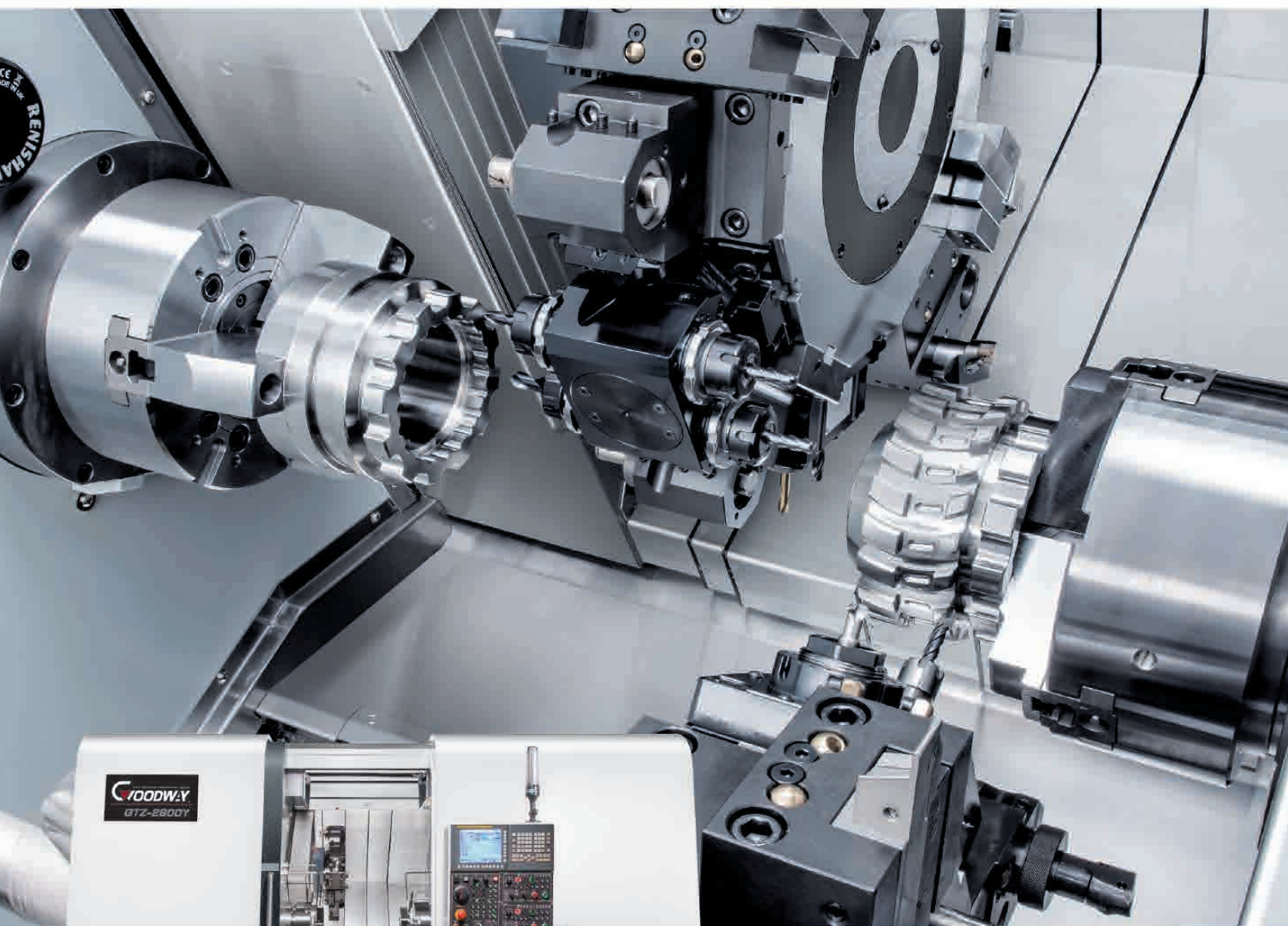


GTZ-2600

SERIES

HIGH PRODUCTIVITY MULTI-AXIS TURNING CENTERS



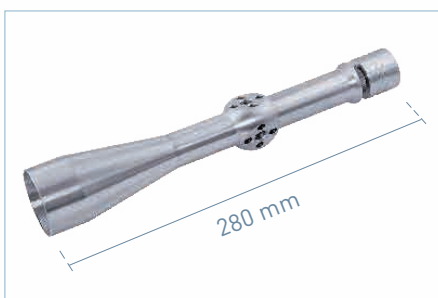
THE ULTIMATE MACHINING POWER
WOODWAY

TWIN SPINDLES, TWIN TURRETS

When facing a dilemma of maintaining a highly efficient production while processing extremely complicated machining parts, GOODWAY GTZ-2600 series is your best solution. Equipped with twin spindles and upper & lower twin turrets, this model is advanced in its design: with each turret that allows for flexibility to support any spindle during processing, its productivity is doubled compared with that of traditional models. Meanwhile, with its capacity to install a maximum of 24 tools for each turret, as well as the Y-axis control function, GTZ-2600 is capable of processing any complex part. Its powerful machining ability meets all your needs, today or in the future.

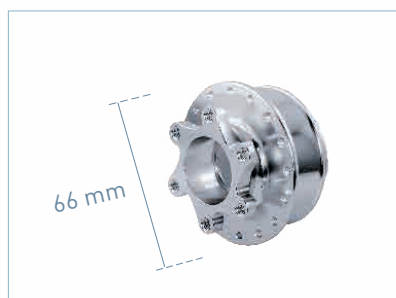


[GTZ-2600Y model shown with optional G.LINC intelligent control system]



Optics industry

Scope unit / Aluminum 6061



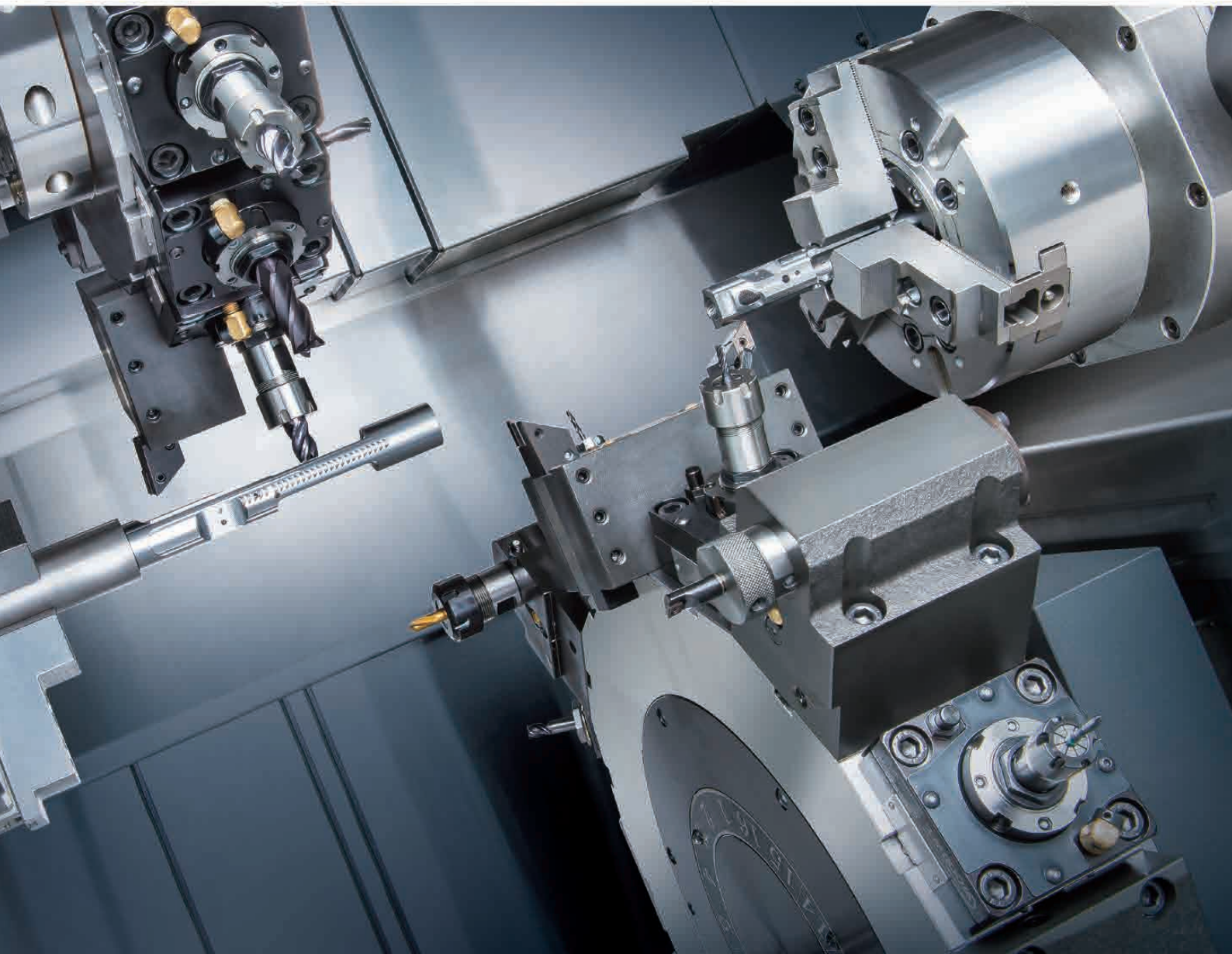
Bicycle industry

Hub / Aluminum 7075

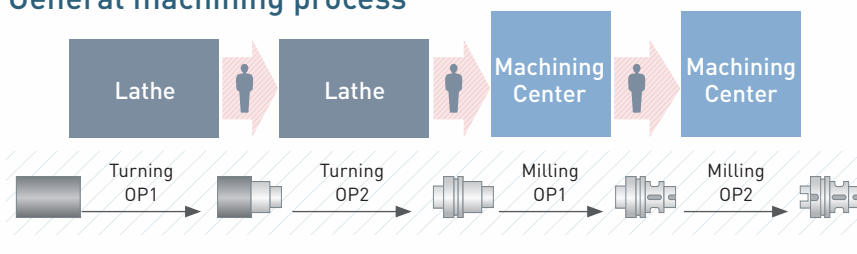


Automotive industry

Epicyclical gears / SCM440



General machining process



GTZ-2600 series Turning / Milling Complex process



GTZ-2600 series **vs** General machining process

- Avoid displacement from repeatedly clamping / unclamping work pieces.
- Save time for loading / unloading.
- Reduce labor cost.
- Minimize floor space taken.
- Lower cost of equipment investment.
- Shorten delivery time.

FLEXIBLE MACHINING MODES

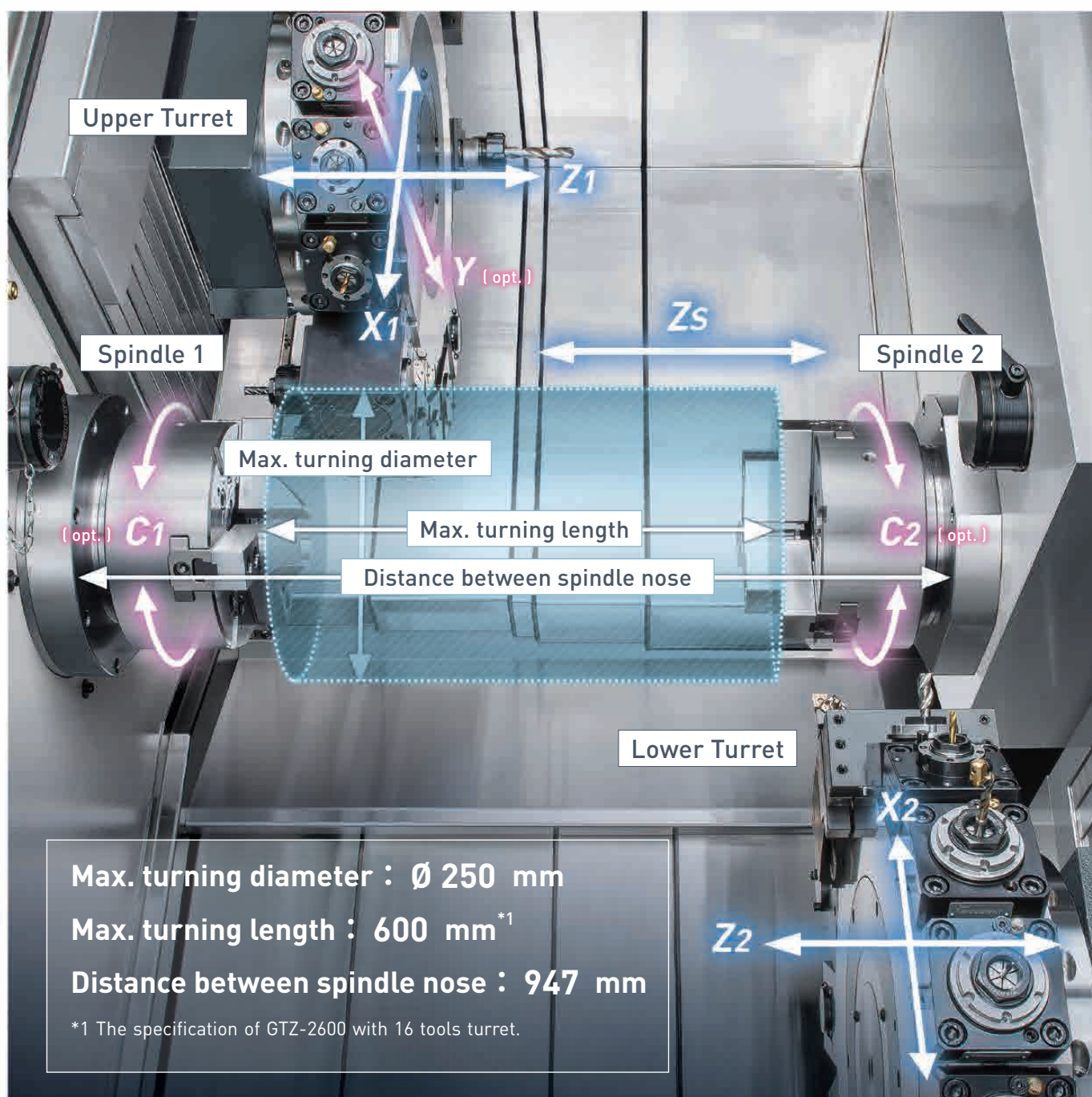
Both upper and lower turrets can agilely support the two spindles; in addition, through clamping the both sides of work piece on the twin spindles, synchronous high precision balanced turning can be performed, which allows for more flexibility in processing arrangement. Its capability of up to 7 axes control, along with $X_1 / Z_1 / C_1 / Y$ 4 axes synchronous processing, can easily accomplish all previously difficult machining tasks.

Maximum

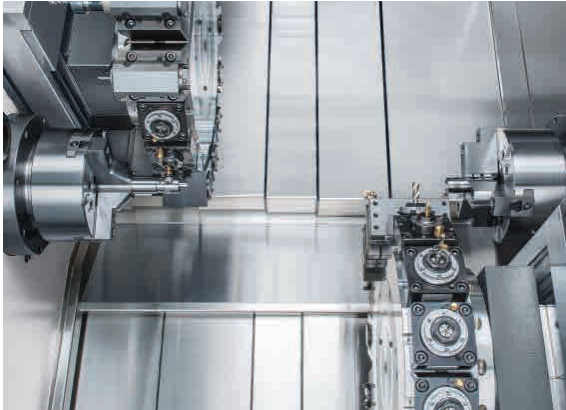
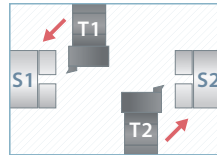
7 axes control

Synchronic

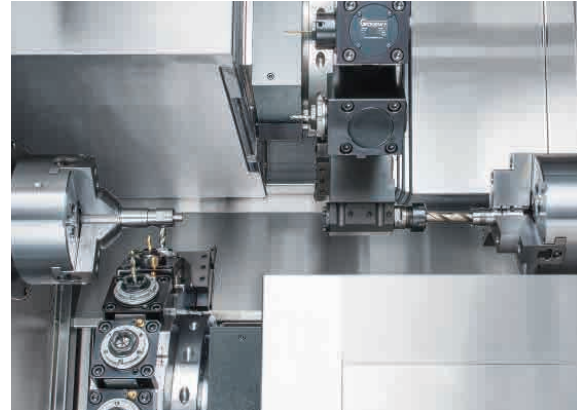
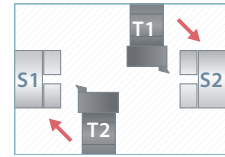
4 axes machining



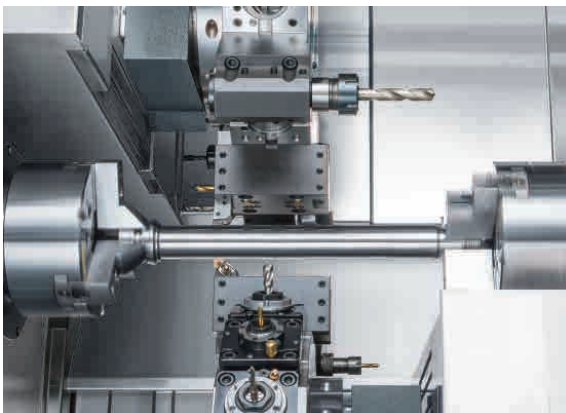
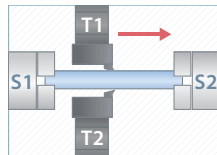
Upper turret works on
spindle 1
Lower turret works on
spindle 2



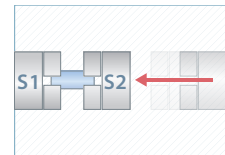
Upper turret works on
spindle 2
Lower turret works on
spindle 1



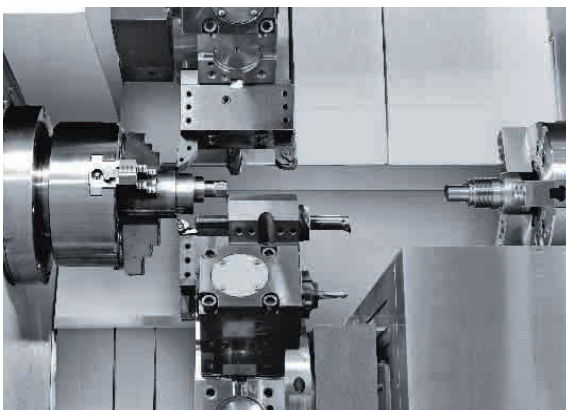
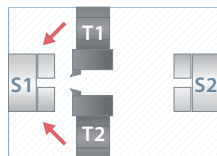
Synchronic balanced
cutting on the work
piece from upper and
lower twin turrets



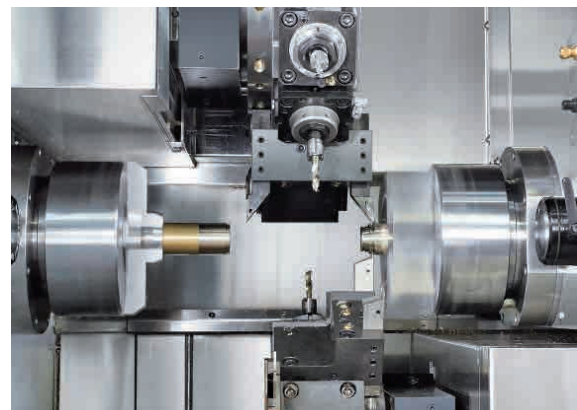
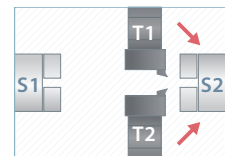
Twin spindles
simultaneous
part catching



Upper & lower twin
turrets synchronously
work on spindle 1



Upper & lower twin
turrets synchronously
work on spindle 2

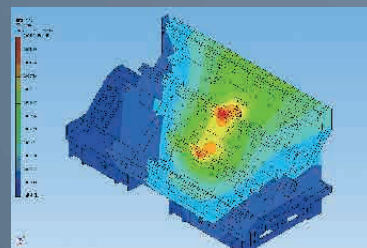


ADVANCED MECHANISM DESIGN

All casted components of GTZ-2600 series are finished in our own factory. Core unit such as spindles, turrets, etc. are assembled and performances are tested in our high-precision assembly line. In this way, GOODWAY can fully control the quality of key components in securing the exertion of ultimate performance of GTZ-2600 series.

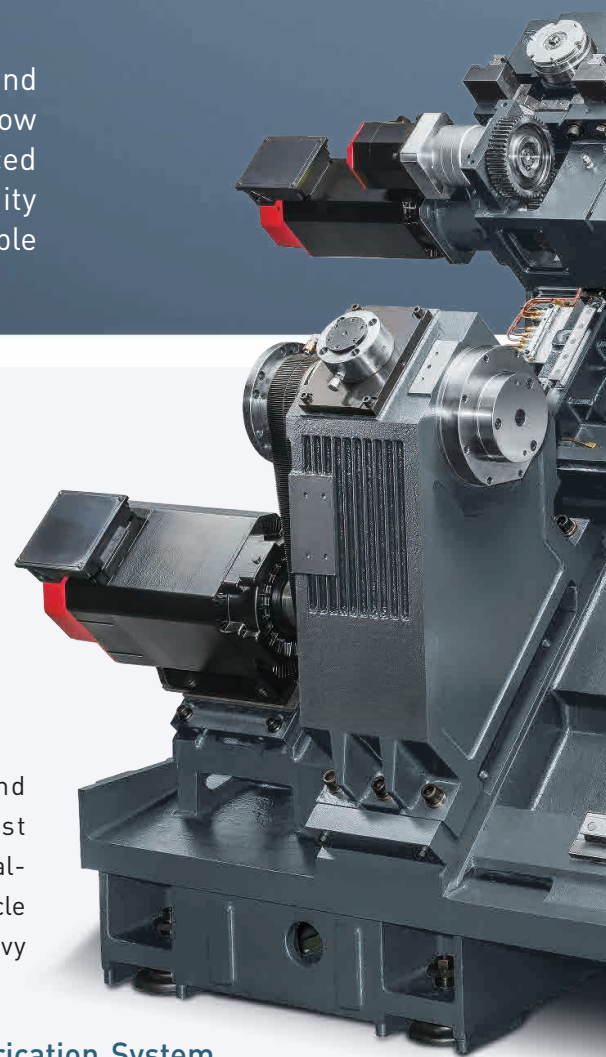
Finite Element Methods (FEM)

All structural components are analyzed with Finite Element Methods (FEM), assuring highest rigidity of ensemble with advantages in optimized design as well as light-weight structure.



High Rigidity Casting Structure

Main structural units such as machine base, headstock and saddle are die-casted from high damping Meehanite of low deformation in one piece, along with specialized reinforced rib design. All main units are characterized by high rigidity and damping capacity, which can effectively reduce possible structural deformation.



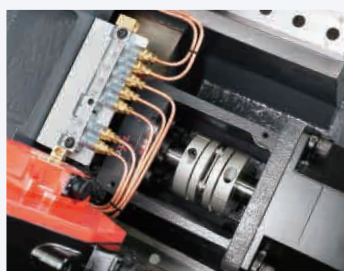
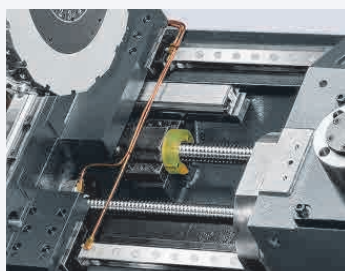
Roller Type Linear Guide Ways

Roller type linear guide on X / Y / Z axes to ensure ultimate rigidity and speed advantage. Six sliding blocks on each X₁ and X₂ rail to provide super support rigidity on turret.



Dual-nuts Secured Ball Screw

C3 class ball screws, heat-treated and precision-grinded, ensure the highest precision and durability possible. The dual-nuts design prolongs the component lifecycle and guarantees the rigidity during heavy cutting.



Auto Lubrication System

Configured with high quality, automatic lubrication system and brass oil tube, the Auto Lubrication System fills oil for guide way, ball screw and other critical units for precise adjustments. This system automatically stops in stand-by mode to reduce waste.

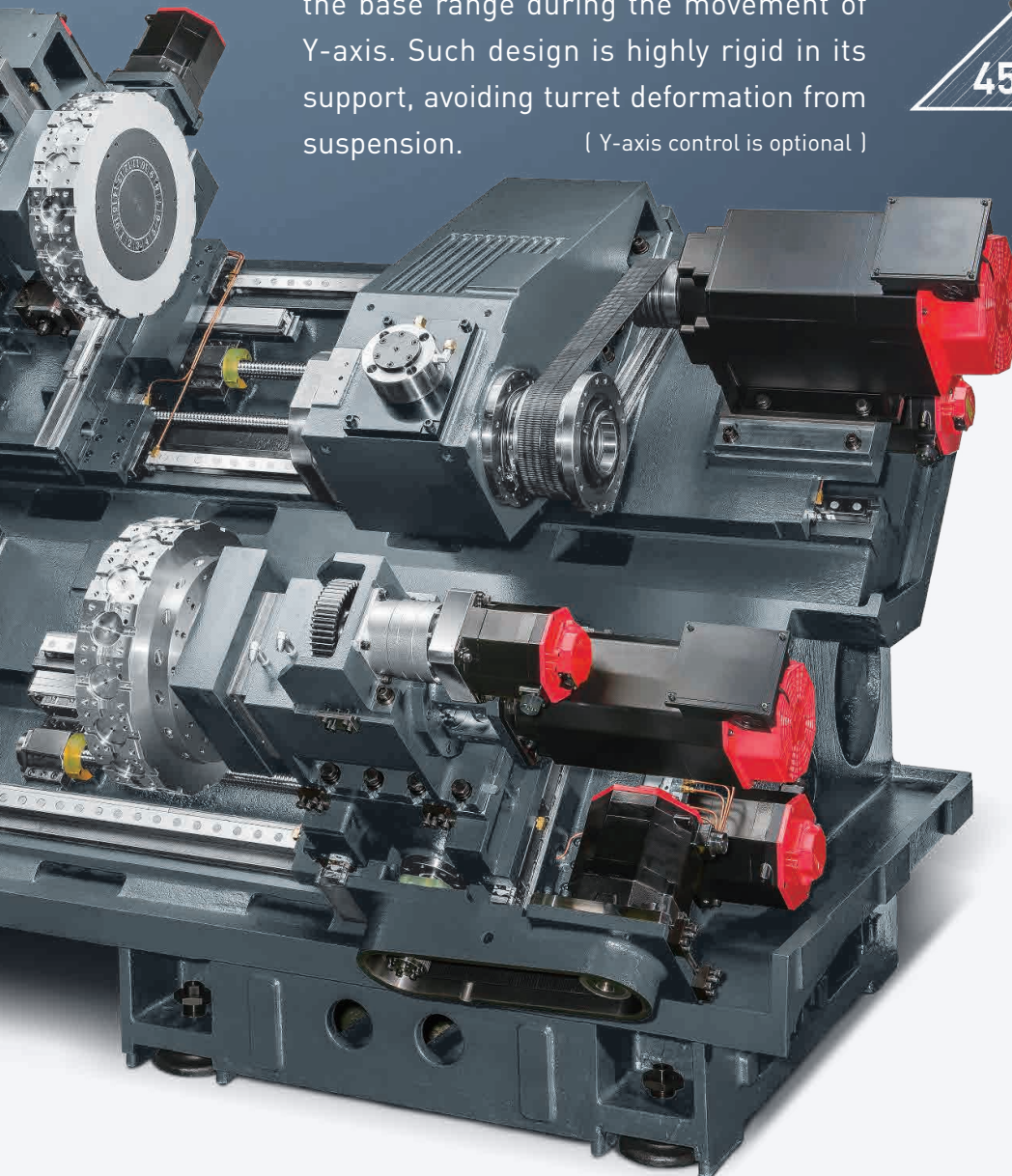
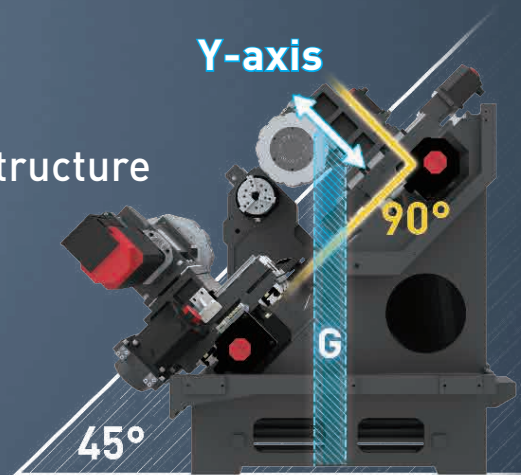
(Lubricating oil or lubricating grease are available for options)

High Rigidity 45° Slant Bed

- High rigidity which provides extremely stable base for spindle and turret
- Design that allows chips gravitating to coolant tank
- Shorten the distance between operator and working area

Low Center of Gravity, Orthogonal Y-axis Structure

In our new generation of design, the Y-axis saddle and X-axis are structured orthogonally (90°), which assures the center of gravity of turret stably within the base range during the movement of Y-axis. Such design is highly rigid in its support, avoiding turret deformation from suspension. (Y-axis control is optional)



(Casting structure of GTZ-2600Y model shown)



High Resolution Linear Scale

X / Y / Z axes are available for optional $\pm 5 \mu\text{m}$ resolution HEIDENHAIN high precision close-loop linear scale, meeting all stringent needs of positioning for high precision processing.

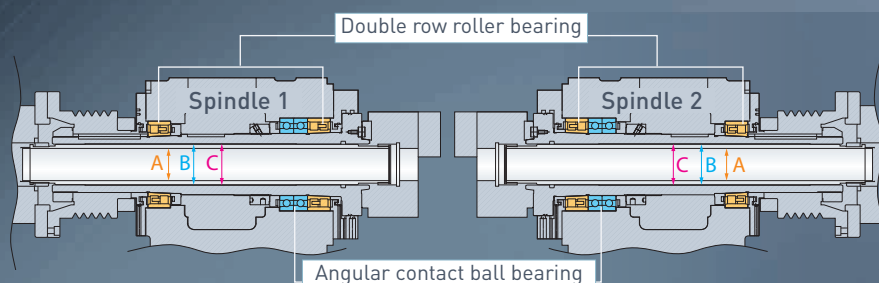


Online Video
GTZ cutting display

OPTIMIZED TWIN SPINDLES SYSTEM

Designed with the same specification, the twin spindles are controlled by dual-path systems, which shortens cycle time by two simultaneous and individual processing. Twin spindles also secure high precision cutting by dual-sided clamping on longer work pieces.

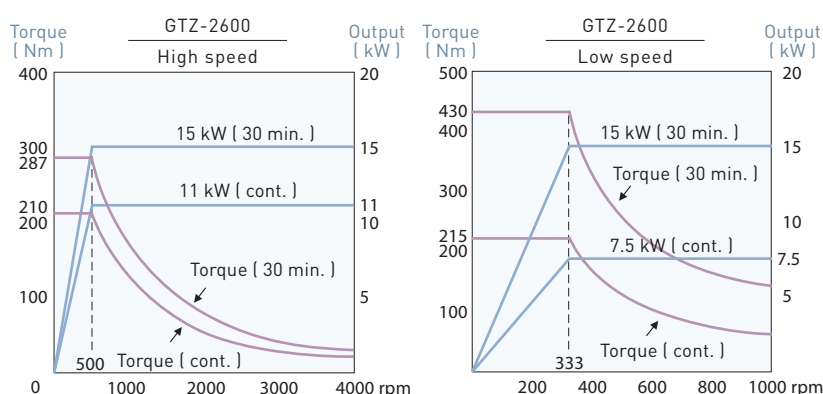
- P4 grade (Class 7) super-high precision bearings are directly assembled for maximum level of support and precision. Bearing configuration is designed for super heavy-duty cutting with ultra-smooth performance and long term durability with a higher level of accuracy.
- The configuration of double row roller bearing and angular contact ball bearing can significantly reduce vibration of spindle radial direction and axial thermal deformation, securing the high rigidity of spindles.



Spindle Dimension Drawing

GTZ-2600	
A : Hole through draw tube	Ø 65 mm
B : Draw tube OD.	Ø 75 mm
C : Hole through spindle	Ø 76 mm

Spindle Output

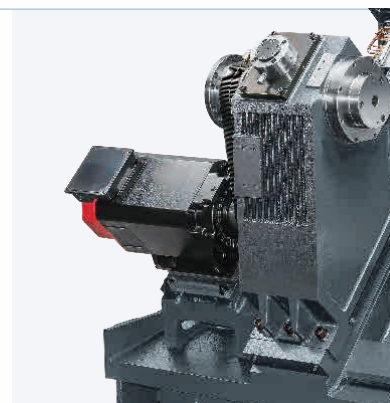


Spindle Acc. / Dec. Time Unit : sec.

GTZ-2600		
Spindle	Spindle 1	Spindle 2
Acceleration	[0 → 4,000 rpm]	
	4.52	4.58
Deceleration	[4,000 → 0 rpm]	
	4.19	4.21

Powerful Spindle Motor

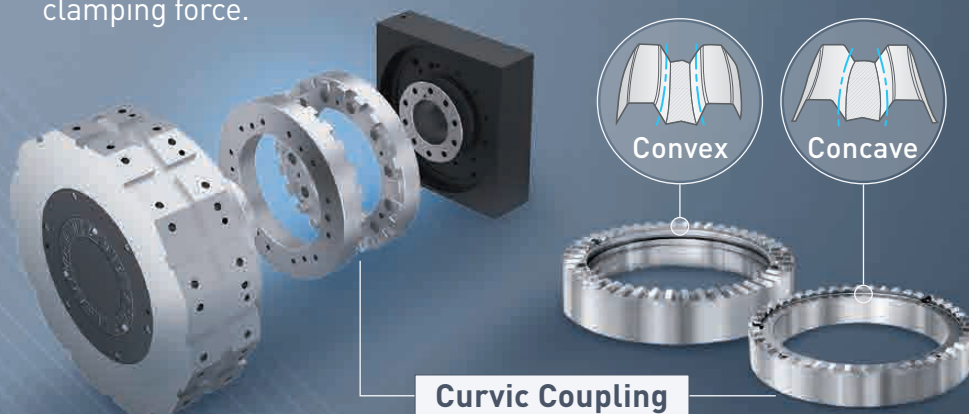
FANUC α P22i series high torque spindle motor, with high-power output of 15 kW (30 min.), generates twice the torque of standard motors. Such motor can deliver full output at 1/2 the RPM of standard motors, providing heavy-duty cutting capacity at lower RPM ranges.



ULTIMATE TURRET PERFORMANCE

Both upper and lower turrets, available with options of 12 or 16 tools, can agilely machining on the two spindles, allowing for more flexibility in processing.

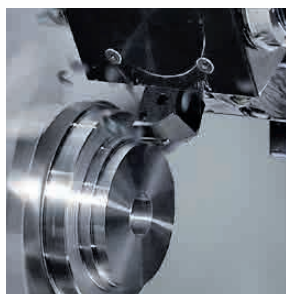
- The turrets are indexed by servo-motors. Indexing times for adjacent stations are within 0.2 second and 0.5 second for opposite stations. Indexing is one-step without pause, no matter how many stations are skipped.
- Sufficient turret rigidity for all cutting conditions is assured by our accurately-positioning turret disk featuring $\varnothing 210$ mm diameter ultra-high precise CURVIC couplings, along with a 4,000 kg of clamping force.



Curvic Coupling

All turret series features accurately positioning turret disks composed of ultra-high precise CURVIC couplings, with large contact area in tooth flanks. Along with the automatic centering function, long-term usage of cutting rigidity and positioning accuracy is guaranteed. (The tool indexing repeatability of GTZ series is ensured at ± 0.003 mm)

Cutting Example Chip removal rate **300** cc/min.



The upper turret turning on the spindle 1

Depth of Cut (AP) : 5 mm
Speed (V) : 200 mm/min.
Feed Rate (F) : 0.3 mm/rev
Material : S45C

Spindle load
107%

The upper turret turning on the spindle 2

Depth of Cut (AP) : 5 mm
Speed (V) : 200 mm/min.
Feed Rate (F) : 0.3 mm/rev
Material : S45C

Spindle load
112%



The lower turret turning on the spindle 1

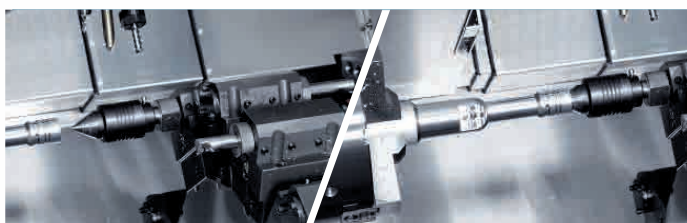
Depth of Cut (AP) : 5 mm
Speed (V) : 200 mm/min.
Feed Rate (F) : 0.3 mm/rev
Material : S45C

Spindle load
101%

The lower turret turning on the spindle 2

Depth of Cut (AP) : 5 mm
Speed (V) : 200 mm/min.
Feed Rate (F) : 0.3 mm/rev
Material : S45C

Spindle load
108%



Option Accessories for Lower Turret

More flexibility for processing is allowed as the lower turret is available for installation of various types of fixtures such as center, steady rests and work support other than turrets.

POWERFUL LIVE TOOLING TURRET

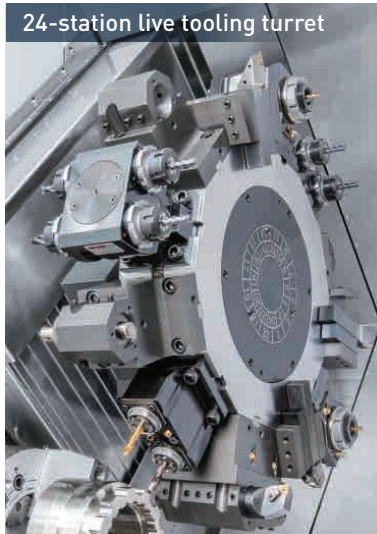
48 tools (opt.)

Upper Turret + Lower Turret

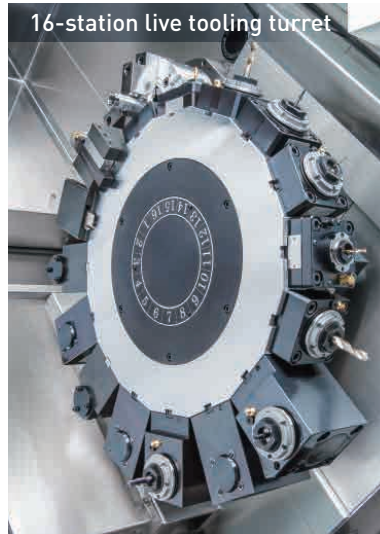
GOODWAY's Live Tooling Turret

- All series live tooling turret are designed and manufactured by GOODWAY.
- 12 / 16 / 24 station turret are available to meet any needs.
- High speed servo indexing turret technology, achieving 0.2 second indexing for adjacent stations.
- Ultra-high precise curvic couplings accurately position the turret disk.

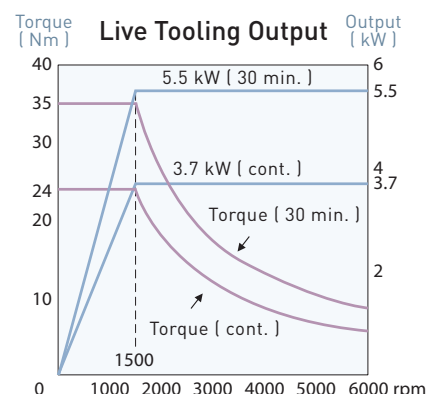
24-station live tooling turret



16-station live tooling turret



Live Tooling Turret	12-station	16-station	24-station
Turret type	Dodecagon	Hexadecagon	Dodecagon
Stations	12	16	24
Live tooling stations	12	16	12
Max. live tooling rpm	6,000 rpm		
O.D. tool shank size	□ 25 mm	□ 20 mm	□ 25 mm
I.D. tool shank size	Ø 40 mm	Ø 32 mm	Ø 40 mm
Live tooling shank size	ER32	ER25	ER32

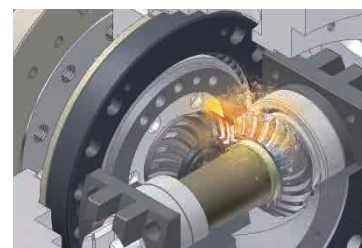


Spindle Motor Drive

Live tooling is driven by 5.5 kW high horsepower spindle motor which can generate 35 Nm of large torque output under 1,500 rpm. Complicated machining process can be achieved without any difficulty.

Standard Equipment of Automatic Oil Mist Lubrication

The oil mist lubrication system will automatically spray in time and ration during the milling process, without the need for manual replenishment of grease. It can provide efficient cooling to the transmission mechanical parts such as bevel gears, meeting the processing needs of long-term high-speed milling.



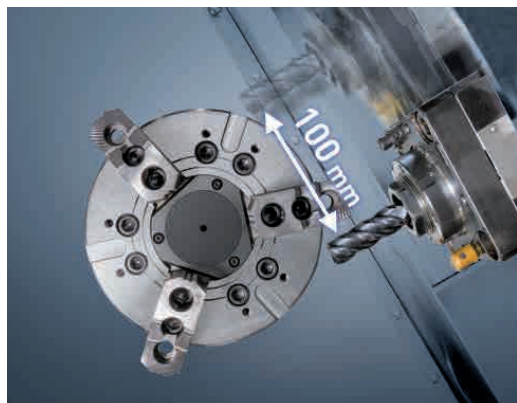
Ultimate C-axis Spindle

In our highly efficient Cs-axis design, spindle mode can be directly switched to C-axis servo mode. Fast indexing speed, along with a minimum spindle indexing angle of 0.001°, facilitates optimal performance.

The optional C-axis control function can greatly reduce the time required for twin-spindle synchronization, such as in dual-spindle synchronic part catching. In average, the efficiency of C-axis synchronization is 5 times more than that of dual spindle synchronization mode.



Y-AXIS MACHINING CAPABILITY



Live Tooling Turret + C-axis + Y-axis

The optional Y-axis control function can achieve simultaneous X, Y, Z and C axes machining, which is capable of working on Y-axis off center milling, drilling and tapping while improving the machining accuracy for multiple parts processing, such as high precision grooving and X-axis off center drilling.

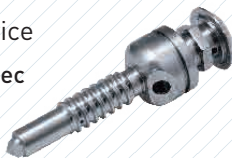
With sufficient Y-axis travel of 100 mm = ± 50 mm (3.93" = ± 1.96 "), any tough processing can be readily accomplished.

[Y-axis control function is available for the upper turret]

Biomedical Industry

Pneumothorax puncture device

- Processing time : 4 min 25 sec
- Material : SUS316
- Size : $\varnothing 20$ mm / 75mm (L)



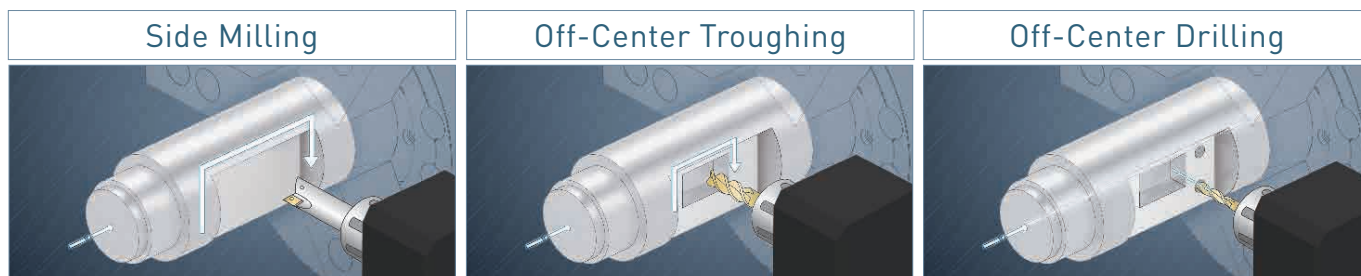
Aerospace Industry

Engine blower disk

- Processing time : 4 hr 52 min
- Material : SUS304
- Size : $\varnothing 150$ mm / 80mm (H)

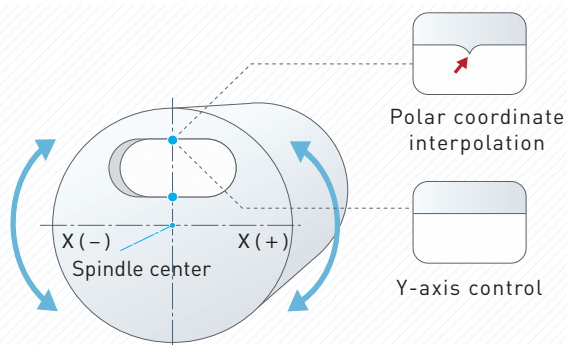


Unique Y-axis Machining Capability



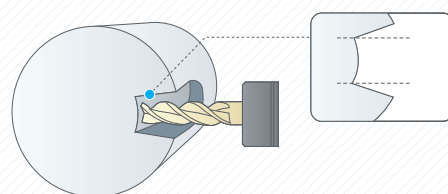
High Precision Y-axis Machining Capability

Polar coordinate interpolation VS Y-axis control

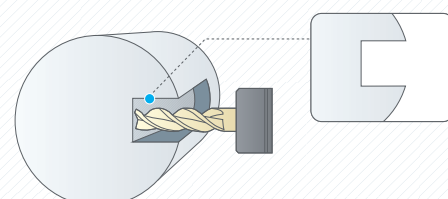


- ▶ The polar coordinate interpolation can work on troughing or contouring. X-axis reverses at cross point of the center point of workpiece and contour, which makes tool not able to be completely contouring and remains worse accuracy.
- ▶ With Y-axis control, it can avoid the situation above and remain better accuracy.

O.D. Troughing



- ▶ Without featuring Y-axis, width of troughs are not perfectly parallel with worse accuracy.



- ▶ Featuring Y-axis, width of trough remains parallel with better accuracy.

ADVANCED CONTROL FUNCTIONS OPT.

INTELLIGENT OPERATING SYSTEM **G.LINC 350**



Main



Ultra fast tool exchange



G/M code assistance



Tool load monitor



MDI program memory



Tool life monitor



Visible servo observation



Graphical process manager



Data recorder



E-manual



Machining preparation

- Ultra fast tool exchange
- 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

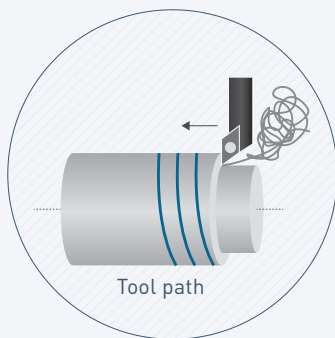
Adjuvant function

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

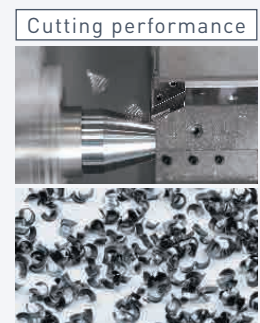
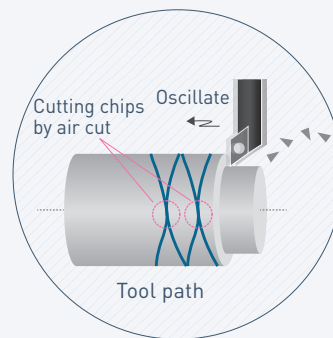
OSCILLATING CHIP REMOVAL (OCR)

In the OCR high speed oscillating cutting function, the machining process alternates between cutting and air-cutting. As the latter finely-cut chips, the occurrences of coarse surface roughness of work piece or mechanical failure due to entangled chips can effectively be avoided, and consequently enhances machine utilization rate.

General Turning

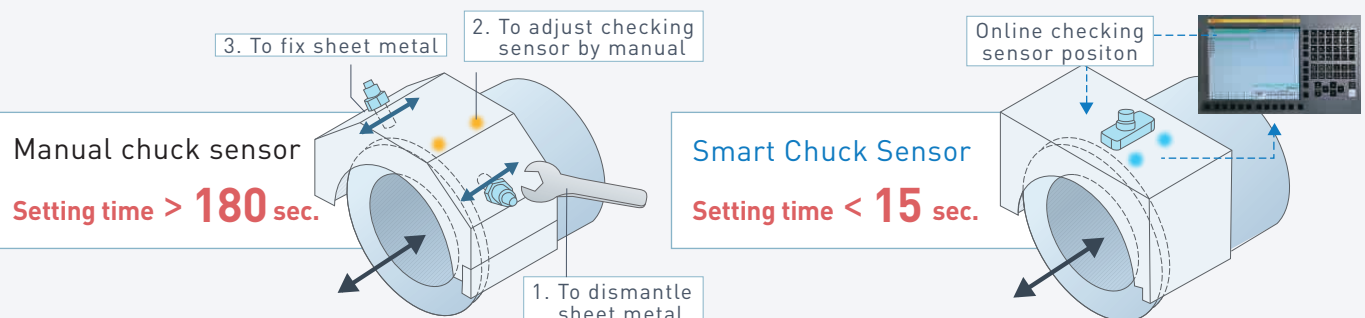


Oscillating Turning



SMART CHUCK SENSOR

When changing different size of parts, only do simple setting on controller then can adjust checking position. Not only ensure the main spindle, chuck clamping/unclamping function but also without complicated procedure by traditional manual method.



Setting time depends on difference range setting value.

AIR BAG

The load of servo motor can be detected in real time. When the load is at an abnormally large value (such as in case of machine collision), the system immediately shifts to emergency stop mode and retract servo axes in the meantime. Such immediate risk control mechanism can save the cost of machine repair and diminish production loss due to machine down.

Retract tools within **0.009 sec.**



Equipped with Air Bag

- Machine crash ▶ EMG mode
- ▶ Servo motor reverse rotary
 - ▶ Machine stop

- Short maintenance time
- Less mechanical damage
- Overload predictable



Not equipped with Air Bag

If axes continue feeding after machine collision, the overall mechanical structure and work pieces will be severely damaged.

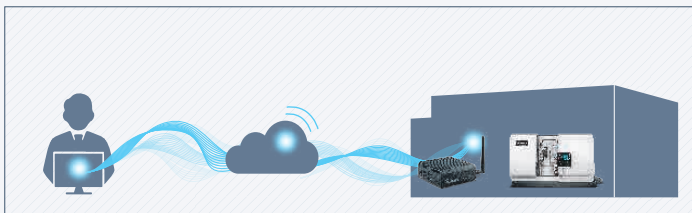
- Long maintenance time
- Severe mechanical damage
- Overload unpredictable

SERVICE CUBE

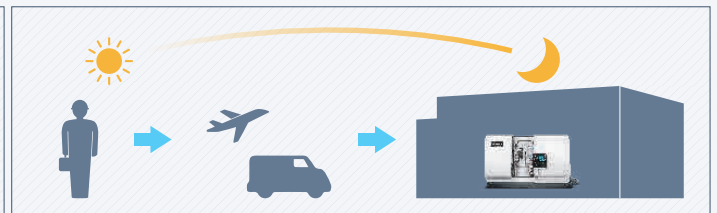
Via service cube, no matter where you are in the world (as long as internet available), you can do machine setting, monitoring, maintenance, upload/download program, etc.. Machine maintenance efficiency can be increased, manpower and traffic cost can be decreased.



Machine with Service Cube



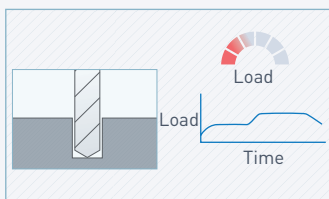
Machine without Service Cube



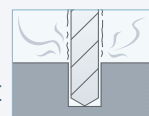
LOAD MONITOR

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

Tool Monitoring

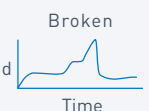
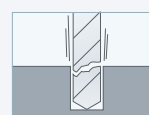


Tool life achievement



Machine stop

Tool wear



Feedrate stop

EQUIPMENT THAT INCREASES PRODUCTIVITY

Gantry Loader

Equipped with gantry loader, the GTZ series can save manpower demand and achieve fully automated production.

※ Please contact with GOODWAY for customized automatic system.



Twin Jaws Robot Arm



Auto Door



Robot-type Parts Catcher

Max. part diameter : $\varnothing$ 65 mm
Max. part length : 150 mm
Max. part weight : 3 kg



Parts Conveyor

Conveyor integrated inside the mechanism, which is equally safe and aesthetic.

※ customized unloading system is available.



Tool Presetter

Auto simultaneous measurement of twin turrets and removable probe arm.



Workpiece Inspection Probe

Available for the identification and set up of workpieces, real-time monitor the surface of workpiece and verification the dimension of finished part.

Bar Feeder



Bar diameters	$\varnothing$ 5~65 mm (0.19"~2.55")
Max. bar lengths ^{*1}	1,250 mm (49.21")
Bar storage capacity	65 mm (2.55") × 10 bars
Control / Drive	Siemens / Pneumatic drive
Machine area of floor spacing	1,600 mm (L) × 1,120 mm (D)
Machine weight	250 Kg (550 lb)

*1 The limitation of bar length is based on the sum length of spindle and workpiece (summed length of workpiece, chuck , spindle, cylinder and the length of spindle rear cover). If the extension length of the bar exceeds the rear cover of spindle, a supplement of bar support device is necessary. Otherwise, the bar may be bent during machining process and consequently cause personnel injuries.

High Pressure Coolant System

ALLCOOL
SYSTEMS



Max. Pressure : 70 bar
Max. Flow Rate : 30 LPM
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

STANDARD & OPTIONAL FEATURES

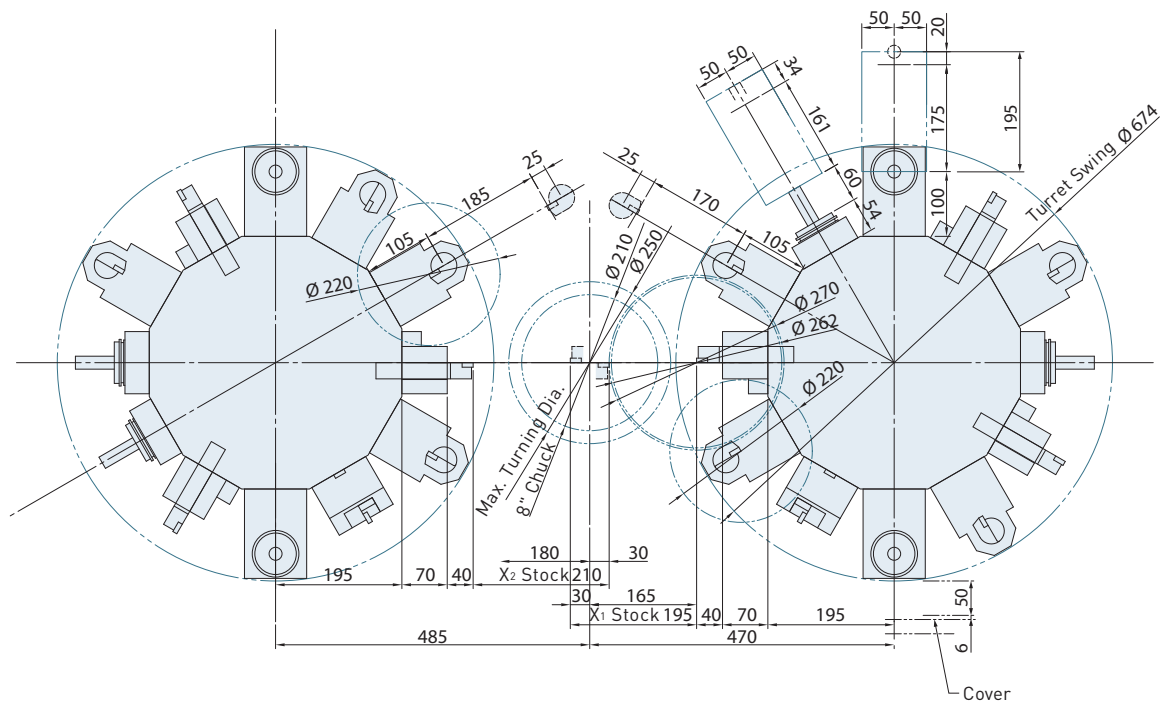
S : Standard O : Option
 – : Not Available C : Contact GOODWAY

SPINDLE 1 & SPINDLE 2			GTZ-2600
Main spindle motor configuration	Belt driven		S
Rigid tapping & spindle orientation			S
Spindle disk brake			O
Cs-axis & spindle disk brake			O
WORK HOLDING			
Hydraulic hollow cylinder for chuck	8"		S
Hydraulic hollow 3-jaw chuck	8"		S
Hard jaws			O
Collet chuck			O
Special work holding chuck			C
In spindle work stopper			O
Spindle liner (guide bushing)			O
Foot switch for chuck operation			S
UPPER & LOWER TURRETS			
Turret	12-station		S
	16-station		O
Live tooling turret	12-station		O
	16-station		O
	24-station		O
Tool holder & sleeve package			S
Live tooling tool holders (0°×2, 90°×2) ^{*1}			O
MEASUREMENT			
RENISHAW HPRA tool presetter	Removeable		O
COOLANT			
Coolant pump	3 kg/cm ²		S
	5 kg/cm ²		O
	10 kg/cm ²		O
High-pressure coolant system	20 kg/cm ²		C
Roll-out coolant tank			S
Oil skimmer			O
Coolant flow switch			O
Coolant level switch			O
Coolant intercooler system			O
CHIP DISPOSAL			
Chip conveyor	Right discharge		S
	Rear discharge		C
Chip cart with coolant drain			O
Chuck air blow			O
Coolant gun			O
Oil mist collector			O
AUTOMATIC OPERATION SUPPORT			
Parts catcher			O
Work-piece transport conveyor			O
Bar feeder			O
Bar feeder interface			O
Gantry-type loader / unloader			O
Auto door			O
Extra M-code output	4 sets (8)		O
	8 sets (16)		O
SAFETY			
Fully enclosed guarding			S
Door interlock (incl. Mechanical lock)			S
Impact resistant viewing window			S
Chuck cylinder stroke out-end check			S
Chuck cylinder check valve			S
Low hydraulic pressure detection switch			S
Over travel (soft limit)			S
Load monitoring function			O

OTHERS			GTZ-2600
Tri-color operation status light tower			S
Florescent work light			S
External work light			O
Electrical cabinet	Heat exchanger		S
	A/C cooling system		O
Complete hydraulic system			S
Advanced auto lubrication system			S
Emergency maintenance electrical part package			S
Operation & maintenance manuals			S
FANUC CONTROL FUNCTIONS			3/i
Display	10.4" color LCD		S
	Standard		S
Graphic function	Dynamic		O
	1M bytes		S
Part program storage size (total)	2M bytes		O
	4M bytes		O
	8M bytes		O
	1,000		S
Registerable programs (total)	4,000		O
	99		S
	128		–
	200		O
	400		O
Tool offset pairs (total)	499		O
	999		O
	2000		O
	HRV 3		S
Servo HRV control			S
Automatic data backup			S
Synchronous / Composite control			O
Inch / metric conversion			S
Polar coordinate interpolation			S
Cylindrical interpolation			S
Multiple repetitive cycle			S
Rigid tapping			S
Unexpected disturbance torque detection function			S
Spindle orientation			S
Spindle speed actuation detection			S
Embedded macro			O
Spindle synchronous control			S
Run hour and parts count display			S
Tool radius / Tool nose radius compensation			S
Polygon turning			S
Helical interpolation			O
Direct drawing dimension programming			S
Thread cutting retract			S
Variable lead threading			S
Multiple repetitive cycle II			S
Canned cycles for drilling			S
Tool nose radius compensation			S
Chamfering / Corner R			S
AI contour control I			S
Multi part program editing			S
Manual handle retrace			O
Manual intervention and return			O
External data input			S
Addition of custom macro			S
Increment system C			S
Run hour & parts counter			S
Auto power-off function			S
RS-232 port			S
Memory card input / output (CF + USB)			S
Ethernet			S

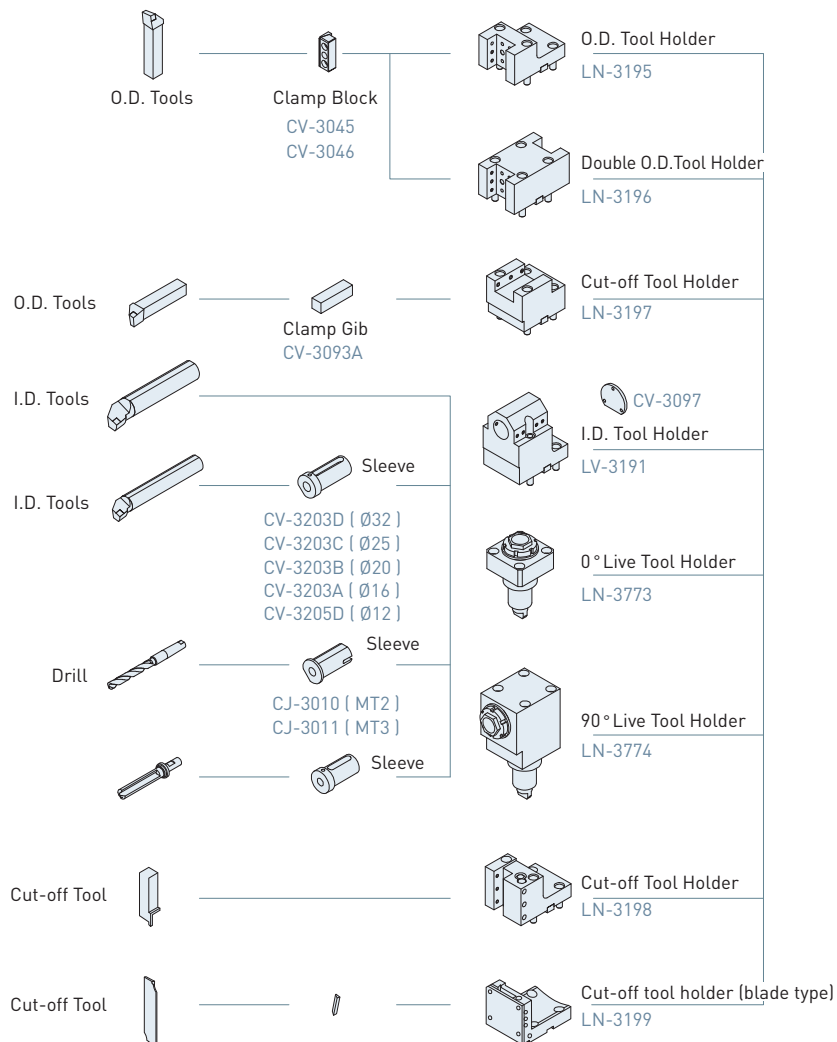
*1 Available for live tooling turret or Y-axis model.
 Specifications are subject to change without notice.

12-station live tooling turret + Y-axis Interference Diagram

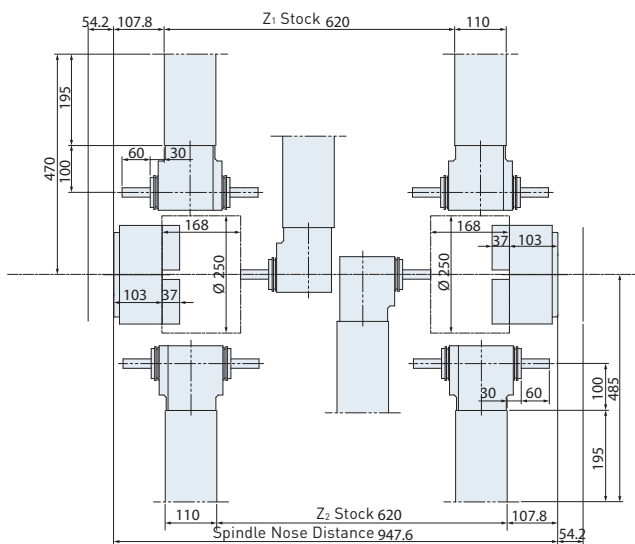
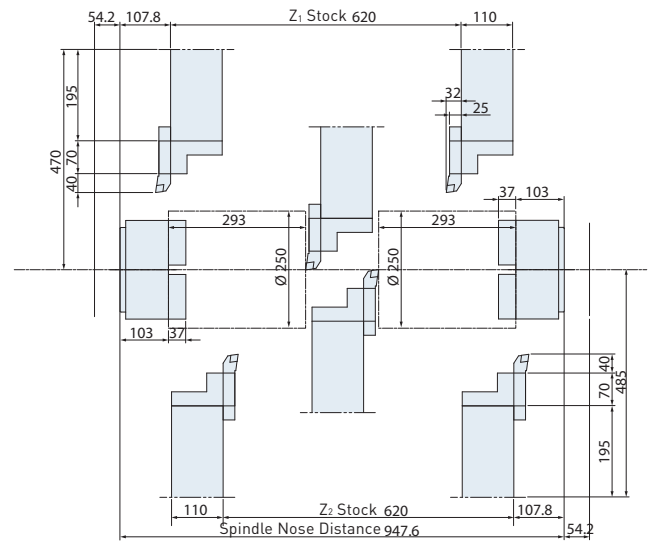
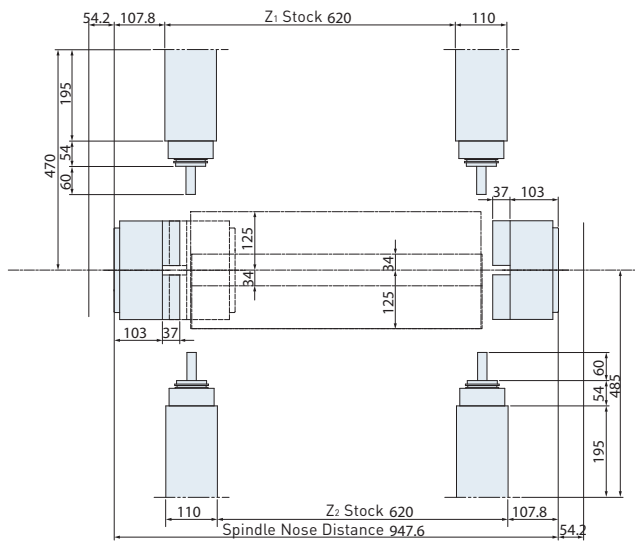
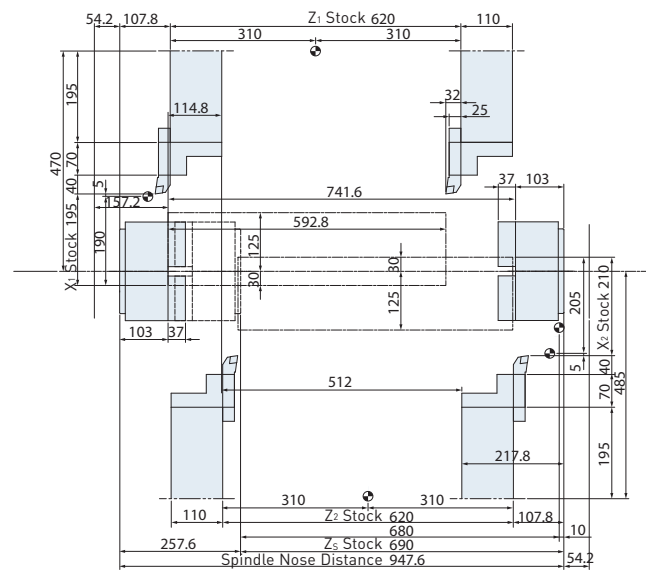
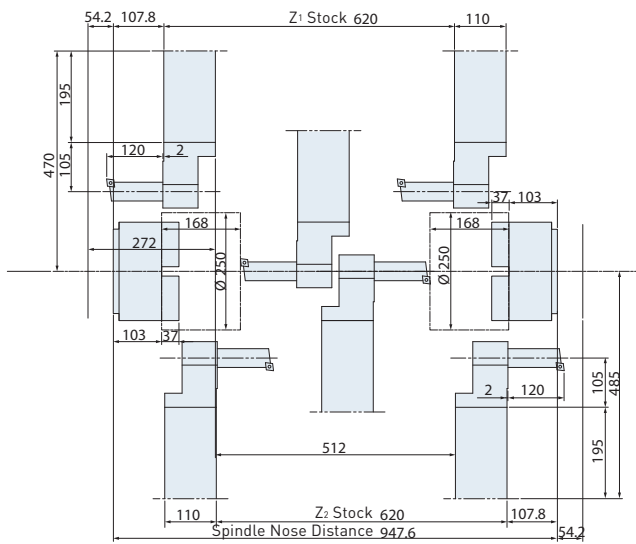


Tooling System

unit : mm

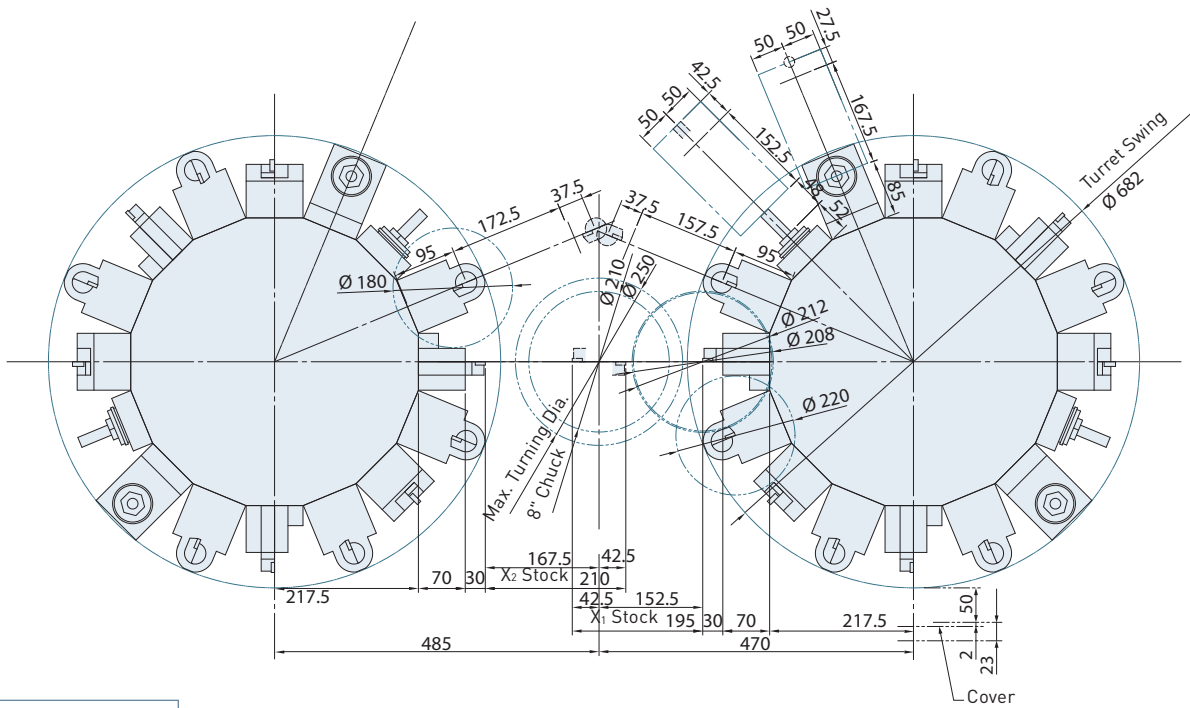


Work Range



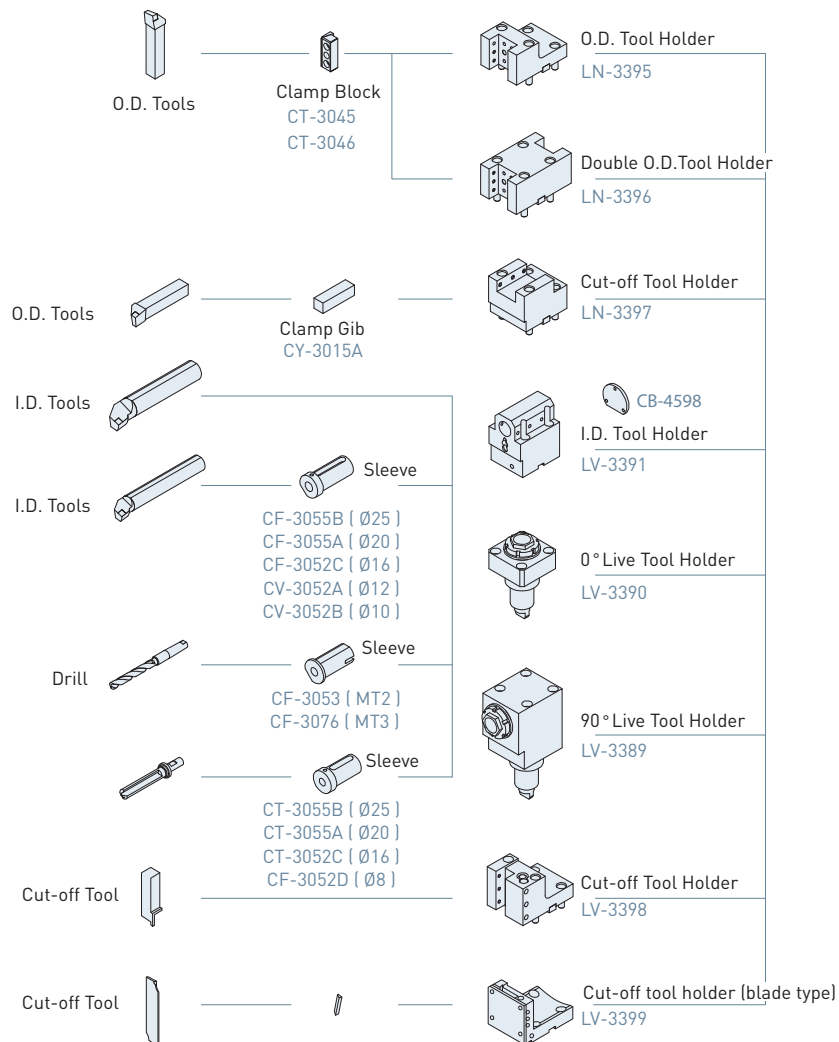
unit : mm

16-station live tooling turret + Y-axis Interference Diagram

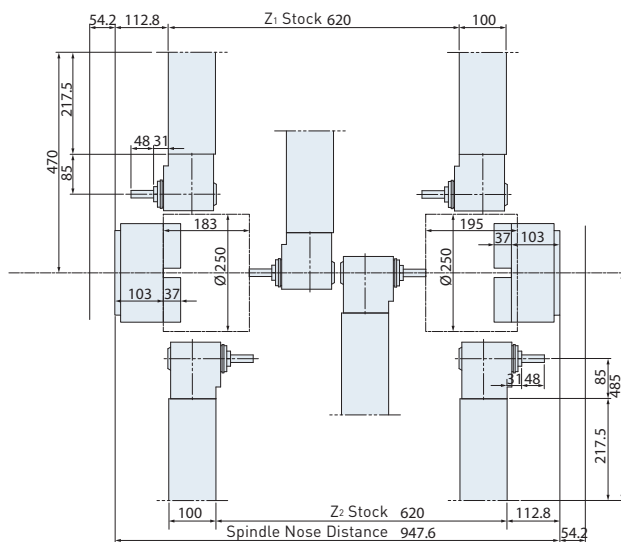
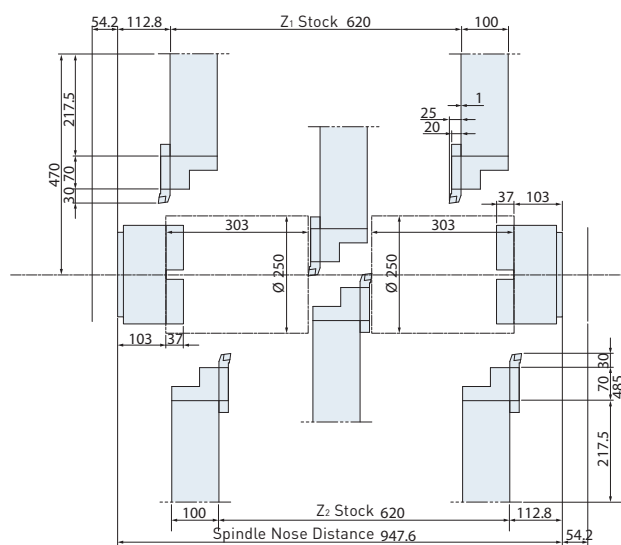
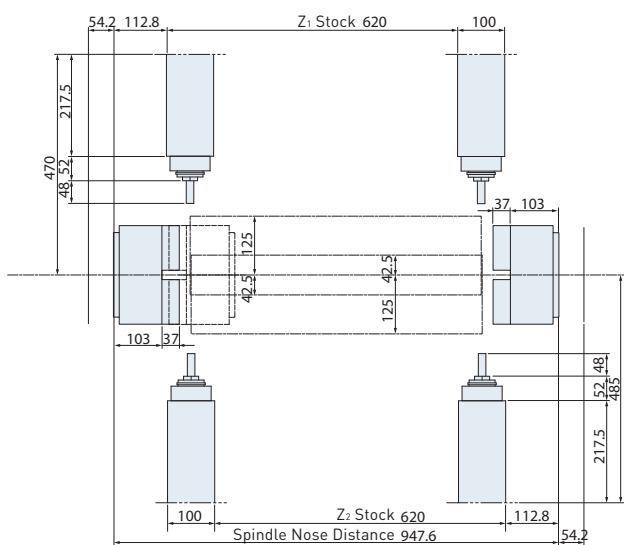
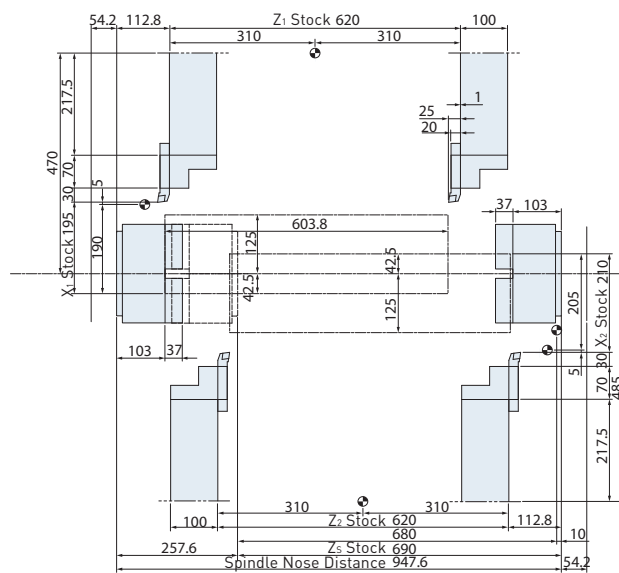
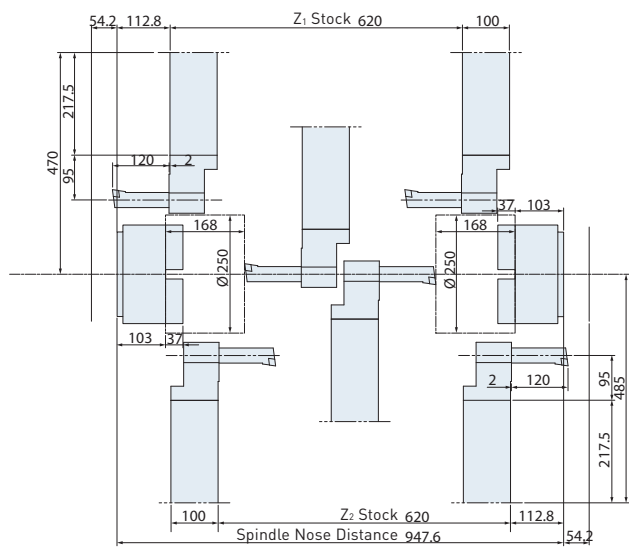


unit : mm

Tooling System

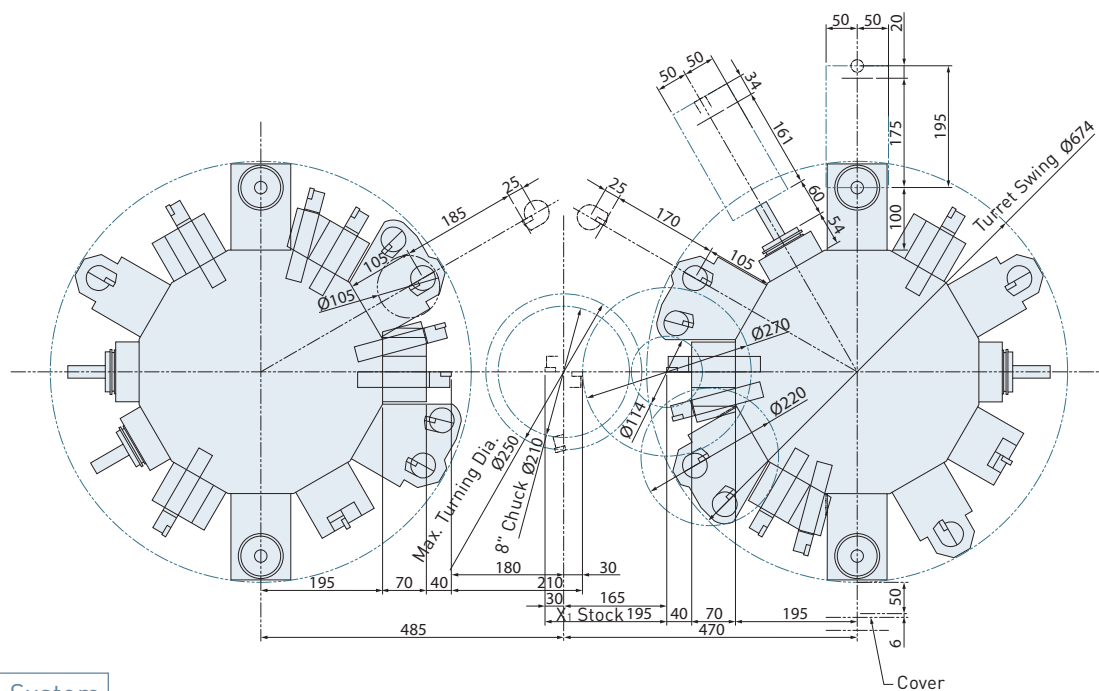


Work Range

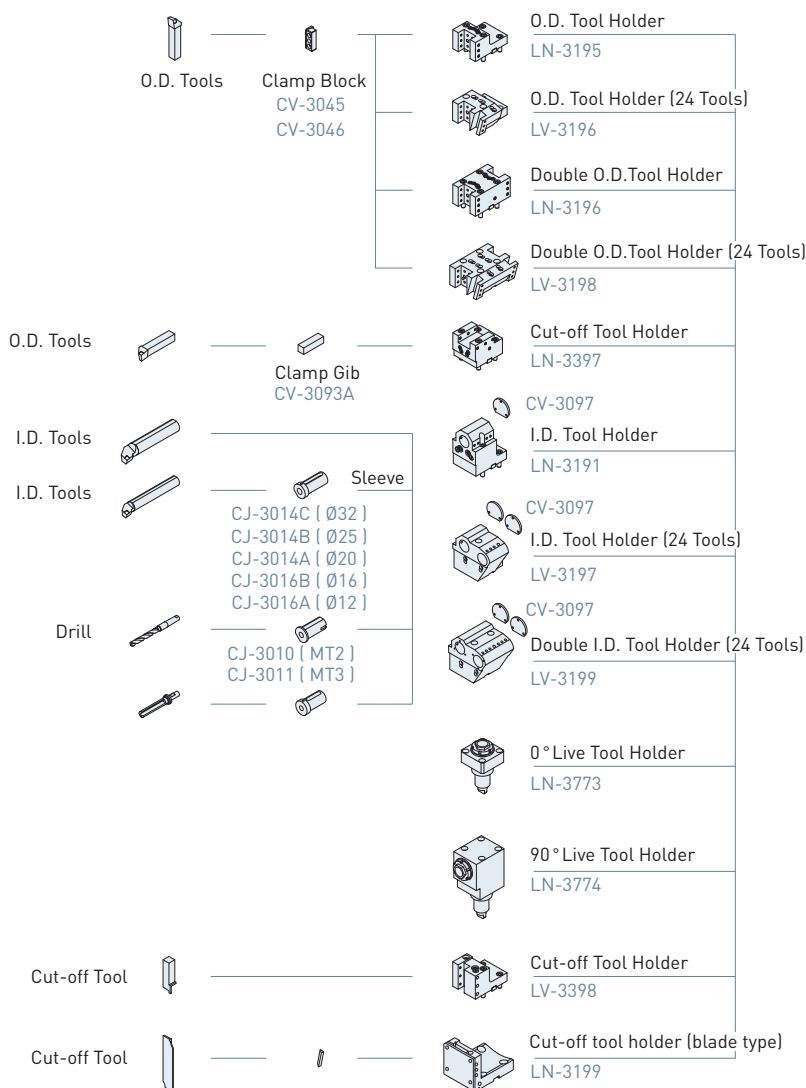


unit : mm

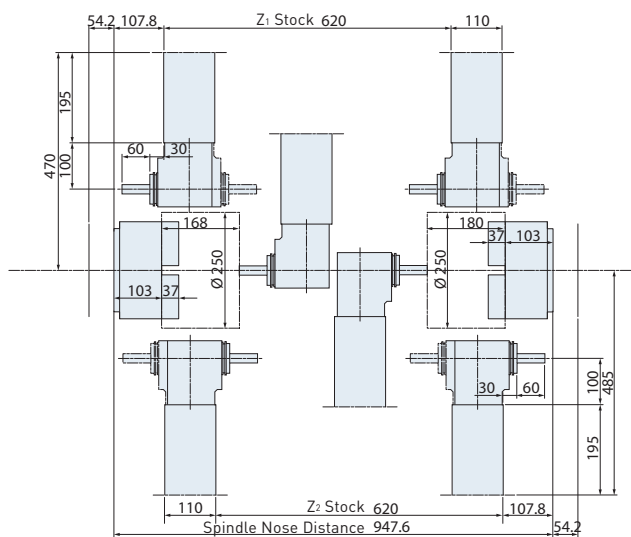
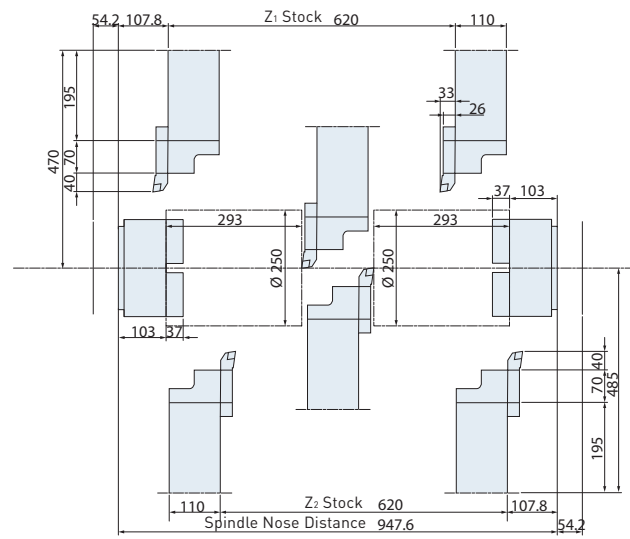
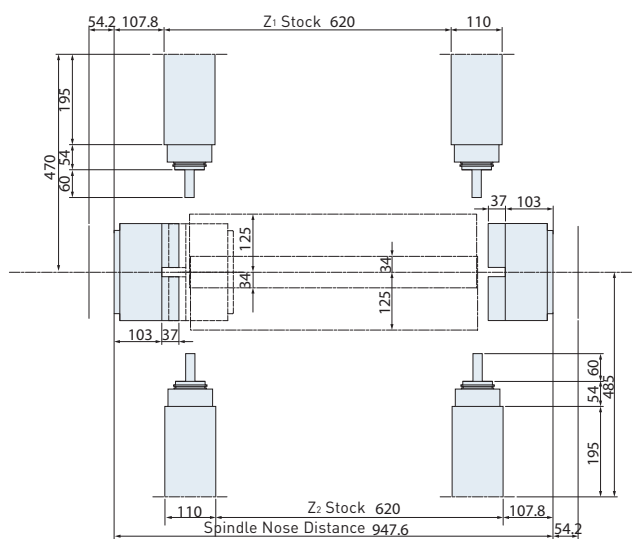
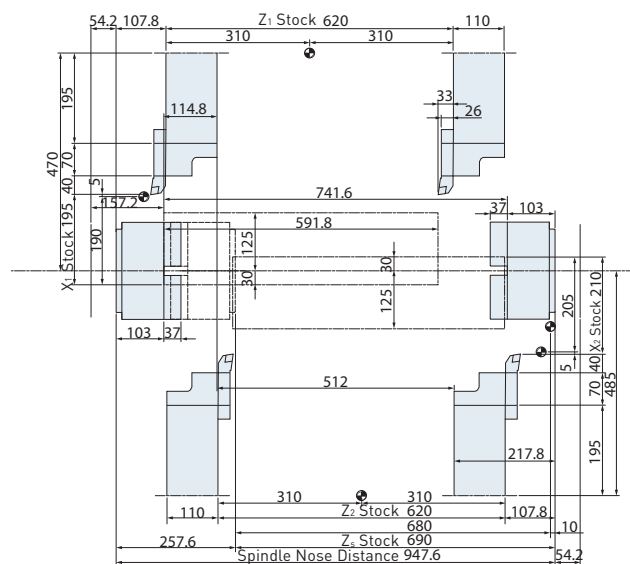
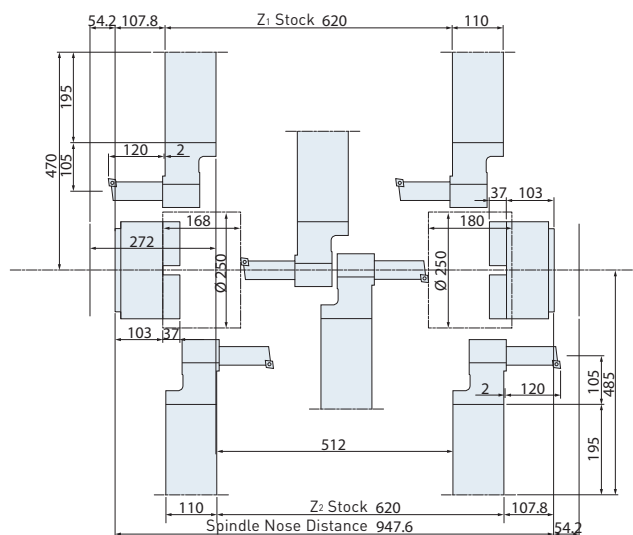
24-station live tooling turret + Y-axis Interference Diagram



Tooling System



Work Range



unit : mm

MACHINE SPECIFICATIONS

■ : Metric ■ : Inch

CAPACITY		GTZ-2600	
Max. swing diameter		Ø 270 mm	10.6"
Max. turning diameter		Ø 250 mm	9.8"
Max. turning length		590 / 600*1 mm	23.2" / 23.6"
Max. loading weight		24 kg	52 lb
Hydraulic chuck		8" (Big-Bore)	
Bar capacity		Ø 65 mm	2.5"
SPINDLE 1 & SPINDLE 2			
Hole through draw tube		Ø 65 mm	2.5"
Hole through spindle		Ø 76 mm	2.9"
Spindle bearing diameter		Ø 120 mm	4.7"
Hydraulic cylinder		10"	
Spindle nose		A2-6	
Spindle motor type		FANUC α P22 / 6000i (AC / Wide-Range)	
Motor output (Cont.)		11 kW	15 hp
Motor output (30 min.)		15 kW	20 hp
Motor full output speed		750 rpm	
Spindle drive system		Direct belt drive	
Spindle drive ratio		2 : 3	
Spindle speed range		40 ~ 4,000 rpm	
Spindle full output speed		500 rpm	
Spindle torque (Cont.)		210 Nm	154 lb-ft
Spindle torque (30 min.)		287 Nm	211 lb-ft
C-AXIS (OPTIONAL)			
Drive type		Cs	
C-axis rapids		33 rpm	
X / Z AXES			
Max. X ₁ / X ₂ axes travel		195 / 210 mm	7.6" / 8.2"
Max. Z ₁ / Z ₂ axes travel		620 / 620 mm	24.4" / 24.4"
Max. Zs-axis travel		690 mm	27.1"
X / Z axes rapids		24 m/min.	945 IPM
Slide way type		Linear Guide Way	
Feed rates		1 ~ 4,800 mm/min	1 ~ 189 IPM
X / Z axes servo motor		AC 3.0 kW	4 HP
X / Z axes thrust		961 kgf	2,100 lbf
X-axis ball screw Ø / pitch	X ₁ : Ø 32 mm	1.2" / Pitch 8	X ₂ : Ø 36 mm 1.6" / Pitch 8
Z-axis ball screw Ø / pitch	Z ₁ : Ø 36 mm	1.2" / Pitch 8	Z ₂ : Ø 36 mm 1.6" / Pitch 8
UPPER & LOWER TURRETS*2			
Station (Upper + Lower)	12 + 12		16 + 16
Indexing drive	FANUC AC Servo motor		
Indexing speed	0.2 sec. Adjacent / 0.5 sec. 180° degree (Single step)		
Accuracy	Positioning : ± 0.00069° Repeatability : ± 0.00027°		
O.D. tool shank size	□ 25 mm	1"	□ 20 mm 3/4"
I.D. tool shank size	Ø 40 mm	1-1/2"	Ø 32 mm 1-1/4"

*1 For 16-station turret

*2 Optional 12 / 16 stations standard turret are available on GTZ-2600 series

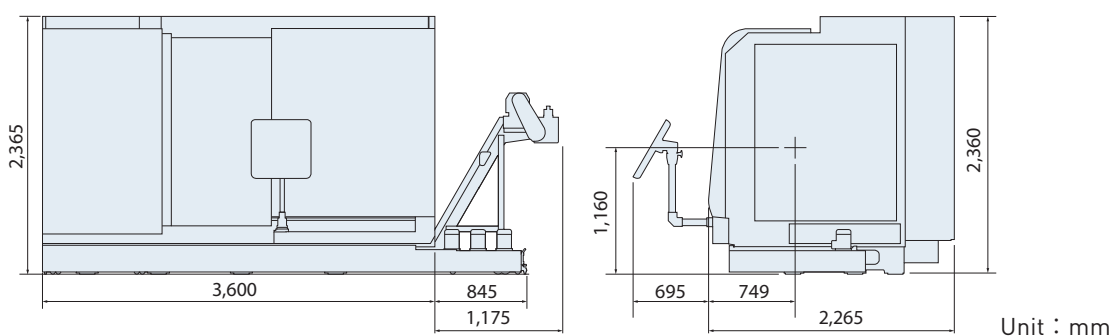
Specifications are subject to change without notice.

■ : Metric ■ : Inch

UPPER & LOWER LIVE TOOLING TURRETS (Opt.) *3		GTZ-2600	
Stations (Upper + Lower)	12 + 12	16 + 16	24 + 24
Live tooling stations (Upper + Lower)	12 + 12	16 + 16	12 + 12
Max. turning length	590 mm 23.2"	600 mm 23.6"	590 mm 23.2"
Indexing drive	FANUC AC Servo motor		
Indexing speed	0.2 sec. Adjacent / 0.5 sec. 180° degree (Single step)		
O.D. tool shank size	□ 25 mm 1"	□ 20 mm 3/4"	□ 25 mm 1"
I.D. tool shank size	Ø 40 mm 1-1/2"	Ø 32 mm 1-1/4"	Ø 40 mm 1-1/2"
Accuracy	Positioning : ± 0.00069° Repeatability : ± 0.00027°		
Live tooling drive motor	AC 3.7 / 5.5 kW 5 HP / 7.3 HP		
Live tooling shank size	ER32 (Ø 20 mm 3/4")	ER25 (Ø 16 mm 5/8")	ER32 (Ø 20 mm 3/4")
Live tooling RPM range	6,000 rpm		
Y -AXIS (Opt.)			
Max. turning diameter	Ø 250 mm 9.8"		
Max. X-axis travel	195 mm 7.6"		
Max. Y-axis travel	100 = ± 50 mm 3.93" = ± 1.96"		
X-axis rapids	24 m/min. 945 IPM		
Y-axis rapids	10 m/min 393 IPM		
Slide way type	Linear Guide Way		
Feed rates	1 ~ 4,800 mm/min 1 ~ 189 IPM		
Y-axis servo motor	AC 1.6 kW 2 HP		
Y-axis thrust	640 kgf 1,410 lbf		
X-axis ball screw Ø / pitch	Ø 32 mm 1.2" / Pitch 8		
Y-axis ball screw Ø / pitch	Ø 32 mm 1.2" / Pitch 8		
CLAW-TYPE PART CATCHER (Opt.)			
Max. work-piece diameter	Ø 65 mm 2.3"		
Max. work-piece length	150 mm 5.9"		
Max. work-piece weight	3 kg 6.6 lb		
GENERAL			
Positioning accuracy	± 0.01 mm 0.0003"		
Repeatability	± 0.003 mm 0.0001"		
NC controller	FANUC 31i		
Voltage / Power requirement	AC 200 / 220 + 10 % to -15 % 3 Phase / 60 kVA		
Hydraulic tank capacity	35 L 9.2 gal		
Coolant tank capacity	380 L 100 gal		
Coolant pump	0.7 kW 1 HP / 5 Bar		
Machine weight	9,000 kg 19,900 lb		
Machine weight (Y-axis model)	10,000 kg 22,100 lb		
Dimensions (L × W × H)	3,600 × 2,960 × 2,360 mm 142" × 117" × 93"		

*3 Optional 12 / 16 / 24 stations live tooling turret are available on GTZ-2600 series

Specifications are subject to change without notice.





GOODWAYCNC.com

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