

CNC Precision Lathe

X-200

CNC PRECISION LATHE X-200

ISO 9001
ISO 14001



JQA-1989
JQA-EM1138



TAKAMAZ

A 10-inch Model that Delivers

We have taken a new stride toward a perfect machine based on our skills and the varied feedback from customers over the past 50 years

"Customer-oriented design" is the key concept we have acquired from the customers' need for strict quality standards in EU countries.

The "X-200" CNC precision lathe equipped with a 15-kW spindle motor and 10-inch chuck can handle even multi-functional, heavy-duty turning operations.

CNC Precision Lathe

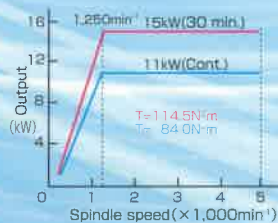
X-200



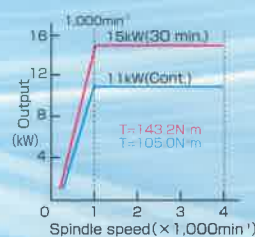
Spindle Types Available

[Spindle output characteristics diagram]

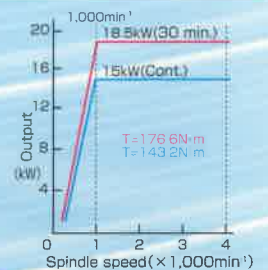
A ϕ 51-mm hole through spindle
AC 15/11kW
Max. 5,000min⁻¹



B ϕ 65-mm hole through spindle
AC 15/11kW
(Opt.) Max. 4,000min⁻¹



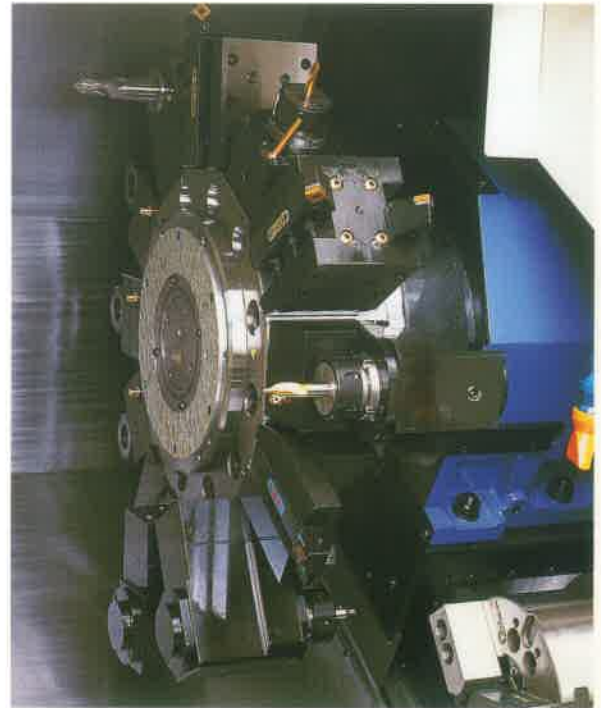
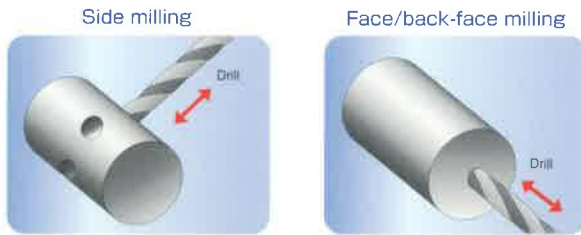
C ϕ 65-mm hole through spindle
AC 18.5/15kW
(Opt.) Max. 4,000min⁻¹



High-rigidity 12-station servo turret for heavy-duty turning and milling

The 12-station turret assures high-speed indexing, within 0.2 sec., which shortens air-cutting time. Square guideways are used for the X- and Z-axis slideways for a rigid design. The optional turret head dedicated to VDI tools is available for even quicker tool changes.

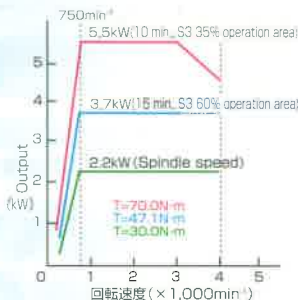
Power tools can be mounted on any station of the turret. The 5.5-kW AC motor, with its wide constant-output range, enables powerful milling/drilling in a short cycle time. High-accuracy tapping is also possible with the rigid tap function.



■ VDI turret
Single-touch tool change for speedy setup (Opt.)

[Power tool output characteristics diagram]

AC5.5/3.7/2.2kW (Max.4,000min⁻¹)



[Major specifications]

Tool storage capacity	pcs	12	
Max. rotating speed	min ⁻¹	Max. 4,000	
Motor	kW	AC 5.5/3.7/2.2	
Capacity	Drill	mm	Max. ϕ 20
	Endmill	mm	Max. ϕ 20
	Tap	mm	M4~M12

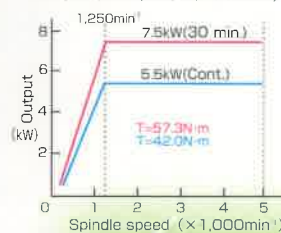
Complete turning from blank to finish when equipped with sub-spindle (Opt.)



A collet chuck or 6-inch chuck can be mounted. Back-face turning/milling in a short time is assured thanks to the 7.5-kW AC motor with a wide constant-output range. Back-face milling with a Cs-axis orientation is also possible.

[Sub-spindle motor output characteristics diagram]

AC7.5/5.5kW (Max.5,000min⁻¹)



[Major specifications]

Chuck size	inch	6
Max. bar dia.	mm	ϕ 26
Spindle speed	min ⁻¹	Max. 5,000
Spindle motor	kW	AC 7.5/5.5
Max. stroke	mm	515
Rapid traverse rate	m/min	30
Synchronization		Complete

Increased speed with the shortest air-cutting time



FANUC Manual Guide "i" for exceptional operability (Opt.)

- ◆ All operations from programming to the simulation check to actual turning can be performed on a single screen.
- ◆ In addition to useful editing functions, such as copy, cut, and paste, a variety of programming support functions are available: the M-code menu, the program format menu, guidance messages, and so on.
- ◆ Cycle operations (milling, turning, slant-facing, etc.) can be programmed with ease and reviewed through simulation.
- ◆ Setup support functions such as tool measurement, work zero point measurement and in-machine workpiece measurement, are available as required.



※The above figure is only an example.

Gantry Loader "SIGMA 200" with 5-kg Capacity

The "SIGMA 200" is a gantry loader that can be tailored flexibly to suit your transfer application; working in a single cell or between linked multiple machines. The 3-jaw double chuck with secure clamping has a workpiece carrying capacity of 5-kg in each chuck. Our "know-how" for automatic loading/unloading systems enables us to cope with the needs of customers who machine a large variety of heavy workpieces in variable quantities.



SIGMA200 [Major specifications]

Controllable axes	2axesX1 set
Max. transfer diameter	mm $\phi 80$
Max. transfer length	mm 70
Max. transfer weight (one side)	kg 5.0
Finger stroke (one side)	mm 16

■ Loader hand
Equipped with a 3-jaw double chuck that assures secure clamping



Station stoker

You can choose from a number of variations according to the workpiece shape or production style.

Tool presetter (Opt.)



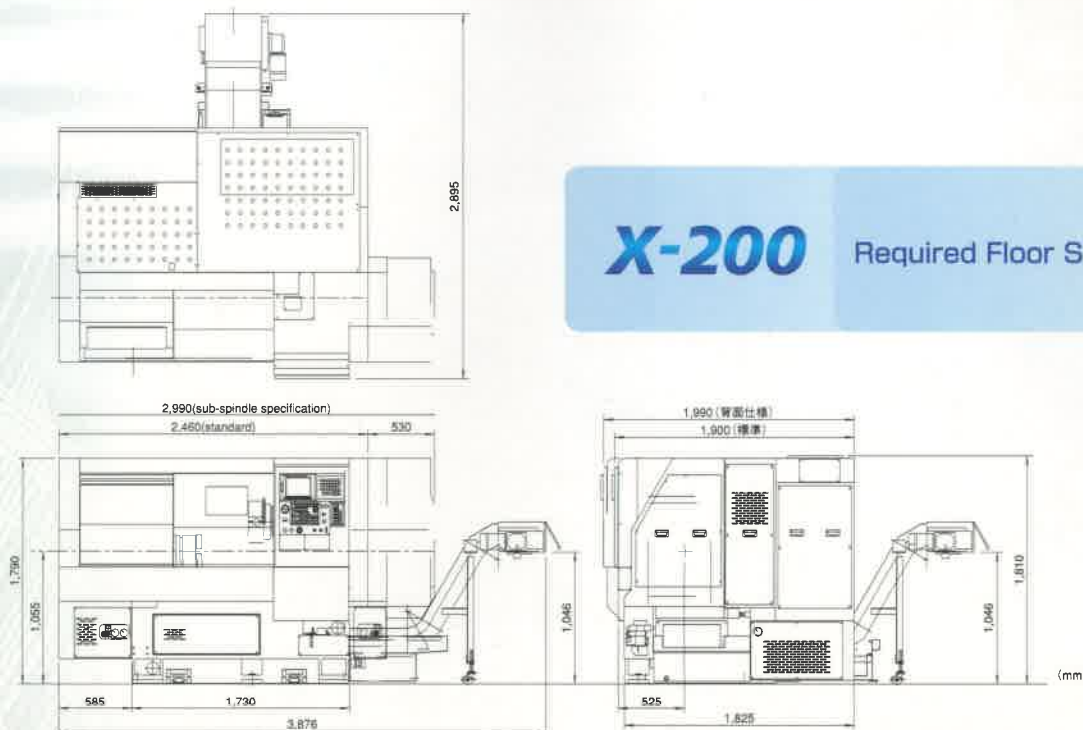
The tool presetter helps you to shorten the setup time.

Energy-saving hydraulic pump "Ecorich" (Opt.)



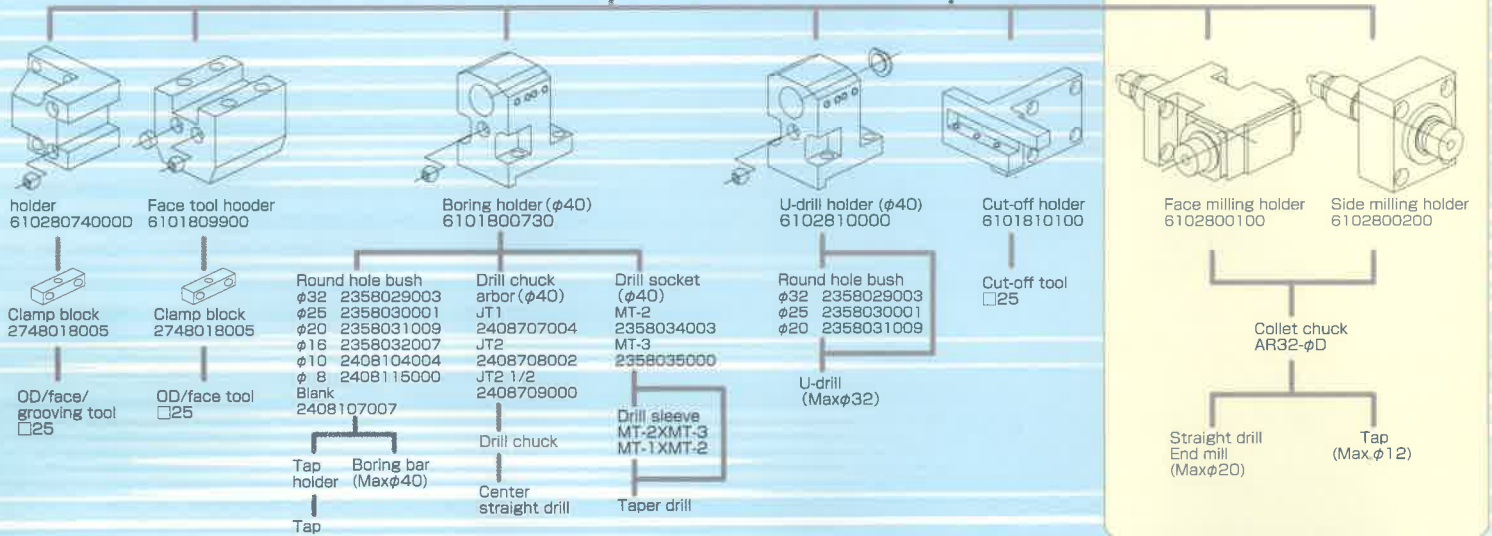
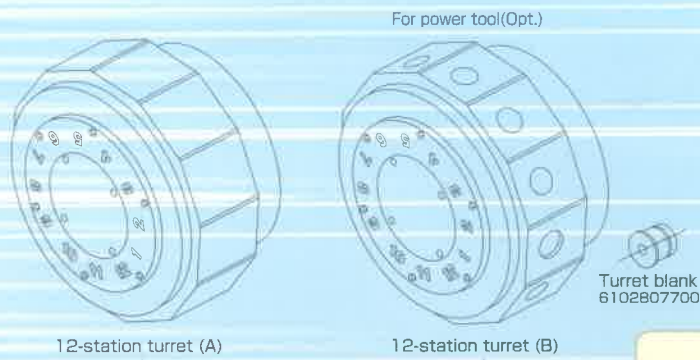
Separate type

Slowing down the motor's rotational speed while the pressure remains constant enables energy savings as well as cost reductions.

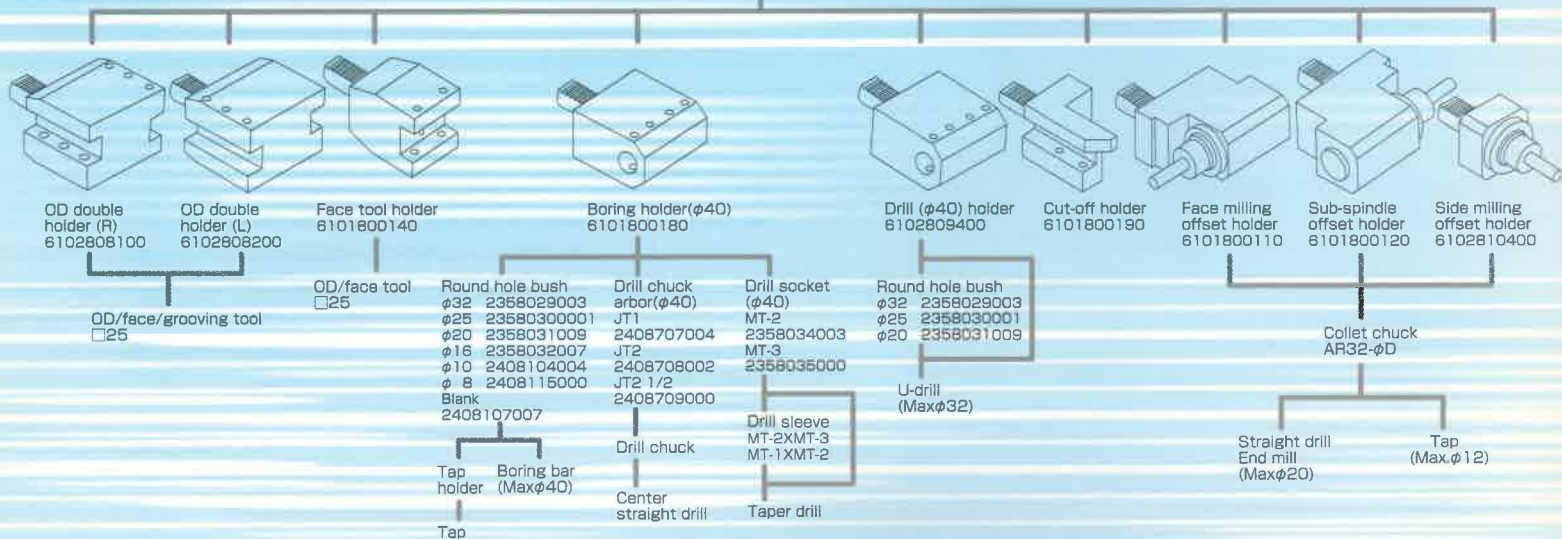
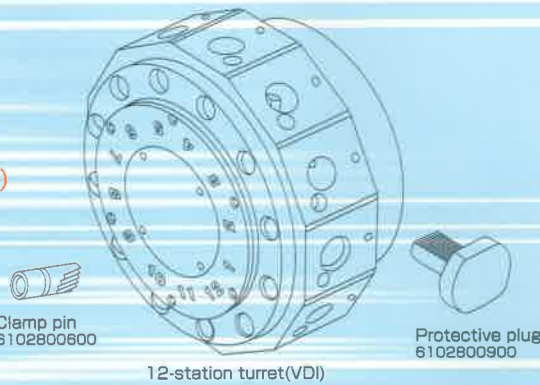


X-200

Tooling System [Standard]

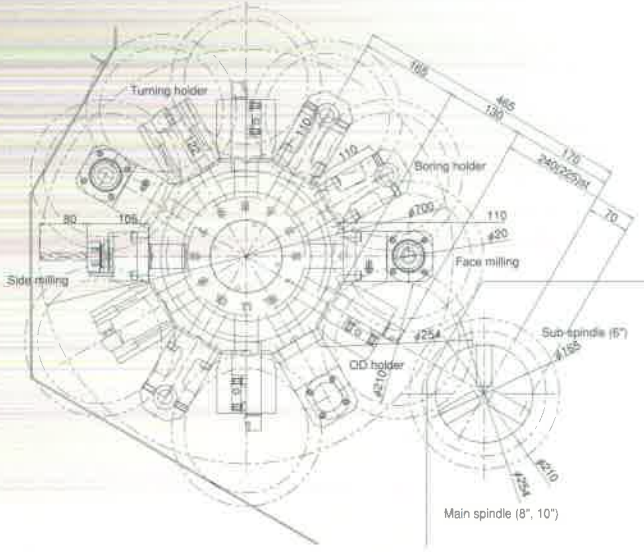


Tooling System [VDI] (Opt.)

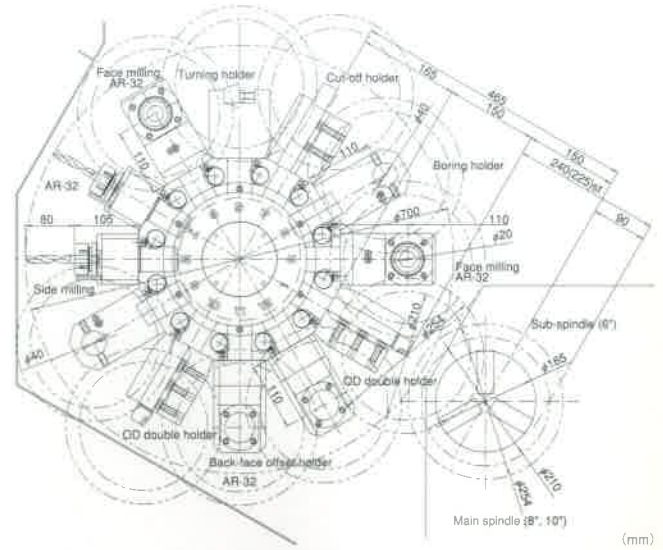


Turret Interference Diagram

Standard turret



VDI 40 turret (Opt.)

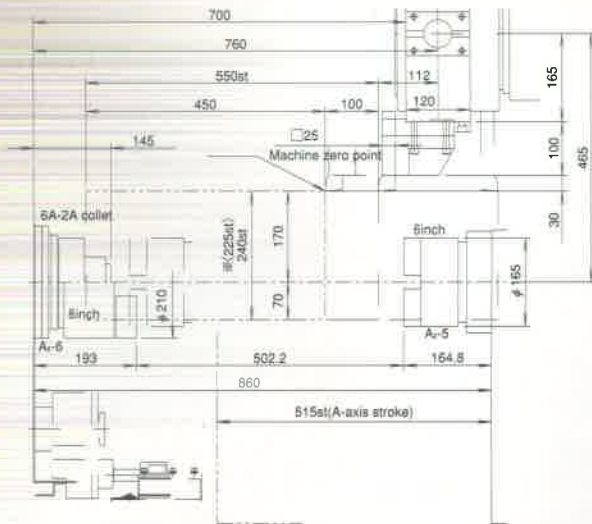


※When the sub-spindle is equipped, the X-axis stroke is shortened to 225 mm from the machine zero point.

Stroke Diagram

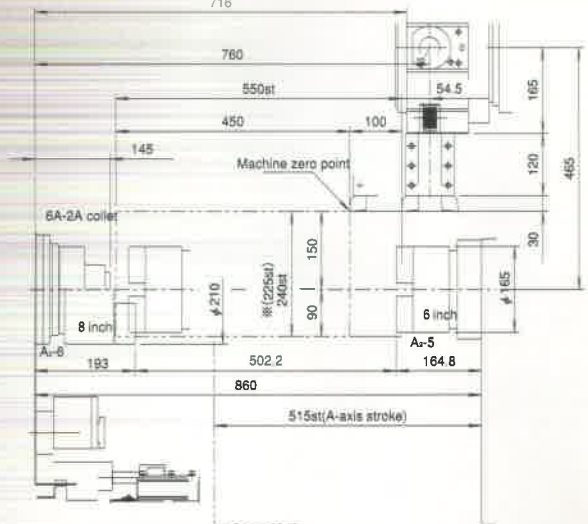
Standard turret

φ100-mm spindle with A₂-6 sub-spindle OD holder

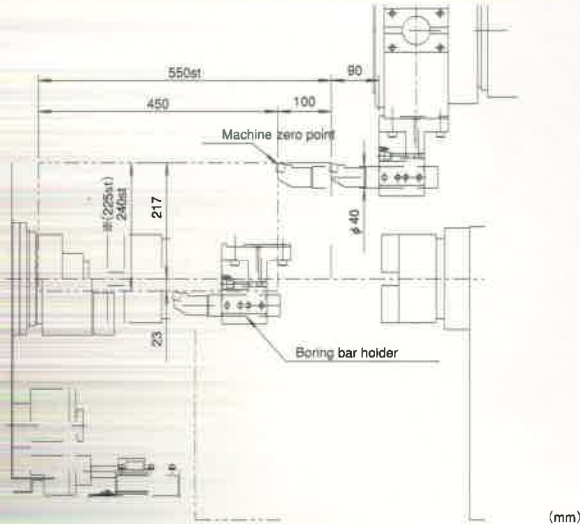


VDI 40 turret

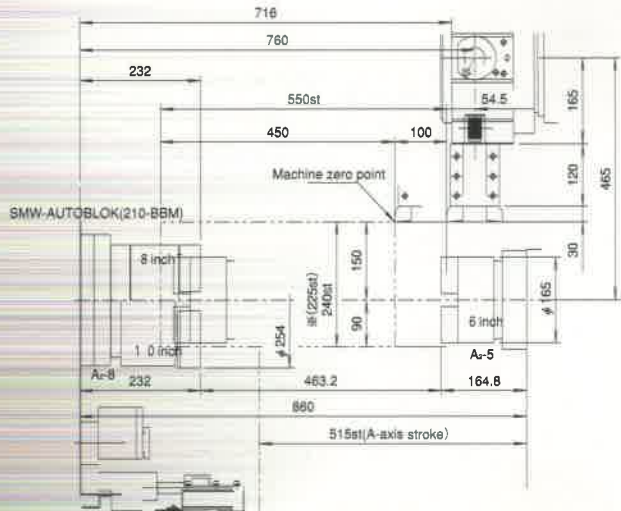
φ100-mm spindle with A₂-6 sub-spindle OD double holder



φ100-mm spindle with A₂-6 sub-spindle Boring bar



φ120-mm spindle with A₂-8 sub-spindle OD double holder



※When the sub-spindle is equipped, the X-axis stroke is shortened to 225 mm from the machine zero point.