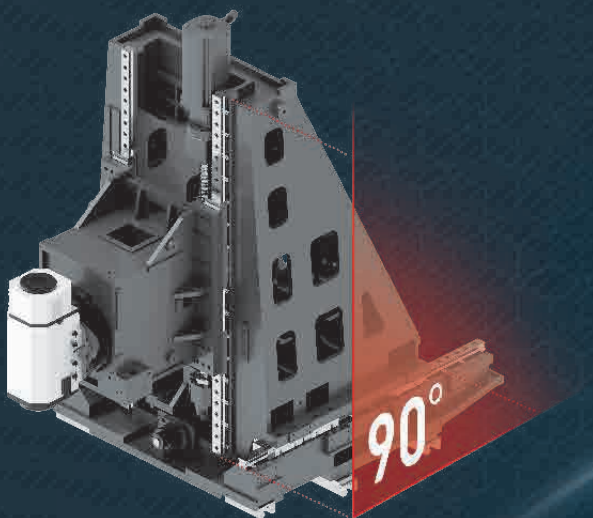
The column structure with low center of gravity can provide the stable support rigidity of the X-axis saddle, avoiding the milling spindle overhang; and the lightweight design allows the Y and Z axes to have higher dynamic performance.

Finite Element Methods (FEM)

All structural parts have passed FEM (Finite Element Methods), which has the advantages of optimized design and lightweight structure to ensure the best structural rigidity of the whole machine.

Orthogonal Y-axis Structure

The Y-axis saddle and the X-axis are designed in an orthogonal structure which can achieve a longer Y-axis stroke, thereby providing a more abundant processing range.





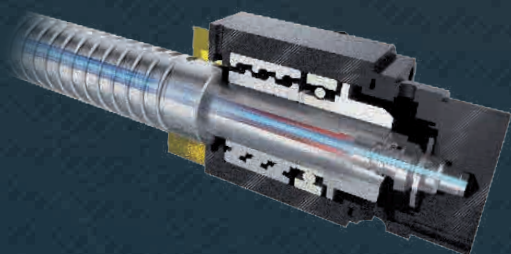
Roller Type Linear Guideway

Super rigid roller type linear guide ways on the all axes provide heavy-duty cutting, fast movement and low friction capabilities.

High Accuracy Ball Screw

The heat-treated and precision-ground C3 grade ball screw can ensure the highest precision and durability. In addition, each axis has a pre-tensioning design, which can minimize the displacement and greatly improve processing accuracy.

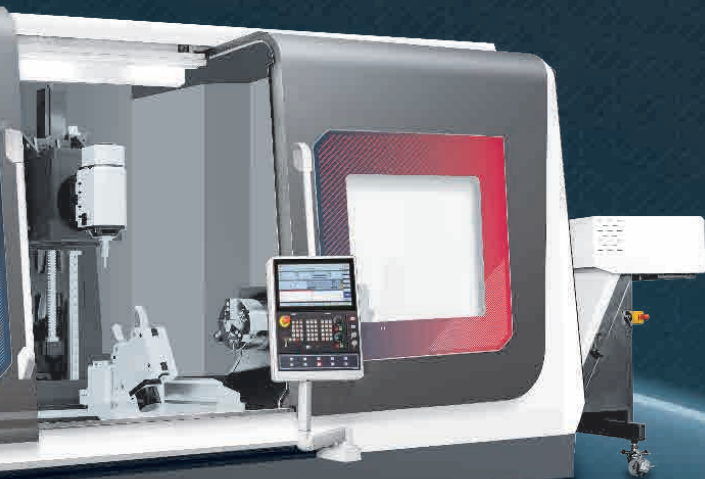
The optional hollow ball screw allows the cooling circuit to suppress axial thermal displacement by passing through the ball screw, meeting the requirements for high-speed and high-precision machining.



Automatic Lubrication System

To provide lubricating grease for precise adjustment of slide rails, ball screw and other important components. The system will automatically shut down during standby to avoid waste.

This series is accurate lubricated with semi-fluid greased and electric oil injector. Compared with clear oil, semi-fluid greased has better lubrication effect and low loss rate. There is no disadvantage of uneven distribution of grease and easy to pollute the coolant tank. it is efficient and environmentally friendly.

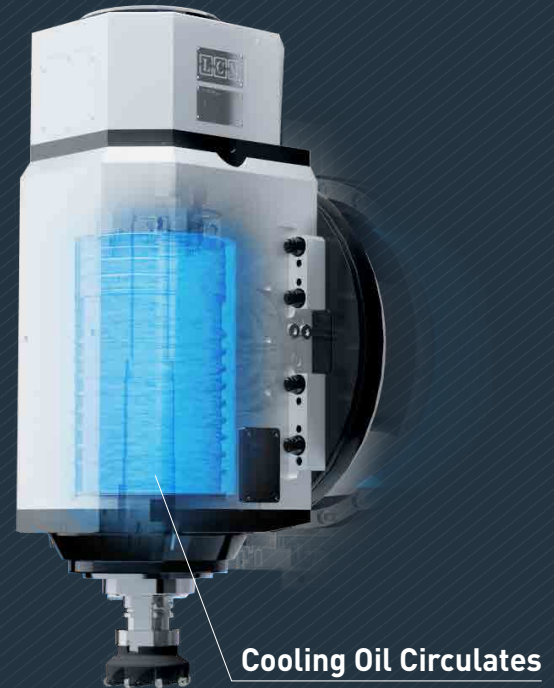


HIGH PERFORMANCE MILLING SPINDLE

The milling spindle comes with many features such as high speed, high precision, low interference, etc.; it can continuously index every 0.001° within the 240° B-axis travel range. Not only to perform heavy cutting on fixed angle, but also perform 5-axis simultaneous motion contour milling, with extremely flexible processing capabilities.

Built-in Spindle

- The built-in motor design can reduce the rotation vibration of the spindle, extend the life of the spindle, and ensure processing accuracy under long-term operation.
- Maximum spindle speed up to 10,000 rpm and providing a maximum torque of 188 Nm (Cont.) at 1,725 rpm to meet various working conditions.
- The special structure design allows the spindle to have an excellent protective effect. Even if the high-pressure cooling system is used for cutting, the coolant will not pollute the spindle. (CTS function is option)

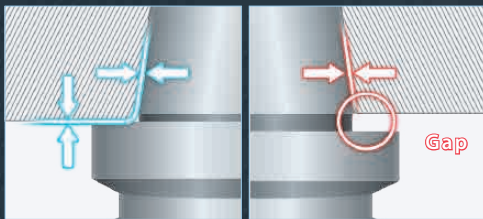
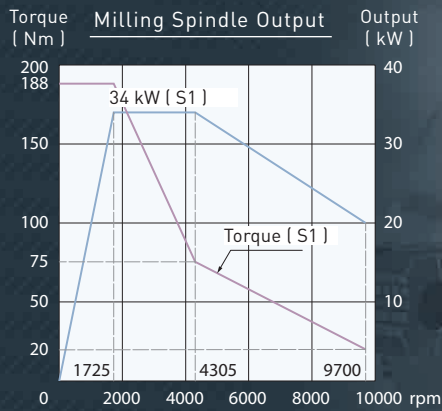


Cooling Oil Circulates



Ultimate B-axis Control Function

- Through B-axis control function, the milling spindle can perform the milling, drilling or contour machining with continuous indexing positioning on specific angle, thus completing machining tasks that are difficult for conventional 3 axes turning center to accomplish.
- B-axis can equip with either DD (Direct Drive) motor with zero backlash, high-dynamic performance, or a super rigidity roller cam drive mechanism, depending on actual requirement to meet various machining characteristics.
- The braking system adopts a hydraulic brake combined with a 3-piece curvic couplings design, with a clamping force of up to 2,750 Nm, which can meet the machining rigidity required for heavy cutting at a fixed angle.
- Standard high resolution angle encoder.



Dual contact spindle Single contact spindle

The taper surface and both ends of the two-sided fixed beam spindle can be closely attached to the tool holder at the same time, ensuring the required tool blades under heavy cutting conditions and extending the tool. (HSK-T100 and Capto C8 are available.)

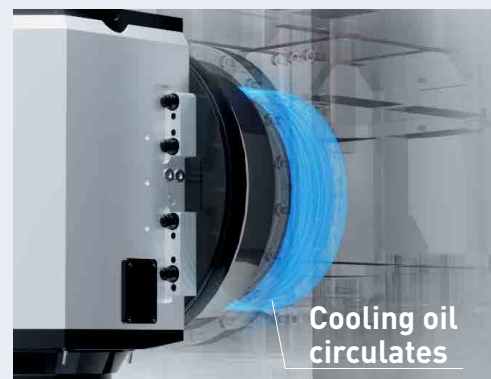


Through the rotation and positioning of the milling spindle, the same turning tool can support the spindle 1 & spindle 2 which can reduce the number of tools required, eliminate the time for tool exchange, and improve production efficiency.

DD (Direct Drive) Motor Transmission

The design of DD motor is direct transmit the drive power from motor to rotary axis. To compare with traditional worm gear systems, the transmission efficiency increase significantly and axial feed is fast, especially there is no backlash problem.

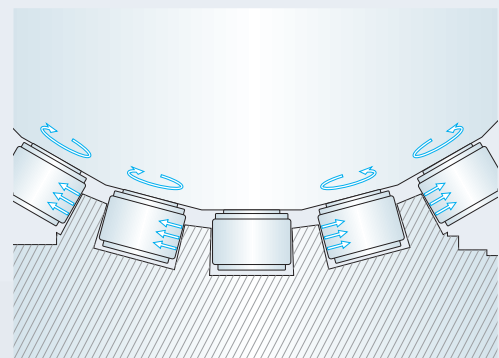
- B-axis indexing accuracy : 4 arc-sec.
- B-axis repeat indexing accuracy : 1.5 arc-sec.
- B-axis rotating speed : 30 rpm



Roller Cam Transmission

The roller and cam adopt a rolling contact transmission, provide several advantages such as super high rigidity, low thermal deformation and minimal wear. It can provide extreme high torsional resistance, satisfy specific angle heavy cutting.

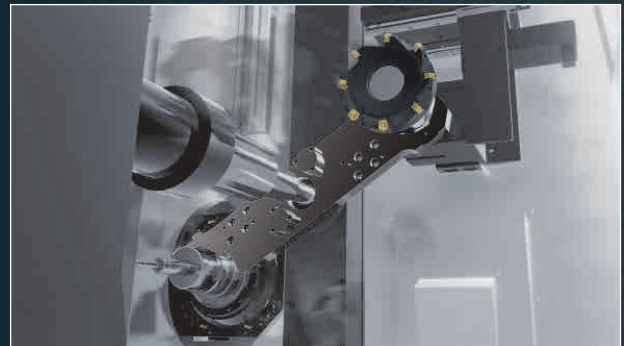
- Rolling type transmit power can efficient reduce energy loss during the driving process and the transmission efficiency exceeding 90%.
- the backlash can be eliminated significantly by preloading of the engagement between roller and cam.



ATC SYSTEM

The chain type magazine is combined with the design of the arm type ATC system, which has ample tool capacity, fast and reliable tool change, can significantly save non-cutting time, and can meet the processing needs of complex workpieces.

- High-speed servo motor drives the tool change design. The tool change is extremely efficient. T-T only takes 1.8 seconds.
- The whole process of tool change is controlled by a precision cam, which can realize the tool exchange stably and reliably.
- The standard ATC magazine has a capacity of 40-tools. (80 or 120 ATC magazines are optional).



Tool Magazine Control Panel

Independent tool magazine control panel is installed on the right hand side of the machine (near the tool magazine), so one operator can independently complete tool loading and disassembly. In addition, the system has complete warning lights and safety mechanisms to ensure operational safety to the greatest extent.



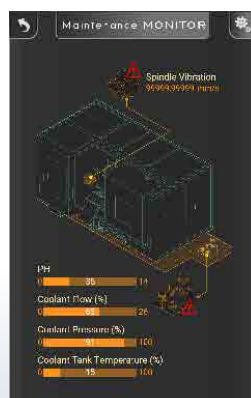
High-grade panel specifications, adaptable to various working environments

- 10.1" full color touch screen
- Panel hardness > 5h
- IP54 dustproof and anti-pollution level

Maintenance Monitoring Function

Opt.

Provides spindle vibration, cutting fluid PH, water level, pressure, flow and other information.



Power Monitoring Function

Opt.

Provides power consumption, carbon emissions, processing time, electricity bills, etc..



ULTIMATE MACHINING POWER

The gearbox is driven by built-in motor with a power rating of 32.3 kW (60%), capable of delivering a high torque output of 3,345 Nm within the speed range of 92 rpm. This is particularly suitable for heavy cutting and processing of difficult-to-cut materials.

High precision bearings are directly assembled for maximum level of support . Bearing configuration is designed for super heavy-duty cutting with ultra-smooth performance and long term durability with a higher level of accuracy.

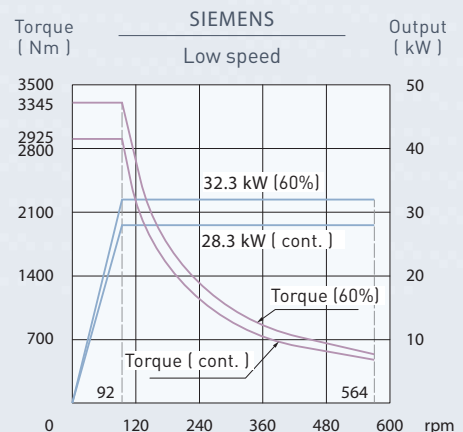
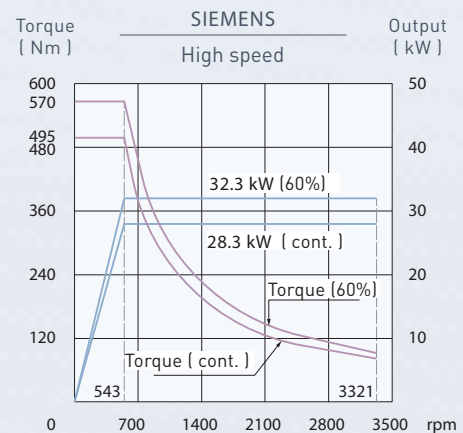
By holding both ends of the long bar and running at the same time, the spindle 1 & spindle 2 can provide stable support for the work piece and meet the demand for ultra-high machining accuracy.

The spindle 1 & spindle 2 have the same specifications

2-speed gear box design

Spindle cooling circulates

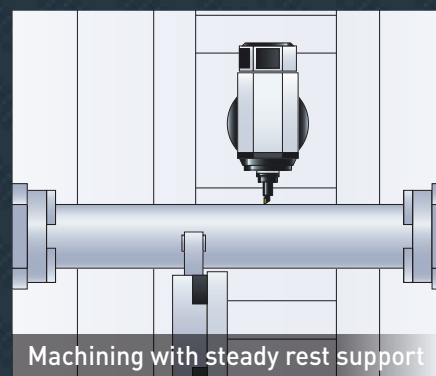
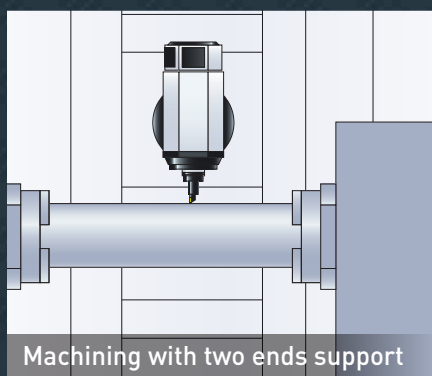
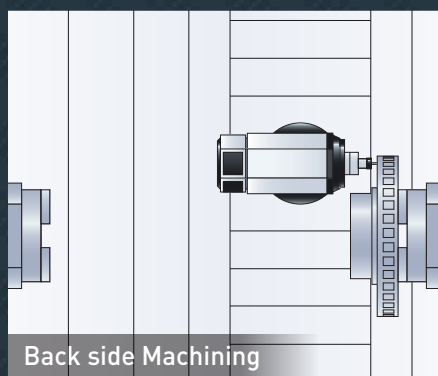
Spindle Output



BACK PROCESSING CAPACITY

The spindle 2 adopts the same specification design as the spindle 1, which can provide the same powerful cutting ability on the front and back of the workpiece.

The spindle 2 can also use the C-axis function with the same specifications as the spindle 1, and the minimum positioning index can reach 0.001°



HIGH RIGIDITY C-AXIS

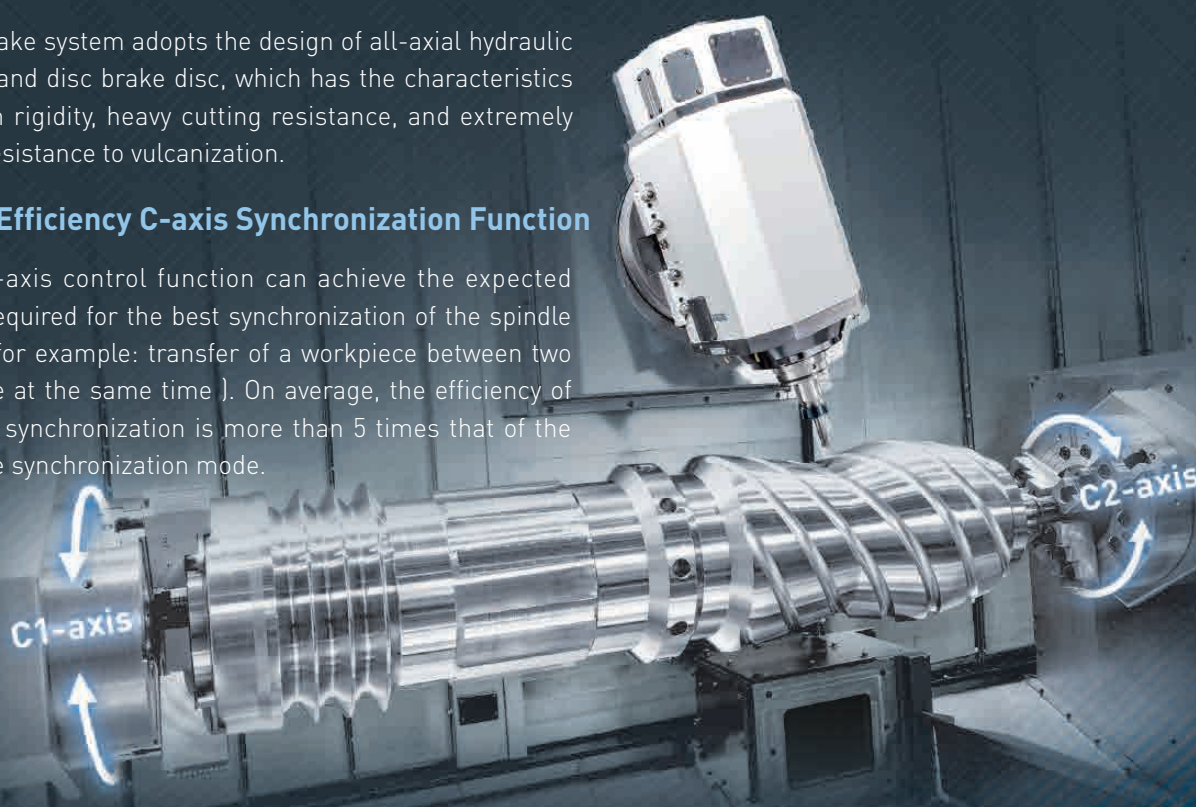
Designed with a high-resolution servo motor combined with a disc brake system (C_f axis), the torque output can reach 2,100 Nm (Cont.), the rigidity is much better than that of similar models, and it can maintain ultra-high dynamic accuracy even under heavy cutting.

Universal Disc Brake System

The brake system adopts the design of all-axial hydraulic brake and disc brake disc, which has the characteristics of high rigidity, heavy cutting resistance, and extremely high resistance to vulcanization.

High Efficiency C-axis Synchronization Function

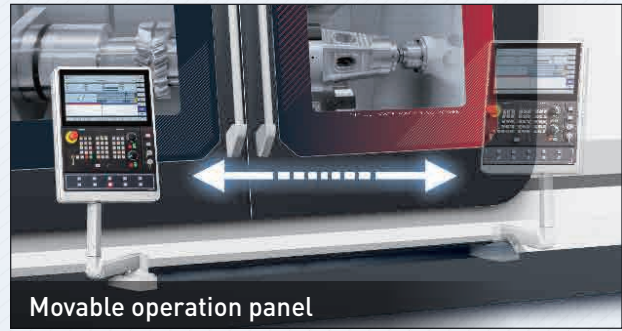
The C-axis control function can achieve the expected time required for the best synchronization of the spindle 1&2 (for example: transfer of a workpiece between two spindle at the same time). On average, the efficiency of C-axis synchronization is more than 5 times that of the spindle synchronization mode.



OUTSTANDING OPERABILITY



Crane hanging suspended material feeding



Movable operation panel



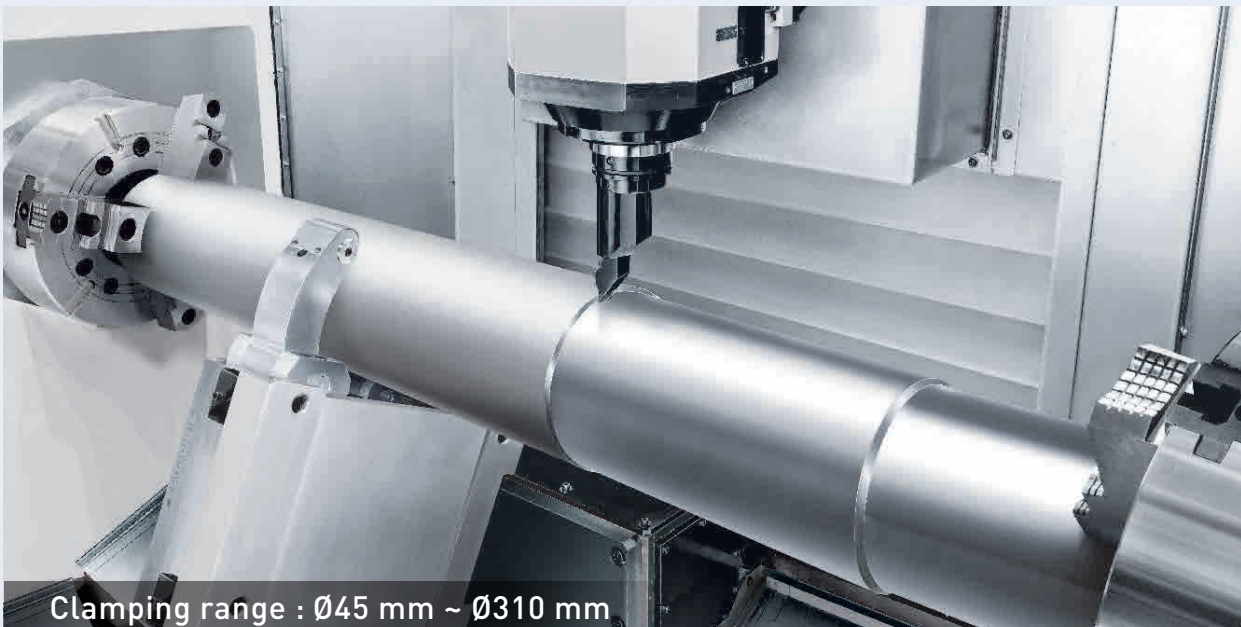
Large impact-resistant window



Tool magazine control panel

SELF-CENTERING STEADY REST

- The optional steady rest can provide stable support for long work pieces, avoid deflection errors caused by rotation, and ensure concentricity.
- The steady rest main body base is driven by servo motor and ball screw. The steady rest can be driven to the required position through NC programming.
- The automatic steady rest can perform automatic centering with high efficiency, and can ensure that the center of the circle will not deviate due to changes in clamping pressure through the automatic compensation system.



Clamping range : Ø45 mm ~ Ø310 mm

STRATEGY FOR CHIPS REMOVING

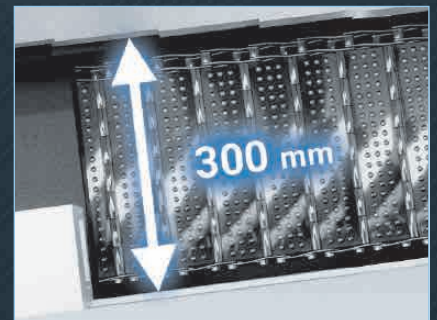
A complete chip removal strategy can quickly take chips away from the machining area and provide excellent tool cooling efficiency, thereby ensuring machining accuracy and extending tool life.



Coolant nozzle around spindle



Coolant through spindle



Large chip chute

* The above features may be optional



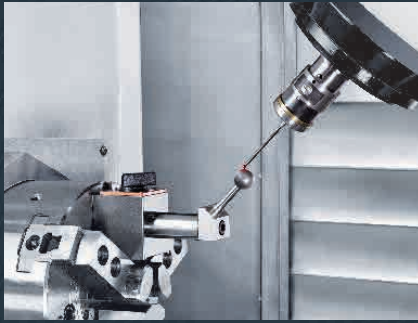
Chip Conveyor

Goodway provides the best solution for the chip conveyor according to different type of chips. Chain type chip conveyor is suitable for curled chips. Scrape type chip conveyor is suitable for the powder chips of casting, aluminum and copper.

Chip type	Curled chips			
Chip material	Steel	aluminum	color metal	
Chain type	●	●	●	
Scrape type	—	—	—	
Chip type	Powder chips			
Chip material	casting	aluminum	copper	non-metal
Chain type	—	—	—	●
Scrape type	●	●	●	—

● Applicable — Not applicable

OPTIONAL ACCESSORIES



The Measurement for The Center Point of Rotating Axis

To adjust the deviation of center point for rotating axis. (The signal is blue tooth transmission with non-directional)



Workpiece Inspection Probe

It is available to identify and set the workpiece, monitor the surface of workpiece and verify the dimension of finished part.



Laser Tool Setter

Contactless design can measure tool dimensional deviation, tool deflection value and detect tool damage with high precision.



Linear Scale

The full enclosed linear scale is with 0.1 μ m resolution and the position accuracy will be ± 0.010 mm / full travel (JIS)



Oil Chiller

Provides a high-efficiency cooling capacity of 21,700 kcal/hr which can effectively suppress thermal temperature rise and ensure machining accuracy.



Coolant Cooler

It is able to control the coolant temperature efficiently and decrease the possibility of deformation from the machining.

R series High Pressure Coolant System Opt.

Max. Pressure : 70 ~ 100 bar (1,000 ~ 1,500 PSI)

Max. Flow Rate : 30 ~ 53 LPM (8 ~ 14 GPM)

Coolant Type : Water or Oil

- Pressure output monitoring system
- Filter replacement checking
- Super large capacity coolant tank
- Patented diaphragm pump (made in USA.)
- Touch screen of HMI



Intelligent Automatic Pressure Control (R series *i* model)

- Pressure controlled by programmable valve control, no need to be adjusted manually, more accurate pressure output.
- It is controlled by closed loop of inverted motor, it can be adjusted to proper flow automatically by pressure to save power and decrease heat raising of coolant.*1
- Use Ethernet to connect*2 with machine, easy wiring and setting, save cost of purchasing hardware.

*1 Traditional manual adjusting way is constant frequency full flow output.

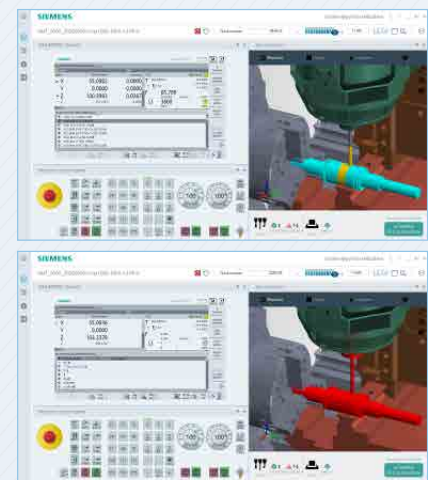
*2 FANUC / SIEMENS controller only.

ADVANCED CONTROL FUNCTION

DIGITAL TWIN (opt.)

Finish following work without using machine in factory under simulated environment by using Digital twins' software Run My Virtual Machine.

- Evaluate process machine movement and actual machine status.
- Test work-piece acceptance by the software.
- Verify status of machine series number and fixture.
- Use real CNC movement to prevent process from collision.
- Use SIEMENS operating panel process 3D model, and finish machine training.

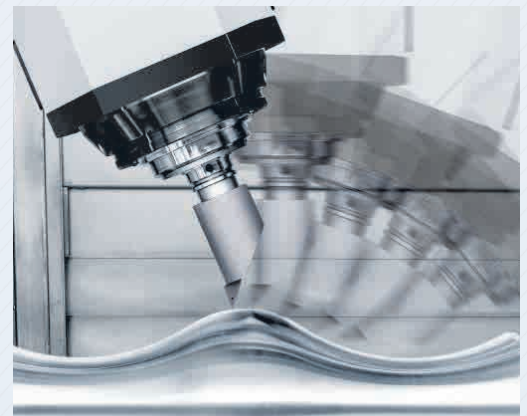


[Siemens only]

ORISON

Direction smooth function can ease the position swing in 5 axes program by using multi-block. The purpose is to reach the property of smoothing both position and contour.

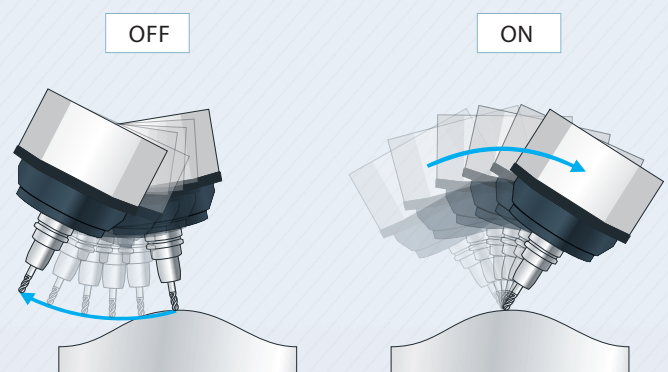
ORISON allows tool position smooth (vector) without involving contour, which is able to use high rotating axis tolerance, and increase process speed rate and shorten process time.



[Siemens only]

TRAORI

X, Y, Z correction movement will be recalculated and includes changing tool position, which tool tip stays in the same position. When calculating amount of movement, current tool length and work-piece frame will be considered.



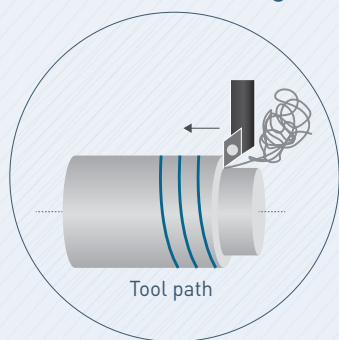
[Siemens only]

OCR (opt.)

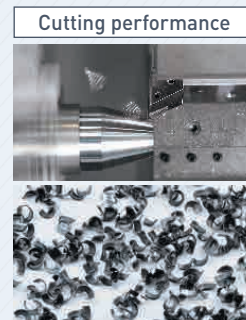
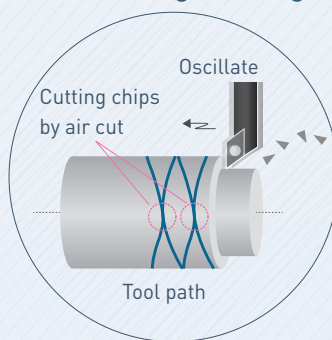
[both Siemens & Fanuc are available]

OCR oscillating cutting function is to air cut fine chips while oscillates the slide axis fully synchronized relative to spindle rotation. No mechanical failure occurred due to entangled chips which enhances machine effectiveness.

General Turning



Oscillating Turning



AIR BAG (opt.)

[Fanuc only]

Check servo motor loading torque. When loading torque is out of range (accidentally crash), system will enter emergency status and return servo axis at the same time to lower the damage and avoid too much service cost and loss from the machine long stop.

Retract tools within **0.009 sec.**

	Equipped with air bag	Not equipped with air bag
Maintenance time	short	long
Mechanical damage	less	badly
Overload	predictable	unpredictable



Equipped with air bag

- Machine crash ► EMG
- Servo motor reverse rotary
- Machine stop



Not equipped with air bag

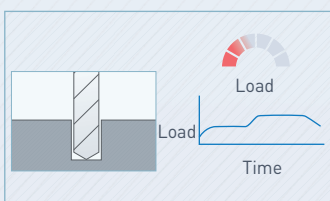
After machine crashed, axes continue feeding, machine structure might get damaged seriously.

LOAD MONITOR (opt.)

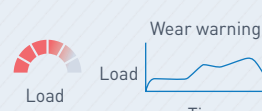
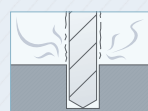
[both Siemens & Fanuc are available]

Load monitoring function can check the abnormal tool load via detecting the electric current variation of main spindle and servo motor when turning. When abnormal loading occurs, if achieve tool life, machine will stop when program end (M30); If achieve wear value, machine will immediately pause the feedrate but will not stop the spindle.

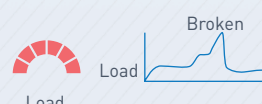
Tool Monitoring



Tool life achievement



Tool wear



Machine stop

Feedrate stop

GLINC INTELLIGENT OPERATING SYSTEM

(FANUC controller only)

Make Your Machine Smarter

- Multi-touch screen
- Excellent operability
- Multiple adjuvant tool
- Utilization rate checking and analysis
- Workpiece counter checking and analysis
- Integrative machining operating interface
- Visible date interface
- Maintenance notification



Machining preparation

- Ultra fast tool selection
- To memorize MDI program

Program editing

- Adjuvant of G/M code
- Graphical procedure management
- Manual Guide *i*

Machining

- Load monitor
- Tool life time
- Machined parts counter
- Visible servo observation

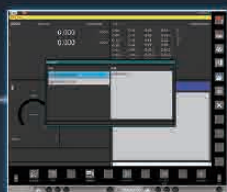
Adjuvant function

- Data record
- Memo
- Maintenance Warn
- E book
- Prt Scrm record



Ultra fast tool selection

To change the current tool number by virtual keyboard and to set the protective button for mistouch.



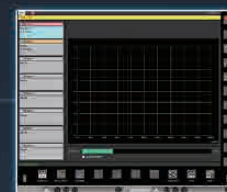
MDI program memory

Operator can save the current machining program code in bookmark and call it again from there.



G/M code assistance

When editing process program, search G/M coder function to assist in editing program.



Visible servo observation

Observe information of each spindle and servo axis, such as coordinates, rotating speed, torque, etc.



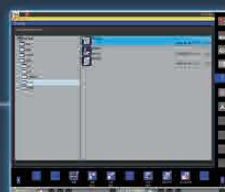
Tool load monitor

In processing, it is able to monitor each axis loading value. If loading value is out of the reasonable range, alarm will sound.



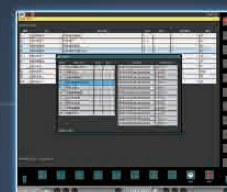
Tool life monitor

Set each tool process time and amount. If it reaches to set value, alarm sound.



Graphical process manager

Graphical present process program list and add note to each process program.



Data recorder

View after setting every information of machine monitor. Export file and analyze the data.

STANDARD & OPTIONAL FEATURES

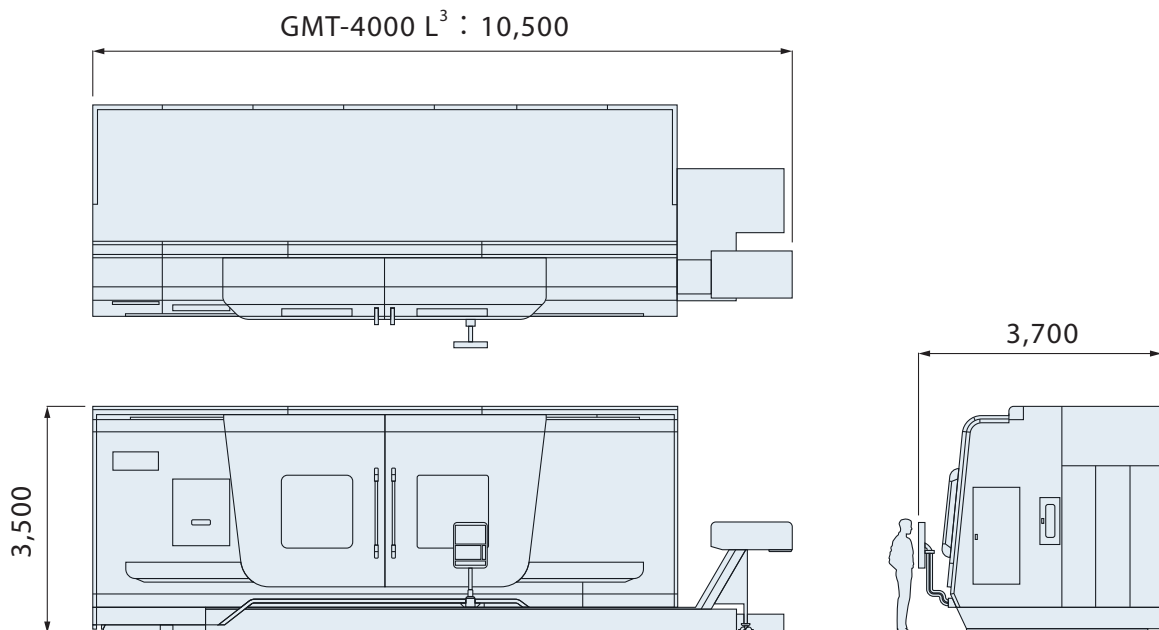
S : Standard O : Option
— : Not Available C : Contact GOODWAY

SIEMENS CONTROL FUNCTIONS		ShopTurn	programGUIDE
System configuration	Control 2~4 axis at the same time	S	S
	Control 5 axes at the same time	—	S
	Minimum command unit 1nm, 0.0001 mm, .00001", 0.0001°	S	S
	Maximum programmable value : ±99999.9999 mm, ±9999.9999", ±99999.9999°	S	S
	Max. number of programs : 1000	S	S
	Program storage : 6 GB	S	S
	Program storage expansion : USB/ FTP	S	S
	Display : 19" touch panel	S	S
	Resolution : 720P	S	S
Axis functions	Linear, circle, helix	S	S
	Splines, polynomials, involutes	S	S
	Advanced Surface	S	S
	Look Ahead	S	S
	Compressor	S	S
	Equal pitch threading	S	S
	Variable pitch threading	S	S
	Re-threading	S	S
	Override threading	S	S
	Override variable threading	S	S
CNC programming	SINUMERIK CNC programming language with high-level language elements	—	S
	Online ISO dialect interpreter	—	S
	ProgramGUIDE	—	S
	DXF reader	O	O
	Technology cycles for drilling, milling and turning	S	S
	Balance cutting	S	S
	ShopMill / ShopTurn machining step programming	S	—
	Cycles for process measurements	S	S
	ProgramSYNC (multi-channel operation and programming)	S	S
	3D CNC simulation for turning / milling	S	S
	Simulation in parallel to the main machining time	S	S

SIEMENS CONTROL FUNCTIONS		ShopTurn	programGUIDE
Axis functions	Acceleration with jerk limiting	S	S
	Dynamic precontrol	S	S
	Dynamic servo control in the drive	S	S
Tool function	Tool Management	S	S
	Number of tools/cutting edges, up to 600 / 1500	S	S
	Unit quantity / tool life monitoring with management of replacement tools	S	S
	3D tool radius compensation	—	S
Communication	OPC UA	S	S
Coordinate system	Machine coordinate system	S	S
	Work coordinate system	S	S
	Local coordinate system	S	S
	External workpiece coordinate shift	S	S
	Machine coordinate system shift	S	S
	Additional work coordinates	S	S
Transformations	Face / peripheral surface transformation	S	S
	Multi-side machining (3+2-axis machining)	S	S
	Dynamic 5-axis machining (TRAORI)	—	S
Machine special function	Travel to fixed stop with force control	S	S
	Synchronized actions	S	S
	Asynchronous subprograms	S	S
	Hobbing	—	O
	Collision Avoidance	S	S
Compensation	Volumetric compensation	O	O
Monitoring	Vibration control and monitoring	O	O

Specifications are subject to change without notice.

Machine Dimensions



Unit : mm

STANDARD & OPTIONAL FEATURES

S : Standard O : Option
 — : Not Available C : Contact GOODWAY

SPINDLE 1			GMT-4000 L ³
Main spindle motor configuration	2-speed gear box		S
2,500 rpm (Hole through spindle Ø 105 mm)			S
Hollow hydraulic chuck	15"		S
	18"		O
	21"		O
	24"		O
Solid hydraulic chuck	15"		O
	18"		O
SPINDLE 2			
Main spindle motor configuration	2-speed gear box		S
2,500 rpm (Hole through spindle Ø 105 mm)			S
Hollow hydraulic chuck	15"		S
	18"		O
	21"		O
	24"		O
Solid hydraulic chuck	15"		O
	18"		O
C-AXIS			
Spindle 1 : 0.001° indexing (C-axis control)			S
Spindle 2 : 0.001° indexing (C-axis control / synchronization function)			S
MILLING SPINDLE			
Y-axis control			S
B-axis 0.001° indexing / contouring (EIA)			S
10,000 rpm (grease lubrication) HSK			S
10,000 rpm (grease lubrication) CAPTO			O
ATC MAGAZINE			
40T			S
80T			O
120T			O
WORK HOLDING			
MT#5 live center (Spindle 2)			O
Hydraulic steady rest			O
Foot switch for steady rest operation			O
Two-stage pressure	Spindle 1		O
	Spindle 2		O
HIGH PRECISION PREPAREDNESS			
Ball screw hollow coolant	X-axis		O
	Y , Z axes		O
	Zs-axis		—
	Zz-axis		—
High resolution linear scale	B-axis		S
	X , Y , Z axes		O
	Zs-axis		O
	Zz-axis		—
X, Y, Z axes screw pitch correction			O
RMP60 wireless bluetooth transmission measuring head			O
AUTOMATIC OPERATION SUPPORT			
Tool Presetter	Milling spindle / Automatic		O
Automatic chuck jaw open / close			S
Chuck jaw open / close confirmation			S
Automatic opening / closing front door			O
Machining finish buzzer			O

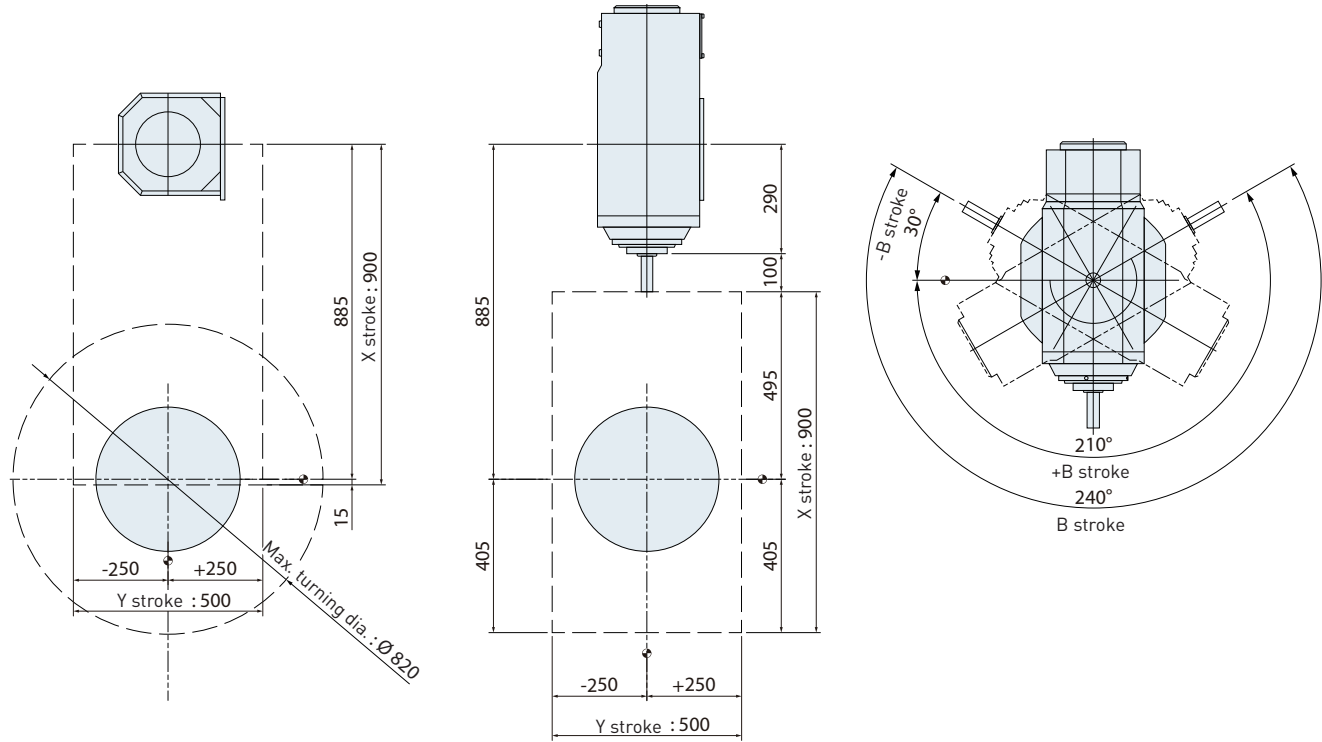
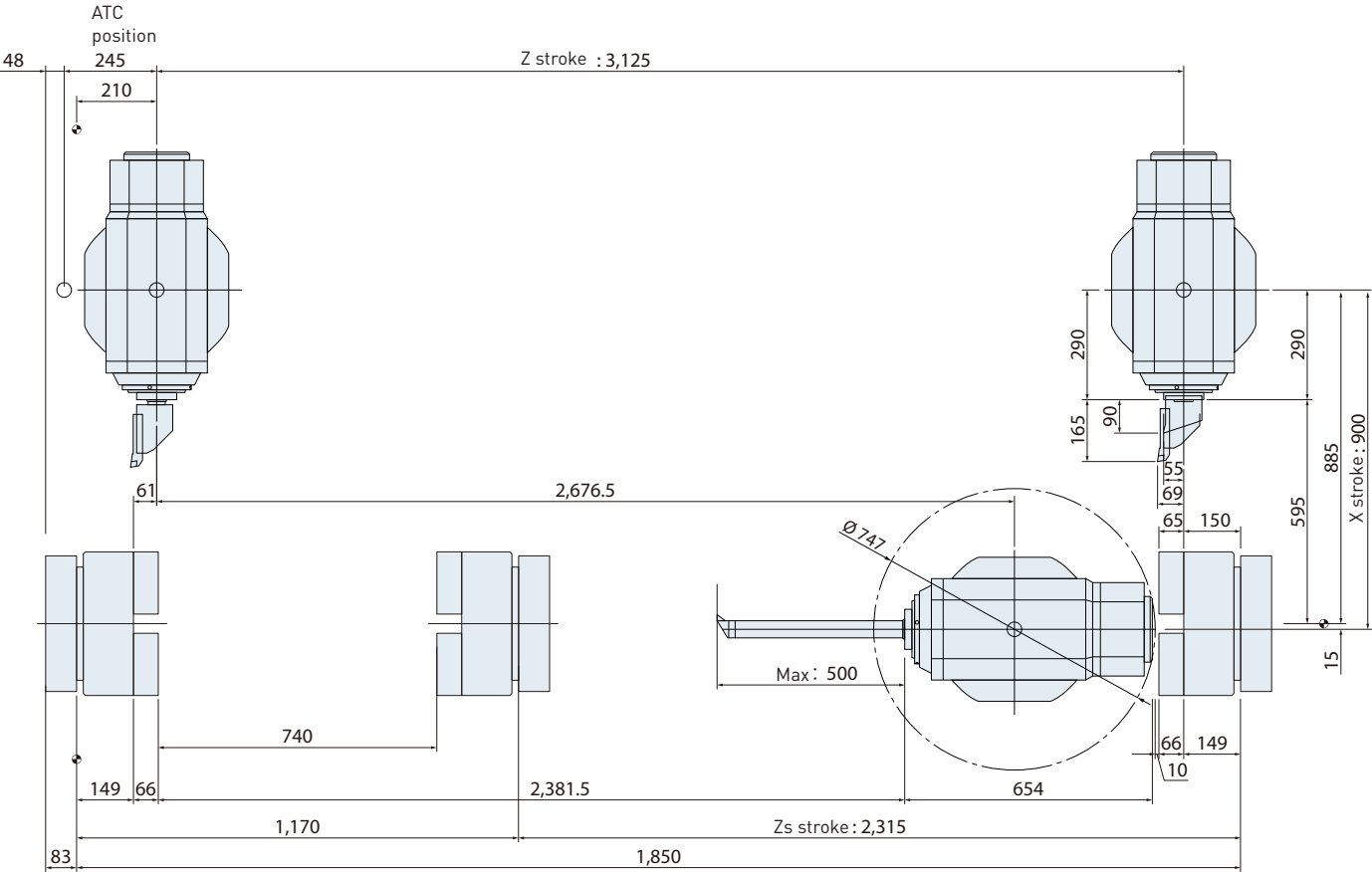
COOLANT / CHIP DISPOSAL			GMT-4000 L ³
Coolant nozzle around spindle			S
Coolant through spindle	0.5 Mpa		S
	1.5 Mpa		O
	3.5 Mpa		O
	7 Mpa		O
Chip wash down (spindle 1)			S
Chip wash down (spindle 2)			S
Coolant temperature control			O
Oil skimmer			O
Oil mist collector			O
Chip punching above the spindle 1			O
Chip punching above the spindle 2			O
Air blast through spindle			O
Air blowing above the spindle 1			O
Air blowing above the spindle 2			O
Chip conveyor (Hinge)			O
Chip conveyor (Magnet scraper)			O
Chip conveyor (Scraper)			O
Chip cart			O
SAFETY			
Hydraulic pressure lock			S
Auto door lock			S
Electrical leakage short circuit			O
Load monitor			O
OTHER			
Tri-color operation status light tower			S
Florescent work light			S
Foot pedal			S
Operation & maintenance manuals			S

Specifications are subject to change without notice.

GENERAL DIMENSION

Work Range

SIEMENS



Unit : mm

MACHINE SPECIFICATIONS

■ : Metric ■ : Inch

GMT-4000 L³

CAPACITY		
Max. swing diameter		Ø 820 mm 32.28"
Max. turning diameter (Milling spindle)		Ø 820 mm 32.28"
Max. turning length		3,055 mm 120.27"
Bar capacity		Ø 92 mm 3.62"
Distance between spindle nose		3,449 mm 135.78"
Spindle center height		1,306 mm 51.41"
TRAVEL		
Max. X-axis travel (Milling spindle)		900 mm 35.43"
Max. Y-axis travel (Milling spindle)		500 (±250) mm 19.68" (±9.84")
Max. Z-axis travel		3,125 mm 123.03"
Max. B-axis travel (Milling spindle)		240° (+ 210° ~ -30°)
Max. Zs travel (Spindle 2)		2,315 / 3,053 (without steady rest) mm 91.14" / 120.19"
Steady rest		2,280 mm 89.76"
SPINDLE 1		
Chuck size		15" ~ 24"
Max. spindle speed		3,320 rpm
Spindle nose		A2-11
Hole through draw tube		Ø 93 mm 3.66"
Hole through spindle		Ø 105 mm 4.13"
Spindle bearing diameter		Ø 150 mm 5.9"
Spindle motor		28.3 / 32.3 kW (Cont. / 40 %) 37 / 43 HP
Spindle torque	L	2,925 / 3,345 Nm (S6 - 40 % / Max.) 2,150 / 2,460 lb-ft
	H	495 / 570 Nm (S6 - 40 % / Max.) 365 / 420 lb-ft
Min. indexing increment		0.001°
SPINDLE 2		
Chuck size		15" ~ 24"
Max. spindle speed		3,320 rpm
Spindle nose		A2-11
Hole through draw tube		Ø 93 mm 3.66"
Hole through spindle		Ø 105 mm 4.13"
Spindle bearing diameter		Ø 150 mm 5.9"
Spindle motor		28.3 / 32.3 kW (Cont. / 40 %) 37 / 43 HP
Spindle torque	L	2,925 / 3,345 Nm (S6 - 40 % / Max.) 2,150 / 2,460 lb-ft
	H	495 / 570 Nm (S6 - 40 % / Max.) 365 / 420 lb-ft
Min. indexing increment		0.001°

GMT-4000 L³

MILLING SPINDLE & B-AXIS

Max. spindle speed	10,000 rpm
O.D. tool shank size	□ 25 mm 1"
I.D. tool shank size	Ø 50 mm 2"
Spindle taper	HSK-T100 / Capto C8
Spindle motor	34 / 44 kW (Cont. / 40 %) 25 / 32 HP
Milling spindle torque	188 / 249 Nm (Cont. / 40 %) 138 / 183 lb-ft
B-axis indexing	5°
Min. indexing increment (B-axis)	0.001°

ATC MAGAZINE

Magazine capacity	40 T (Opt. 80 / 120 T)
Max. tool diameter	Ø 135 mm (adj. pocket empty : Ø 260 mm) 5.31" (10.23")
Max. tool length	500 mm 19.68"
Max. tool weight	30 kg 66 lb

FEED RATE

X-axis	40 m/min. 1,574 IPM
Y-axis	40 m/min. 1,574 IPM
Z-axis	40 m/min. 1,574 IPM
Zs-axis	12 m/min. 472 IPM
B-axis	30 rpm
C-axis	20 rpm

GENERAL

NC controller	SIEMENS ONE / SIEMENS 840D sl	
Voltage / Power requirement	AC 380 / 400 ±10% 3 phase / 173 kVA	
Hydraulic tank capacity	60 L 15 gal	
Lubricating oil tank capacity	0.7 L 0.18 gal	
Coolant tank capacity	1,400 L 370 gal	
Dimensions	H	3,500 mm 138"
	L x W	10,500 x 3,700 mm 414" x 146"
Machine weight	29,800 kg 65,700 lb	

Specifications are subject to change without notice.



GMT-2000 SERIES ■ : Metric ■ : Inch

MULTI-TASKING MACHINE

- Max. swing diameter : Ø 660 mm 25.98"
- Max. turning diameter : Ø 660 mm 25.98"
- Max. turning length : 2,520 mm 99.21"
- Chuck size : 8" / 10" / 12"



GOODWAYCNC.com

GOODWAY MACHINE CORP.

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