SC-200ⅡL

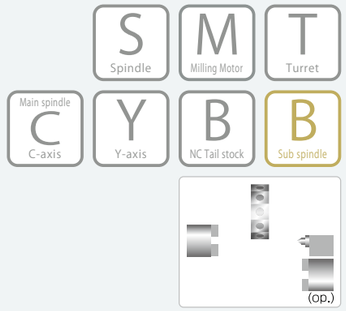
NAKAMURA-TOME
PRECISION INDUSTRY CO.,LTD.

Next level machining

Innovative Technology
～Creating new values～

SC-200ⅢL

The advance of SC-200L!
With a highly rigid slant bed with box way slides, suitable for heavy cutting and high precision machining.
8" class single-turret machine capable of performing one-rank higher machining.



Suitable for Machining Long Workpieces

It carries out great machining rigidity and stability, with a highly rigid slant bed with box-way slides.

Although it is an 8" class machine, it holds a maximum turning diameter of 390mm and a tool swinging diameter of 620mm, thus ensuring a machining area equivalent to that of a 10" class machine.

In addition, the distance between centers has been increased to 715mm (distance between spindles: 800mm).
NC tailstock specifications are now standard, making it easier to machine long workpieces.

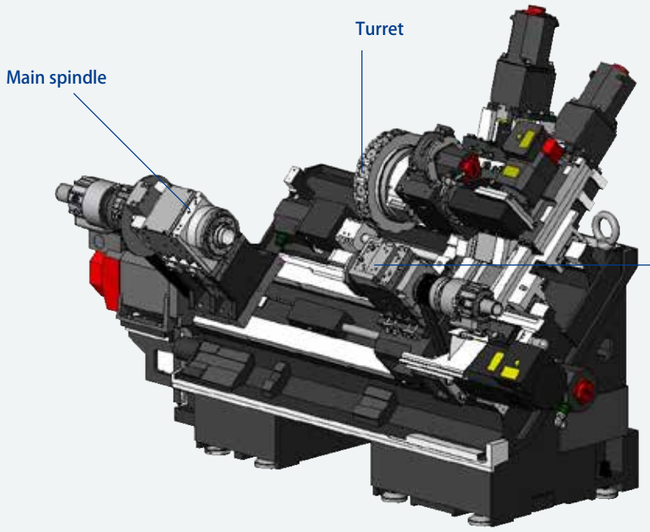
Easier to use, more efficient
Next level machining

■ Main spindle

Standard	Option	Option	Option
Bar capacity Φ65mm Spindle speed 4,500min^{-1}		Bar capacity Φ71mm Spindle speed 4,500min^{-1}	
Spindle motor 15/11kW	Spindle motor 18.5/15kW	Spindle motor 15/11kW	Spindle motor 18.5/15kW

■ Turret

Standard	Option
Y axis slide travel ±50mm Milling spindle speed 6,000min^{-1} Milling motor 5.5/3.7kW	
Type of turret head Dodecagonal Number of milling stations / Number of indexing positions 12 / 24	Type of turret head Hexadecagon Number of milling stations / Number of indexing positions 16 / 16



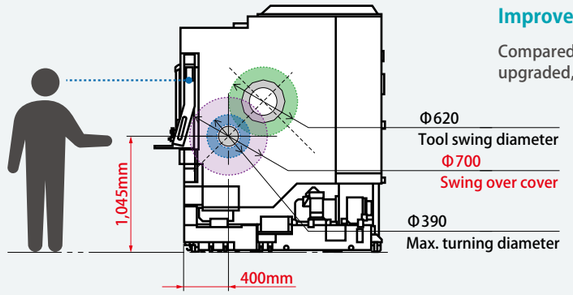
Milling and Y-axis standard

■ Tailstock

Standard
Driving system NC control servo-driven type Quill taper MT-4(Rotating center), MT-3(Built-in center) Range of thrust force 2.5 - 6.5kN

■ Sub spindle (MATA-BEI / op.)

Option
Bar capacity φ51mm Spindle speed 5,000min^{-1} Spindle motor 15/11kW



Improved swing, and machining diameters

Compared to the previous model, the machining product range has been upgraded, giving it the ability to perform one-rank higher machining.

Stress-free

For best accessibility, the distance from machine front to spindle, and the spindle height have been improved. The control panel height was designed for optimum operator comfort. Ergonomically designed for a more comfortable posture.

Nakamura-Tome FANUC 0i-TF Plus 15 inch touch screen

With a movable operation panel, the angle can now be adjusted by the operator.

Tool setter(op.)

Can be configured for a detachable, or for an automatic swing-down type tool setter.

Chip conveyor(op.)

Can be configured for ejection from the side or from the back.

GR-203 High-Speed(op.)

The whole process from loading a blank material to unloading a finished part can be automated.

* The image is of NTY^{3}-100.

Parts catcher type A(op.)

Discharging of remnants and finished parts can be automated.

Option
Diameter Φ15 - Φ71mm Length 30 - 150mm Weight 0.1 - 1.5kg

User friendry

Redesigned to make it easier to refill the lubrication oil tank.

■ Capacity

		φ65	φ71(op.)	φ51(op.)
Max. turning diameter	12st	390mm		
	16st(op.)	340mm		
Distance between centers		max.715mm / min.245mm		
Distance between spindles(op.)		800mm		
Max. turning length		522.8mm		
Bar capacity		φ65mm	φ71mm	φ51mm
Chuck size		8"	10"	6" / 8"

■ Axis travel

X-axis slide travel	242mm	201mm
Z-axis slide travel	580mm	
Y-axis slide travel	±50mm	
B-axis slide travel(op.)	540mm	

■ 早送り速度

X 軸 早送り速度	24m/min
Z 軸 早送り速度	36m/min
Y 軸 早送り速度	6m/min
B 軸 早送り速度 (op.)	20m/min

■ Main spindle

Spindle speed	4,500min^{-1}	4,500min^{-1}	—
Spindle speed range	Stepless	Stepless	—
Spindle nose	A2-6	A2-6	—
Hole through spindle	80mm	80mm	—
I.D. of front bearing	110mm	110mm	—
Hole through draw tube	66mm	72mm	—

■ Sub spindle(op.) *2

Spindle speed	—	—	5,000min^{-1}
Spindle speed range	—	—	Stepless
Spindle nose	—	—	A2-5
Hole through spindle	—	—	63mm
I.D. of front bearing	—	—	90mm
Hole through draw tube	—	—	52mm

● Safety quality specifications

Various interlocks, such safety fences, auto extinguisher devices, and other safety related equipment may be required. These have to be selected during the configuration of the machine.

① Safety devices include electromagnetic door lock, chuck interlock, hydraulic
pressure switch, air pressure switch, short circuit breaker and quill interlock.
(Door interlock and chuck interlock are standard equipment.)

② In the case of automation, various safety fences may be required, such as work stocker safety fences, robot safety fences, etc.

During the configuration of machine specifications, please discuss these requirements with the Nakamura-Tome machine sales representative.

● Precautions on the use of cutting fluids and lubricating oils

Some types of cutting fluids (coolant) are harmful to machine components, causing damages such as peeling of paint, cracking of resin, expansion of rubber, corrosion, and rust build-up on aluminum and copper.

To avoid causing damage to the machine, never use synthetic coolants, or any coolants containing chlorine. In addition, never use coolants and lubricating oils which contain organic solvents such as butane, pentane, hexane, and octane.

■ Turret

Type of turret head	12st	Dodecagonal
	16st(op.)	Hexadecagon
Number of Indexing positions	12st	24
	16st(op.)	16
Tool size (square shank)		□20mm, □25mm
Tool size (round shank)		φ25mm, φ32mm

■ Milling

Rotary system		Individual rotation
Milling spindle speed		6,000min^{-1}
Spindle speed range		Stepless
Number of milling stations	12st	12
	16st(op.)	16
Tool size		Straight holder φ1mm -φ16mm
		Cross holder φ1mm -φ16mm

■ Tailstock *1

Driving system	NC control servo-driven type
Travel	470mm
Rapid feed	8m/min
Quill taper	MT-4(Rotating center), MT-3(Built-in center)
Quill diameter / Quill stroke	—
Range of thrust force	2.5-6.5kN

■ Drive motor

Main spindle motor	15/11kW , 18.5/15kW(op.)
Sub spindle motor	15/11kW
Milling motor	5.5/3.7kW

■ General

Height	2,125mm
Max. height of movable part	2,221mm
Floor space (L x W)	3,787.5mm ×1,967mm
Machine weight (incl. control)	8,500kg

■ Power requirements

Power supply	24.0kVA (Main spindle 15/11kW)
	27.3kVA (Main spindle 18.5/15kW)
	31.6kVA (Main spindle 15/11kW, Sub spindle 15/11kW)
	34.9kVA (Main spindle 18.5/15kW, Sub spindle 15/11kW)

*1 NC tailstock (MT-4/rotating center) specification is standard.
*2 When the sub spindle specification is selected, the dodecagonal turret is not selectable.

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