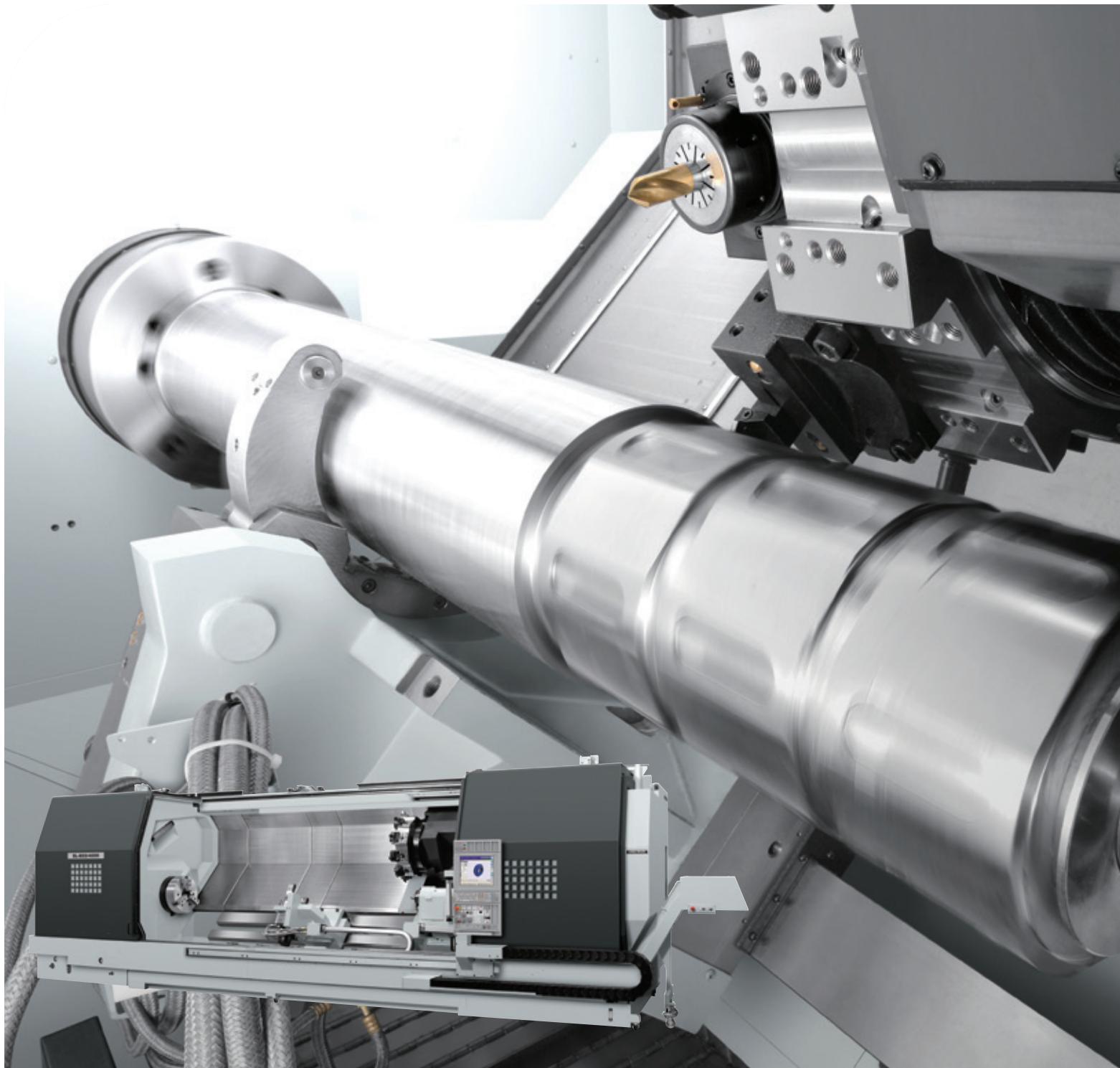


Turning Center

SL-603

SL-603



SL-603

T U R N I N G C E N T E R

A machine that maximizes
and stabilizes speed and
high precision.



SL-603C/1000

C O N T E N T S

- 4 Spindle/Turret, Feed
- 5 Superior rigidity/Cutting test
- 6-7 Ideal for shaft workpieces
- 8-9 Peripheral equipment
- 10 MAPPS IV
- 11-12 Spindle speed torque/output diagrams
- 13-15 Tooling system
- 16 Standard & optional features
- 17 Numerical control unit specifications
- 18-21 Machine specifications

- The photo shows the machine equipped with options.
- Actual nameplate may differ from the photo.

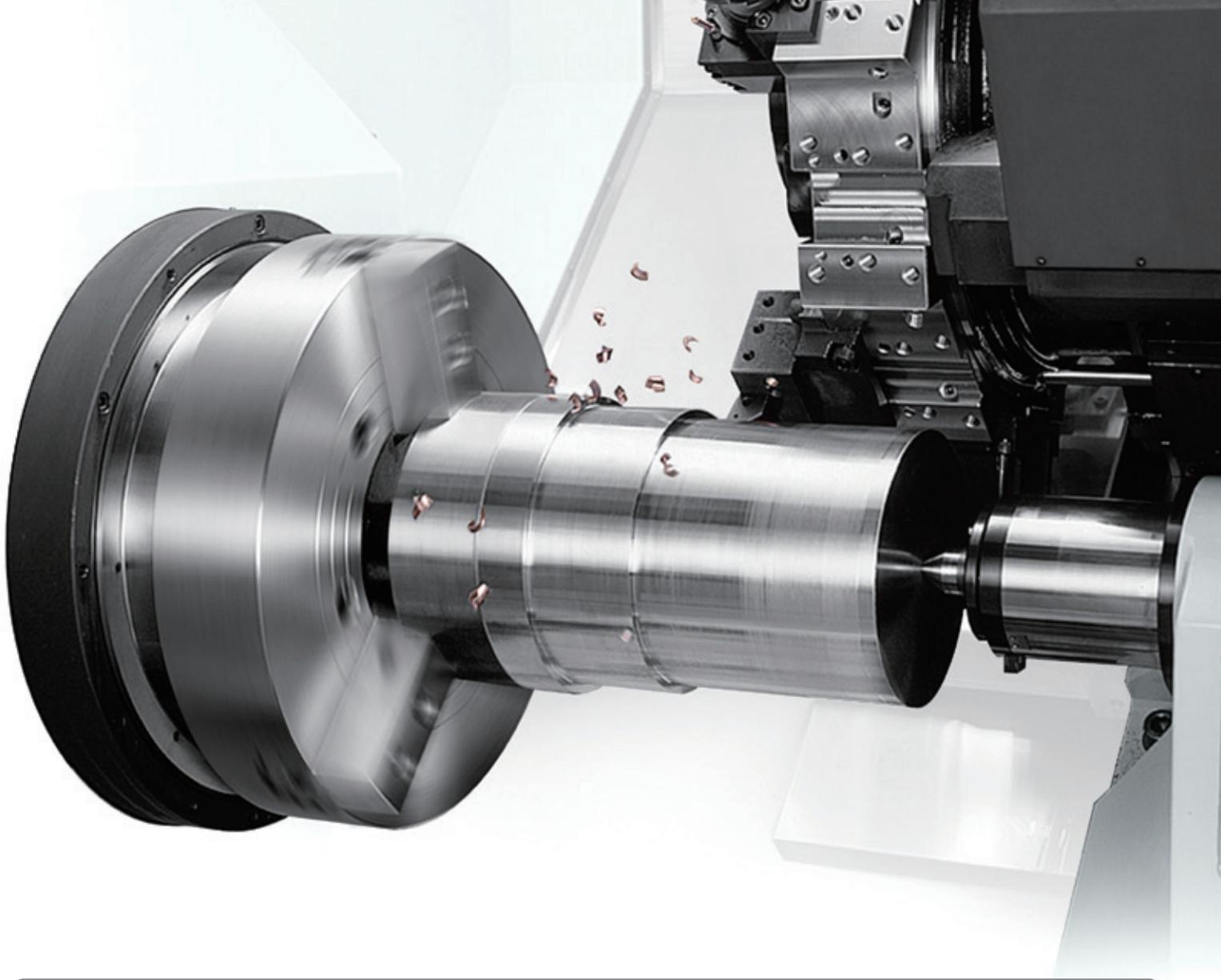
Machine variations

○: Applicable
-: Not applicable

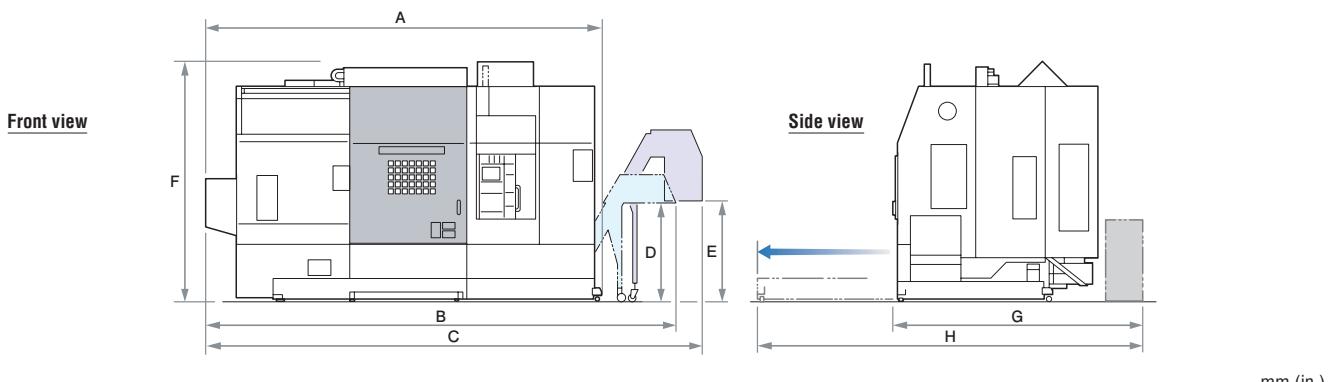
Distance between centers		1000 type		3000 type		4000 type	
Turret		Standard	Milling	Standard	Milling	Standard	Milling
Through-spindle hole diameter	B-type <185 mm (7.3 in.)>	○	○	○	○	○	○
	C-type <275 mm (10.8 in.)>	○	○	○	○	○	○
	D-type <375 mm (14.8 in.)>	○	-	○	-	○	-

MAPPS: Mori Advanced Programming Production System

● Figures in inches were converted from metric measurements.



Machine size

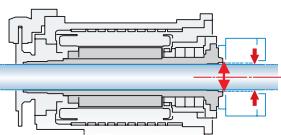


Distance between centers	Type	Width			Chip conveyor disposal height		Depth		Height	
		Machine only	Including chip conveyor		Standard	EN Standards	Including oil chiller	Including space to remove coolant tank		
			Standard	EN Standards						
1000 type	SL-603B, SL-603C	4,983 (196.2)	5,873 (231.2)	6,211 (244.5)	1,214 (47.8)	1,234 (48.6)	3,091 (121.7)	4,899 (192.9)	2,911 (114.6)	
	SL-603BMC, SL-603CMC						3,366 (132.5)	5,174 (203.7)	2,943 (115.9)	
	SL-603D								2,911 (114.6)	
3000 type	SL-603B, SL-603C	—	8,231 (324.1) <chip conveyors are standard>	8,501 (334.7)	1,214 (47.8)	1,119 (44.1)	3,451 (135.9)	5,198 (204.6)	2,911 (114.6)	
	SL-603BMC, SL-603CMC						3,726 (146.7)	5,473 (215.5)	2,943 (115.9)	
	SL-603D								2,911 (114.6)	
4000 type	SL-603B, SL-603C	—	9,515 (374.6) <chip conveyors are standard>	9,852 (387.9)	1,229 (48.4)	1,251 (49.3)	3,665 (144.3)	6,046 (238.0)	2,911 (114.6)	
	SL-603BMC, SL-603CMC						3,940 (155.1)	6,321 (248.9)	2,943 (115.9)	
	SL-603D								2,911 (114.6)	

Q50100E11/Q50123E10/Q50687A09/Q50703A06
EN: European Norm (European Standards)

Spindle

■ Through-spindle hole diameter



B-type 185 mm (7.3 in.)

C-type 275 mm (10.8 in.)

D-type 375 mm (14.8 in.)



■ SL-603 variations

Spindle type	B-type <B, BMC>	C-type <C, CMC>	D-type <D>	
Spindle drive motor	37/30 kW (50/40 HP) <30 min/cont>	45/37 kW (60/50 HP) <30 min/cont>	37/30 kW (50/40 HP) <30 min/cont>	45/37 kW (60/50 HP) <30 min/cont>
Spindle speed	1,500 min ⁻¹ ●	○	—	—
1,000 min ⁻¹	○	○	○	—
700 min ⁻¹	—	—	●	—
500 min ⁻¹	—	—	—	●

●: Standard ○: Option —: Not applicable

Turret, Feed

■ Turret indexing time

0.4 sec.
(1-station)

■ Rapid traverse rate

X-axis: **20 m/min (787.4 ipm)**
Z-axis: **20 m/min (787.4 ipm)**
C-axis: **25 min⁻¹ <BMC, CMC>**

The turret employs DMG MORI's own nonstop random indexing system driven by a servo motor.

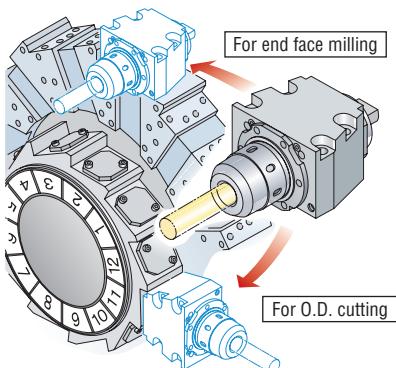


Milling specifications



Once-only chucking lets you turn, mill, drill, or tap.

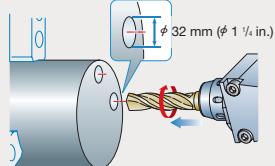
■ Rotary-tool holders



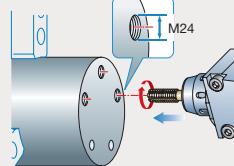
Rotary-tool holders can be mounted in all stations and used for O.D. cutting or end face milling.

Acceptable rotary tool size

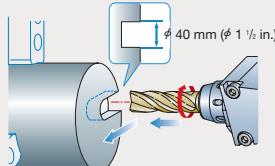
Drill Max. ϕ 32 mm (ϕ 1 1/4 in.)
<morse tapers up to MT4 can be mounted>



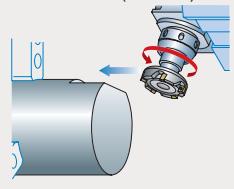
Tap Max. M24



End mill Max. ϕ 40 mm (ϕ 1 1/2 in.)
<max. shank diameter: 32 mm (1 1/4 in.)>



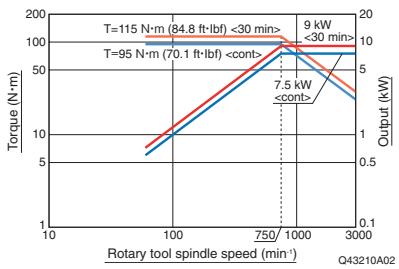
Face mill Max. ϕ 100 mm (ϕ 3.9 in.)



■ Rotary tool spindle speed-torque/output diagram

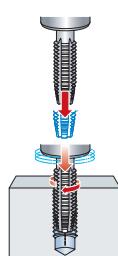
Rotary tool spindle drive motor: 9/7.5 kW (12/10 HP)
<30 min/cont>

Max. rotary tool spindle speed: 3,000 min⁻¹



■ Synchronized tapping function (standard)

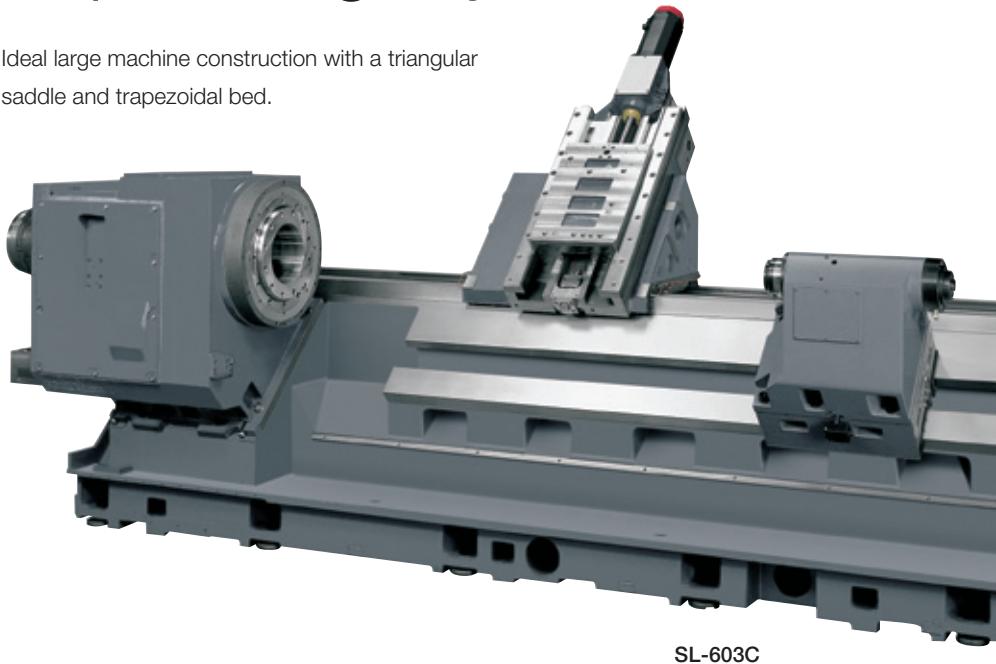
Rotating speed of the rotary tool spindle is synchronized with X and Z axes feed.



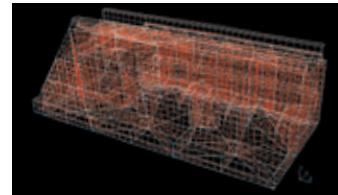
- Max. speed of rotary tool spindle is 3,000 min⁻¹.
- Max. pressure for oil-hole tool holder is 0.7 MPa (101.5 psi).
- The oil-hole tool holder requires coolant spraying.

Superior rigidity

Ideal large machine construction with a triangular saddle and trapezoidal bed.

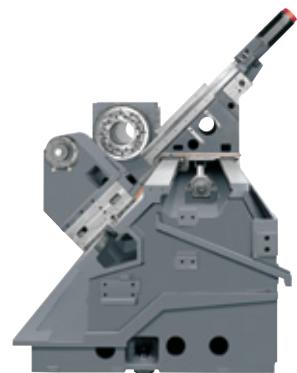


SL-603C



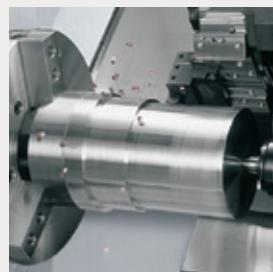
Maximum machine rigidity achieved in the basic design by using FEM.

FEM: Finite Element Method

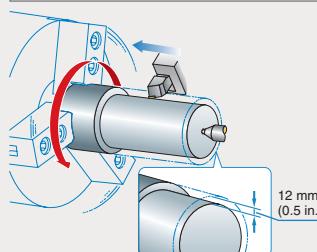


Cutting test

■ Turning performance (material <JIS>: S45C*)

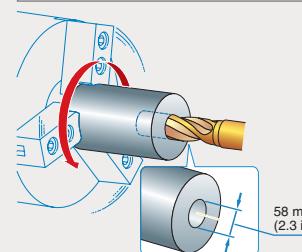


Heavy-duty cutting (O.D.) <32 mm×32 mm (1 1/4 in.×1 1/4 in.) qualified tool>



Spindle speed	229 min ⁻¹
Cutting speed	120 m/min (393.7 fpm)
Depth of cut	12 mm (0.5 in.)
Feedrate	0.78 mm/rev (0.031 ipr)

Throw-away drill

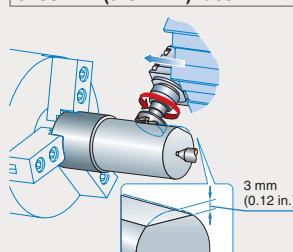


Drill diameter	58 mm (2.3 in.)
Spindle speed	658 min ⁻¹
Cutting speed	120 m/min (393.7 fpm)
Feedrate	0.3 mm/rev (0.012 ipr)

■ Milling capacity (material <JIS>: S45C*)

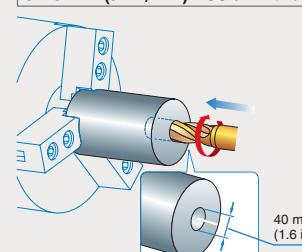


Φ 80 mm (Φ 3 1/2 in.) face mill <7 flutes> (for end facing)



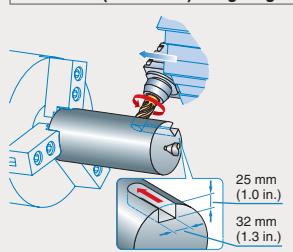
Spindle speed	1,000 min ⁻¹
Cutting speed	250 m/min (820.3 fpm)
Depth of cut	3 mm (0.12 in.)
Feedrate	1,050 mm/min (41.3 ipm)

Φ 40 mm (Φ 1 1/2 in.) HSS drill <max. shank diameter 32 mm (1 1/4 in.)>



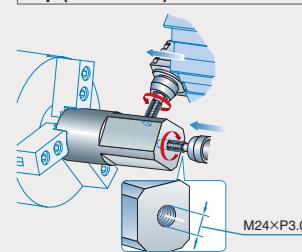
Spindle speed	200 min ⁻¹
Cutting speed	25 m/min (82.0 fpm)
Depth of cut	40 mm (1.6 in.)
Feedrate	40 mm/min (1.6 ipm)

Φ 32 mm (Φ 1 1/2 in.) roughing end mill <5 flutes>



Spindle speed	300 min ⁻¹
Cutting speed	30 m/min (98.4 fpm)
Depth of cut	25 mm (1.0 in.)
Feedrate	135 mm/min (5.3 ipm)

Tap (M24×P3.0)



Spindle speed	106 min ⁻¹
Cutting speed	8 m/min (26.2 fpm)
Depth of cut	30 mm (1.2 in.)
Feedrate	318 mm/min (12.5 ipm)

S45C: Carbon steel *1045, 1046 (ANSI), C45, C45E, C45R (BS, DIN), 45 (GB) • HSS: High-speed steel • Depth of cut: axis direction of spindle JIS: Japanese Industrial Standard

• All above data are actual results from the SL-603CMC/1000 measurement model.

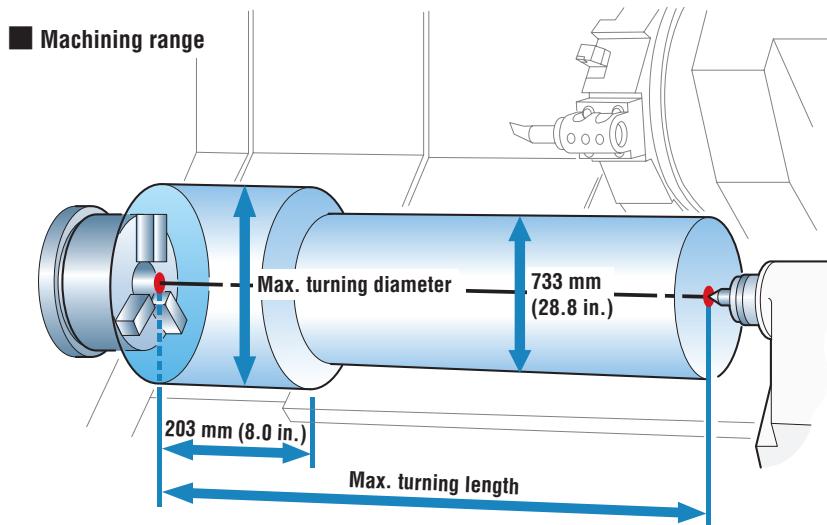
The results indicated in this catalog may not be obtained due to differences in cutting conditions and environmental conditions during measurement.

Ideal for shaft workpieces

In order to achieve high-speed, high-precision machining of long workpieces, we have installed a highly rigid bed and specialized functions and equipment for bar workpieces. It is the definitive bar work machine, eliminating all compromise.



SL-603B/4000



■ Tailstock travel

SL-603/1000

1,100 mm (43.3 in.)

SL-603/3000

3,100 mm (122.0 in.)

SL-603/4000

4,100 mm (161.4 in.)

Max. turning diameter*

900 mm (35.4 in.) <B, C, D>

930 mm (36.6 in.) <BMC, CMC>

* The travel on the cross slide may be limited depending on the size of the workpiece.

Max. turning length

1,000 mm (39.3 in.) <SL-603/1000> 3,000 mm (118.1 in.) <SL-603/3000>

4,000 mm (157.4 in.) <SL-603/4000>

Programmable tailstock

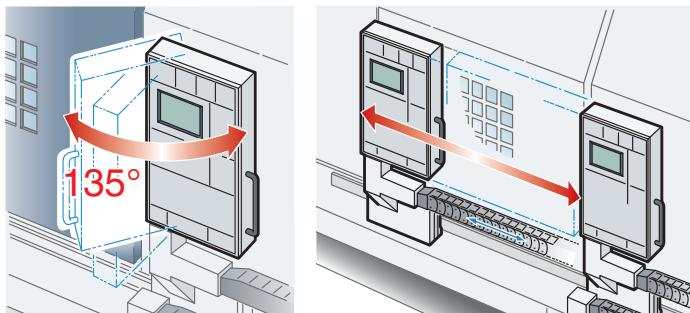


The tailstock can be moved easily to any position, which shortens setup time between differing workpiece sizes.

Built-in tailstock spindle

A highly rigid built-in tailstock stabilizes long or large workpieces.

■ Operability



Depending on machining situation, the operator can slide the operation panel for ease and comfort.

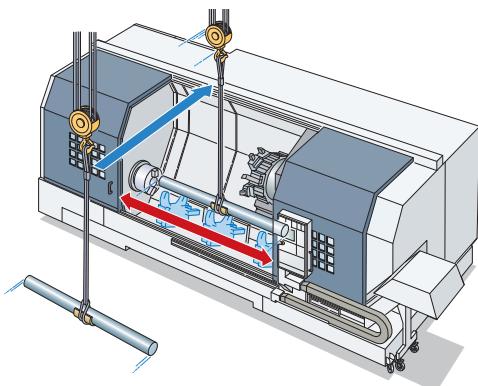
Operation panel travel

SL-603/3000	SL-603/4000
2,650 mm (104.3 in.)	3,650 mm (143.7 in.)

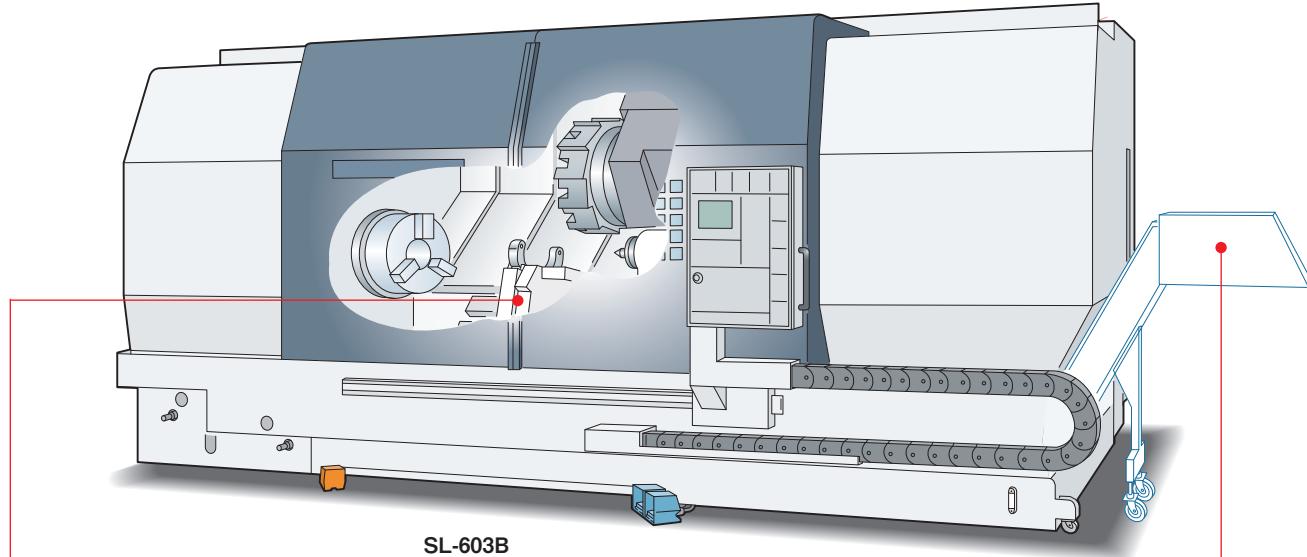
■ Door opening (max.)

To improve operability when using a crane, it is equipped with a wide door opening.

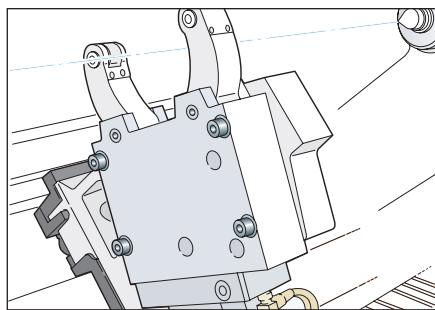
SL-603/1000	SL-603/3000
1,255 mm (49.4 in.)	3,550 mm (139.8 in.)
SL-603/4000	4,550 mm (179.1 in.)



■ Peripheral equipment

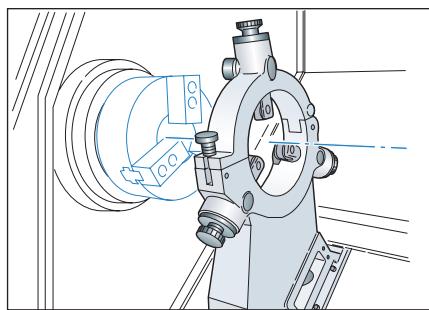


Steady rest



Hydraulic steady rest

The hydraulic steady rest can be set up in less time and without any manual setting thanks to automatic centering.



Steady rest

Bolts are tightened manually, supporting the workpiece.

Chip conveyor outside machine



Chips are continuously transported out of the machine to prevent buildup inside.

- The hinge type chip conveyor is standard for the machines with distances between centers of 3000 and 4000.

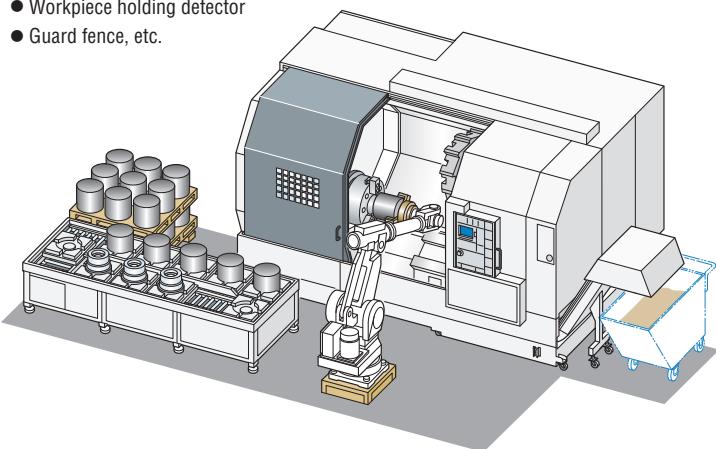
Peripheral equipment OP

System examples

Robots make workpiece loading and unloading more efficient, which improves productivity.

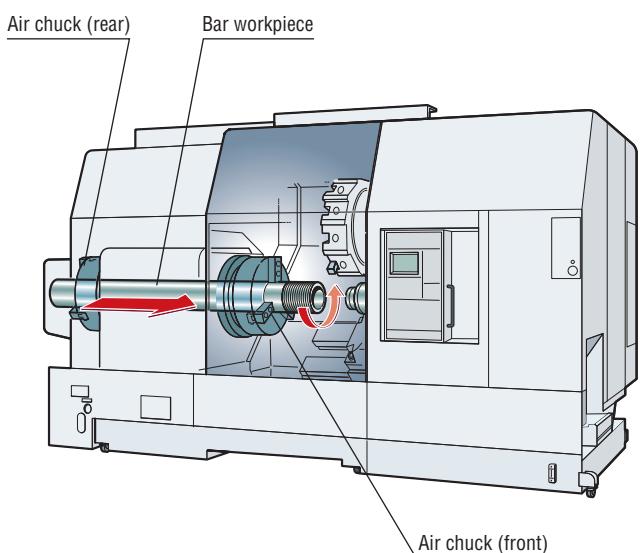
Add any of the below options. <Consultation is required>

- Robot (interface)
- Work stocker
- Workpiece holding detector
- Guard fence, etc.



Example with front and rear chucks <Consultation is required>

By installing a large hole chuck on the front and rear ends of the spindle, it becomes possible to machine the ends of long bar workpieces. A particular advantage is seen in threading pipes.



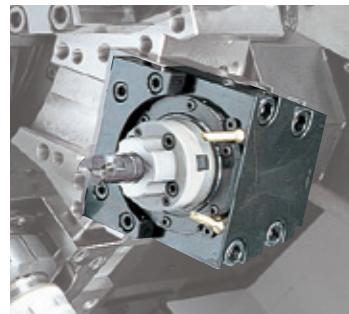
Others



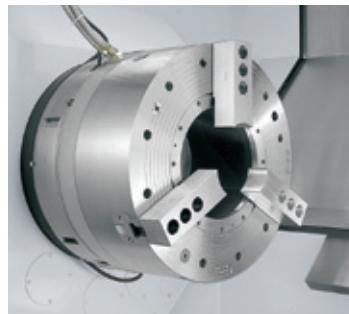
Mist collector <Consultation is required>



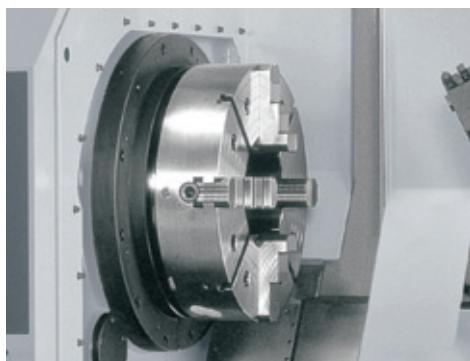
Automatic measuring system



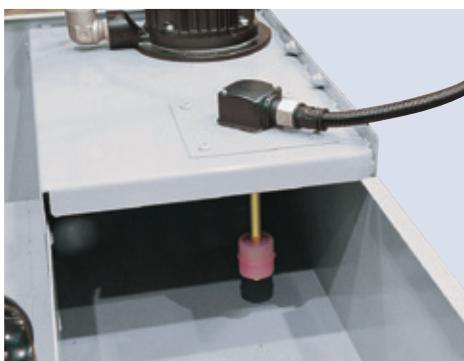
Rotary-tool holders



Air chuck (front) <Consultation is required>



4-jaw chuck <Consultation is required>



Coolant float switch <Consultation is required>



Oil skimmer

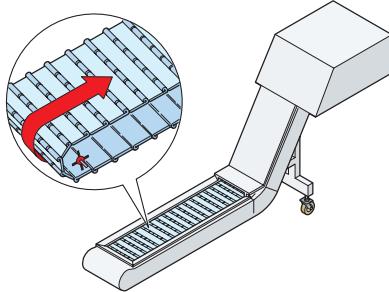
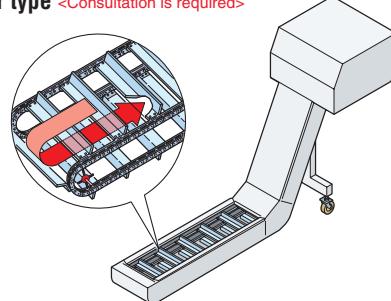
- See the page 16 for details.
- The colors and configurations shown in the photographs or illustrations may differ from those of the actual product.

Coolant chiller (separate type) <Consultation is required>

Increased coolant temperature causes thermal displacement in the fixtures and workpiece, affecting the machining accuracy of the workpiece. Use this unit to prevent the cutting coolant from heating up. **When using oil-based coolant**, the coolant temperature can become extremely high even with the standard coolant pump, so please be sure to select this unit.

**When using oil-based coolant or a super-high-pressure coolant system,
please be sure to consult our sales representative.**

- We cannot guarantee that this unit will completely control the coolant temperature. It is designed to help prevent oil temperature increases.

**Chip disposal****■ Hinge type****■ Scraper type <Consultation is required>**

Specifications	Workpiece material and chip size							○: Suitable	—: Not suitable		
	Steel			Cast iron	Aluminum/non-ferrous metal						
	Long	Short	Powdery	Short	Long	Short	Powdery				
Hinge type	○	○	—	—	○	—	—	—	—		
Scraper type <Consultation is required>	—	○	○	○	—	—	—	—	—		
Hinge type+drum filter type <Consultation is required>	○	○	○	○	○	○	○	—	—		
Hinge type+scraper type+drum filter type <Consultation is required>	○	○	○	○	○	○	○	—	—		

● Chip size guidelines

Short: chips 50 mm (2.0 in.) or less in length, bundles of chips ϕ 40 mm (ϕ 1.6 in.) or less
Long: bigger than the above

● Please select a chip conveyor to suit the shape of your chips. When using special or difficult-to-cut material (chip hardness HRC45 or higher), please consult our sales representative.

● Chip conveyors are available in various types for handling chips of different shape and material. For details, please consult our sales representative.

● The options table shows the general options when using coolant. Changes may be necessary if you are not using coolant, or depending on the amount of coolant, compatibility with machines, or the specifications required.

Eco-friendly design

Automatic machine light function

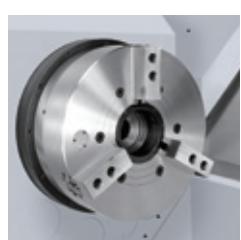
If the operating panel is not touched for a certain amount of time, the interior light turns off. This saves energy and lengthens the life of the machine lights.



Power-saving setting screen

Automatic sleep function

If the keyboard is not touched for a certain amount of time and NC operation is not being performed, power is cut off to the servo motor, the spindle, the coolant pump and the chip conveyor, thereby saving energy.



MAPPS IV

High-Performance Operation System
for Turning Centers



● 19-inch operation panel

High-performance operation system that pursues ease of use, and combines the best hardware in the industry with the advanced application/network systems.

- ▶ Outstanding operability thanks to upgraded hardware
- ▶ Cutting-edge functions for easier setup and maintenance
- ▶ Various types of monitoring, including internal monitoring, are possible on the screen (option)
- ▶ In the event of trouble, DMG MORI's remote maintenance service solves it smoothly

MORI-NET Global Edition Advance [OP](#)

Outstanding operability

Vertical soft-keys

Vertical soft-keys are arranged on the left and right sides of the screen. The vertical soft-keys can be used as option buttons or shortcut keys to which you can assign your desired screens and functions, allowing you to quickly display the screen you want.



Keyboard

A PC-type keyboard is used as standard, making key input easy. A keyboard with a conventional key layout is also available as an option.

Advanced hardware

Reduction of drawing time*

Shorter drawing time was achieved thanks to increased CPU performance.



* The reduction rate differs depending on the program.

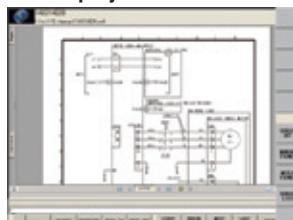
Main specifications

Main memory	2 GB
User area	6 GB
Interface	<ul style="list-style-type: none">• USB 2.0 3 ports (Screen side: 2, Bottom of operation panel: 1)• LAN 1 port (1000BASE-T)• RS-232-C port
Soft-keys	Left/right 12 keys Bottom 12 keys

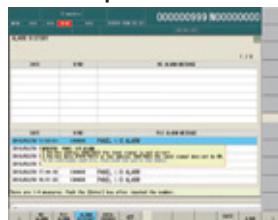
Improved ease of setup and maintenance

MAPPS IV is packed with new functions for easier setup and maintenance, including the File Display and Memo function that displays operating instructions and manuals on the screen and the Alarm help function that provides instructions when alarms occur.

File display and Memo function



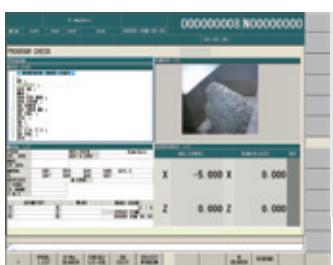
Alarm help function



Improved work efficiency

Fixed-point in-machine camera [OP](#) [Consultation is required]

Images taken by cameras installed inside/outside the machine can be viewed on the programming screen. This function is useful for maintenance.



Examples of camera locations

- Inside machine (to check machining)
- Tool magazine (to check cutting tools)
- Chip bucket (to check chip accumulation)

Network application systems

Remote Maintenance/Machine Operation Monitoring Service

MORI-NET Global Edition Advance [OP](#)

This system enables access to customer support services as well as high-speed, large-capacity data transmission between the machines and Service Center, by using a network that combines the internal LAN and the Internet.

- Download data
- Remote alarm support
- Transmission of alarm information

Application for Data Transmission

MORI-SERVER [Standard features]

This enables high-speed transfer of programming data between your office computer and machine, reducing the lead time of pre-machining processes.

● The photo shown may differ from actual machine.

MAPPS: Mori Advanced Programming Production System

● Information about the screen is current as of October 2017.

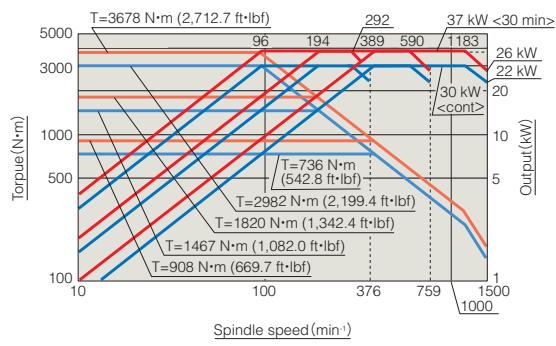
Spindle speed torque/output diagrams

OP Option

SL-603B, BMC types

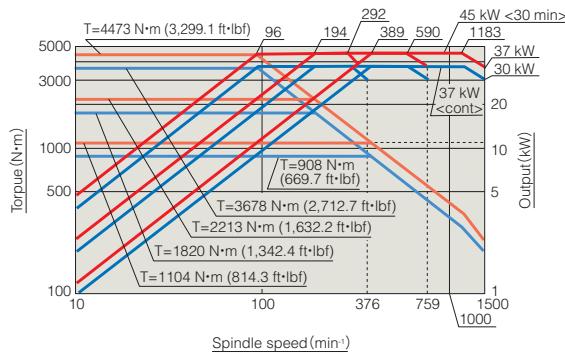
[Standard]

- Max. spindle speed: 1,500 min⁻¹
- Spindle drive motor: 37/30 kW (50/40 HP) <30 min/cont>
- Max. spindle torque: 3,678 N·m (2,712.7 ft·lbf)<30 min>



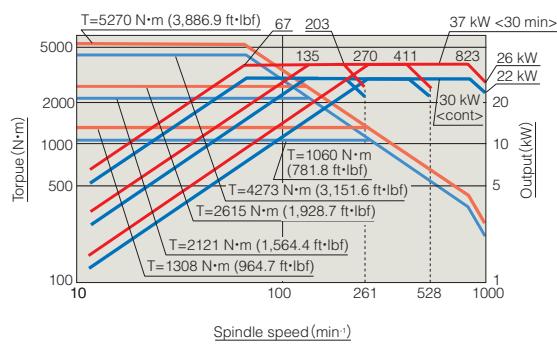
[High output, high torque **OP**]

- Max. spindle speed: 1,500 min⁻¹
- Spindle drive motor: 45/37 kW (60/50 HP) <30 min/cont>
- Max. spindle torque: 4,473 N·m (3,299.1 ft·lbf)<30 min>



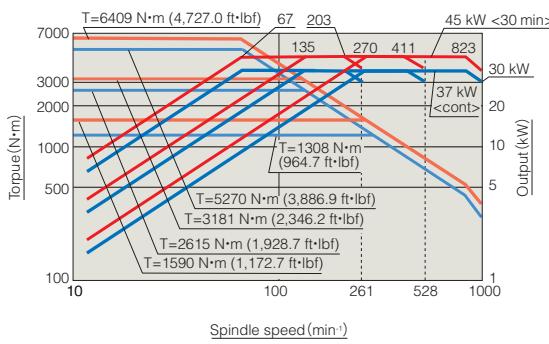
[Low speed, high torque **OP**]

- Max. spindle speed: 1,000 min⁻¹
- Spindle drive motor: 37/30 kW (50/40 HP) <30 min/cont>
- Max. spindle torque: 5,270 N·m (3,886.9 ft·lbf)<30 min>



[Low speed, high output, high torque **OP**]

- Max. spindle speed: 1,000 min⁻¹
- Spindle drive motor: 45/37 kW (60/50 HP) <30 min/cont>
- Max. spindle torque: 6,409 N·m (4,727.0 ft·lbf)<30 min>



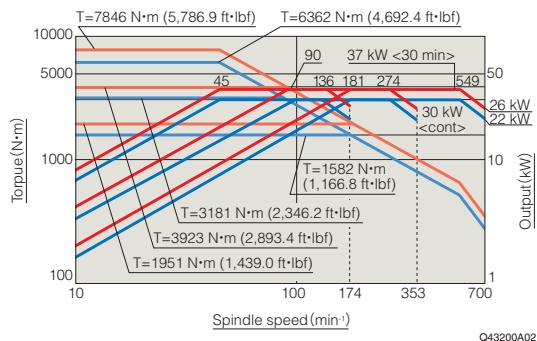
Spindle speed torque/output diagrams

OP Option

SL-603C, CMC types

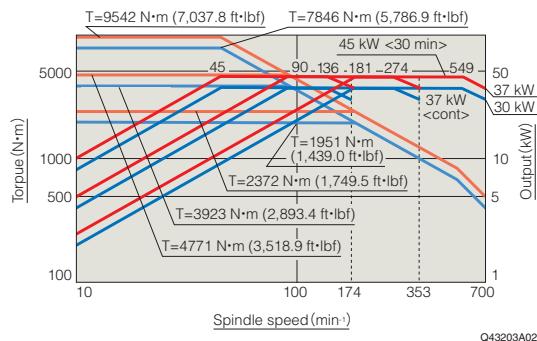
[Standard]

- Max. spindle speed: 700 min⁻¹
- Spindle drive motor: 37/30 kW (50/40 HP) <30 min/cont>
- Max. spindle torque: 7,846 N·m (5,786.9 ft·lbf) <30 min>



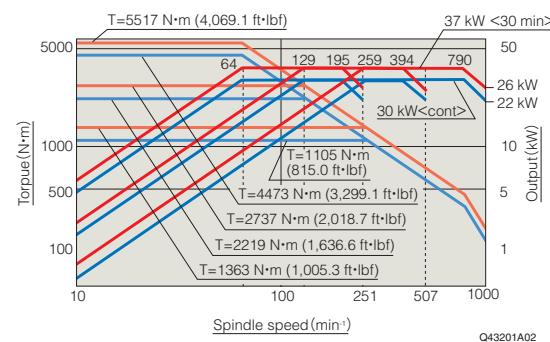
[High output, high torque **OP**]

- Max. spindle speed: 700 min⁻¹
- Spindle drive motor: 45/37 kW (60/50 HP) <30 min/cont>
- Max. spindle torque: 9,542 N·m (7,037.8 ft·lbf) <30 min>



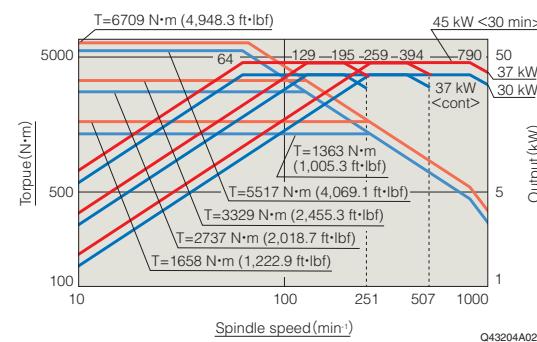
[High speed **OP**]

- Max. spindle speed: 1,000 min⁻¹
- Spindle drive motor: 37/30 kW (50/40 HP) <30 min/cont>
- Max. spindle torque: 5,517 N·m (4,069.1 ft·lbf) <30 min>



[High speed, high output **OP**]

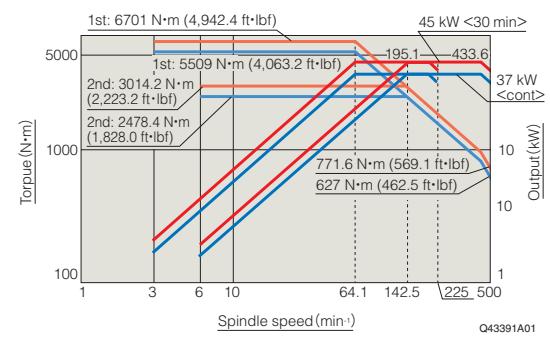
- Max. spindle speed: 1,000 min⁻¹
- Spindle drive motor: 45/37 kW (60/50 HP) <30 min/cont>
- Max. spindle torque: 6,709 N·m (4,948.3 ft·lbf) <30 min>



SL-603D type

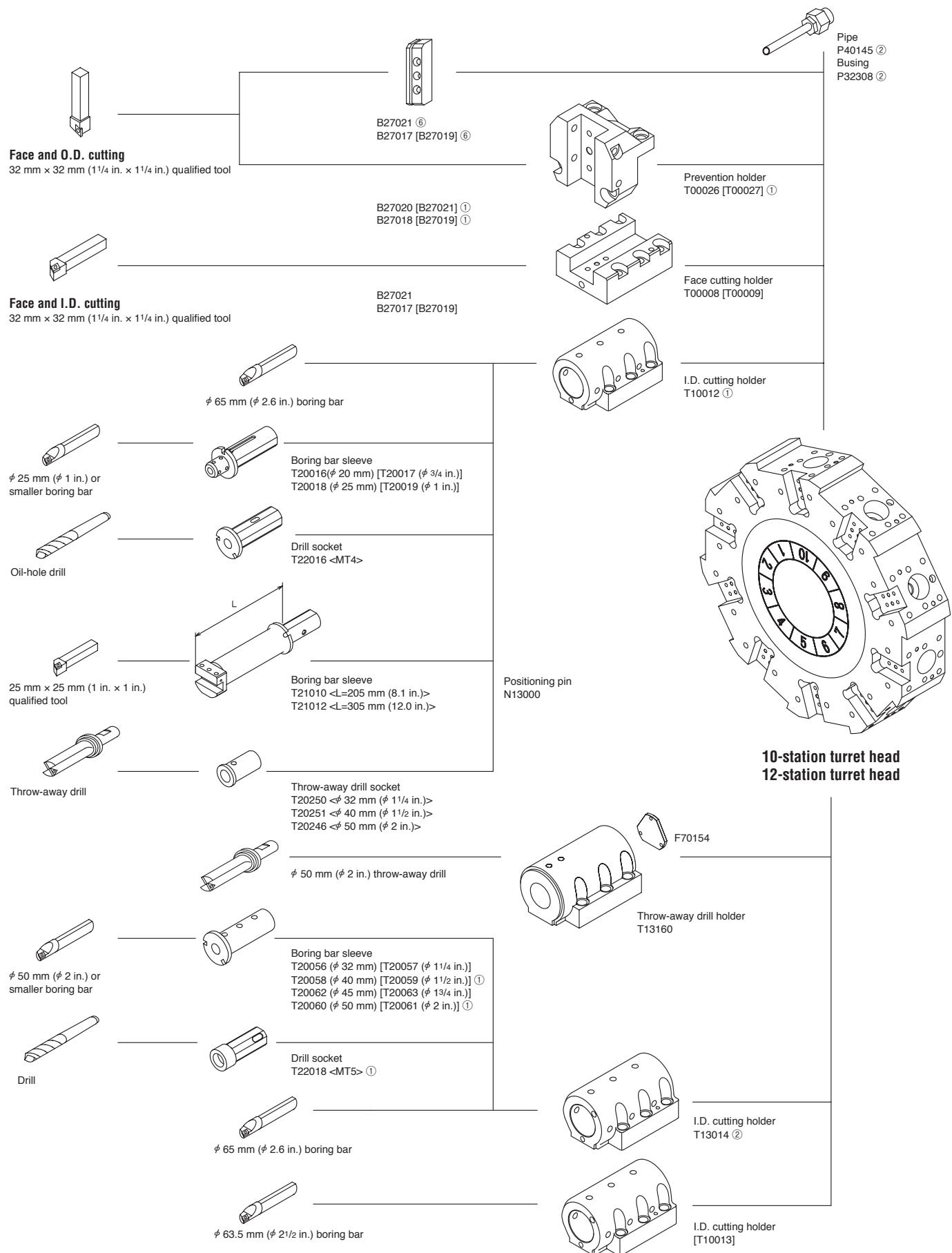
[Standard]

- Max. spindle speed: 500 min⁻¹
(1st: 3–64.1–225 min⁻¹/2nd: 6–142.5–500 min⁻¹)
- Spindle drive motor: 45/37 kW (60/50 HP) <30 min/cont>
- Max. spindle torque: 6,701 N·m (4,942.4 ft·lbf) <30 min>



Tooling system

SL-603B, SL-603C, SL-603D

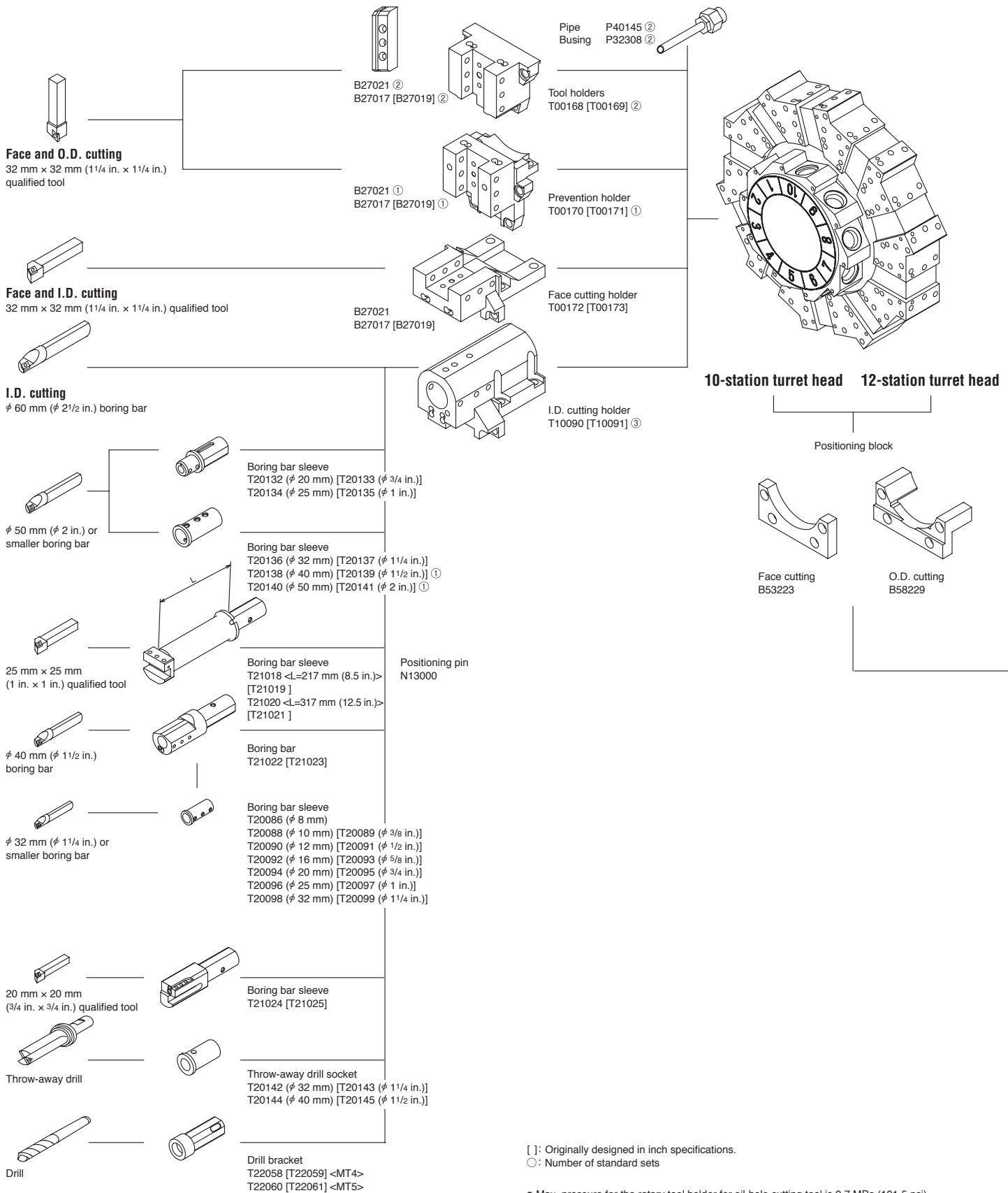


[]: Originally designed in inch specifications.

①: Number of standard sets

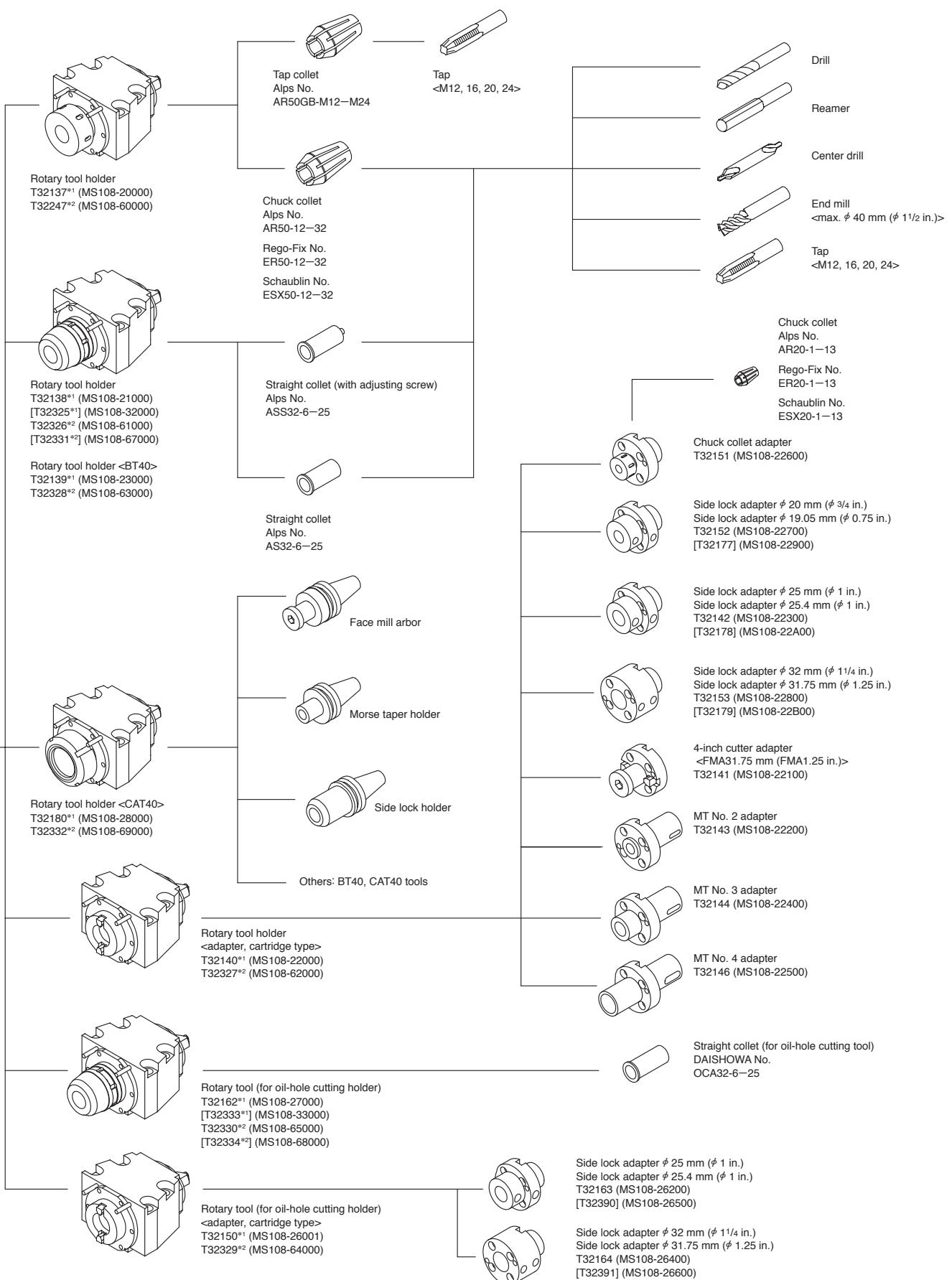
Tooling system

SL-603BMC, SL-603CMC



[]: Originally designed in inch specifications.
○: Number of standard sets

- Max. pressure for the rotary tool holder for oil-hole cutting tool is 0.7 MPa (101.5 psi).
- Rotary tool (for oil-hole cutting holder): this unit cannot perform use in those without coolant.



*1: 1,500 min⁻¹ specifications *2: 3,000 min⁻¹ specifications

Standard & optional features

●: Standard features ○: Options ☆: Consultation is required —: Not applicable

Spindle

	SL-6035	SL-6035MC	SL-603C	SL-603C-MC	SL-603D
1,500 min ⁻¹ : 37/30 kW (50/40 HP) <30 min/cont>	● ●	—	—	—	—
1,500 min ⁻¹ : 45/37 kW (60/50 HP) <30 min/cont> <High output, high torque>	○ ○	—	—	—	—
1,000 min ⁻¹ : 37/30 kW (50/40 HP) <30 min/cont> <Low speed, high torque>	○ ○	—	—	—	—
1,000 min ⁻¹ : 45/37 kW (60/50 HP) <30 min/cont> <Low speed, high output, high torque>	○ ○	—	—	—	—
700 min ⁻¹ : 37/30 kW (50/40 HP) <30 min/cont>	— —	● ●	—	—	—
700 min ⁻¹ : 45/37 kW (60/50 HP) <30 min/cont> <High output, high torque>	— —	○ ○	—	—	—
1,000 min ⁻¹ : 37/30 kW (50/40 HP) <30 min/cont> <High speed>	— —	○ ○	—	—	—
1,000 min ⁻¹ : 45/37 kW (60/50 HP) <30 min/cont> <High speed, high output>	— —	○ ○	—	—	—
500 min ⁻¹ : 45/37 kW (60/50 HP) <30 min/cont>	— —	—	—	—	●
Oil chiller	● ●	● ●	● ●	● ●	● ●

Turret

10-station bolt-tightened turret	● ● ● ● ●
12-station bolt-tightened turret	○ ○ ○ ○ ○
10-station VDI quick-change turret	Shank diameter 60 mm (2 1/2 in.)
12-station VDI quick-change turret	Shank diameter 60 mm (2 1/2 in.)
Rotary tool spindle	3,000 min ⁻¹ : 9/7.5 kW (12/10 HP) <30 min/cont>

Workpiece holding device

Hydraulic chuck	18 inches	○ ○ ☆ ☆ ☆
	21 inches	○ ○ ☆ ☆ ☆
	24 inches	○ ○ ○ ○ ○
Chuck high/low pressure system		○ ○ ○ ○ ○
Air chuck	Front	☆ ☆ ☆ ☆ ☆
	Rear	☆ ☆ ☆ ☆ ☆
	Front + rear	☆ ☆ ☆ ☆ ☆
4-jaw chuck		☆ ☆ ☆ ☆ ☆
Index chuck interface		☆ ☆ ☆ ☆ ☆
Hydraulic steady rest	SLU-X5Z <bolt-tightened, φ 45 – φ 310 mm (φ 1.8 – φ 12.2 in.)>	○* ○* ○* ○* ○*
	SLU-X5Z (bolt-tightened) interface	○ ○ ○ ○ ○
Fixed steady rest	φ 100 – φ 450 mm (φ 3.9 – φ 17.7 in.)	○ ○ ○ ○ ○
	φ 400 – φ 600 mm (φ 15.7 – φ 23.6 in.)	○ ○ ○ ○ ○

Coolant

Coolant float switch	☆ ☆ ☆ ☆ ☆
Oil skimmer	○ ○ ○ ○ ○
Coolant chiller (separate type)	Optional when using water-soluble coolant
	Essential when using oil-based coolant (for details, please be sure to consult our sales representative)

Measurement

Manual type in-machine tool presetter	Left-right-fwd-back-type	● ● ● ● ●
Automatic in-machine tool presetter	In-out type	○ ○ ○ ○ ○
In-machine workpiece measuring system ^{*1}	Optical type touch sensor (RENISHAW)	○ ○ ○ ○ ○
In-machine workpiece measuring system optical type touch sensor (RENISHAW) ^{*1}		○ ○ ○ ○ ○
Automatic in-machine tool presetter (in-out type)		○ ○ ○ ○ ○

*1 Certain workpiece shapes cannot be measured.

Operation support device/function

Front door power assist system	● ● ● ● ●
Automatic door	○ ○ ○ ○ ○
Auto power off	○ ○ ○ ○ ○
Total counter	○ ○ ○ ○ ○
Workpiece counter	○ ○ ○ ○ ○

Automatic operation support

External M-code	5	○ ○ ○ ○ ○
	10	○ ○ ○ ○ ○

* DMQP (DMG MORI Qualified Products)

● The information in this catalog is valid as of October 2017.

● Specifications, accessories, safety device and function are available upon request.

● Some options are not available in particular regions. For details, please consult our sales representative.

Safety features

	SL-6035	SL-6035MC	SL-603C	SL-603C-MC	SL-603D	SL-6035	SL-6035MC	SL-603C	SL-603C-MC	SL-603D
Full cover	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●
Impact resistant viewing window	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●
Door interlock system	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●
Tailstock spindle stroke out - end check	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●
Chuck jaw stroke end check ^{*1}	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●
Cylinder check valve ^{*1}	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●
Low hydraulic pressure detecting switch	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●
Low air pressure detecting switch	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●
Earth leakage breaker	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○
Danger sensing device interface (recommended when oil-based coolant is used or during unmanned operation)	☆ ☆ ☆ ☆ ☆	☆ ☆ ☆ ☆ ☆	☆ ☆ ☆ ☆ ☆	☆ ☆ ☆ ☆ ☆	☆ ☆ ☆ ☆ ☆	☆ ☆ ☆ ☆ ☆	☆ ☆ ☆ ☆ ☆	☆ ☆ ☆ ☆ ☆	☆ ☆ ☆ ☆ ☆	☆ ☆ ☆ ☆ ☆

*1 Featured only when optional chuck/cylinder is selected.

Others

Built-in worklight	● ● ● ● ●
Leveling block	● ● ● ● ●
Hand tools	● ● ● ● ●
Tool holders	● ● ● ● ●
Rotary tool holders	— ○ — ○ —
Rotary tool holders (oil hole)	— ○ — ○ —
Signal lamp	3 colors (LED type: red, yellow, green)
Chuck foot switch	Single Double
Manual pulse generator (separate type)	○ ○ ○ ○ ○
Refrigerating type air dryer	○* ○* ○* ○* ○*
EtherNet/IP interface	○ ○ ○ ○ ○
Robot interface (EtherNet/IP)	○ ○ ○ ○ ○
<EtherNet/IP interface is necessary required separating>	○ ○ ○ ○ ○
Tool cabinet	○* ○* ○* ○* ○*
Mist collector	☆ ☆ ☆ ☆ ☆

Coolant

Coolant system	325/520 W <50/60 Hz> 635/1,040 W <50/60 Hz>	● ● ●
Chip flow coolant	325/520 W <50/60 Hz>	— — ●

Tailstock/tailstock spindle

Tailstock spindle built-in center ^{*1}	MT5	● — —
	MT6	— ● ●
Programmable tailstock	Carriage direct-coupled type	● ● ●
Foot switch for tailstock		● ● ●
Tailstock spindle travel check		○ ○ ○
Without tailstock		○ — —

*1 The center is standard.

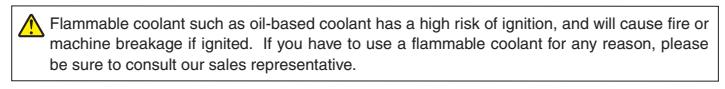
Chip disposal

Air blow	Chuck Tool tip ^{*1} Tailstock spindle Right discharge, hinge type Right discharge, scraper type Right discharge, interface Rear discharge, hinge type (flush to right or rear discharge) Rear discharge, scraper type (flush to right or rear discharge)	○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ● ● ☆ ☆ ☆ ● ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆
Chip conveyor		
Chip bucket	254 L (67.1gal)	○* ○* ○*
Coolant gun		○ ○ ○
Without chip conveyor		— ☆ ☆

*1 When the tool tip air blow is regularly used, air supply of more than 300 L/min (79.2 gpm) is separately required.

Improved accuracy

Full closed loop control (Scale feedback)	X-axis Z-axis	○ ○ ○ ○ ☆ ☆
--	------------------	----------------



Numerical control unit specifications F32iB

●: Standard ○: Option ☆: Consultation is required —: Not applicable

Controlled axis	MC-type 2-axis turning
Controlled axis	D-type: X, Z, 3 B-, C-type: X, Z, 3, 4 X, Z, C, 4, 5
Simultaneously controlled axes	X, Z X, Z, C
Least input increment	X, Z: 0.001 mm (0.0001 in.) C: 0.001°
Programming resolution multiplied by 1/10	X, Z: 0.0001 mm (0.00001 in.) C: 0.0001°
Max. command value	±99,999.999 mm (±9,999.999 in.)
Software damper	Abnormal load detection function
Inch/metric conversion	
Machine lock	
Stored stroke check 2, 3	
Stroke limit check before movement	
Chuck, tailstock barrier	
Chamfering on/off	
Backlash compensation	±9,999 pulses
Rapid traverse/cutting feed backlash compensation	
Stored pitch error compensation	
Operation	
Dry run	● ●
Single block	● ●
Jog feed	0—5,000 mm/min (0—197.0 ipm) <20 steps>
Manual reference position return	
Manual pulse handle feed	×1, ×10, ×100
Manual handle interruption	
Program restart	
Tool retract and recover	
Sequence number comparison and stop	
Interpolation functions	
Positioning	● ●
Polar coordinate interpolation	G12.1, G13.1 (G112, G113)
Cylindrical interpolation	G7.1 (G107)
Threading, synchronous cutting	G32
Multiple start thread cutting	G32
Thread cutting retract	
Continuous thread cutting	
External high-speed skip (installation of high-speed skip terminal)	○ ○
Variable lead threading	G34
Reference position return	G28
Reference position return check	G27
2nd reference position return	G30
3rd, 4th reference position return	○ ○
Thread cutting override	Override change is effective after next retract
Variable speed thread cutting	
Thread re-cutting	
Multi-step skip	
Feed functions	
Rapid traverse override	F0/1/10/25/100% <5 steps>
Feed per minute	
Feed per revolution	
Tangential speed constant control	
Cutting feedrate clamp	
Automatic acceleration/ deceleration	Linear type (rapid traverse)/ Exponential function type (cutting feed)
Feedrate override	0—200% (10% increments)
Feedrate override cancel	

Program input	MC-type 2-axis turning
Optional block skip	1 block
Addition of optional block skip	Soft key type (2—9)
Max. command value	±9 digits
Program number	4-digit O code
Sequence number	8-digit O code
Absolute (incremental) programming	5-digit N code X (U), Z (W) X (U), Z (W), C (H)
Decimal point programming	Decimal point programming or electronic calculator type decimal point programming can be set using parameters.
Plane selection	G17, G18, G19
Rotary axis designation	
Rotary axis roll-over	
Local coordinate system setting	G52
Machine coordinate system selection	G53
Selecting a workpiece coordinate system	G54—G59
Programmable data input	G10
Sub-program call	Up to 10 nestings
Custom macro	○ ○
Custom macro common variables <in total>	100 variables (#100 to #149, #500 to #549) 600 variables (#100 to #199, #500 to #999)
Interruption type custom macro	○ ○
Single repetitive cycle	● ●
Multiple repetitive cycle	● ●
Multiple repetitive cycle II	Pocket cutting, zigzag thread cutting
Hole machining canned cycle	○ ○
F15 format	● ●
Programmable mirror image	● ●
Islands, open pockets <MAPPS>	— ○
Text engraving function <MAPPS>	— ○
MORI-POST advanced mode <MAPPS>	○ ○
DXF import function <MAPPS>	○ ○
Relief machining <MAPPS>	○ ○
Miscellaneous function/Spindle speed function	
Miscellaneous	8-digit M code
Auxiliary function lock	● ●
Multiple M cords in single block (Multi M code function)	Available for specific M codes
Spindle speed function	5-digit S code
Constant surface speed control	● ●
Spindle speed override	50—150% (10% increments)
Spindle orientation	Software locking (not suitable for EN Standard models going to Europe) Without lock Mechanical locking
Load monitor function B	● ●
Multiple-spindle control	— ●
Synchronous tapping	Turning spindle With rotary tool spindle
Tool function/Tool offset function	
Tool function	4-digit T code
Number of tool offsets	32 sets
Additional number of tool offsets	64 sets 99 sets
Tool nose radius compensation	G40—G42
Tool geometry offset/Tool wear offset	● ●
Tool life management	● ●
Tool pair in total for tool life management	640 sets
Tool offset measurement direct input	● ●
Tool offset measurement direct input B	In-machine tool presetter

Editing	MC-type 2-axis turning
Part program storage length <in total> + Registerable programs <in total>	32 KB <80 m (263 ft)> + 63 programs 64 KB <160 m (525 ft)> + 125 programs 128 KB <320 m (1,050 ft)> + 250 programs 256 KB <640 m (2,100 ft)> + 500 programs 512 KB <1,280 m (4,200 ft)> + 1,000 programs 1 MB <2,560 m (8,400 ft)> + 1,000 programs 2 MB <5,120 m (16,800 ft)> + 1,000 programs
Expanded program editing	Copy buffer: 10 KB
Program protect	● ●
Background editing	● ●
Playback	○ ○
Machining time stamp	○ ○
Undo/Redo function <MAPPS>	● ●
Line number display <MAPPS>	● ●
Setting and display	
Status display	● ●
Clock function	● ●
Current position display	● ●
Program display	Program comment display 191 characters (4-digit O code), 187 characters (8-digit O code)
Parameter setting display	● ●
Self-diagnosis function	Includes alarm display, I/O signal diagnosis and ladder diagram
Alarm display	● ●
Alarm history display	● ●
Operator's message history display	● ●
Operation history display	● ●
Running time display/Number of parts display	● ●
Actual cutting feedrate display	● ●
Operation panel: display section 19-inch TFT color LCD	● ●
Regular interval maintenance screen	● ●
Screen clear	It is possible to set on the screen of saving electric power
Multi-counter display <MAPPS>	☆ ☆
Data input/output	
I/O interface	USB RS-232-C
Ethernet	10/100/1000BASE-T (access to user memory area by Ethernet function with MORI-SERVER Software)
Fast data server	○ ○
Memory card for data server*	○ ○
Fast data server+ Memory card for data server*	○ ○
DNC operation using external memory (front USB port)	○ ○
6 GB Program storage area, updatable (for MAPPS-DNC operation function, for data backup) <MAPPS>	Files up to 10 MB in size can be edited

*CF card (1 GB) + ATA adaptor

i95068C03

Machine specifications

Item		SL-603B/1000	SL-603C/1000	SL-603D/1000	SL-603BMC/1000	SL-603CMC/1000
Capacity	Swing over bed	mm (in.)		1,030 (40.6)		
	Swing over cross slide	mm (in.)		733 (28.9)		
	Between centers	mm (in.)		1,300 (51.2)		
	Max. turning diameter	mm (in.)	900 (35.4)		930 (36.6)	
	Standard turning diameter	mm (in.)	456 (17.9) [374 (14.7) <12-station turret head>]		461 (18.1) [374 (14.7) <12-station turret head>]	
	Max. turning length	mm (in.)		1,000 (39.3)		
Travel	X-axis travel	mm (in.)	485 (19.1) <450+35 (17.7+1.4) (travel in the minus direction from the spindle center)>		485 (19.1) <465+20 (18.3+0.8) (travel in the minus direction from the spindle center)>	
	Z-axis travel	mm (in.)		1,150 (45.3)		1,100 (43.3)
Spindle	Max. spindle speed	min ⁻¹	1,500 [1,000]	700 [1,000]	500	1,500 [1,000] 700 [1,000]
	Number of spindle speed ranges			3	2	3
	Type of spindle nose		JIS A2-15	JIS A1-20	JIS A2-20	JIS A2-15 JIS A1-20
	Through-spindle hole diameter	mm (in.)	185 (7.3)	275 (10.8)	375 (14.8)	185 (7.3) 275 (10.8)
	Min. spindle indexing angle			—		0.001° <least input increment>
	Spindle bearing inner diameter	mm (in.)	260 (10.2)	360 (14.2)	450.85 (17.8)	260 (10.2) 360 (14.2)
Turret	Number of tool stations			10 [12]		10 [12] (rotary tools: 10 [12])
	Shank height for square tool	mm (in.)		32 (1 ¼)		
	Shank diameter for boring bar	mm (in.)		Max. 65 (2.6)		Max. 60 (2 ½)
	Turret indexing time	s		0.4		
Feedrate	Max. rotary tool spindle speed	min ⁻¹	—			3,000
	Rapid traverse rate	mm/min (ipm)		X, Z: 20,000 (787.4)		X, Z: 20,000 (787.4) C: 25 min ⁻¹
	Jog feedrate	mm/min (ipm)		X, Z: 0—5,000 (0—197.0) <20 steps>		
Tailstock	Tailstock travel	mm (in.)		1,100 (43.3)		
	Tailstock spindle diameter	mm (in.)		150 (5.9)		
	Taper hole of tailstock spindle			MT5 <built-in center>		
	Tailstock spindle travel	mm (in.)		150 (5.9)		
Motor	Spindle drive motor <30 min/cont>	kW (HP)	37/30 (50/40) [45/37 (60/50)]	45/37 (60/50)	37/30 (50/40) [45/37 (60/50)]	
	Feed motor <X/Z-axis>	kW (HP)		6.0/6.0 (8/8)		
	Rotary tool spindle drive motor <30 min/cont>	kW (HP)	—		9/7.5 (12/10)	
	Coolant pump motor <50/60 Hz>	kW (HP)	0.325/0.52×1 (0.43/0.69×1) [0.625/1.04×1 (0.83/1.39×1)]			
	Chip flush coolant pump motor <50/60 Hz>	kW (HP)	—			
Power sources	Electrical power supply <cont>	I94168F04 kVA	53.5 [61.6 <high output>]	67.3	62.9 [71.4 <high output>]	
	Compressed air supply <standard>	MPa (psi), L/min (gpm)	0.5 (72.5), 300 (79.2) <ANR>	0.5 (72.5), 400 (105.6) <ANR>	0.5 (72.5), 200 (52.8) <ANR>	0.5 (72.5), 300 (79.2) <ANR>
Tank capacity	Coolant tank capacity	L (gal.)		400 (105.6)		
Machine size	Machine height <from floor>	mm (in.)		2,911 (114.6)		2,943 (115.9)
	Floor space <width×depth> (depth includes oil chiller)	mm (in.)	4,983×3,091 (196.2×121.7)	4,983×3,366 (196.2×132.5)	4,983×3,091 (196.2×121.7)	
	Mass of machine	kg (lb.)	14,900 (32,780)		16,500 (36,300)	
Noise data	A-weighted, time-average radiated sound pressure level	dB		65—84 (Measurement uncertainty is 4 dB)		

[] Option JIS: Japanese Industrial Standard

- Max. spindle speed: depending on restrictions imposed by the workpiece clamping device, fixture and tool used, it may not be possible to rotate at the maximum spindle speed.
- ANR: ANR refers to a standard atmospheric state; i.e., temperature at 20 °C (68 °F), absolute pressure at 101.3 kPa (14.7 psi) and relative humidity at 65%.
- Power sources, machine size: the actual values may differ from those specified in the catalogue, depending on the optional features and peripheral equipment.
- Compressed air supply: please be sure to supply clean compressed air <air pressure: 0.7 MPa (101.5 psi), pressure dew point: 10 °C (50 °F) or below>.
- A criterion capacity to select a compressor is 90 L/min (23.8 gpm) per 0.75 kW (1 HP). However, this figure may differ depending on the type of compressors and options attached. For details, please check the compressor specifications.
- When the tool tip air blow is regularly used, air supply of more than 300 L/min (79.2 gpm) is separately required.
- Noise data: the values were measured at the front of the SL-603CMC/1000 with a maximum spindle speed of 1,000 min⁻¹. For details, please consult our sales representative.
- The information in this catalog is valid as of October 2017.

Item		SL-603B/3000	SL-603C/3000	SL-603D/3000	SL-603BMC/3000	SL-603CMC/3000
Capacity	Swing over bed	mm (in.)		970 (38.2)		
	Swing over cross slide	mm (in.)		733 (28.9)		
	Between centers	mm (in.)		3,300 (129.9)		
	Max. turning diameter	mm (in.)	900 (35.4)		930 (36.6)	
	Standard turning diameter	mm (in.)	456 (17.9) [374 (14.7) <12-station turret head>]		461 (18.1) [374 (14.7) <12-station turret head>]	
	Max. turning length	mm (in.)		3,000 (118.1)		
Travel	X-axis travel	mm (in.)	485 (19.1) <450+35 (17.7+1.4) (travel in the minus direction from the spindle center)>		485 (19.1) <465+20 (18.3+0.8) (travel in the minus direction from the spindle center)>	
	Z-axis travel	mm (in.)	3,150 (124.0)		3,100 (122.0)	
Spindle	Max. spindle speed	min ⁻¹	1,500 [1,000]	700 [1,000]	500	1,500 [1,000] 700 [1,000]
	Number of spindle speed ranges			3	2	3
	Type of spindle nose		JIS A2-15	JIS A1-20	JIS A2-20	JIS A2-15 JIS A1-20
	Through-spindle hole diameter	mm (in.)	185 (7.3)	275 (10.8)	375 (14.8)	185 (7.3) 275 (10.8)
	Min. spindle indexing angle			—		0.001° <least input increment>
	Spindle bearing inner diameter	mm (in.)	260 (10.2)	360 (14.2)	450.85 (17.8)	260 (10.2) 360 (14.2)
Turret	Number of tool stations		10 [12]		10 [12] <rotary tools: 10 [12]>	
	Shank height for square tool	mm (in.)	32 (1 ¼)			
	Shank diameter for boring bar	mm (in.)	Max. 65 (2.6)		Max. 60 (2 ½)	
	Turret indexing time	s	0.4			
Feedrate	Max. rotary tool spindle speed	min ⁻¹	—		3,000	
	Rapid traverse rate	mm/min (ipm)	X, Z: 20,000 (787.4)		X, Z: 20,000 (787.4) C: 25 min ⁻¹	
	Jog feedrate	mm/min (ipm)	X, Z: 0—5,000 (0—197.0) <20 steps>			
Tailstock	Tailstock travel	mm (in.)	3,100 (122.0)			
	Tailstock spindle diameter	mm (in.)	180 (7.1)			
	Taper hole of tailstock spindle		MT6 <built-in center>			
	Tailstock spindle travel	mm (in.)	150 (5.9)			
Motor	Spindle drive motor <30 min/cont>	kW (HP)	37/30 (50/40) [45/37 (60/50)]		45/37 (60/50)	37/30 (50/40) [45/37 (60/50)]
	Feed motor <X/Z-axis>	kW (HP)	6.0/6.0 (8/8)			
	Rotary tool spindle drive motor <30 min/cont>	kW (HP)	—		9/7.5 (12/10)	
	Coolant pump motor <50/60 Hz>	kW (HP)	0.325/0.52×1 (0.43/0.69×1) [0.625/1.04×1 (0.83/1.39×1)]			
	Chip flush coolant pump motor <50/60 Hz>	kW (HP)	—			
Power sources	Electrical power supply <cont>	i94168F04 kVA	53.5 [61.6 <high output>]		67.3	62.9 [71.4 <high output>]
	Compressed air supply <standard>	MPa (psi), L/min (gpm)	0.5 (72.5), 300 (79.2) <ANR>	0.5 (72.5), 400 (105.6) <ANR>	0.5 (72.5), 200 (52.8) <ANR>	0.5 (72.5), 300 (79.2) <ANR>
Tank capacity	Coolant tank capacity	L (gal.)	600 (158.4)			
Machine size	Machine height <from floor>	mm (in.)	2,911 (114.6)		2,943 (115.9)	
	Floor space <width×depth> (width includes chip conveyor, depth includes oil chiller)	mm (in.)	8,231×3,451 (324.1×135.9)		8,231×3,726 (324.1×146.7)	
	Mass of machine	kg (lb.)	22,400 (49,280)		23,400 (51,480)	
Noise data	A-weighted, time-average radiated sound pressure level	db	65—84 (Measurement uncertainty is 4 dB)			

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- Max. spindle speed: depending on restrictions imposed by the workpiece clamping device, fixture and tool used, it may not be possible to rotate at the maximum spindle speed.
- ANR: ANR refers to a standard atmospheric state; i. e., temperature at 20 °C (68 °F), absolute pressure at 101.3 kPa (14.7 psi) and relative humidity at 65%.
- Power sources, machine size: the actual values may differ from those specified in the catalogue, depending on the optional features and peripheral equipment.
- Compressed air supply: please be sure to supply clean compressed air <at pressure: 0.7 MPa (101.5 psi), pressure dew point: 10 °C (50 °F) or below>.
- A criterion capacity to select a compressor is 90 L/min (23.8 gpm) per 0.75 kW (1 HP). However, this figure may differ depending on the type of compressors and options attached. For details, please check the compressor specifications.
- When the tool tip air blow is regularly used, air supply of more than 300 L/min (79.2 gpm) is separately required.
- Noise data: the values were measured at the front of the SL-603CMC/1000 with a maximum spindle speed of 1,000 min⁻¹. For details, please consult our sales representative.
- The information in this catalog is valid as of October 2017.

Machine specifications

Item		SL-603B/4000	SL-603C/4000	SL-603D/4000	SL-603BMC/4000	SL-603CMC/4000
Capacity	Swing over bed	mm (in.)		970 (38.2)		
	Swing over cross slide	mm (in.)		733 (28.9)		
	Between centers	mm (in.)		4,300 (169.3)		
	Max. turning diameter	mm (in.)	900 (35.4)		930 (36.6)	
	Standard turning diameter	mm (in.)	456 (17.9) [374 (14.7) <12-station turret head>]		461 (18.1) [374 (14.7) <12-station turret head>]	
	Max. turning length	mm (in.)		4,000 (157.4)		
Travel	X-axis travel	mm (in.)	485 (19.1) <450+35 (17.7+1.4) (travel in the minus direction from the spindle center)>		485 (19.1) <465+20 (18.3+0.8) (travel in the minus direction from the spindle center)>	
	Z-axis travel	mm (in.)	4,150 (163.4)		4,100 (161.4)	
Spindle	Max. spindle speed	min ⁻¹	1,500 [1,000]	700 [1,000]	500	1,500 [1,000] 700 [1,000]
	Number of spindle speed ranges			3	2	3
	Type of spindle nose		JIS A2-15	JIS A1-20	JIS A2-20	JIS A2-15 JIS A1-20
	Through-spindle hole diameter	mm (in.)	185 (7.3)	275 (10.8)	375 (14.8)	185 (7.3) 275 (10.8)
	Min. spindle indexing angle			—		0.001° <least input increment>
	Spindle bearing inner diameter	mm (in.)	260 (10.2)	360 (14.2)	450.85 (17.8)	260 (10.2) 360 (14.2)
Turret	Number of tool stations		10 [12]		10 [12] <rotary tools: 10 [12]>	
	Shank height for square tool	mm (in.)	32 (1 ¼)			
	Shank diameter for boring bar	mm (in.)	Max. 65 (2.6)		Max. 60 (2 ½)	
	Turret indexing time	s	0.4			
Feedrate	Max. rotary tool spindle speed	min ⁻¹	—		3,000	
	Rapid traverse rate	mm/min (ipm)	X, Z: 20,000 (787.4)		X, Z: 20,000 (787.4) C: 25 min ⁻¹	
	Jog feedrate	mm/min (ipm)	X, Z: 0–5,000 (0–197.0) <20 steps>			
Tailstock	Tailstock travel	mm (in.)	4,100 (161.4)			
	Tailstock spindle diameter	mm (in.)	180 (7.1)			
	Taper hole of tailstock spindle		MT6 <built-in center>			
	Tailstock spindle travel	mm (in.)	150 (5.9)			
Motor	Spindle drive motor <30 min/cont>	kW (HP)	37/30 (50/40) [45/37 (60/50)]		45/37 (60/50)	37/30 (50/40) [45/37 (60/50)]
	Feed motor <X/Z-axis>	kW (HP)	6.0/6.0 (8/8)			
	Rotary tool spindle drive motor <30 min/cont>	kW (HP)	—		9/7.5 (12/10)	
	Coolant pump motor <50/60 Hz>	kW (HP)	0.325/0.52×1 (0.43/0.69×1) [0.625/1.04×1 (0.83/1.39×1)]			
	Chip flush coolant pump motor <50/60 Hz>	kW (HP)	0.325/0.52×1 (0.43/0.69×1)			
Power sources	Electrical power supply <cont>	I94168F04 kVA	54.2 [62.3 <high output>]		68.0	63.6 [72.1 <high output>]
	Compressed air supply <standard>	MPa (psi), L/min (gpm)	0.5 (72.5), 300 (79.2) <ANR>	0.5 (72.5), 400 (105.6) <ANR>	0.5 (72.5), 200 (52.8) <ANR>	0.5 (72.5), 300 (79.2) <ANR> 0.5 (72.5), 400 (105.6) <ANR>
Tank capacity	Coolant tank capacity	L (gal.)	900 (237.6)			
Machine size	Machine height <from floor>	mm (in.)	2,911 (114.6)		2,943 (115.9)	
	Floor space <width×depth> (width includes chip conveyor, depth includes oil chiller)	mm (in.)	9,515×3,665 (374.6×144.3)		9,515×3,940 (374.6×155.1)	
	Mass of machine	kg (lb.)	27,300 (60,060)		28,300 (62,260)	
Noise data	A-weighted, time-average radiated sound pressure level	db	65–84 (Measurement uncertainty is 4 dB)			

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- Max. spindle speed: depending on restrictions imposed by the workpiece clamping device, fixture and tool used, it may not be possible to rotate at the maximum spindle speed.
- ANR: ANR refers to a standard atmospheric state; i.e., temperature at 20 °C (68 °F), absolute pressure at 101.3 kPa (14.7 psi) and relative humidity at 65%.
- Power sources, machine size: the actual values may differ from those specified in the catalogue, depending on the optional features and peripheral equipment.
- Compressed air supply: please be sure to supply clean compressed air <air pressure: 0.7 MPa (101.5 psi), pressure dew point: 10 °C (50 °F) or below>.
- A criterion capacity to select a compressor is 90 L/min (23.8 gpm) per 0.75 kW (1 HP). However, this figure may differ depending on the type of compressors and options attached. For details, please check the compressor specifications.
- When the tool tip air blow is regularly used, air supply of more than 300 L/min (79.2 gpm) is separately required.
- Noise data: the values were measured at the front of the SL-603CMC/1000 with a maximum spindle speed of 1,000 min⁻¹. For details, please consult our sales representative.
- The information in this catalog is valid as of October 2017.

<Precautions for Machine Relocation>

EXPORTATION:

All contracts are subject to export permit by the Government of Japan.

Customer shall comply with the laws and regulations of the exporting country governing the exportation or re-exportation of the Equipment, including but not limited to the Export Administration Regulations. The Equipment is subject to export restrictions imposed by Japan and other exporting countries and the Customer will not export or permit the export of the Equipment anywhere outside the exporting country without proper government authorization.

To prevent the illegal diversion of the Equipment to individuals or nations that threaten international security, it may include a "Relocation Machine Security Function" that automatically disables the Equipment if it is moved following installation.

If the Equipment is so-disabled, it can only be re-enabled by contacting DMG MORI or its distributor representative. DMG MORI and its distributor representative may refuse to re-enable the Equipment if it determines that doing so would be an unauthorized export of technology or otherwise violates applicable export restrictions.

DMG MORI and its distributor representative shall have no obligation to re-enable such Equipment.

DMG MORI and its distributor representative shall have no liability (including for lost profits or business interruption or under the limited service warranty included herein) as a result of the Equipment being disabled.

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+ If you have any questions regarding the content, please consult our sales representative.

+ The information in this catalog is valid as of October 2017. Designs and specifications are subject to changes without notice.

+ The machines shown in the catalog may differ from the actual machines. The location and the size of the nameplates may also differ from the actual machines, or the nameplates may not be attached to some machines.

+ DMG MORI is not responsible for differences between the information in the catalog and the actual machine.

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