



QUICK TURN

SERIES



QUICK TURN SERIES

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QUICK TURN SERIES 24.07. 0 GH 99J1B2522E3



QUICK TURN SERIES

The QUICK TURN turning center series - held in high regard by manufacturers around the world since 1981

Designed to provide you the maximum value through unsurpassed performance

- High-rigidity construction and high-performance integral spindle / motors
- Chuck size, center distance, turning, milling, Y-axis and second spindle specifications designed to meet your production requirements
- Wide variety of automation equipment optionally available for increased productivity
- Mazatrol Smooth CNC standard equipment – world leader in conversationally programmed CNC systems



QUICK TURN 250MSY (500U)

QUICK TURN 200MY (1000U)



QUICK TURN 250MSY (500U) [MAZATROL SmoothG]
Shown with optional equipment



QUICK TURN 400M (2000U) [MAZATROL SmoothG]
Shown with optional equipment

●: Standard ○: Option - : N/A

Wide range of specifications are available to meet your production requirements

Compact, high-performance turning centers

QUICK TURN 100 SERIES



QUICK TURN 100MSY (300U)
Shown with optional equipment

		Max. swing	Turret		Milling function	Second spindle	Y-axis	Tailstock	Universal
			Bolt-on	VDI					
100MY		Φ550 mm	●	○	●	—	●	●	300U
100MS		Φ550 mm	●	○	●	●	—	—	300U
100MSY		Φ550 mm	●	○	●	●	●	—	300U

High-torque spindle specifications for heavy-duty machining

QUICK TURN 300, 350 SERIES



QUICK TURN 350MY (1250U)
Shown with optional equipment

		Max. swing	Turret		Milling function	Y-axis	Tailstock	Universal
			Bolt-on	VDI				
300	350	Φ720 mm	●	—	—	—	●	650U / 1250U / 1500U
300MA	350MA	Φ720 mm	●	—	●	—	●	650U / 1250U
300MB	350MB	Φ830 mm	—	●	●	—	●	650U / 1250U
300MY	350MY	Φ830 mm	●	○	●	●	●	650U / 1250U / 1500U

Medium size turning centers designed for high productivity

QUICK TURN 200, 250 SERIES



QUICK TURN 250MSY (500U)
Shown with optional equipment

		Max. swing	Turret		Milling function	Second spindle	Y-axis	Tailstock	Universal
			Bolt-on	VDI					
200	250	Φ660 mm	●	—	—	—	—	●	500U / 1000U
200MA	250MA	Φ660 mm	●	—	●	—	—	●	500U / 1000U
200MB	250MB	Φ695 mm	—	●	●	—	—	●	500U / 1000U
200MY	250MY	Φ695 mm	●	○	●	—	●	●	500U / 1000U
200MSY	250MSY	Φ695 mm	●	○	●	●	●	—	500U

Large turning centers for large workpieces

QUICK TURN 400, 450 SERIES



QUICK TURN 400M (2000U)
Shown with optional equipment

		Max. swing	Turret		Milling function	Tailstock	Universal
			Bolt-on	VDI			
400	450	Φ845 mm	●	—	—	●	1000U / 2000U
400M	450M	Φ845 mm	●	○	●	●	1000U / 2000U



Higher Productivity & Higher Accuracy

Exceptional machining accuracy stability thanks to the machine construction and CNC technology

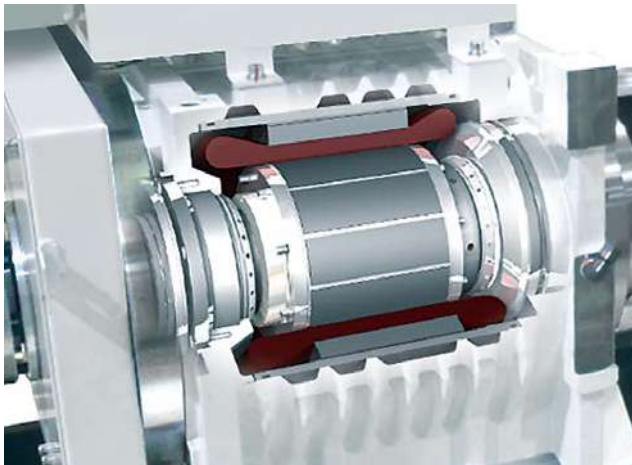
High rigidity construction

The rigid machine construction is designed to ensure high precision during heavy-duty machining and high-speed feedrates.

Integral spindle / motor

Thanks to its design, vibration is minimized during high-speed operation to ensure exceptional surface finishes and maximum tool life.

Since no transmission with belts, pulleys or gears is used, the higher efficiency of the integral spindle / motor delivers more power to the tool tip to be used for cutting.



Linear roller guides on all axes

Linear roller guides are utilized on all axes for high-speed, high-rigidity and a long service life.

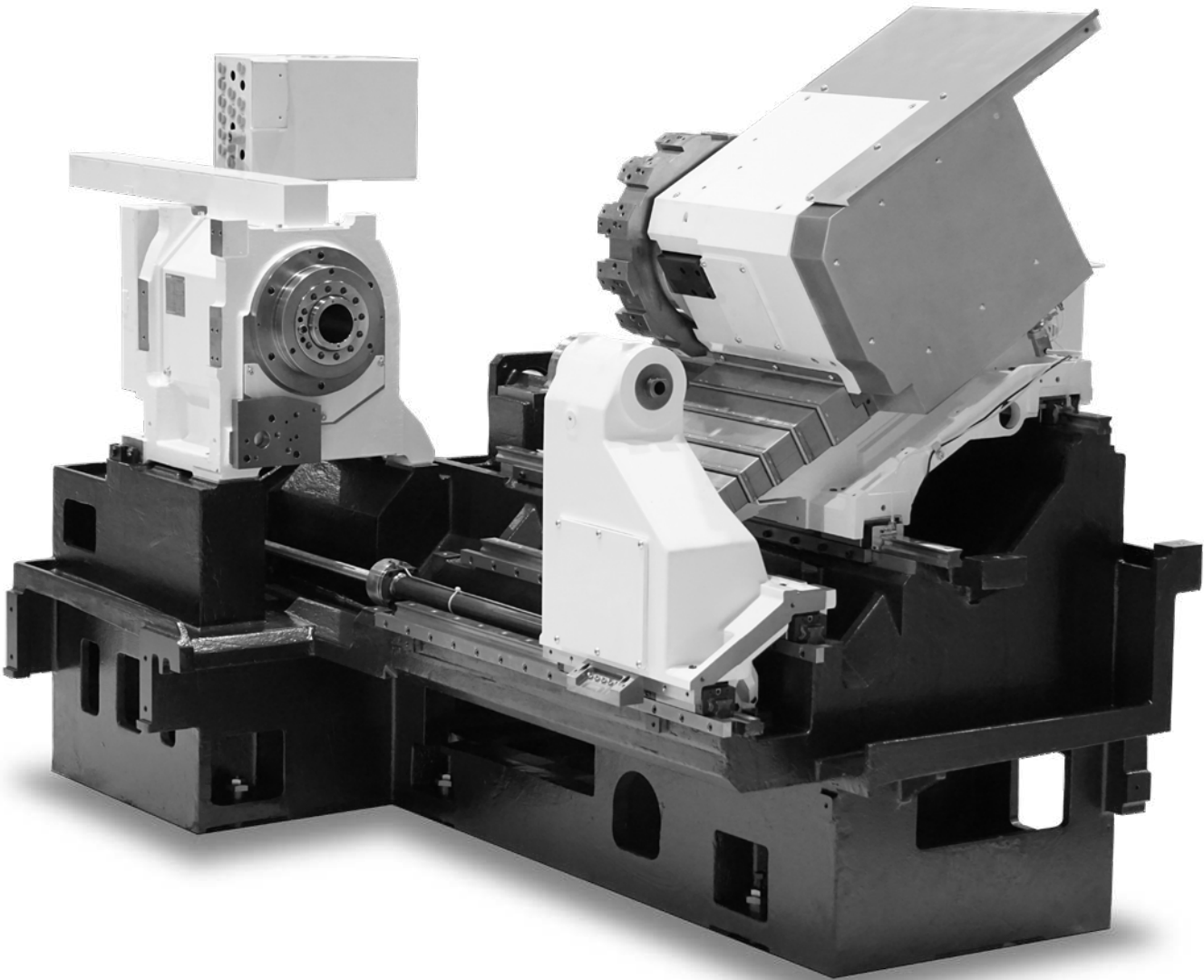


High-accuracy scale feedback

Scale feedback for the X- and Z-axis is optionally available to ensure high accuracy over extended periods of operation. (Not available for the 100 series)

C-axis positioning minimum indexing increment: 0.0001°

Main spindle and second spindle minimum C-axis positioning indexing increment is 0.0001° - standard equipment. Contouring is standard equipment for the main spindle of all versions of the QUICK TURN with milling capability, and optional for the second spindle.



Ai Thermal Shield

New algorithms automatically determine the amount of compensation to be applied according to changes in the temperature to ensure even higher machining accuracy.



Machining



Workpiece inspection



Simulation

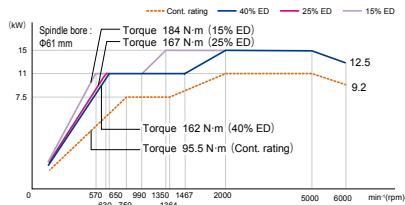
Higher Productivity

Integral spindle / motor (main spindle) ensures high-productivity and high-accuracy

Wide range of spindle specifications to meet your machining requirements

QUICK TURN 100 Series

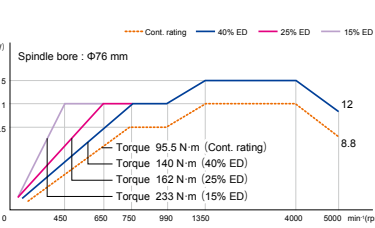
6000 min⁻¹(rpm), 15 kW (20 HP) spindle



Machines	Output (40% ED)	Speed	Torque	Chuck size	Spindle bore	Bar work capacity
100MY, 100MS, 100MSY	15 kW	6000 min ⁻¹ (rpm)	184 N·m	6"	Φ61 mm	Φ52 mm

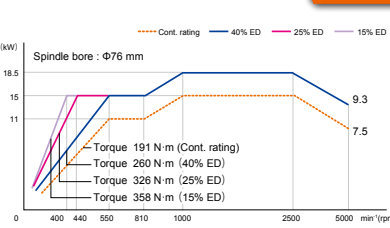
QUICK TURN 200 Series

5000 min⁻¹(rpm), 15 kW (20 HP) spindle



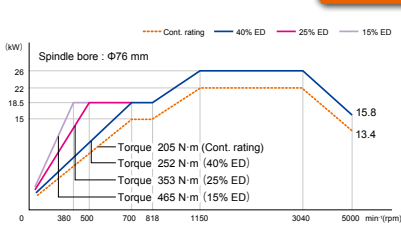
5000 min⁻¹(rpm), 18.5 kW (25 HP) spindle

OPTION



5000 min⁻¹(rpm), 26 kW (35 HP) spindle

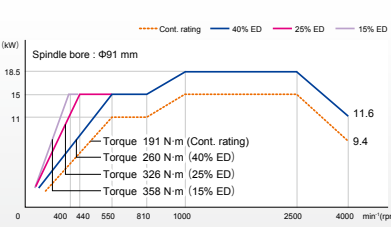
OPTION



Machines	Output (40% ED)	Speed	Torque	Chuck size	Spindle bore	Bar work capacity
200, 200MA, 200MB, 200MY, 200MSY	15 kW	5000 min ⁻¹ (rpm)	233 N·m	8"	Φ76 mm	Φ65 mm
	18.5 kW	5000 min ⁻¹ (rpm)	358 N·m	8"	Φ76 mm	Φ65 mm
	26 kW	5000 min ⁻¹ (rpm)	465 N·m	8"	Φ76 mm	Φ65 mm

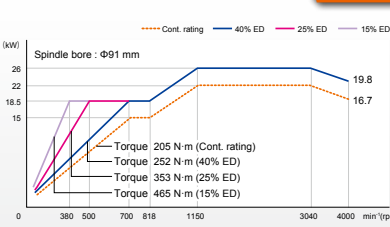
QUICK TURN 250 Series

4000 min⁻¹(rpm), 18.5 kW (25 HP) spindle



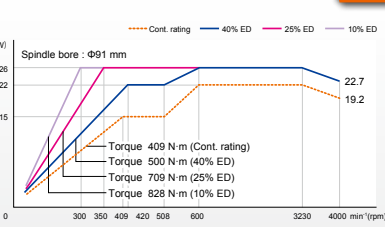
4000 min⁻¹(rpm), 26 kW (35 HP) spindle

OPTION



4000 min⁻¹(rpm), 26 kW (35 HP) high torque spindle

OPTION



Machines	Output (40% ED)	Speed	Torque	Chuck size	Spindle bore	Bar work capacity
250, 250MA, 250MB, 250MY, 250MSY	18.5 kW	4000 min ⁻¹ (rpm)	358 N·m	10"	Φ91 mm	Φ80 mm
	26 kW	4000 min ⁻¹ (rpm)	465 N·m	10"	Φ91 mm	Φ80 mm
	26 kW	4000 min ⁻¹ (rpm)	828 N·m	10"	Φ91 mm	Φ80 mm

High-output and high-torque spindle for heavy-duty cutting

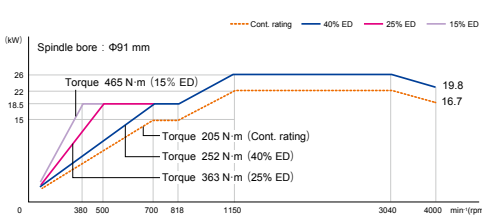
Example : QUICK TURN 350MY

3300 min⁻¹(rpm), 37 kW (50 HP) high torque spindle
Cutting speed : 180 m/min Feedrate : 0.4 mm/rev **DOC : 7.0 mm**



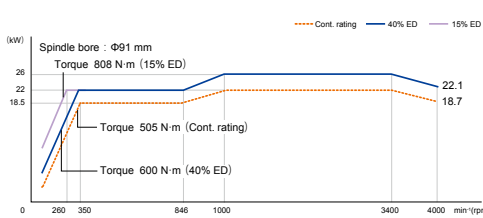
QUICK TURN 300 Series

4000 min⁻¹(rpm), 26 kW (35 HP) spindle



4000 min⁻¹(rpm), 26 kW (35 HP) high torque spindle

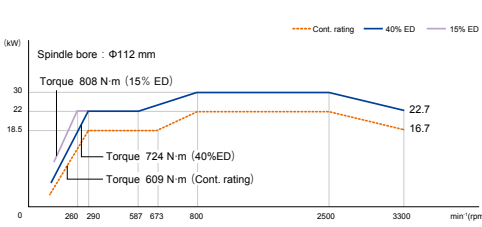
OPTION



Machines	Output (40% ED)	Speed	Torque	Chuck size	Spindle bore	Bar work capacity
300, 300MA, 300MB, 300MY	26 kW	4000 min ⁻¹ (rpm)	465 N·m	10"	Φ91 mm	Φ80 mm
	26 kW	4000 min ⁻¹ (rpm)	808 N·m	10"	Φ91 mm	Φ80 mm

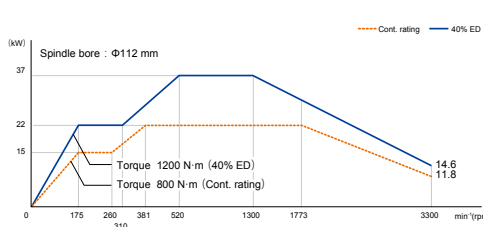
QUICK TURN 350 Series

3300 min⁻¹(rpm), 30 kW (40 HP) spindle



3300 min⁻¹(rpm), 37 kW (50H) high torque spindle

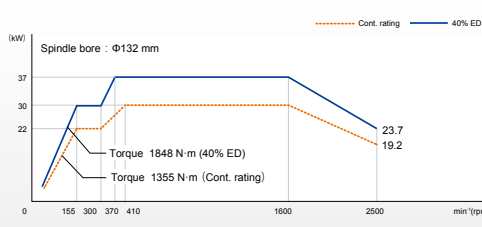
OPTION



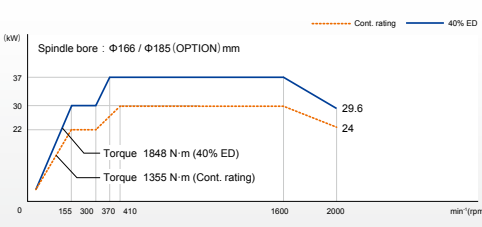
Machines	Output (40% ED)	Speed	Torque	Chuck size	Spindle bore	Bar work capacity
350, 350MA, 350MB, 350MY	30 kW	3300 min ⁻¹ (rpm)	808 N·m	12"	Φ112 mm	Φ102 mm
	37 kW	3300 min ⁻¹ (rpm)	1200 N·m	12"	Φ112 mm	Φ102 mm

QUICK TURN 400 Series

2500 min⁻¹(rpm), 37 kW (50 HP) spindle



2000 min⁻¹(rpm), 37 kW (50 HP) spindle

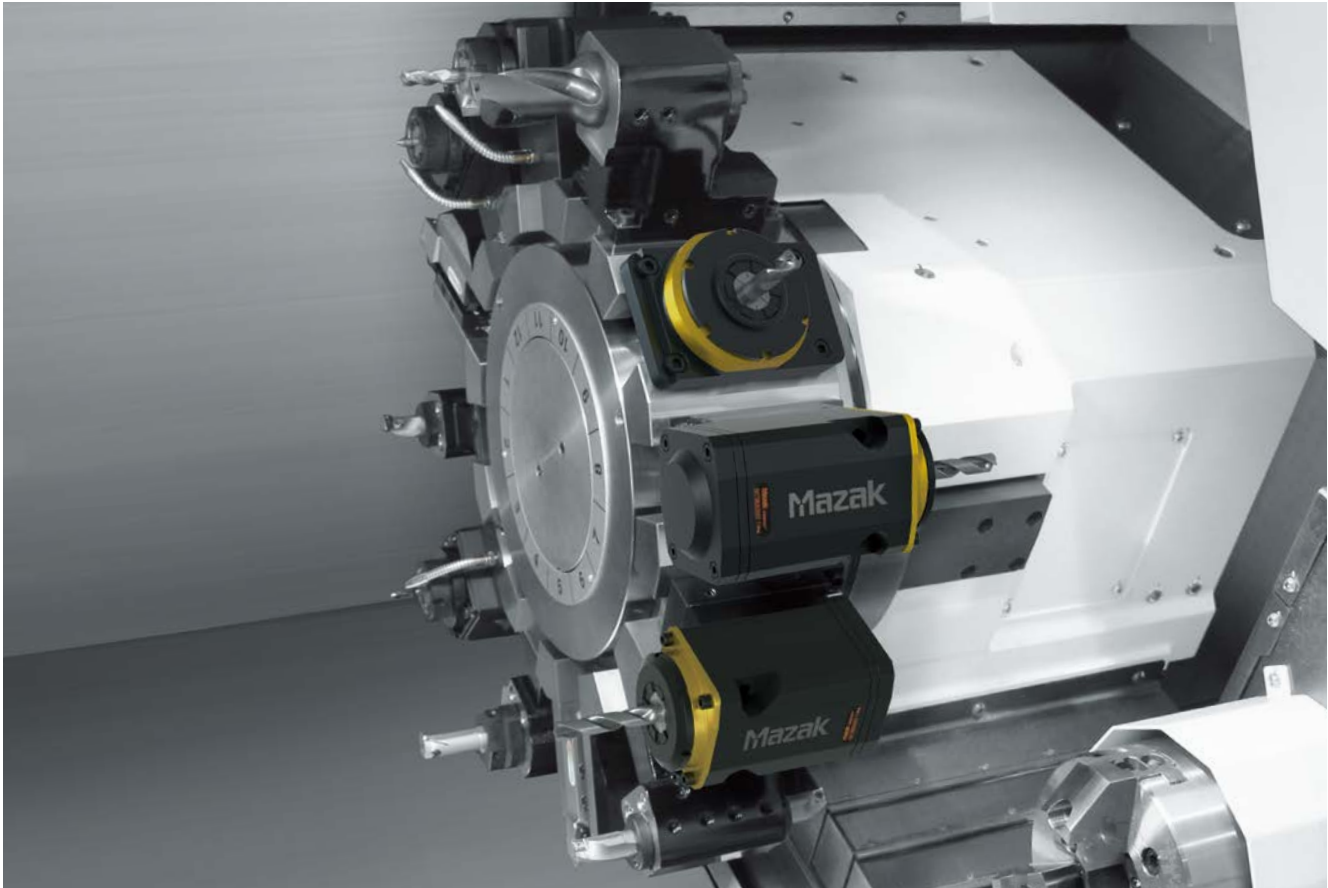


Machines	Output (40% ED)	Speed	Torque	Chuck size	Spindle bore	Bar work capacity
400, 400M	37 kW	2500 min ⁻¹ (rpm)	1848 N·m	12"	Φ132 mm	Φ103 mm
450, 450M	37 kW	2000 min ⁻¹ (rpm)	1848 N·m	18"	Φ166 mm	Φ165 mm
	37 kW	2000 min ⁻¹ (rpm)	1848 N·m	18"	Φ185 mm	Φ184 mm

Available turrets

The drum turret is designed for the minimum interface. By using non-lift rotary indexing, high speed turret clamping / unclamping can be performed without interference. Additionally, thanks to random selection / shortest path indexing, chip-to-chip time when changing tools is extremely fast.

Bolt-on turret



Tool holders are rigidly mounted on the turret by four bolts.
In case more than 12 tools are required, a 16-position drum turret is optionally available.

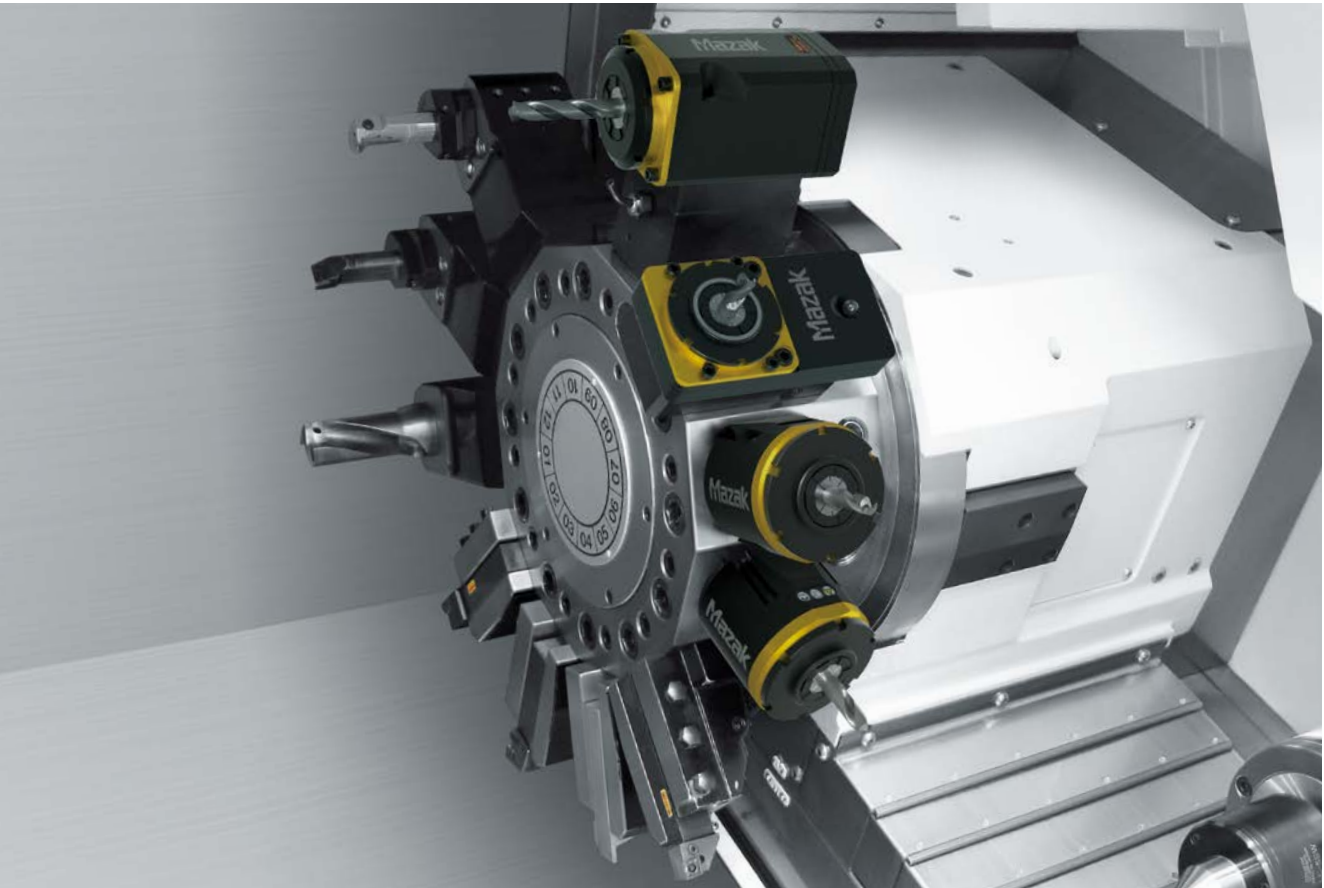
Machines	Type of turret	Tool capacity
100MY, MS, MSY	12 position drum turret	12
200, MA 250, MA	12 position drum turret	12
200MY, MSY 250MY, MSY	12 position drum turret 16 position drum turret*	12 16

*Option

Machines	Type of turret	Tool capacity
300, MA 350, MA	12 position drum turret	12
300MY 350MY	12 position drum turret 16 position drum turret*	12 16
400, 450	12 position drum turret (24 position)	12
400M, 450M	12 position drum turret 16 position drum turret*	12 16

VDI turret

OPTION



VDI tool holders can quickly and easily be mounted or removed to / from the turret by turning one bolt. Milling holders can be mounted at any turret position for smooth tool setups.

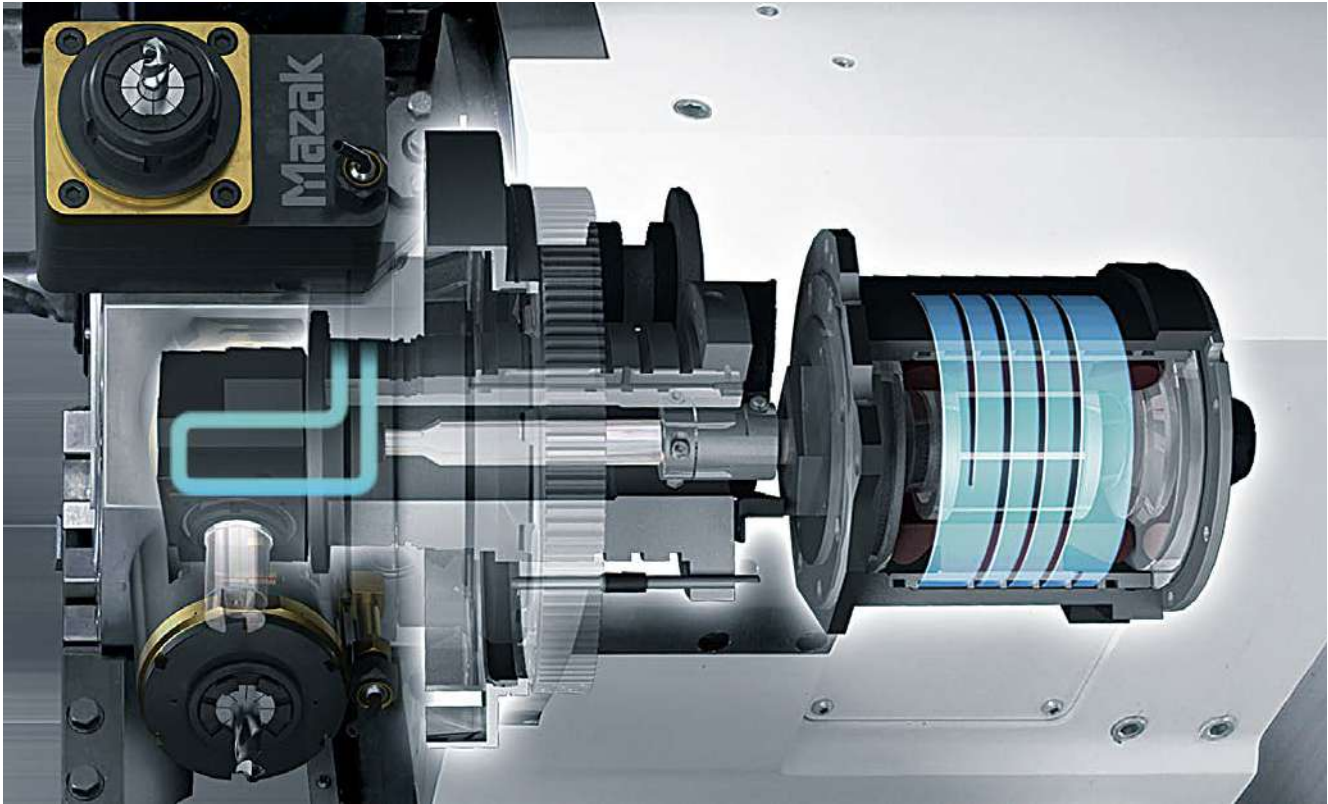
Machines	Type of turret	Tool capacity
100MY, MS, MSY	12 position drum turret	12
200MB**1, MY, MSY 250MB**1, MY, MSY	12 position drum turret	12
300MB**1, MY 350MB**1, MY	12 position drum turret	12
400M, 450M	12 position drum turret	12

**1 Standard equipment for MB



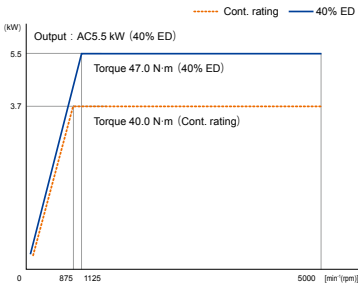
Smooth Mill Drive – Turret milling integral spindle / motor

An integral spindle / motor is utilized for the turret milling spindle to minimize vibration for high accuracy. Temperature controlled cooling oil is circulated around the spindle bearings and housing to minimize any thermal change



100MY, MS, MSY, 200MA, MB, MY, MSY, 250MA, MB, MY, MSY Smooth Mill Drive

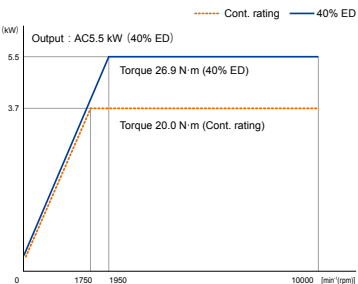
5000 min⁻¹(rpm) rotary tool spindle Standard for bolt-on turret and VDI turret



Rotary tool specification	Bolt-on / VDI
Speed	5000 min ⁻¹ (rpm)
Output (40% ED / cont. rating)	5.5 kW / 3.7 kW
Torque	47 N·m (40% ED)

10000 min⁻¹(rpm) rotary tool spindle Bolt-on turret only

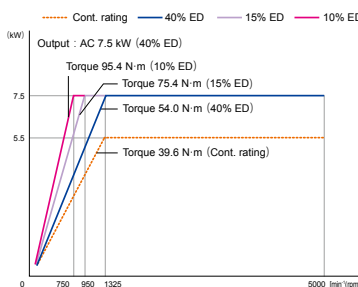
OPTION



Rotary tool specification	Bolt-on
Speed	10000 min ⁻¹ (rpm)
Output (40% ED / cont. rating)	5.5 kW / 3.7 kW
Torque	26.9 N·m (40% ED)

300MA, MB, MY, 350MA, MB, MY, 400M, 450M (Smooth Mill Drive)

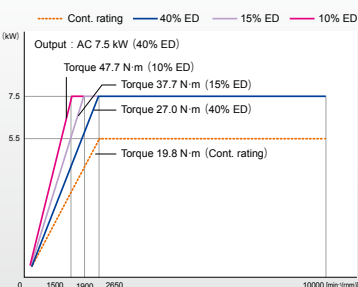
5000 min⁻¹(rpm) rotary tool spindle Standard for bolt-on turret and VDI turret



Rotary tool specification	Bolt-on / VDI
Speed	5000 min ⁻¹ (rpm)
Output (40% ED / cont. rating)	7.5 kW / 5.5 kW
Torque	54 N·m (40% ED)

10000 min⁻¹(rpm) rotary tool spindle Bolt-on turret only

OPTION



Rotary tool specification	Bolt-on
Speed	10000 min ⁻¹ (rpm)
Output (40% ED / cont. rating)	7.5 kW / 5.5 kW
Torque	27 N·m (40% ED)

Quick-Change Mill holder

The QUICK TURN series use tool holder equipped with Quick Change system for higher machining capability. Tools can be mounted / removed easily by using one-hand wrench. A wide variety of tools can be mounted by using adapter.



One-hand-wrench can easily tight by spring

NC tailstock

NC tailstock moved by servo motor and ball screw

The tailstock travel and thrust is controlled by a servo motor. The operator can set the tailstock position on the setup screen and move the tailstock to the correct position by 0.1 kN increments using a menukey or M-code. The low thrust force capability ensures high accuracy turning even for small diameter shaft workpieces. Operation is much easier compared to manual carriage movement or hydraulic / pneumatic positioning methods.



Machines	Universal	Tailstock center
100MY	300U	MT No.4 dead center
200, 200MA, 200MB, 200MY	500U	MT No.5 dead center
250, 250MA, 250MB, 250MY	1000U	MT No.4 built-in center

Machines	Universal	Tailstock center
300, 300MA, 300MB, 300MY	650U, 1250U	MT No.5 dead center
350, 350MA, 350MB, 350MY	1500U	MT No.5 built-in center
400, 400M, 450, 450M	1000U, 2000U	MT No.5 built-in center

Second spindle (MS, MSY)

By orienting both spindles, high accuracy workpiece transfer from the main spindle to the second spindle can be performed for continuous machining.

The second spindle also utilizes a high efficiency integral spindle / motor. Powerful turning and milling can be performed with the second spindle. C-axis indexing in 0.0001° minimum increments is standard and contouring is optionally available.



	100MS, 100MSY	200MSY, 250MSY
Speed	6000 min ⁻¹ (rpm)	6000 min ⁻¹ (rpm)
Output (25% ED / Cont. rating)	11 kW / 7.5 kW	11 kW / 7.5 kW
Torque (15% ED)	90 N·m	90 N·m
Chuck size	5"	6"

Steady rest

OPTION

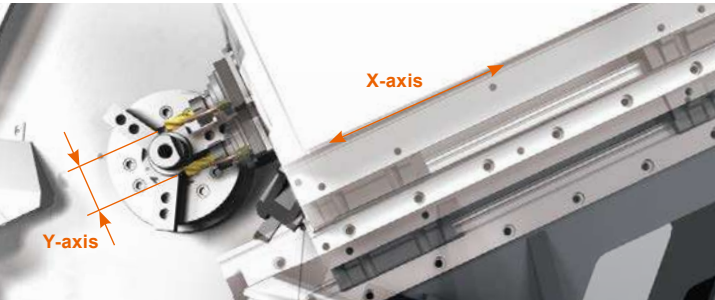
A steady rest can be mounted for high-accuracy and high-efficiency machining of shaft workpieces. It can be moved automatically by connecting it to the turret base by a coupling pin.

Machines	Universal	Steady rest	Max. workpiece diameter
200, 250, 200MA, 250MA, 200MB, 250MB, 200MY, 250MY	1000U	SMW SLUX3.1 × 1	Φ20 mm ~ Φ165 mm
		SMW SLUA3.1 × 1	Φ22 mm ~ Φ150 mm
300, 350, 300MA, 350MA, 300MB, 350MB, 300MY, 350MY	1250U 1500U	SMW K3 × 1	Φ65 mm ~ Φ235 mm
		Fixed steady rest × 1	Φ30 mm ~ Φ220 mm
400, 450, 400M, 450M	1000U 2000U	SMW K4 × 1	Φ52 mm ~ Φ280 mm
		SMW K4.1 × 1	Φ90 mm ~ Φ330 mm
		Fixed steady rest × 1	Φ30 mm ~ Φ220 mm
		Fixed steady rest × 1	Φ110 mm ~ Φ300 mm



Y-axis (MY, MSY)

The long Y-axis stroke ensures for high-accuracy and high efficiency machining of complex workpieces. The double slide Y-axis enables multi-tasking machining of large workpieces in a compact machine.



Machines	Y-axis stroke
100MY, 100MSY, 200MY, 200MSY, 250MY, 250MSY	100 (±50) mm
300MY, 350MY	150 (±75) mm





Gantry loader system (Except 400 and 450 series)

Flexible installation – part conveyor can be located on the machine right or left side, measurement equipment can be added, and can be used with 2 machines. By adding automatic door and robot I/F, the gantry loader can be field-installed on QUICK TURNS.

QUICK TURN 200MA + GL-150
(Actual product may vary)

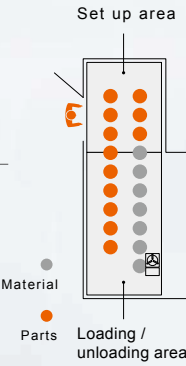
Rotary conveyor

Pallets rotate to move the workpieces to the robot loading / unloading position. Workpieces can be stacked in multiple levels for increased storage. The rotary conveyor can only be used for chuck workpieces.

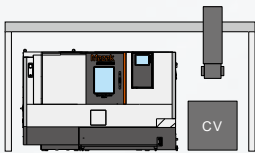


Set up area

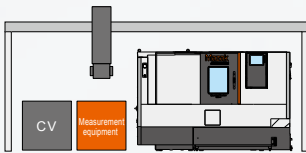
The operator can load raw material and unload finished workpieces at the setup area during automatic operation, without causing any machine idle time.
(Note: Only available for the 20-pallet rotary conveyor.)



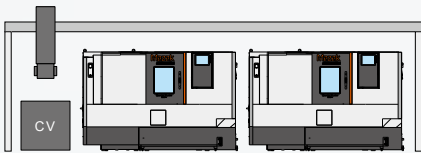
Flexible installation



Conveyor located on machine right side



Add measurement equipment



Conveyor with 2 machines

Ez LOADER

Automation system integrated with the cobot in compact floor space

The Ez LOADER is flexibly adopted to customers' production requirements. Dedicated software for Mazak machines provides easy system setup without complicated robot teaching.



QUICK TURN 200MA + Ez LOADER 20

		Ez LOADER 10, Ez LOADER 20	Ez LOADER 30
Machines*1		100 series*1, 200, 250 series	300, 350 series, 400, 450 series
Dimensions	Width × Length × Height	700 mm × 530 mm × 665 mm*2	1000 mm × 800 mm × 505 mm*2
Material	Material diameter	Min. Φ50 mm ~ Max. Φ200 mm	Min. Φ50 mm ~ Max. Φ200 mm
	Material length	25 mm ~ 100 mm	25 mm ~ 200 mm
	Max. weight	5 kg (Ez LOADER 10) / 10 kg (Ez LOADER 20)	21 kg (single hand) / 11 kg × 2 (tow-handed double hand) / 18 kg (one-handed double hand)

*1 For machine with distance between centers is 300U, only Ez LOADER 10 is available.
*2 The robot arm and outriggers are not included

Bar feeder

Bar feeders can be used by the QUICK TURN. A bar feed interface is available for most of the widely used systems. Optional bar feeder scheduling for high-mix, small lot size production and set production is available.



(Actual product may vary)

Auto parts catcher

Auto parts catcher automatically moves workpieces to outside of the machine. By using a bar feeder and work conveyor, automatic operation can be performed.



Ergonomics

Convenient operation and maintenance thanks to the ergonomic machine design

Wide door opening

The wide overhead door opening provides convenient workpiece loading / unloading when using an overhead crane.

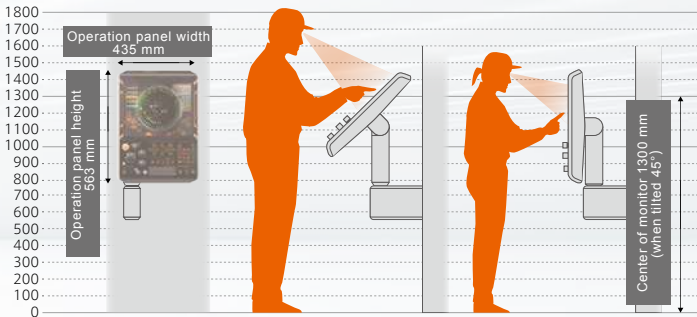


QUICK TURN 350MY (1250U)
Shown with optional equipment

Adjustable CNC touch panel

**MAZATROL
SMOOTH G**

The operation touch panel can be tilted to the optimum position for any operator's height to ensure ease of operation.



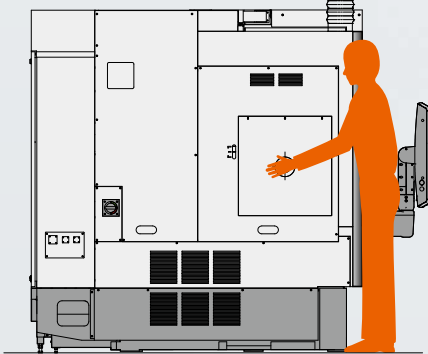
Large window

The large front door window allows the operator to easily monitor workpiece machining.



Excellent accessibility for setup

The distance from the front cover to the spindle center line is small for convenient setup and workpiece loading / unloading.



Convenient maintenance

All units requiring frequent access for maintenance are in a convenient central location.



Color-coded cables

Electric cables are color-coded for convenient maintenance.





Fastest CNC in the world

Latest hardware and software for unprecedented speed and precision

Smooth graphical user interface

MAZATROL Smooth graphical user interface for unsurpassed ease of operation
Touch screen operation - operate similar to your smartphone / tablet

Ease of operation

Designed for unsurpassed ease of operation

5 process home screens

Programming, confirmation, editing and tool data registration



Pop-up windows for easy display selection and data input

Menu and keyboard will be displayed by selection when data input are required for ease of operation



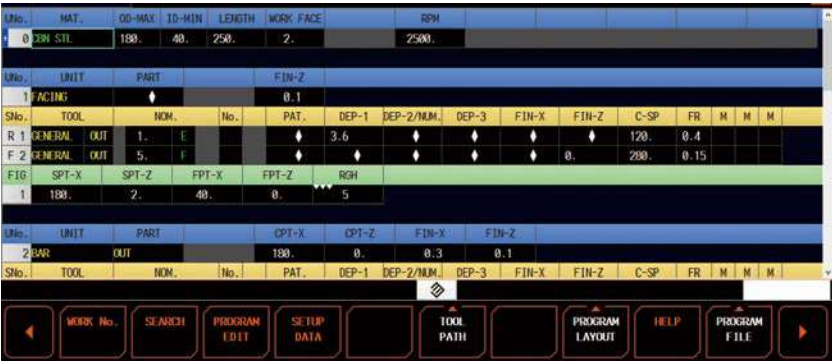
4 axes simultaneous CNC

MAZATROL **SMOOTHG**

Ease of Programming

MAZATROL conversational programming

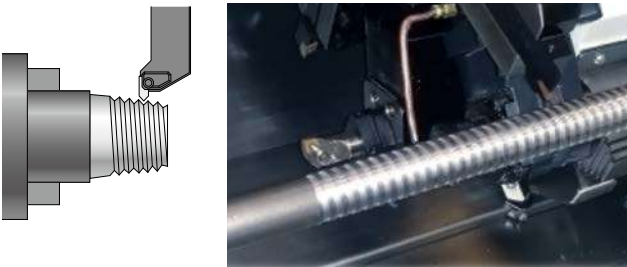
MAZATROL interactive programming uses conversational language and it is easy to make / edit programs by inputting data on workpiece drawings in response to questions displayed on the operation screen. Even a beginner operator can quickly make programs with automatically determined cutting conditions and automatic creation of tool paths.



Re-threading function

OPTION

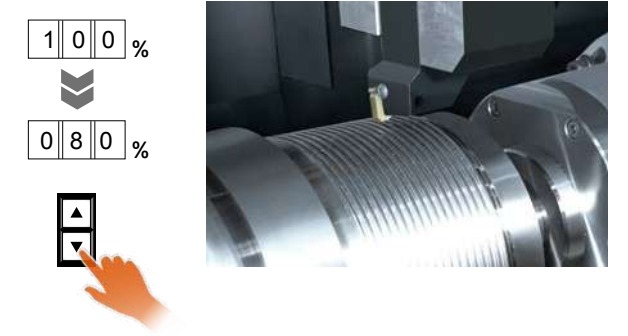
Easily re-thread workpieces which have been previously unloaded or produced by another machine.



Thread cut-speed override function

OPTION

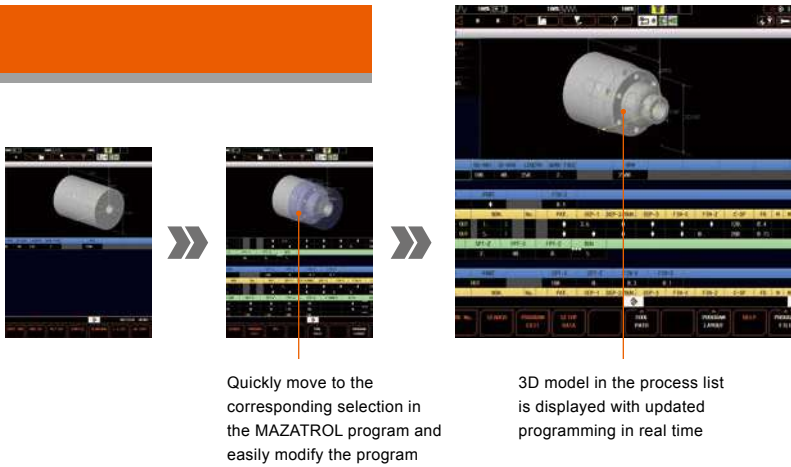
Spindle override (Spindle speed) can be changed during threading. Large and long threads in which setting the machining conditions can be difficult can be machined with less vibration.



QUICK MAZATROL

Reduced time for conversational programming

MAZATROL program, unit list and 3D workpiece shape are linked to each other. After defining a machining unit in a MAZATROL program, the 3D shape is immediately displayed to easily and quickly check for any programming error. Quickly move to the corresponding selection in the MAZATROL program by touching a feature in the 3D model.



VFC function

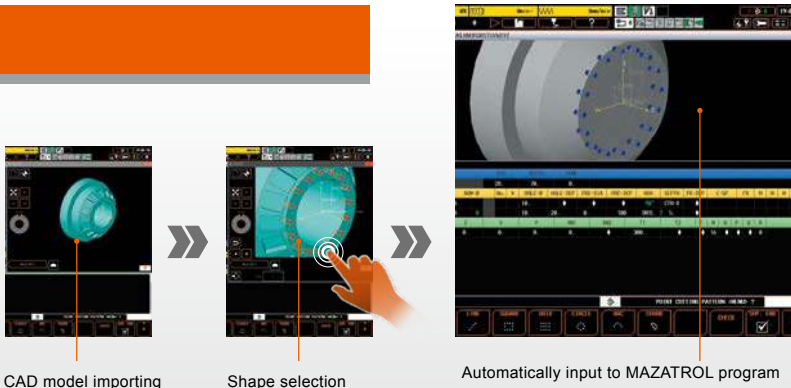
By pushing the VFC key, the programmed cutting conditions can be overridden and changed in the machining program. The new cutting conditions data can be used when a new program is made.



3D ASSIST

Making a program directly from 3D CAD data

Workpiece and coordinates data can be imported from 3D CAD data to a MAZATROL program. Can reduce input errors and time for program checking.

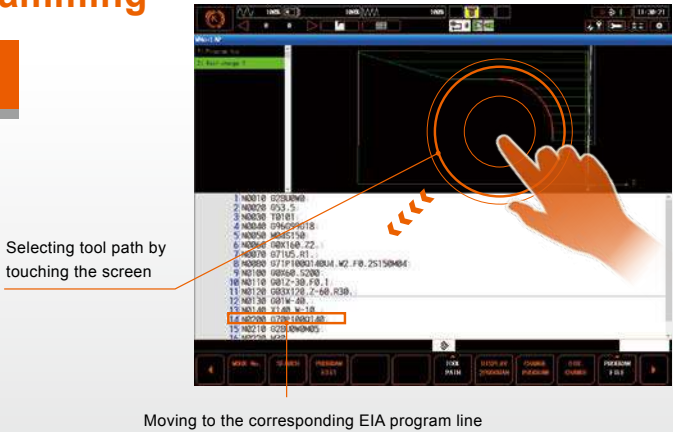


Reduce the time for EIA / ISO programming

QUICK EIA

EIA program Visualization

Program, process list and 3D tool path display are linked to each other. Visible search on the touch screen can reduce the time for program checking.



Automation

1 Tool eye

The tool eye can be programmed for automatic tool measurement and compensation as well as inspection for tool breakage. In addition, since tool setup is done by simply bringing the tool tip into contact with the tool eye, tool setup time is considerably reduced.



2 Automatic opening / closing chuck jaws

Chuck jaws are automatically opened / closed with M code. Required when a machine is installed with a bar feeder or robot system of another manufacturer.

3 High / low chuck pressure

Chuck pressure can be automatically changed by program M code, which is effective for machining various kinds of workpieces that need frequent chuck clamping pressure changes.

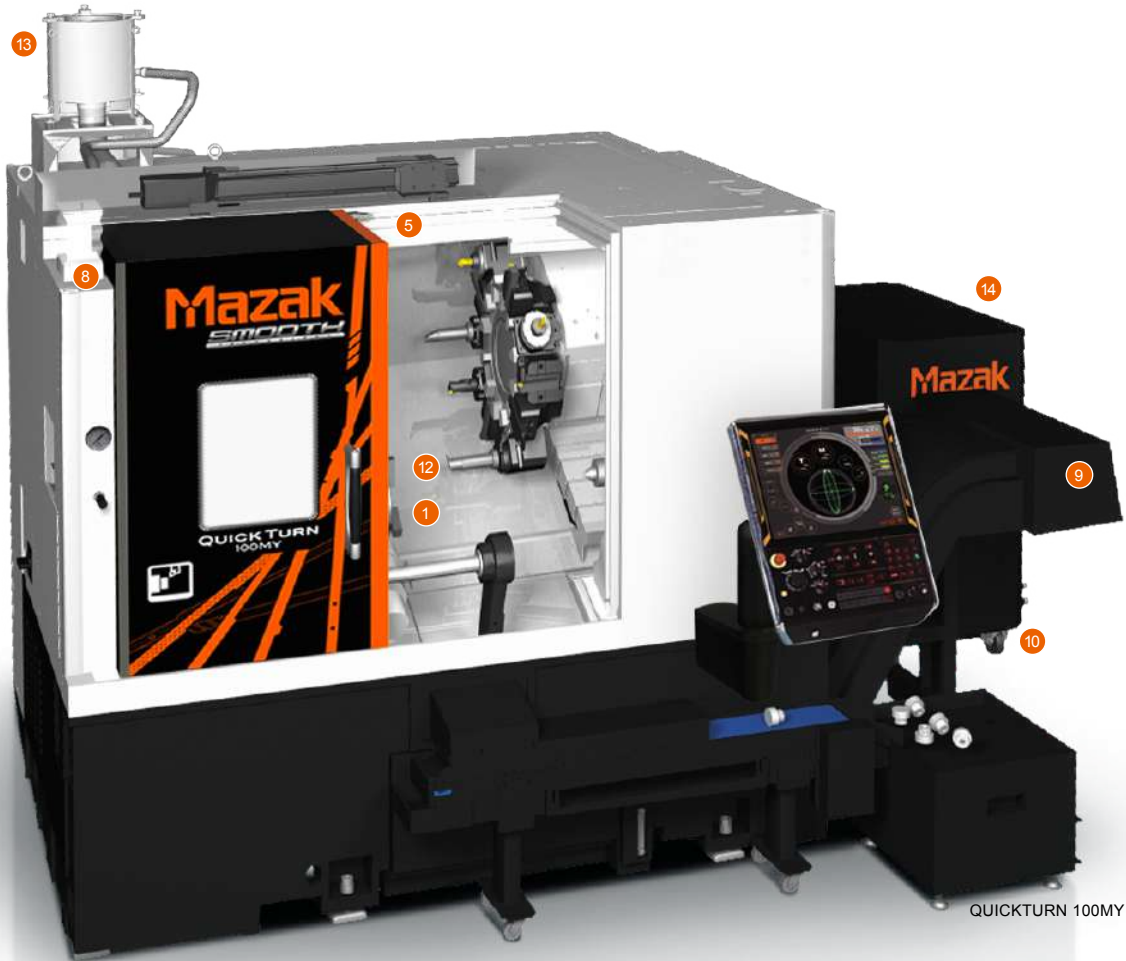
4 Double foot pedal chuck switch

The double foot pedal switch is used to open / close the chucks separately. (Available for both the main spindle and second spindle)



5 Automatic opening / closing front door

The automatic opening / closing front door operates in 3 speed steps. If an operator inadvertently places a hand in the opening, operation will automatically stop when the door contacts his hand. (Left door only for 400, 450 series)



6 Automatic workpiece measurement

This function uses a turret-mounted touch sensor to automatically measure the inside and outside diameters, surface irregularity etc. of the machined workpiece to perform tool corrections and to maintain machining accuracy during unattended operation. The swing arm type of automatic workpiece-measuring unit also allows highly accurate machining with a test-cutting macro (NC option) to be started from the first workpiece.



7 Automatic power ON / OFF + warm-up operation (standard)

Using timer setting, power can be automatically turned on and off, as well as perform warm-up operation.

8 3 color machine status light

Consists of three lights: red for alarm, yellow for machining completion and green for automatic operation.

Chip disposal

9 Chip conveyor (hinge side disposal / rear disposal)

Chips are removed by hinge-plate belt and discharged from the rear or side of machine.

10 Chip bucket (rotating / fixed)



Coolant

11 Coolant system (standard)

Coolant in the coolant tank is pumped up by coolant pump which is located in the rear of the machine and fed to the cutting tool tip.



12 Additional coolant nozzle on head side

Coolant is fed through the nozzle over the chuck to cool the workpiece and remove chips.



13 Mist collector

Coolant mist generated by machining is removed from the machining area in order to maintain a safe and clean working environment.

14 High-pressure coolant system SUPERFLOW coolant system

The SUPERFLOW coolant system is equipped with a diaphragm pump with exceptional energy efficiency and high-performance cyclone filter. It features improved chip-control, lower tool tip temperatures and longer tool life with faster spindle speeds and feedrates to realize higher productivity. Coolant pressure is easily set by M-code (pressure range from 1.0 to 7.0 MPa (10 to 71 kgf/cm²)).



15 Coolant temperature control

The coolant temperature is maintained by a chiller unit to be same as the room temperature for high accuracy machining.

■ Standard and Optional equipment

QUICK TURN 100 series

		● : Standard ○ : Option - : N/A		
		100MY	100MS	100MSY
Machine	Main spindle 6" non through-hole chuck N-06	●	—	—
	Main spindle 6" through-hole chuck B-206	○	●	●
	Main spindle 6" through-hole chuck BR06	○	○	○
	Second spindle 5" through-hole chuck B-205	—	●	●
	Collet chuck (O-CHS-476)	○	○	○
	12 position drum turret (bolt-on tool holder)	●	●	●
	12 position drum turret (VDI tool holder)	○	○	○
	Rotary tool 5000 min ⁻¹ (rpm)	●	●	●
	Rotary tool 10000 min ⁻¹ (rpm) (bolt-on tool holder only)	—	○	○
	Second spindle 0.0001° C-axis control (contouring)	—	○	○
	Tailstock (MT No.4 dead center)	●	—	—
	Tailstock thrust automatic change	●	—	—
	Live center LC4X-7W	○	—	—
	Work light	●	●	●
Automation	Absolute position detection	●	●	●
	Spindle orient	○	○	○
	Tool eye (automatic)	○	○	○
	Automatic chuck jaws open / close	○	●	●
	Chuck jaws air blast	○	○	○
	Chuck jaws air blast (second spindle)	—	●	●
	Workpiece automatic measurement	○	○	○
	Bar feeder interface	○	○	○
	Robot interface	○	○	○
	Auto parts catcher	○	○	○
	Workpiece output conveyor	○	○	○
	Automatic front door open / close	○	○	○
	Automatic power ON / OFF + warm-up operation	●	●	●
	Operation end buzzer	○	○	○
	Status light (3 colors)	○	○	○
Safety	Chuck jaws open / close confirmation	●	●	●
	Hydraulic pressure interlock	●	●	●
	Double foot pedal chuck switch	○	○	○
	Earth leakage breaker	○	○	○
	Overload detection system	○	○	○
Coolant / Chip disposal	Chip pan	●	●	●
	Side discharge chip conveyor	○	○	○
	Rear discharge chip conveyor	○	○	○
	Preparation for chip conveyor	○	○	○
	Chip bucket (rotary)	○	○	○
	Chip bucket (fixed)	○	○	○
	Coolant temperature control	○	○	○
	Turret air blast	○	○	○
	Additional coolant nozzle (head side)	○	○	○
	Mist collector	○	○	○
	Coolant system	●	●	●
	Powerful coolant (520 W)	○	○	○
	Powerful coolant (1.1 kW)	○	○	○
	SUPERFLOW coolant system	○	○	○
	Tool holder for high pressure coolant	○	○	○
Others	CD manual	●	●	●
	One set of adjusting tools	●	●	●

QUICK TURN 200, 250 series

		● : Standard ○ : Option - : N/A									
		200	200MA	200MB	200MY	200MSY	250	250MA	250MB	250MY	250MSY
Machine	Main spindle 8" non through-hole chuck N-08	●	●	●	●	—	—	—	—	—	—
	Main spindle 8" through-hole chuck B-208	○	○	○	○	●	—	—	—	—	—
	Main spindle 8" through-hole chuck BR08	○	○	○	○	○	—	—	—	—	—
	Main spindle 10" non through-hole chuck N-10	—	—	—	—	—	●	●	●	●	—
	Main spindle 10" through-hole chuck B-210	—	—	—	—	—	○	○	○	○	●
	Main spindle 10" through-hole chuck BR10	—	—	—	—	—	○	○	○	○	○
	Second spindle 6" through-hole chuck B-206	—	—	—	—	●	—	—	—	—	●
	12 position drum turret (bolt-on tool holder)	●	●	—	●	●	●	—	—	●	●
	16 position drum turret (bolt-on tool holder)	—	—	—	○	○	—	—	—	○	○
	12 position drum turret (VDI tool holder)	—	—	●	○	○	—	—	●	○	○
	Rotary tool 5000 min ⁻¹ (rpm)	—	●	●	●	●	—	●	●	●	●
	Rotary tool 10000 min ⁻¹ (rpm) (bolt-on tool holder only)	—	○	—	○	○	—	○	—	○	○
	Second spindle 0.0001° C-axis control (contouring)	—	—	—	—	○	—	—	—	—	○
	Tailstock (MT No.5 dead center) (500U only)	●	●	●	●	—	●	●	●	●	—
	Tailstock (MT No.4 built-in center)* ¹	○	○	○	○	—	○	○	○	○	—
	Tailstock thrust automatic change	●	●	●	●	—	●	●	●	●	—
	Live center LC-5SW (500U only)	○	○	○	○	—	○	○	○	○	—
	Live center LC-5A (500U only)	○	○	○	○	—	○	○	○	○	—
	Automatic steady rest SMW SLUA3.1 (1000U only)	○	○	○	○	—	○	○	○	○	—
	Automatic steady rest SMW SLUX3.1 (1000U only)	○	○	○	○	—	○	○	○	○	—
	Preparation for automatic steady rest SMW SLUA3.1 (1000U only)	○	○	○	○	—	○	○	○	○	—
	Preparation for automatic steady rest SMW SLUX3.1 (1000U only)	○	○	○	○	—	○	○	○	○	—
	Scale feedback	○	○	○	○	○	○	○	○	○	○
	Work light	●	●	●	●	●	●	●	●	●	●
Automation	Absolute position detection	●	●	●	●	●	●	●	●	●	●
	Spindle orient	○	○	○	○	○	○	○	○	○	○
	Tool eye (automatic)	○	○	○	○	○	○	○	○	○	○
	Automatic chuck jaws open / close	○	○	○	○	●	○	○	○	○	●
	Chuck jaws air blast	○	○	○	○	○	○	○	○	○	○
	Chuck jaws air blast (second spindle)	—	—	—	—	●	—	—	—	—	●
	Workpiece automatic measurement	○	○	○	○	○	○	○	○	○	○
	Bar feeder interface	○	○	○	○	○	○	○	○	○	○
	Robot interface	○	○	○	○	○	○	○	○	○	○
	Auto parts catcher	○	○	○	○	○	○	○	○	○	○
	Workpiece output conveyor	○	○	○	○	○	○	○	○	○	○
	Automatic front door open / close 500U	○	○	○	○	○	○	○	○	○	○
	Automatic front door open / close (left side door only)	○	○	○	○	—	○	○	○	○	—
	Automatic power ON / OFF + warm-up operation	●	●	●	●	●	●	●	●	●	●
Safety	Operation end buzzer	○	○	○	○	○	○	○	○	○	○
	Status light (3 colors)	○	○	○	○	○	○	○	○	○	○
	Chuck jaws open / close confirmation	●	●	●	●	●	●	●	●	●	●
	Hydraulic pressure interlock	●	●	●	●	●	●	●	●	●	●
	Double foot pedal chuck switch	○	○	○	○	○	○	○	○	○	○
	Earth leakage breaker	○	○	○	○	○	○	○	○	○	○
	Overload detection system	○	○	○	○	○	○	○	○	○	○
Coolant / Chip disposal	Chip pan	●	●	●	●	●	●	●	●	●	●
	Side discharge chip conveyor	○	○	○	○	○	○	○	○	○	○
	Rear discharge chip conveyor (500U)	○	○	—	—	—	○	○	—	—	—
	Chip conveyor preparation	○	○	○	○	○	○	○	○	○	○
	Chip bucket (rotary)	○	○	○	○	○	○	○	○	○	○
	Chip bucket (fixed)	○	○	○	○	○	○	○	○	○	○
	Coolant temperature control	○	○	○	○	○	○	○	○	○	○
	Turret air blast	○	○	○	○	○	○	○	○	○	○
	Additional coolant nozzle (head side)	○	○	○	○	○	○	○	○	○	○
	Mist collector	○	○	○	○	○	○	○	○	○	○
	Coolant system	●	●	●	●	●	●	●	●	●	●
	Powerful coolant (520 W)	○	○	○	○	○	○	○	○	○	○
	Powerful coolant (1.1 kW)	○	○	○	○	○	○	○	○	○	○
	SUPERFLOW coolant system	○	○	○	○	○	○	○	○	○	○
	Tool holder for high pressure	○	○	○	○	○	○	○	○	○	○
Others	CD manual	●	●	●	●	●	●	●	●	●	●
	One set of adjusting tools	●	●	●	●	●	●	●	●	●	●

*1 Standard equipment for 1000U

■ Standard and Optional equipment

QUICK TURN 300, 350 series

		●: Standard ○: Option -: N/A							
		300	300MA	300MB	300MY	350	350MA	350MB	350MY
Machine	Main spindle 10" non through-hole chuck N-10	●	●	●	●	—	—	—	—
	Main spindle 10" through-hole chuck B-210	○	○	○	○	—	—	—	—
	Main spindle 10" through-hole chuck BR-10	○	○	○	○	—	—	—	—
	Main spindle 12" non through-hole chuck N-12	—	—	—	—	●	●	●	●
	Main spindle 12" through-hole chuck B-212	—	—	—	—	○	○	○	○
	Main spindle 12" through-hole chuck BR-12	—	—	—	—	○	○	○	○
	12 position drum turret (bolt-on tool holder)	●	●	—	●	●	●	—	●
	12 position drum turret (VDI tool holder)	—	—	●	○	—	—	●	○
	16 position drum turret (bolt-on tool holder)	—	—	—	○	—	—	—	○
	Rotary tool 5000 min ⁻¹ (rpm)	—	●	●	●	—	●	●	●
	Rotary tool 10000 min ⁻¹ (rpm) (bolt-on tool holder only)	—	○	—	○	—	○	—	○
	Tailstock (MT No.5 dead center) (650U / 1250U)	●	●	●	●	●	●	●	●
	Tailstock (MT No.5 built-in center)* ¹	○	○	○	○	○	○	○	○
	Tailstock thrust automatic change	●	●	●	●	●	●	●	●
	Live center LC-5SW (650U / 1250U)	○	○	○	○	○	○	○	○
	Live center LC-5A (650U)	○	○	○	○	○	○	○	○
	Automatic steady rest K3 (except 650U)	○	○	○	○	○	○	○	○
	Automatic steady rest preparation for K3 (except 650U)	○	○	○	○	○	○	○	○
	Fixed steady rest (Φ30 mm-Φ220 mm) (except 650U)	○	○	○	○	○	○	○	○
	Scale feedback	○	○	○	○	○	○	○	○
	Work light	●	●	●	●	●	●	●	●
Automation	Absolute position detection	●	●	●	●	●	●	●	●
	Spindle orient	○	○	○	○	○	○	○	○
	Tool eye (automatic)	○	○	○	○	○	○	○	○
	Automatic chuck jaws open / close	○	○	○	○	○	○	○	○
	Chuck jaws air blast	○	○	○	○	○	○	○	○
	Workpiece automatic measurement	○	○	○	○	○	○	○	○
	Bar feeder interface	○	○	○	○	○	○	○	○
	Robot interface	○	○	○	○	○	○	○	○
	Auto parts catcher	○	○	○	○	○	○	○	○
	Workpiece output conveyor (650U)	○	○	○	○	○	○	○	○
	Automatic front door open / close (650U)	○	○	○	○	○	○	○	○
	Automatic front door open / close (left side door only)	○	○	○	○	○	○	○	○
	Automatic power ON / OFF + warm-up operation	●	●	●	●	●	●	●	●
	Operation end buzzer	○	○	○	○	○	○	○	○
	Status light (3 colors)	○	○	○	○	○	○	○	○
Safety	Chuck jaws open / close confirmation	●	●	●	●	●	●	●	●
	Hydraulic pressure interlock	●	●	●	●	●	●	●	●
	Double foot pedal chuck switch	○	○	○	○	○	○	○	○
	Earth leakage breaker	○	○	○	○	○	○	○	○
	Overload detection system	○	○	○	○	○	○	○	○
Coolant /	Chip pan	●	●	●	●	●	●	●	●
Chip disposal	Side discharge chip conveyor	○	○	○	○	○	○	○	○
	Preparation for chip conveyor	○	○	○	○	○	○	○	○
	Chip bucket (rotary)	○	○	○	○	○	○	○	○
	Chip bucket (fixed)	○	○	○	○	○	○	○	○
	Coolant temperature control	○	○	○	○	○	○	○	○
	Turret air blast	○	○	○	○	○	○	○	○
	Additional coolant nozzle (head side)	○	○	○	○	○	○	○	○
	Mist collector	○	○	○	○	○	○	○	○
	Coolant system	●	●	●	●	●	●	●	●
	Powerful coolant (520 W)	●	●	●	●	●	●	●	●
	Powerful coolant (1.1 kW)	○	○	○	○	○	○	○	○
	SUPERFLOW coolant system	○	○	○	○	○	○	○	○
	Tool holder for high pressure coolant	○	○	○	○	○	○	○	○
	CD manual	●	●	●	●	●	●	●	●
	One set of adjusting tools	●	●	●	●	●	●	●	●

*1 Standard equipment for 1500U

QUICK TURN 400, 450 series

		●: Standard ○: Option -: N/A			
		400	400M	450	450M
Machine	Main spindle 12" non through-hole chuck N-12	●	●	—	—
	Main spindle 12" through-hole chuck BR-12	○	○	—	—
	Main spindle 15" through-hole chuck B-15	○	○	—	—
	Main spindle 18" through-hole chuck B-18	—	—	○	○
	Main spindle 18" through-hole chuck BB-218	—	—	○	○
	Main spindle 21" through-hole chuck B-21	—	—	○	○
	Big bore spindle Φ185 mm	—	—	○	○
	12 position drum turret (bolt-on tool holder)	—	●	—	●
	12 position drum turret (24 position)	●	—	●	—
	12 position drum turret (VDI tool holder)	—	○	—	○
	16 position drum turret (bolt-on tool holder)	—	○	—	○
	Rotary tool 5000 min ⁻¹ (rpm)	—	●	—	●
	Rotary tool 10000 min ⁻¹ (rpm) (bolt-on tool holder)	—	○	—	○
	Tailstock (MT No.5 built-in center)	●	●	●	●
	Tailstock thrust automatic change	●	●	●	●
	Automatic steady rest K4 / K4.1	○	○	○	○
	Automatic steady rest preparation for K4 / K4.1	○	○	○	○
	Fixed steady rest (Φ30 mm-Φ220 mm)	○	○	○	○
	Fixed steady rest (Φ110 mm - Φ300 mm)	○	○	○	○
	Scale feedback	○	○	○	○
	Work light	●	●	●	●
Automation	Absolute position detection	●	●	●	●
	Spindle orient	○	○	○	○
	Tool eye (automatic)	○	○	○	○
	Automatic chuck jaws open / close	○	○	○	○
	Chuck jaws air blast	○	○	○	○
	Bar feeder interface	○	○	○	○
	Robot interface	○	○	○	○
	Automatic power ON / OFF + warm-up operation ^{a3}	●	●	●	●
	Operation end buzzer	○	○	○	○
	Status light (3 colors)	○	○	○	○
Safety	Chuck jaws open / close confirmation	●	●	●	●
	Hydraulic pressure interlock	●	●	●	●
	Double foot pedal chuck switch	○	○	○	○
	Earth leakage breaker	○	○	○	○
	Overload detection system	○	○	○	○
Coolant / Chip disposal	Chip pan	●	●	●	●
	Side discharge chip conveyor	○	○	○	○
	Preparation for chip conveyor	○	○	○	○
	Chip bucket (rotary)	○	○	○	○
	Chip bucket (fixed)	○	○	○	○
	Coolant temperature control	○	○	○	○
	Turret air blast	○	○	○	○
	Additional coolant nozzle (head side)	○	○	○	○
	Mist collector	○	○	○	○
	Coolant system	●	●	●	●
	Powerful coolant (520 W)	●	●	●	●
	Powerful coolant (1.1 kW)	○	○	○	○
	SUPERFLOW coolant system	○	○	○	○
	Tool holder for high pressure coolant	○	○	○	○
Others	CD manual	●	●	●	●
	One set of adjusting tools	●	●	●	●

■ Standard and Optional Tooling

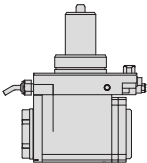
Number : Standard QTY. No number : Option - : N/A Unit : mm

QUICK TURN 100MY, 100MS, 100MSY 12 position drum bolt-on turret

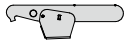
		100MY	100MS, MSY					100MY	100MS, MSY		
			Main spindle	Second spindle					Main spindle	Second spindle	
CAP PLATE		1		—	CHUCK COLLET (WITHOUT THROUGH COOLANT)	ER32Φ2					
TURNING HOLDER	FORWARD,REVERSE	4	3	1		ER32Φ2.5					
FACING HOLDER	FORWARD,REVERSE	1	1	—		ER32Φ3					
BORING BAR HOLDER	Φ32	2	2	—		ER32Φ3.5					
	Φ20	—	—	1		ER32Φ4					
U DRILL HOLDER	Φ32	1		—		ER32Φ4.5					
CUT-OFF HOLDER			1	—		ER32Φ5					
BORING BAR SOCKET	RING	—	—	1		ER32Φ6					
	Φ25	1	1	—		ER32Φ7					
	Φ20	1	1	—		ER32Φ8					
	Φ16					ER32Φ9					
	Φ12					ER32Φ10					
	Φ10					ER32Φ11					
	Φ8					ER32Φ12	1	1			
DRILL SOCKET	M.T. No.2			—		ER32Φ13					
	M.T. No.1	1	1	—		ER32Φ14					
U DRILL SOCKET	Φ25			—		ER32Φ15					
	Φ20			—		ER32Φ16	1	1			
H-TYPE QUICK-CHANGE MILLING HOLDER (WITH Φ20 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	2	2	—	CHUCK COLLET (WITH THROUGH COOLANT)	ER32Φ17					
H-TYPE QUICK-CHANGE MILLING HOLDER (WITH Φ20 CHUCK COLLECT) 10000 min ⁻¹ (rpm)	WITH THROUGH COOLANT			—		ER32Φ18					
H-TYPE BACK MILLING HOLDER (WITH Φ20 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	—	—			ER32Φ19					
H-TYPE BACK MILLING HOLDER (WITH Φ20 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITH THROUGH COOLANT	—	—			ER32Φ20					
H-TYPE BACK MILLING HOLDER (WITH Φ20 CHUCK COLLECT) 10000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	—	—			AR32Φ8					
V-TYPE QUICK-CHANGE MILLING HOLDER (WITH Φ20 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	1	1	—		AR32Φ8.5					
V-TYPE QUICK-CHANGE MILLING HOLDER (WITH Φ20 CHUCK COLLECT) 10000 min ⁻¹ (rpm)	WITH THROUGH COOLANT			—		AR32Φ9					
V-TYPE OFFSET MILLING HOLDER (WITH Φ20 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT					AR32Φ9.5					
V-TYPE OFFSET MILLING HOLDER (WITH Φ20 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITH THROUGH COOLANT			—		AR32Φ10					
HOOK WRENCH FOR MILLING TOOL EXCHANGE		—	—			AR32Φ10.5					
SPANNER WRENCH	ER32	1	1	—		AR32Φ11					
ONE HAND WRENCH		1	1			AR32Φ11.5					
						AR32Φ12					
						AR32Φ12.5					
						AR32Φ13					
						AR32Φ13.5					
						AR32Φ14					
						AR32Φ14.5					
						AR32Φ15					
						AR32Φ15.5					
						AR32Φ16					
						AR32Φ16.5					
						AR32Φ17					
						AR32Φ17.5					
						AR32Φ18					
						AR32Φ18.5					
						AR32Φ19					
						AR32Φ19.5					
						AR32Φ20					

QUICK TURN 100MY, 100MS, 100MSY 12 position VDI turret

		100MY	100MS, MSY					100MY	100MS, MSY		
			Main spindle	Second spindle					Main spindle	Second spindle	
CAP PLATE	PLUG	1		—	CHUCK COLLET (WITHOUT THROUGH COOLANT)	ER25Φ2					
TURNING HOLDER	FORWARD	3	2	—		ER25Φ3					
	REVERSE	1	1	—		ER25Φ4					
	FORWARD,REVERSE	—	—	1		ER25Φ5					
FACING HOLDER	FORWARD	1	1	—		ER25Φ6					
BORING BAR HOLDER	Φ32	2	2	—		ER25Φ7					
	Φ20	—	—	1		ER25Φ8	1	1			
U DRILL HOLDER	Φ32	1		—		ER25Φ9					
CUT-OFF HOLDER	FORWARD		1	—		ER25Φ10					
BORING BAR SOCKET	RING	—	—	1		ER25Φ11					
	Φ25	1	1	—		ER25Φ12	1	1			
	Φ20	1	1	—		ER25Φ13					
	Φ16					ER25Φ14					
	Φ12					ER25Φ15					
	Φ10					ER25Φ16					
	Φ8										
DRILL SOCKET	M.T. No.2			—	CHUCK COLLET (WITH THROUGH COOLANT)	AR25Φ6					
	M.T. No.1	1	1	—		AR25Φ6.5					
U DRILL SOCKET	Φ25			—		AR25Φ7					
	Φ20			—		AR25Φ7.5					
H-TYPE QUICK-CHANGE MILLING HOLDER (WITH Φ16 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	2	2	—		AR25Φ8					
H-TYPE QUICK-CHANGE MILLING HOLDER (WITH Φ16 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITH THROUGH COOLANT			—		AR25Φ8.5					
H-TYPE BACK MILLING HOLDER (WITH Φ16 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	—	—			AR25Φ9					
H-TYPE BACK MILLING HOLDER (WITH Φ16 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITH THROUGH COOLANT	—	—			AR25Φ9.5					
V-TYPE QUICK-CHANGE MILLING HOLDER (WITH Φ16 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	1	1	—		AR25Φ10					
V-TYPE QUICK-CHANGE MILLING HOLDER (WITH Φ16 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITH THROUGH COOLANT			—		AR25Φ10.5					
V-TYPE OFFSET QUICK-CHANGE MILLING HOLDER (WITH Φ16 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT			—		AR25Φ11					
V-TYPE OFFSET QUICK-CHANGE MILLING HOLDER (WITH Φ16 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITH THROUGH COOLANT			—		AR25Φ11.5					
POLYGON MILLING HOLDER	3 teeth			—		AR25Φ12					
H-TYPE TAPPER				—		AR25Φ12.5					
	WITH STROKE LIMITTER			—		AR25Φ13					
H-TYPE BACK TAPPER	M4~M8	—	—			AR25Φ13.5					
V-TYPE TAPPER : STRAIGHT				—		AR25Φ14					
	WITH STROKE LIMITTER			—		AR25Φ14.5					
V-TYPE TAPPER : OFFSET				—		AR25Φ15					
	WITH STROKE LIMITTER			—		AR25Φ15.5					
RUBBER COLLET	M4~M10 (J420)			—		AR25Φ16					
	M10~M12 (J422)			—							
OPEN ENDED SPANNER	SP-27										
	27 × 30	1	1	1							
HOOK WRENCH FOR MILLING TOOL EXCHANGE		—	—								
SPANNER WRENCH	ER25	1	1	—							
ONE HAND WRENCH		1	1								



H-TYPE QUICK-CHANGE MILLING HOLDER
(WITH Φ16 CHUCK COLLET)
6000min⁻¹ (rpm)



ONE HAND WRENCH



OPEN ENDED SPANER FOR
TAPPER



CAP



SPANNER WRENCH

QUICK TURN 200, 250 12 position drum bolt-on turret

QUICK TURN 200MA, 250MA, 200MY, 250MY, 200MSY, 250MSY Bolt-on turret

QUICK TURN 200MB, 250MB, 200MY, 250MY, 200MSY, 250MSY 12 position VDI turret

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■ Standard and Optional Tooling

Number : Standard QTY. No number : Option - : N/A Unit : mm

QUICK TURN 300, 350 12 position drum bolt-on turret

300, 350		300, 350		300, 350	
TURNING HOLDER	2	BORING BAR SOCKET	Φ32	1	DRILL SOCKET
FACING HOLDER	1		Φ25		M.T. No.4
BORING BAR HOLDER	Φ50 3		Φ20		M.T. No.3
U DRILL HOLDER	Φ40		Φ16		M.T. No.2
BORING BAR SOCKET	Φ40 1		Φ15		U DRILL SOCKET
	Φ35		Φ12		Φ32
					Φ25
					Φ20
					TURNING BLOCK
					5

300MA, 350MA, 300MY, 350MY Bolt-on turret

		300・350MA 12 position	300・350MY 12 position	300・350MY 16 position	300・350MA, MY 12 position, 16 position	
CAP PLATE		1	1	5	CHUCK COLLET	ER40Φ4
TURNING HOLDER		4	4	4	(WITHOUT THROUGH COOLANT)	ER40Φ5
FACING HOLDER		1	1	1		ER40Φ6
BORING BAR HOLDER	Φ50	2	2	2		ER40Φ7
U DRILL HOLDER	Φ40	1	1	1		ER40Φ8
CUT-OFF HOLDER						ER40Φ9
BORING BAR SOCKET	Φ40	1	1	1		ER40Φ10
	Φ35					ER40Φ11
	Φ32	1	1	1		ER40Φ12
	Φ25					ER40Φ13
	Φ20					ER40Φ14
	Φ16					ER40Φ15
	Φ15					ER40Φ16
	Φ12					ER40Φ17
DRILL SOCKET	M.T. No.4	1	1	1		ER40Φ18
	M.T. No.3					ER40Φ19
	M.T. No.2					ER40Φ20
U DRILL SOCKET	Φ32					ER40Φ21
	Φ25					ER40Φ22
	Φ20					ER40Φ23
						ER40Φ24
						ER40Φ25
H-TYPE QUICK-CHANGE MILLING HOLDER (WITH Φ25 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	2	2	2	CHUCK COLLET	AR40Φ10
	WITH THROUGH COOLANT				(WITH THROUGH COOLANT)	AR40Φ10.5
H-TYPE QUICK-CHANGE MILLING HOLDER (WITH Φ25 CHUCK COLLECT) 10000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	2	2	2		AR40Φ11
	COOLANT					AR40Φ11.5
V-TYPE QUICK-CHANGE MILLING HOLDER (WITH Φ25 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	1				AR40Φ12
	WITH THROUGH COOLANT					AR40Φ12.5
V-TYPE QUICK-CHANGE MILLING HOLDER (WITH Φ25 CHUCK COLLECT)10000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	1				AR40Φ13
	COOLANT					AR40Φ13.5
V-TYPE OFFSET QUICK-CHANGE MILLING HOLDER (WITH Φ25 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	—	1	1		AR40Φ14
	WITH THROUGH COOLANT	—				AR40Φ14.5
V-TYPE OFFSET QUICK-CHANGE MILLING HOLDER (WITH Φ25 CHUCK COLLECT)10000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	—	1	1		AR40Φ15
	COOLANT	—				AR40Φ15.5
FACE MILL HOLDER 6000 min ⁻¹ (rpm)	Φ80					AR40Φ16
SPANNER WRENCH	ER32	1	1	1		AR40Φ16.5
ONE HAND WRENCH		1	1	1		AR40Φ17
						AR40Φ17.5
						AR40Φ18
						AR40Φ18.5
						AR40Φ19
						AR40Φ19.5
						AR40Φ20
						AR40Φ20.5
						AR40Φ21
						AR40Φ21.5
						AR40Φ22
						AR40Φ22.5
						AR40Φ23
						AR40Φ23.5
						AR40Φ24
						AR40Φ24.5
						AR40Φ25

QUICK TURN 300MB, 350MB, 300MY, 350MY 12 position VDI turret

		300-350 MB, MY	300-350 MB, MY	
CAP	PLUG	1	CHUCK COLLET	R40Φ4
TURNING HOLDER	FORWARD	3	(WITHOUT THROUGH COOLANT)	ER40Φ5
	REVERSE	1		ER40Φ6
FACING HOLDER	FORWARD	1		ER40Φ7
BORING BAR HOLDER	Φ50	2		ER40Φ8
U DRILL HOLDER	Φ40	1		ER40Φ9
CUT-OFF HOLDER	FORWARD			ER40Φ10
BORING BAR SOCKET	Φ40	1		ER40Φ11
	Φ35			ER40Φ12
	Φ32	1		ER40Φ13
	Φ25			ER40Φ14
	Φ20			ER40Φ15
	Φ16			ER40Φ16
	Φ15			ER40Φ17
	Φ12			ER40Φ18
DRILL SOCKET	M.T. No.4	1		ER40Φ19
	M.T. No.3			ER40Φ20
	M.T. No.2			ER40Φ21
UDRILL SOCKET	Φ32			ER40Φ22
	Φ25			ER40Φ23
	Φ20			ER40Φ24
				ER40Φ25
H-TYPE QUICK-CHANGE MILLING HOLDER (WITH Φ25 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	2	CHUCK COLLET	AR40Φ10
	WITH THROUGH COOLANT		(WITH THROUGH COOLANT)	AR40Φ10.5
V-TYPE QUICK-CHANGE MILLING HOLDER (WITH Φ25 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT			AR40Φ11
	WITH THROUGH COOLANT			AR40Φ11.5
V-TYPE OFFSET QUICK-CHANGE MILLING HOLDER (WITH Φ25 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	1		AR40Φ12
	WITH THROUGH COOLANT			AR40Φ12.5
H-TYPE TAPPER (WITH STROKE LIMITTER)	M4 ~ M12			AR40Φ13
	M14 ~ M20			AR40Φ13.5
V-TYPE OFFSET TAPPER (WITH STROKE LIMITTER)	M4 ~ M12			AR40Φ14
OPEN ENDED SPANNER	SP-27			AR40Φ14.5
	36			AR40Φ15
				AR40Φ15.5
				AR40Φ16
				AR40Φ16.5
V-TYPE OFFSET TOOL HOLDER (BT-40) 4000 min ⁻¹ (rpm)				AR40Φ17
H-TYPE TOOL HOLDER (BT-40) 4000 min ⁻¹ (rpm)				AR40Φ17.5
PULL BOLT	M16			AR40Φ18
MILLING CHUCK	Φ20			AR40Φ18.5
M.T. HOLDER	MILL Φ12 ~ Φ22			AR40Φ19
	DRILL Φ14.5 ~ Φ23			AR40Φ19.5
	MILL Φ6 ~ Φ14			AR40Φ20
	DRILL Φ2 ~ Φ14			AR40Φ20.5
SPECIAL LL CHUCK	DRILL Φ3 ~ Φ13			AR40Φ21
SPECIAL TAPPER	M4 ~ M12			AR40Φ21.5
	M14 ~ M16 H-TYPE ONLY			AR40Φ22
SIDE CUTTER ARBOR	Max. Φ100			AR40Φ22.5
	Max. Φ66			AR40Φ23
FACE MILL ARBOR (V-TYPE ONLY)	Max. Φ80			AR40Φ23.5
SPANNER WRENCH	ER40	1		AR40Φ24
ONE HAND WRENCH		1		AR40Φ24.5
STRAIGHT COLLET * ¹	MILL Φ16			AR40Φ25
	MILL Φ12			
	MILL Φ10			
	MILL Φ8			
	MILL Φ6			
M.T. SOCKET * ¹	No.2			
	No.1			
RUBBER COLLET	Φ3 ~ Φ7 (SJ-443) * ²			
	Φ7 ~ Φ13 (SJ-440) * ²			
	M14 ~ M20 (SJ-445) * ³			
	M4 ~ M10 (SJ-420) * ⁴			
	M10 ~ M12 (SJ-422) * ⁴			

*¹ Milling chuck only
*² Special LL chuck and special tapper only
*³ H-type tapper only
*⁴ H-type tapper and V-type offset tapper only

■ Standard and Optional Tooling

Number : Standard QTY. No number : Option - : N/A Unit : mm

QUICK TURN 400, 450 12 position drum bolt-on turret

	400, 450		400, 450
TURNING HOLDER		BORING BAR	Φ25 1
FACING HOLDER	1	SOCKET	Φ20
BORING BAR HOLDER	Φ50 3		Φ16
BORING BAR HOLDER (OFFSET)	Φ50		Φ12
U DRILL HOLDER	Φ50	DRILL SOCKET	M.T. No.4
BORING BAR SOCKET	Φ40 1		M.T. No.3
	Φ32 1		M.T. No.2

	400, 450
U DRILL SOCKET	Φ40
	Φ32
	Φ25
	Φ20
BORING BAR RING	Φ50 × 15 1
	Φ50 × 40 1
TURNING BLOCK	8

QUICK TURN 400M, 450M Bolt-on turret

		400M 450M 12 position	400M 450M 16 position
CAP PLATE		1	5
TURNING HOLDER	□32	4	4
	□25		
FACING HOLDER	□32	1	1
	□25		
BORING BAR HOLDER	Φ50	2	2
U DRILL HOLDER	Φ40	1	1
BORING BAR SOCKET	Φ40	1	1
	Φ35		
	Φ32	1	1
	Φ25		
	Φ20		
	Φ16		
	Φ15		
	Φ12		
DRILL SOCKET	M.T. No.4	1	1
	M.T. No.3		
	M.T. No.2		
UDRILL SOCKET	Φ32		
	Φ25		
	Φ20		
H-TYPE QUICK-CHANGE MILLING HOLDER (WITH Φ25 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	2	2
	WITH THROUGH COOLANT		
H-TYPE QUICK-CHANGE MILLING HOLDER (WITH Φ25 CHUCK COLLECT) 10000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	2	2
V-TYPE QUICK-CHANGE MILLING HOLDER (WITH Φ25 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT		
	WITH THROUGH COOLANT		
V-TYPE QUICK-CHANGE MILLING HOLDER (WITH Φ25 CHUCK COLLECT)10000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT		
V-TYPE OFFSET QUICK-CHANGE MILLING HOLDER (WITH Φ25 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	1	1
	WITH THROUGH COOLANT		
V-TYPE OFFSET QUICK-CHANGE MILLING HOLDER (WITH Φ25 CHUCK COLLECT) 10000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	1	1
FACE MILL HOLDER 6000 min ⁻¹ (rpm)	Φ80		
SPANNER WRENCH	ER40	1	1
ONE HAND WRENCH		1	1

		400M 450M 12 position	400M 450M 16 position
CHUCK COLLET (WITHOUT THROUGH COOLANT)	ER40Φ4		
	ER40Φ5		
	ER40Φ6		
	ER40Φ7		
	ER40Φ8		
	ER40Φ9		
	ER40Φ10		
	ER40Φ11		
	ER40Φ12		
	ER40Φ13		
	ER40Φ14		
	ER40Φ15		
	ER40Φ16		
	ER40Φ17		
	ER40Φ18		
	ER40Φ19		
	ER40Φ20		
	ER40Φ21		
	ER40Φ22		
	ER40Φ23		
	ER40Φ24		
	ER40Φ25		
CHUCK COLLET (WITH THROUGH COOLANT)	AR40Φ10		
	AR40Φ10.5		
	AR40Φ11		
	AR40Φ11.5		
	AR40Φ12		
	AR40Φ12.5		
	AR40Φ13		
	AR40Φ13.5		
	AR40Φ14		
	AR40Φ14.5		
	AR40Φ15		
	AR40Φ15.5		
	AR40Φ16		
	AR40Φ16.5		
	AR40Φ17		
	AR40Φ17.5		
	AR40Φ18		
	AR40Φ18.5		
	AR40Φ19		
	AR40Φ19.5		
	AR40Φ20		
	AR40Φ20.5		
	AR40Φ21		
	AR40Φ21.5		
	AR40Φ22		
	AR40Φ22.5		
	AR40Φ23		
	AR40Φ23.5		
	AR40Φ24		
	AR40Φ24.5		
	AR40Φ25		

QUICK TURN 400M, 450M 12 position VDI turret

		400M 450M
CAP	PLUG	1
TURNING HOLDER	FORWARD	3
	REVERSE	1
FACING HOLDER	FORWARD	1
BORING BAR HOLDER	Φ50	2
U DRILL HOLDER	Φ40	1
BORING BAR SOCKET	Φ40	1
	Φ35	
	Φ32	1
	Φ25	
	Φ20	
	Φ16	
	Φ15	
	Φ12	
DRILL SOCKET	M.T. No.4	1
	M.T. No.3	
	M.T. No.2	
UDRILL SOCKET	Φ32	
	Φ25	
	Φ20	
H-TYPE QUICK-CHANGE MILLING HOLDER (WITH Φ25 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	2
	WITH THROUGH COOLANT	
V-TYPE QUICK-CHANGE MILLING HOLDER (WITH Φ25 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	
	WITH THROUGH COOLANT	
V-TYPE OFFSET QUICK-CHANGE MILLING HOLDER (WITH Φ25 CHUCK COLLECT) 6000 min ⁻¹ (rpm)	WITHOUT THROUGH COOLANT	1
	WITH THROUGH COOLANT	
H-TYPE TAPPER (WITH STROKE LIMITTER)	M4 ~ M12	
	M14 ~ M20	
V-TYPE OFFSET TAPPER (WITH STROKE LIMITTER)	M4 ~ M12	
OPEN ENDED SPANNER	SP-27	
	36	
V-TYPE OFFSET TOOL HOLDER (BT-40) 4000 min ⁻¹ (rpm)		
H-TYPE TOOL HOLDER (BT-40) 4000 min ⁻¹ (rpm)		
PULL BOLT	M16	
MILLING CHUCK	Φ20	
M.T. HOLDER	MILLING Φ12 ~ Φ22	
	DRILL Φ14.5 ~ Φ23	
	MILLING Φ6 ~ Φ14	
	DRILL Φ2 ~ Φ14	
SPECIAL LL CHUCK	DRILLING Φ3 ~ Φ13	
SPECIAL TAPPER	M4 ~ M12	
	M14 ~ M16 H-TYPE ONLY	
SIDE CUTTER ARBOR	Max. Φ100	
	Max. Φ66	
FACE MILL ARBOR (V-TYPE ONLY)	Max. Φ80	
SPANNER WRENCH	ER40	1
ONE HAND WRENCH		1
STRAIGHT COLLET *1	MILLING Φ16	
	MILLING Φ12	
	MILLING Φ10	
	MILLING Φ8	
	MILLING Φ6	
M.T. SOCKET *1	No.2	
	No.1	
RUBBER COLLET	Φ3 ~ Φ7 (SJ-443) *2	
	Φ7 ~ Φ13 (SJ-440) *2	
	M14 ~ M20 (SJ-445) *3	
	M4 ~ M10 (SJ-420) *4	
	M10 ~ M12 (SJ-422) *4	

		400M 450M
CHUCK COLLET	ER40Φ4	
(WITHOUT THROUGH COOLANT)	ER40Φ5	
	ER40Φ6	
	ER40Φ7	
	ER40Φ8	
	ER40Φ9	
	ER40Φ10	
	ER40Φ11	
	ER40Φ12	
	ER40Φ13	
	ER40Φ14	
	ER40Φ15	
	ER40Φ16	
	ER40Φ17	
	ER40Φ18	
	ER40Φ19	
	ER40Φ20	
	ER40Φ21	
	ER40Φ22	
	ER40Φ23	
	ER40Φ24	
	ER40Φ25	
CHUCK COLLET (WITH THROUGH COOLANT)	AR40Φ10	
	AR40Φ10.5	
	AR40Φ11	
	AR40Φ11.5	
	AR40Φ12	
	AR40Φ12.5	
	AR40Φ13	
	AR40Φ13.5	
	AR40Φ14	
	AR40Φ14.5	
	AR40Φ15	
	AR40Φ15.5	
	AR40Φ16	
	AR40Φ16.5	
	AR40Φ17	
	AR40Φ17.5	
	AR40Φ18	
	AR40Φ18.5	
	AR40Φ19	
	AR40Φ19.5	
	AR40Φ20	
	AR40Φ20.5	
	AR40Φ21	
	AR40Φ21.5	
	AR40Φ22	
	AR40Φ22.5	
	AR40Φ23	
	AR40Φ23.5	
	AR40Φ24	
	AR40Φ24.5	
	AR40Φ25	

*1 Milling chuck only
*2 Special LL chuck and special taper only
*3 H-type taper only
*4 H-type taper and V-type offset taper only

■ Standard Machine Specifications

QUICK TURN 100MY, 100MS, 100MSY

		100MY	100MS	100MSY
Universal		300U		
Capacity	Max. swing	Φ550 mm		
	Max. machining diameter	Φ280 mm		
	Distance between chuck jaws top faces*1	—	455 mm	
	Max. machining length*1	340 mm	409 mm	
	Bar work capacity*2	Φ52 mm		
Travel	X-axis	187 mm		
	Y-axis	100 mm	—	100 mm
	Z-axis	440 mm	510 mm	
	W-axis	—	460 mm	
Spindle	Chuck size	6"		
	Spindle speed*1	6000 min ⁻¹ (rpm)		
	Number of spindle speed ranges	1-Stepless		
	Spindle nose	A2-5		
	Spindle bore	Φ61 mm		
Second spindle	Chuck size	—	5"	
	Spindle speed*1	—	6000 min ⁻¹ (rpm)	
	Number of spindle speed ranges	—	1-Stepless	
	Spindle nose	—	A2-5	
	Spindle bore	—	Φ52 mm	
Turret	Turret type	12 position drum turret (bolt-on / option : VDI)		
	Number of tools	12 tools (rotary tools are available at all positions)		
	Turning tool shank size	20 mm		
	Boring bar shank diameter	Φ32 mm		
	Turret indexing time	0.22 sec. / 1 step		
Rotary tool spindle	Spindle speed	5000 min ⁻¹ (rpm) [option : 10000 min ⁻¹ (rpm) for bolt-on turret]		
	Milling capacity (5000 min ⁻¹ (rpm))	Drill : Φ20 mm (VDI : Φ16 mm) Endmill : Φ20 mm (VDI : Φ16 mm) Tap : M20 × 2.5 (VDI : M16 × 2.0)		
Feedrate	Rapid traverse rate : X-axis	33 m/min		
	Rapid traverse rate : Y-axis	21 m/min	—	21 m/min
	Rapid traverse rate : Z-axis	33 m/min		
	Rapid traverse rate : C-axis	555 min ⁻¹ (rpm)		
	Rapid traverse rate : W-axis	—	30 m/min	
Tailstock	Tailstock stroke*3	375 mm	—	
	Tailstock center	MT No.4	—	
Motors	Spindle motor (40% ED / cont. rating)	15 kW (20 HP) / 11 kW (15 HP)		
	Rotary tool spindle motor (40% ED / cont. rating)	5.5 kW (7.5 HP) / 3.7 kW (5 HP)		
	Second spindle motor (25% ED / cont. rating)	—	11 kW (15 HP) / 7.5 kW (10 HP)	
Power requirement	Electrical power requirements (40% ED / cont. rating)	26.4 kVA / 20.7 kVA	26.2 kVA / 20.5 kVA	26.6 kVA / 20.9 kVA
	Air supply	0.5 MPa (5 kgf/cm ²), 320 L/min	0.5 MPa (5 kgf/cm ²), 330 L/min	
Coolant tank capacity	Tank capacity*4	130 L		
Machine size	Machine height	1930 mm	1800 mm	1930 mm
	Floor space requirement*5	2070 mm × 1600 mm	2315 mm × 1600 mm	2315 mm × 1600 mm
	Weight*6	4100 kg	4300 kg	4400 kg

*1 Depends on chuck specifications.
*2 When using through-hole chuck BR06A515+SR1453C.
*3 Depends on tailstock specifications.
*4 Chip pan specification.
*5 Operation panel not included.
*6 Chip pan specification. Coolant not included.

QUICK TURN 200, 200MA, 200MB, 200MY, 200MSY

		200	200MA	200MB	200MY	200MSY
Universal		500U / 1000U				
Capacity	Max. swing	Φ660 mm			Φ695 mm	
	Max. machining diameter	Φ350 mm	Φ360 mm	Φ380 mm		
	Max. machining length	541 mm / 1063 mm	535 mm / 1055 mm	541 mm / 1047 mm	555 mm / 1020 mm	—
	Distance between chuck jaws top faces*1	—				
	Bar work capacity*2	Φ65 mm				
Travel	X-axis	195 mm	225 mm	234 mm		
	Y-axis	—			100 mm (±50 mm)	
	Z-axis	560 mm / 1105 mm	605 mm / 1125 mm	625 mm / 1090 mm		625 mm
	W-axis	—				
Spindle	Chuck size	8"				
	Spindle speed*1	5000 min ⁻¹ (rpm)				
	Number of spindle speed ranges	1-Stepless				
	Spindle nose	A2-6				
	Spindle bore	Φ76 mm				
Second spindle	Chuck size	—				6"
	Spindle speed*1	—				6000 min ⁻¹ (rpm)
	Number of spindle speed ranges	—				1-Stepless
	Spindle nose	—				A2-5
	Spindle bore	—				Φ52 mm
Turret	Turret type	12 position drum turret (bolt-on)		12 position drum turret (VDI)	12 position drum turret (bolt-on / option : VDI)	
	Number of tools	12 tools				
	Turning tool shank size	25 mm				
	Boring bar shank diameter	Φ40 mm				
	Turret indexing time	0.25 sec. / 1 step				
Rotary tool spindle	Spindle speed	—	5000 min ⁻¹ (rpm)			
	Milling capacity (5000 min ⁻¹ (rpm))	—	Drill : Φ20 mm Endmill : Φ20 mm Tap : M20 × 2.5			
Feedrate	Rapid traverse rate : X-axis	30 m/min				
	Rapid traverse rate : Y-axis	—			21 m/min	
	Rapid traverse rate : Z-axis	33 m/min				
	Rapid traverse rate : C-axis	—	555 min ⁻¹ (rpm)			
	Rapid traverse rate : W-axis	—				30 m/min
Tailstock	Tailstock stroke*3	565 mm / 1075 mm		550 mm / 1075 mm		—
	Tailstock center	MT No.5				—
Motors	Spindle motor (40% ED / cont. rating)	15 kW (20 HP) / 11 kW (15 HP)				
	Rotary tool spindle motor (40% ED / cont. rating)	—	5.5 kW (7.5 HP) / 3.7 kW (5 HP)			
	Second spindle motor (25% ED / cont. rating)	—				11 kW (15 HP) / 7.5 kW (10 HP)
Power requirement	Electrical power requirements (40% ED / cont. rating)	26.6 kVA / 20.8 kVA	26.5 kVA / 20.8 kVA	26.7 kVA / 21.0 kVA	27.6 kVA / 21.9 kVA	28.0 kVA / 22.3 kVA
	Air supply	—	0.5 MPa (5 kgf/cm ²), 320 L/min			0.5 MPa (5 kgf/cm ²), 340 L/min
Coolant tank capacity	Tank capacity*4	180 L / 270 L				180L
Machine size	Machine height	1703 mm			1857 mm	
	Floor space requirement*5	2630 mm × 1680 mm / 3385 mm × 1720 mm			2760 mm × 1845 mm / 3550 mm × 1995 mm	
	Weight*6	4500 kg / 5500 kg	4700 kg / 5700 kg	5500 kg / 6200 kg		5600 kg

*1 Depends on chuck specifications.
*2 When using through-hole chuck BR08A615 + SR1566C.
*3 Depends on tailstock specifications.
*4 Chip pan specification.
*5 Operation panel not included.
*6 Chip pan specification. Coolant not included.

■ Standard Machine Specifications

QUICK TURN 250, 250MA, 250MB, 250MY, 250MSY

		250	250MA	250MB	250MY	250MSY
Universal		500U / 1000U				500U
Capacity	Max. swing	Φ660 mm			Φ695 mm	
	Max. machining diameter	Φ380 mm	Φ360 mm	Φ380 mm		
	Machining diameter	Φ255 mm			Φ276 mm	
	Max. machining length	510.5 mm / 1032.5 mm	504.5 mm / 1024.5 mm	512 mm / 1018 mm	526 mm / 991 mm	—
	Distance between chuck jaws top faces* ¹	—				539.5 mm
	Bar work capacity* ²	Φ80 mm				
Travel	X-axis	210 mm	225 mm	234 mm		
	Y-axis	—			100 mm (±50 mm)	
	Z-axis	560 mm / 1105 mm	605 mm / 1125 mm	625 mm / 1090 mm		625 mm
	W-axis	—				585 mm
Spindle	Chuck size	10"				
	Spindle speed* ¹	4000 min ⁻¹ (rpm)				
	Number of spindle speed ranges	1-Stepless				
	Spindle nose	A2-8				
	Spindle bore	Φ91 mm				
Second spindle	Chuck size	—				6"
	Spindle speed* ¹	—				6000 min ⁻¹ (rpm)
	Number of spindle speed ranges	—				1-Stepless
	Spindle nose	—				A2-5
	Spindle bore	—				Φ52 mm
Turret	Turret type	12 position drum turret (bolt-on)		12 position drum turret (VDI)	12 position drum turret (bolt-on / option : VDI)	
	Number of tools	12 tools				
	Turning tool shank size	25 mm				
	Boring bar shank diameter	Φ40 mm				
	Turret indexing time	0.25 sec. / 1 step				
	Rotary tool spindle	Spindle speed	—	5000 min ⁻¹ (rpm)		
Milling capacity (5000 min ⁻¹ (rpm))		—	Drill : Φ20 mm Endmill : Φ20 mm Tap : M20 × 2.5			
Feedrate	Rapid traverse rate : X-axis	30 m/min				
	Rapid traverse rate : Y-axis	—			21 m/min	
	Rapid traverse rate : Z-axis	33 m/min				
	Rapid traverse rate : C-axis	—	555 min ⁻¹ (rpm)			
	Rapid traverse rate : W-axis	—				30 m/min
Tailstock	Tailstock stroke* ³	565 mm / 1075 mm		550 mm / 1075 mm		—
	Tailstock center	MT No.5				—
Motors	Spindle motor (40% ED / cont. rating)	18.5 kW (25 HP) / 15 kW (20 HP)				
	Rotary tool spindle motor (40% ED / cont. rating)	—	5.5 kW (7.5 HP) / 3.7 kW (5 HP)			
	Second spindle motor (25% ED / cont. rating)	—				11 kW (15 HP) / 7.5 kW (10 HP)
Power requirement	Electrical power requirements (40% ED / cont. rating)	31.6 kVA / 26.6 kVA	31.6 kVA / 26.6 kVA	31.8 kVA / 26.8 kVA	32.7 kVA / 27.7 kVA	33.0 kVA / 28.1 kVA
	Air supply	0.5 MPa (5 kgf/cm ²), 30 L/min	0.5 MPa (5 kgf/cm ²), 330 L/min			0.5 MPa (5 kgf/cm ²), 350 L/min
Coolant tank capacity	Tank capacity* ⁴	180 L / 270 L				180 L
Machine size	Machine height	1703 mm			1857 mm	
	Floor space requirement* ⁵	2630 mm × 1680 mm / 3385 mm × 1720 mm			2760 mm × 1845 mm / 3550 mm × 1995 mm	
	Weight* ⁶	4800 kg / 5800 kg	5000 kg / 6000 kg	5800 kg / 6500 kg		5900 kg

*¹ Depends on chuck specifications.
*² When using through-hole chuck BR10A815F + SR1781C.
*³ Depends on tailstock specifications.
*⁴ Chip pan specification.
*⁵ Operation panel not included.
*⁶ Chip pan specification. Coolant not included.

QUICK TURN 300, 300MA, 300MB, 300MY

		300	300MA	300MB	300MY
Universal		650U / 1250U / 1500U	650U / 1250U		650U / 1250U / 1500U
Capacity	Max. swing	Φ720 mm		Φ830 mm	
	Max. machining diameter	Φ420 mm			Φ430 mm (OP.VDI : Φ420 mm)
	Machining diameter	Φ254 mm	Φ276 mm	Φ336 mm	Φ333 mm (OP.VDI : Φ336 mm)
	Max. machining length* ¹	662 mm / 1282 mm / 1597 mm	662 mm / 1282 mm	652 mm / 1247 mm	658 mm / 1253 mm / 1593 mm
	Bar work capacity* ²	Φ80 mm			
Travel	X-axis	240 mm	265 mm	270 mm	
	Y-axis	—			150 mm (±75 mm)
	Z-axis	710 mm / 1314 mm / 1645 mm	730 mm / 1350 mm	690 mm / 1285 mm	690 mm / 1285 mm / 1625 mm
Spindle	Chuck size	10"			
	Spindle speed* ¹	4000 min ⁻¹ (rpm)			
	Number of spindle speed ranges	1-Stepless			
	Spindle nose	A2-8			
	Spindle bore	Φ91 mm			
Turret	Turret type	12 position drum turret (bolt-on)		12 position drum turret (VDI)	12 position drum turret (bolt-on / option : VDI)
	Number of tools	12 tools			
	Turning tool shank size	25 mm			
	Boring bar shank diameter	Φ50 mm			
	Turret indexing time	0.23 sec. / 1 step	0.29 sec. / 1 step	0.26 sec. / 1 step	
Rotary tool spindle	Spindle speed	—	5000 min ⁻¹ (rpm)		
	Milling capacity	—	Drill : Φ25 mm Endmill : Φ25 mm Tap : M24 × 3.0		
Feedrate	Rapid traverse rate : X-axis	30 m/min			
	Rapid traverse rate : Y-axis	33 m/min			
	Rapid traverse rate : Z-axis	—			15 m/min
	Rapid traverse rate : C-axis	—	555 min ⁻¹ (rpm)		
Tailstock	Tailstock stroke* ³	645 mm / 1265 mm / 1580 mm	645 mm / 1265 mm	645 mm / 1240 mm	645 mm / 1240 mm / 1580 mm
	Tailstock center	MT No.5 (dead type) (option : built in MT No.5) built-in standard on 1500U			
Motors	Spindle motor (40% ED / cont. rating)	26 kW (35 HP) / 22 kW (30 HP)			
	Rotary tool spindle motor (40% ED / cont. rating)	—	7.5 kW (10 HP) / 5.5 kW (7.5 HP)		
	Motor for coolant	0.52 kW			
Power requirement	Electrical power requirements (40% ED / cont. rating)	43.2 kVA / 37.7 kVA	43.5 kVA / 37.9 kVA		45.0 kVA / 39.4 kVA
	Air supply	0.5 MPa (5 kgf/cm ²), 40 L/min	0.5 MPa (5 kgf/cm ²), 330 L/min		
Coolant tank capacity	Tank capacity* ⁴	225 L / 320 L / 340 L	225 L / 320 L	225 L / 270 L	225 L / 270 L / 290 L
Machine size	Machine height	1900 mm		2175 mm	
	Floor space requirement* ⁵	3050 mm × 1910 mm / 3770 mm × 1910 mm / 4500 mm × 1910 mm	3050 mm × 1910 mm / 3770 mm × 1910 mm	3355 mm × 2100 mm / 3915 mm × 2100 mm	3355 mm × 2100 mm / 3915 mm × 2100 mm / 4270 mm × 2100 mm
	Weight* ⁶	5800 kg / 6600 kg / 7000 kg	6100 kg / 6900 kg	8800 kg / 9450 kg	8800 kg / 9450 kg / 8800 kg

*¹ Depends on chuck specifications.
*² When using through-hole chuck BR10A815F + SR1781C.
*³ Depends on tailstock specifications.
*⁴ Chip pan specification.
*⁵ Operation panel not included.
*⁶ Chip pan specification. Coolant not included.

■ Standard Machine Specifications

QUICK TURN 350, 350MA, 350MB, 350MY

		350	350MA	350MB	350MY
Universal		650U / 1250U / 1500U	650U / 1250U		650U / 1250U / 1500U
Capacity	Max. swing	Φ720 mm		Φ830 mm	
	Max. machining diameter	Φ420 mm			Φ430 mm (OP.VDI : Φ420 mm)
	Machining diameter	Φ254 mm	Φ276 mm	Φ336 mm	Φ333 mm (OP.VDI : Φ336 mm)
	Max. machining length*1	614 mm / 1234 mm / 1549 mm	614 mm / 1234 mm	604 mm / 1199 mm	610 mm / 1205 mm / 1545 mm
	Bar work capacity*2	Φ102 mm			
Travel	X-axis	240 mm	265 mm	270 mm	
	Y-axis	—			150 mm (±75 mm)
	Z-axis	710 mm / 1314 mm / 1645 mm	730 mm / 1350 mm	690 mm / 1285 mm	690 mm / 1285 mm / 1625 mm
Spindle	Chuck size	12"			
	Spindle speed*1	3300 min ⁻¹ (rpm)			
	Number of spindle speed ranges	1-Stepless			
	Spindle nose	A2-11			
	Spindle bore	Φ112 mm			
Turret	Turret type	12 position drum turret (bolt-on)		12 position drum turret (VDI)	12 position drum turret (bolt-on / option : VDI)
	Number of tools	12 tools			
	Turning tool shank size	25 mm			
	Boring bar shank diameter	Φ50 mm			
	Turret indexing time	0.23 sec. / 1 step	0.29 sec. / 1 step	0.26 sec. / 1 step	
Rotary tool spindle	Spindle speed	—	5000 min ⁻¹ (rpm) Drill : Φ25 mm Endmill : Φ25 mm Tap : M24 × 3.0		
	Milling capacity	—			
Feedrate	Rapid traverse rate : X-axis	30 m/min			
	Rapid traverse rate : Y-axis	33 m/min			
	Rapid traverse rate : Z-axis	—			15 m/min
	Rapid traverse rate : C-axis	—		555 min ⁻¹ (rpm)	
Tailstock	Tailstock stroke*3	645 mm / 1265 mm / 1580 mm		645 mm / 1240 mm	645 mm / 1240 mm / 1580 mm
	Tailstock center	MT No.5 (dead type) (option : built in MT No.5) built-in standard on 1500U			
Motors	Spindle motor (40% ED / cont. rating)	30 kW (40 HP) / 22 kW (30 HP)			
	Rotary tool spindle motor (40% ED / cont. rating)	—	7.5 kW (10 HP) / 5.5 kW (7.5 HP)		
	Motor for coolant	0.52 kW			
Power requirement	Electrical power requirements (40% ED / cont. rating)	49.0 kVA / 37.8 kVA	49.3 kVA / 38.1 kVA		50.8 kVA / 39.6 kVA
	Air supply	0.5 MPa (5 kgf/cm ²), 40 L/min	0.5 MPa (5 kgf/cm ²), 330 L/min		
Coolant tank capacity	Tank capacity*4	225 L / 320 L / 340 L	225 L / 320 L	225 L / 270 L	225 L / 270 L / 290 L
Machine size	Machine height	1900 mm		2175 mm	
	Floor space requirement*5	3050 mm × 1910 mm / 3770 mm × 1910 mm / 4500 mm × 1910 mm	3050 mm × 1910 mm / 3770 mm × 1910 mm	3355 mm × 2100 mm / 3915 mm × 2100 mm / 4270 mm × 2100 mm	
	Weight*6	6100 kg / 6900 kg / 7300 kg	6400 kg / 7200 kg	9000 kg / 9650 kg	9000 kg / 9650 kg / 8900 kg

*1 Depends on chuck specifications.
*2 When using through-hole chuck BR12A115B + SS2110C-15Y.
*3 Depends on tailstock specifications.
*4 Chip pan specification.
*5 Operation panel not included.
*6 Chip pan specification. Coolant not included.

QUICK TURN 400, 400M, 450, 450M

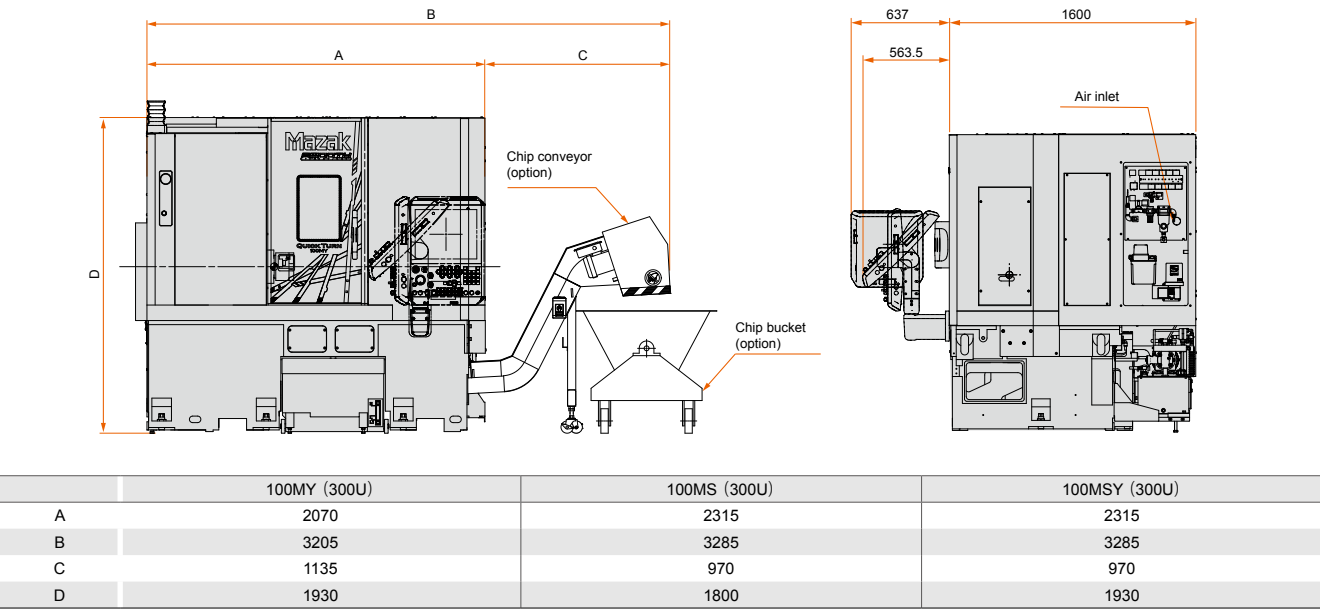
	400	400M	450	450M
Universal	1000U / 2000U			
Capacity	Max. swing	Φ845 mm		
	Max. machining diameter	Φ580 mm		
	Machining diameter	Φ316 mm	Φ336 mm (OP.16 position drum turret : Φ240 mm)	Φ316 mm
	Max. machining length*1	1024 mm / 2074 mm	996.5 mm / 2080.5 mm	—
	Bar work capacity*2	Φ103 mm		Φ165 mm (Φ184 mm with optional Φ185 mm spindle bore)
Travel	X-axis	320 mm	350 mm	320 mm
	Z-axis	1070 mm / 2120 mm		
Spindle	Chuck size	12"		18", 21" (option)
	Spindle speed*3	2500 min ⁻¹ (rpm)		2000 min ⁻¹ (rpm)
	Number of spindle speed ranges	1-Stepless		
	Spindle nose	A2-11		A2-15
	Spindle bore	Φ132 mm		Φ166 mm (option : Φ185 mm)
Turret	Turret type	12 position drum turret (bolt-on)	12 position drum turret (bolt-on / option : VDI)	12 position drum turret (bolt-on)
				12 position drum turret (bolt-on / option : VDI)
	Number of tools	12 tools		
	Turning tool shank size	32 mm		
	Boring bar shank diameter	Φ50 mm		
	Turret indexing time	0.26 sec. / 1 step		
Rotary tool spindle	Spindle speed	—	5000 min ⁻¹ (rpm)	—
	Milling capacity	—	Drill : Φ25 mm Endmill : Φ25 mm Tap : M24 × 3.0	Drill : Φ25 mm Endmill : Φ25 mm Tap : M24 × 3.0
Feedrate	Rapid traverse rate : X-axis	30 m/min		
	Rapid traverse rate : Z-axis	30 m/min		
	Rapid traverse rate : C-axis	—	400 min ⁻¹ (rpm)	—
Tailstock	Tailstock stroke*4	1025 mm / 2075 mm		
	Tailstock center	MT No.5 (built-in)		
Motors	Spindle motor (40% ED / cont. rating)	37 kW (50 HP) / 30 kW (40 HP)		
	Rotary tool spindle motor (40% ED / cont. rating)	—	7.5 kW (10 HP) / 5.5 kW (7.5 HP)	—
	Motor for coolant	0.52 kW + 1.21 kW		
Power requirement	Electrical power requirements (40% ED / cont. rating)	64.2 kVA / 54.2 kVA		
	Air supply	0.5 MPa (5 kgf/cm ²), 40 L/min	0.5 MPa (5 kgf/cm ²), 330 L/min	0.5 MPa (5 kgf/cm ²), 40 L/min
Coolant tank capacity	Tank capacity*5	320 L / 450 L		
Machine size	Machine height	2040 mm		
	Floor space requirement*6	3820 mm × 2313 mm / 4930 mm × 2313 mm		
	Weight*7	9900 kg / 11700 kg	10350 kg / 12150kg	9900 kg / 11700 kg
				10350 kg / 12150 kg

*1 Depends on chuck and turret specifications.
*2 QUICK TURN 400 : when using through-hole chuck BR12A115E + SS2110C15Y.
QUICK TURN 450 : without chuck and cylinder
*3 Depends on chuck specifications.
*4 Depends on tailstock specifications.
*5 Chip pan specification.
*6 Operation panel and chip conveyor not included. Depends on chuck specifications.
*7 Chip pan specification. Coolant not included.

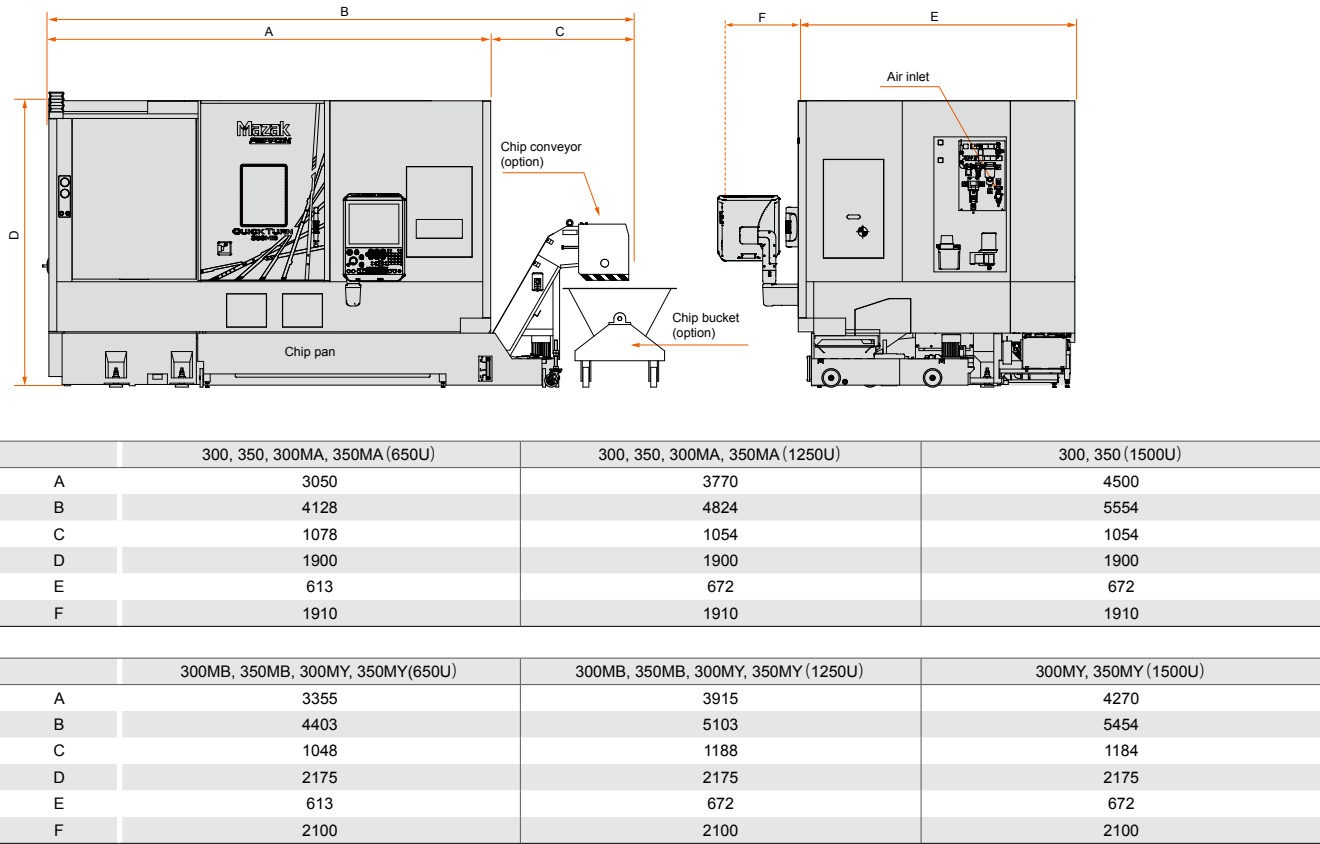
Standard Machine Specifications

Unit : mm

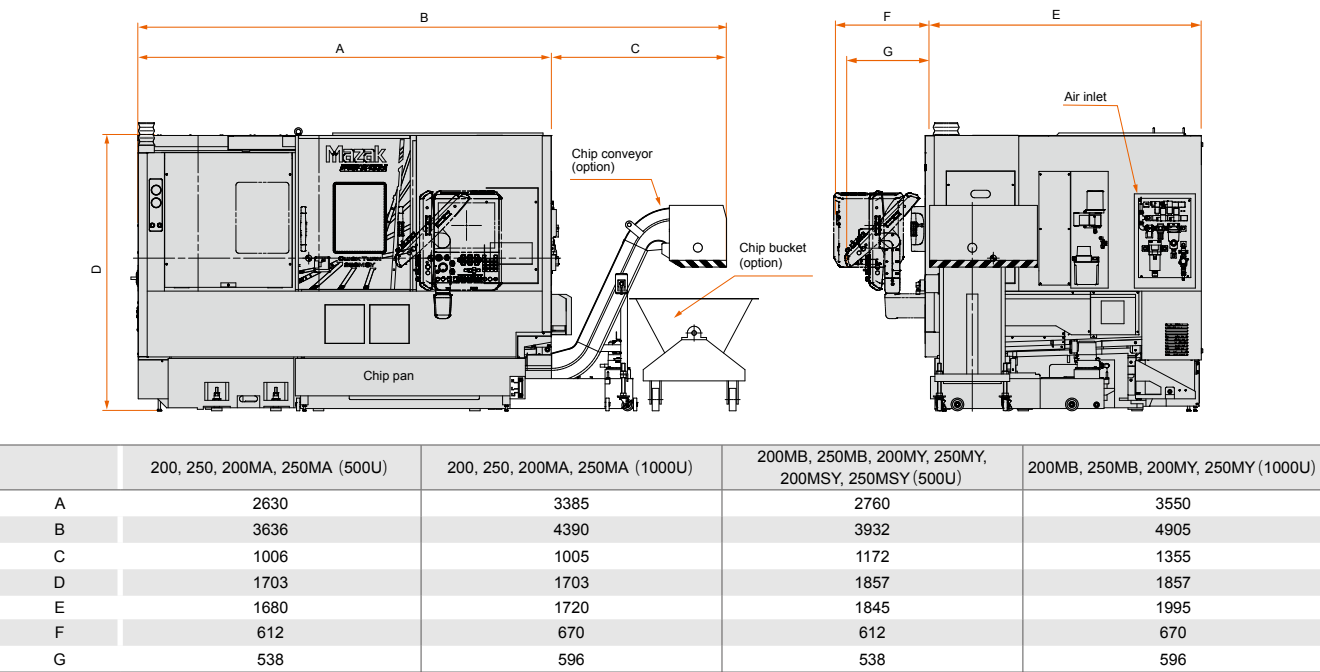
QUICK TURN 100MY, 100MS, 100MSY



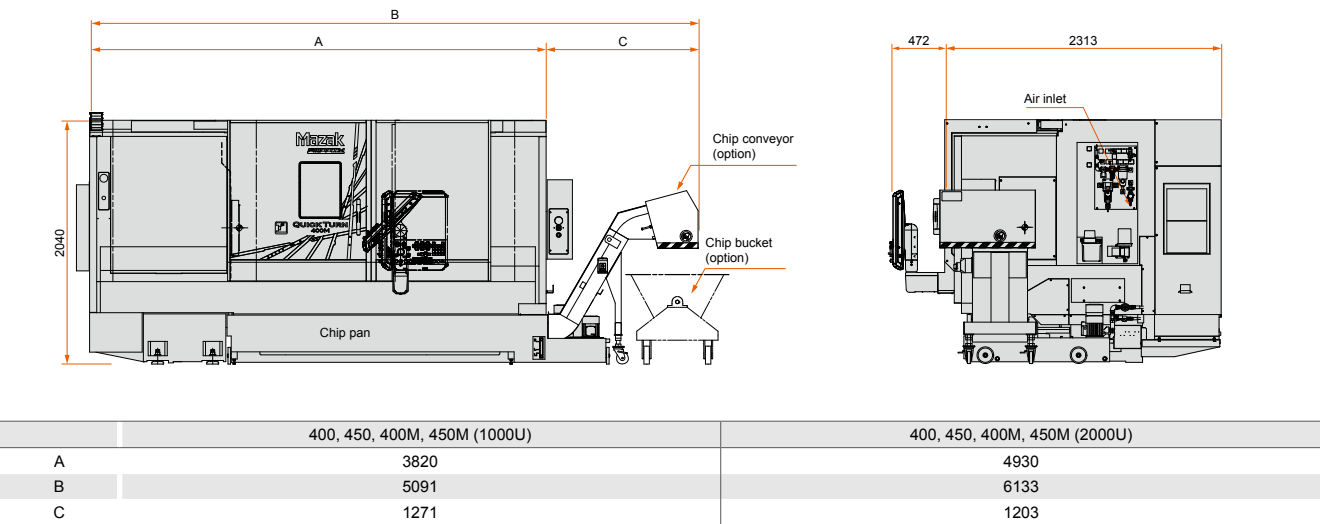
QUICK TURN 300, 350, 300MA, 350MA, 300MB, 350MB, 300MY, 350MY



QUICK TURN 200, 250, 200MA, 250MA, 200MB, 250MB, 200MY, 250MY, 200MSY, 250MSY



QUICK TURN 400, 450, 400M, 450M



MAZATROL SmoothG Specifications

	MAZATROL	EIA
Number of controlled axes	Simultaneous 2 ~ 4 axes	
Least input increment	0.0001 mm, 0.00001 inch, 0.0001 deg	
High speed, high precision control	Shape compensation, Smooth corner control, Rapid traverse overlap	
Interpolation	Positioning (interpolation), Positioning (non-interpolation), Linear interpolation, Circular interpolation, Cylindrical interpolation, Polar coordinate interpolation, Constant lead threading, Re-threading*, Thread start point compensation*, Thread cut-speed override*, Synchronous tapping*	Positioning (interpolation), Positioning (non-interpolation), Linear interpolation, Circular interpolation, Spiral interpolation, Helical interpolation, Constant lead threading, Variable lead threading, Threading (C-axis interpolation type), Cylindrical interpolation*, NURBS interpolation*, Polar coordinate interpolation*, Re-threading*, Thread start point compensation*, Thread cut-speed override*, Synchronous tapping*
Feedrate	Rapid traverse, Cutting feed, Cutting feed (per minute), Cutting feed (per revolution), Dwell (time / rotation), Rapid traverse override, Cutting feed override, G0 speed variable control, Feedrate limitation, Variable acceleration control, G0 slope constant*	Rapid traverse, Cutting feed, Cutting feed (per minute), Cutting feed (per revolution), Inverse time feed, Dwell (time / rotation), Rapid traverse override, Cutting feed override, G0 speed variable control, Feedrate limitation, Time constant changing for G1, Variable acceleration control, G0 slope constant*
Program registration	Number of programs : 256 (Standard) / 960 (Max.), Program memory : 2 MB, Program memory expansion : 8 MB*, Program memory expansion : 32 MB*	
Control display	Display : 19" touch panel , Resolution : SXGA	
Spindle functions	S code output, Spindle speed limitation, Spindle speed override, Spindle speed reaching detection, Multiple position orient, Constant surface speed, Spindle speed command with decimal digits, Synchronized spindle control, Spindle speed range setting	
Tool functions	Number of tool offset : 4000, T code output for tool number, Tool life monitoring (time), Tool life monitoring (number of machined workpieces), Tool life monitoring (wear)	Number of tool offset : 4000, T code output for tool number, T code output for group number, Tool life monitoring (time), Tool life monitoring (number of machined workpieces), Tool life monitoring (wear)
Miscellaneous functions	M code output, Simultaneous output of multiple M codes	
Tool offset functions	Tool position offset, Tool length offset, Tool diameter / tool nose R offset, Tool nose shape offset, Tool wear offset, Fixed amount offset, Simple wear offset	Tool position offset, Tool length offset, Tool diameter / tool nose R offset, Tool wear offset, Fixed amount offset, Simple wear offset
Coordinate system	Machine coordinate system, Work coordinate system, Local coordinate system, MAZATROL coordinate system, Additional work coordinates (300 sets)	
Machine functions	—	Polygonal machining*, Hobbing*
Machine compensation	Backlash compensation, Pitch error compensation, Ai Thermal shield	
Protection functions	Emergency stop, Interlock, Pre-move stroke check, Barrier, SAFETY SHIELD (manual mode), SAFETY SHIELD (automatic mode)*, VOICE ADVISER	
Automatic operation mode	Memory operation	Memory operation, Tape operation, MDI operation, EtherNet operation*
Automatic operation control	Optional stop, Dry run, Manual handle interruption, MDI interruption, TPS, Restart, Single process, Machine lock	Optional block skip, Optional stop, Dry run, Manual handle interruption, MDI interruption, TPS, Restart, Restart 2, Collation stop, Machine lock
Manual measuring functions	Tool-setting data teach, Tool length teach, Touch sensor coordinates measurement, Workpiece offset measurement, Tool eye measurement	Tool-setting data teach, Tool length teach, Tool offset teach, Touch sensor coordinates measurement, Workpiece offset measurement, Tool eye measurement
Automatic measuring functions	Workpiece measurement, Sensor calibration, Tool eye auto tool measurement, Tool breakage detection	
Peripheral network	PROFIBUS-DP *, EtherNet/IP*, CC-Link*, CC-Link IE Field Basic	
Interface	SD card interface, USB	
EtherNet	10 M / 100 M / 1 Gbps	
Security function	Security software*	

* Option

Environmentally Friendly

Designed with environmental considerations

Mazak Go GREEN

The environment and our impact on natural surroundings have always been important concerns of Yamazaki Mazak. This is shown by the fact that all factories in Japan where Mazak machine tools are produced are ISO 14001 certified, an international standard confirming that the operation of our production facilities does not adversely affect air, water or land.

Automatic-off LED worklight and CNC screen is standard equipment for the QUICK TURN 200, 250 series. The chip conveyor automatically stops operation 5 minutes after cycle completion for reduced electrical power consumption.

High efficiency lubrication system delivers the optimum amount of grease to the linear roller guides and ball screws with lower lubricant consumption. The grease lubrication system eliminates tramp oil for extended service life of coolant.

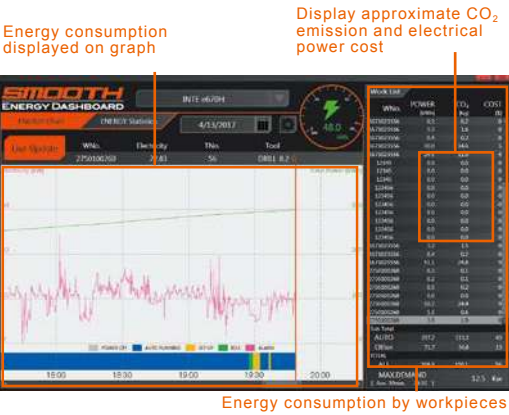


QUICK TURN 250MSY

Energy Dashboard

OPTION

The Energy Dashboard provides a convenient visual monitoring of energy consumption and analysis.



Process screen display

- Total energy consumption (of workpiece in operation)
- Current energy consumption

