

CNC ■ Spindle ■ Turret
Precision Lathe

XC·XT·XL series

CNC PRECISION LATHE

XC-100 XC-150 XT-6/XT-6M XL-150 XL-200

TAKAMAZ

Compact low-Cost Creativity



XC-100

6

Max. turning diameter	ø180mm
Max. turning length	190mm
Max. bar diameter	ø26mm
Tool post type	8-station turret
Rapid traverse rate	X: 12/Z: 18 m/min
Spindle motor	AC 7.5/5.5kW
Dimensions (L×W)	1,150×1,360mm
Controller	TAKAMAZ & FANUC

In 1976, **TAKAMAZ** developed CNC lathe with CRT, "TCC-8" from Japan. Since its development, TAKAMAZ has provided a total of 40,000 CNC lathes and has been providing CNC lathes worldwide. The core of the CNC lathe line up is the "X Series" that has one spindle and one turret structure. This is the most basic structure and yet it is through this structure that TAKAMAZ garnered confidence from valuable customers. In 2010, a more compact, less priced, and aimed at a more creative design, the new series [XC/XT/XL] Series is born.



XC-150

8

Max. turning diameter	φ 290mm
Max. turning length	204mm
Max. bar diameter	(φ51mm)
Tool post type	8-station turret
Rapid traverse rate	X : 18/Z : 24 m/min
Spindle motor	AC 11/7.5kW
Dimensions (L×W)	1,250×1,480mm
Controller	TAKAMAZ & FANUC

() : Option

※The photo shows new TAKAMAZ standard color.Environmentally friendly powder coating is employed.

Long stroke+Compound Machining



XT-6/6M **NEW**

Chuck size **6** inch

Max. turning diameter	φ180mm (φ200mm)
Max. turning length	240mm (195mm)
Max. bar diameter	φ26mm (φ35mm, φ42mm)
Tool post type	8-station turret (12-station)
Rapid traverse rate	X: 18/Z: 24 m/min
Spindle motor	AC 7.5/5.5kW (11/7.5kW)
Dimensions (L×W)	1,360×1,370mm
Controller	TAKAMAZ & FANUC



XL-150

Chuck size **8** inch

Max. turning diameter	φ320mm (For 8-Station Turret)
Max. turning length	370mm
Max. bar diameter	(φ65mm)
Tool post type	8-station turret (12-station)
Rapid traverse rate	X: 18/Z: 24 m/min
Spindle motor	AC 11/7.5kW (15/11kW)
Dimensions (L×W)	1,600×1,535mm
Controller	TAKAMAZ & FANUC

“Surprise the World with Hidden Creativity”



XL-200

8

Max. turning diameter	ø340mm
Max. turning length	720mm
Max. bar diameter	(ø65mm)
Tool post type	12-station turret
Rapid traverse rate	X: 18/Z: 24 m/min
Spindle motor	AC 11/7.5kW (18.5/15kW)
Dimensions (L×W)	2,900×1,845mm
Controller	TAKAMAZ & FANUC

(): Option

※The photo shows new TAKAMAZ standard color. Environmentally friendly powder coating is employed.

CNC Multi-Turning Center

XX series

TAKAMAZ



CNC Multi-Turning Center

XY series

From Blank to Finish with a Single Switch!

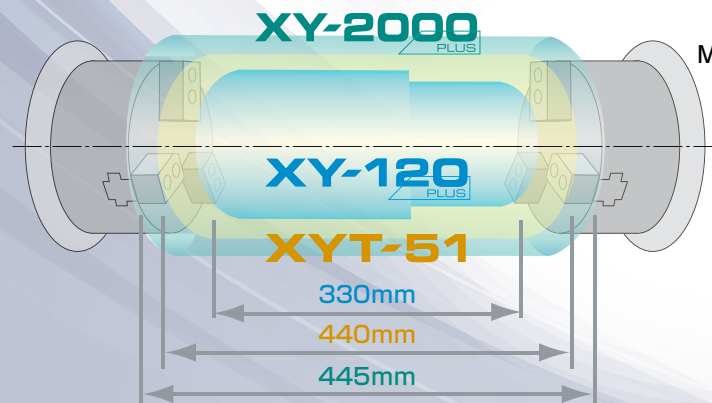
The answer is here. it's XY series !

From the age of mass production to optimal quantity production
Supporting optimal creation of new things through
intelligent fusion of man and machine,
the XY series is the ideal machine for a new era.

Turning
range

Max. turning diameter
#1 Turret

φ240mm
φ190mm
φ170mm



Max. turning diameter
#2 Turret

φ240mm
φ190mm
φ135mm

Max. bar
diameter



※The available turning range varies depending on the chuck size or part shape.

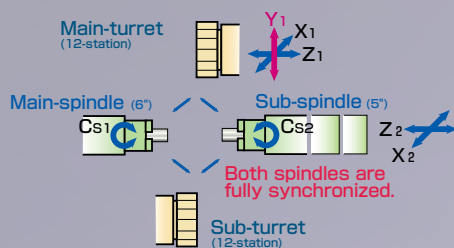
XY-120

PLUS

This middle size multi-turning center is equipped with the sub-spindle X2 axis to enable superimposed cutting and can be installed with an optional sub-turret, which further helps shorten turning time.

Compared to conventional machines, higher-grade motors are used to achieve an OD turning area of 0.87 mm^2 (10% increase) on the main-spindle side and 0.5 mm^2 (13% increase) on the sub-spindle side.

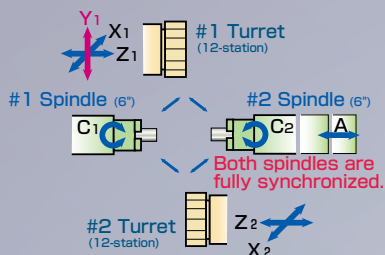
※Cutting amount×Feedrate.



XYT-51

NEW

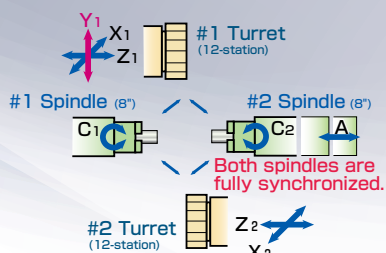
Suited to bar work up to max. $\phi 51 \text{ mm}$, and able to accommodate a maximum of 48 turning tools through half indexing or 24 power tools. Increasing motor output beyond that of the existing machines allows it to handle heavy-duty cutting and compound machining.



XY-2000

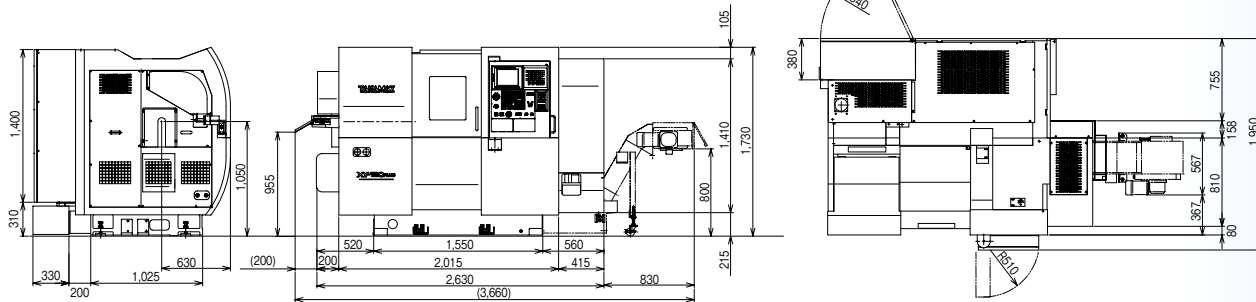
PLUS

Suitable for bar materials of $\phi 65 \text{ mm}$ maximum. 24 power tools can be installed on #1 and #2 turrets, enabling highly efficient multi-turning operation from blank to finish. VDI tooling systems are also available for European countries, which can shorten setup time.



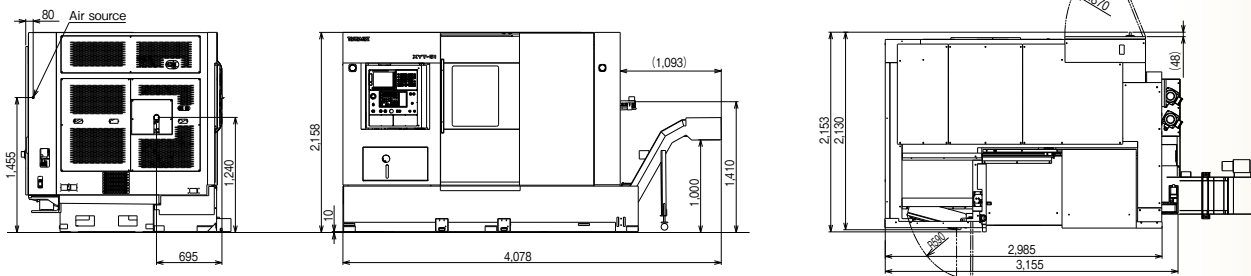
Machines shown in the photos are in standard color. Environmentally friendly powder coating is applied.

XY-120 PLUS



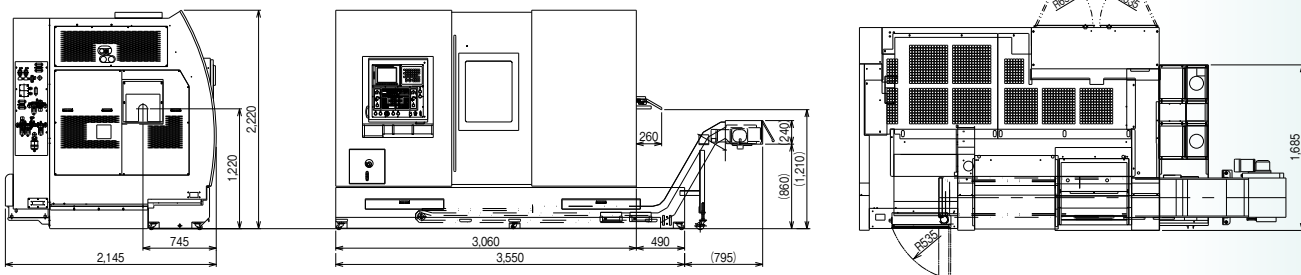
Unit(mm)

XYT-51



Unit(mm)

XY-2000 PLUS



Unit(mm)

TAKAMAZ

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The user must not export, sell, or relocate the product, to any country with different regulations or standards.



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CNC ▯ Spindle ▯ Slide
Precision Lathe

XXW series



TAKAMAZ



※The photo shows the XW-30PLUS.

CNC 2-Spindle 2-Slide Precision Lathe

XW-30/30

PLUS

※The XW-30 accepts 3-inch chucks only.





※The photo shows the XW-60m.

CNC 2-Spindle 2-Turret Precision Lathe

XW-60/60m **NEW**

XW-130



CNC 2-Spindle 2-Turret Precision Lathe

XW-130





CNC 2-Spindle 2-Turret Precision Lathe

XW-130M



CNC 2-Spindle 2-Turret Precision Lathe

XW-200

XWT-10



CNC 2-Spindle 2-Turret Precision Lathe

XWT-10

NEW

Equipped with the [Speed] and [Small Footprint] Servo Loader, “Σi Series”

As a result of machine body and loader integrated as one unit, superiority in design balance is accomplished as well as high productivity and space savings, and with after-sale service by **TAKAMAZ**, will benefit the customer on different aspects.

- ◆The largest three-axis control, setup is easy and can be done quickly.
- ◆Depending on the cutting time, it is possible to equip the machine with 1 or 2 loaders.
- ◆In each point, it is possible to set the interlock to prevent accidental collision.
- ◆All database, the servo parameter, the data tables, and timer setting can be uploaded and downloaded to and from the memory card.



Loader transfer capacity

Item	Unit	XW-30/30PLUS		XW-60/60M		XW-130	XW-130M/200	XW-200	XWT-10
Loader Model		ΣIW30*	ΣIW30H*	ΣIGTH60	ΣIGTH60(High speed type)	ΣIGTH150		ΣIGTH200	
Number of axes	axes	2				3			
Loading Time (Reference)	sec.	4	2	6	2	6		7	
Transport	Diameter x Length (Reference)	mm		mm		mm		mm	
Work Dimension	Weight	kg		kg		kg		kg	
	Drive System								
Shoulder (Traverse axis : Z)	Stroke	mm							
	Rapid Traverse Rate	m/min							
Forward/ Backward axis : X	Drive System								
	Stroke	mm							
	Rapid Traverse Rate	m/min							
Arm (Vertical axis: Y)	Drive System								
	Stroke	mm							
	Rapid Traverse Rate	m/min							
Hand	Drive System								
	Angle	deg.							
	Jaw Stroke	mm							
Hand Type									

※The loader installed on the XW-30 is the ΣW30/ΣW30H.

※The loader for the XW-30PLUS with CE specifications is the ΣW30/ΣW30H.

The loading time, transport and work dimensions are the indicators.

CNC ■ Spindle ■ Turret
Precision Lathe

SL series

TAKAMAZ

CNC 1 Spindle 1 Turret Precision Lathe

GSL series



GSL-10

Chuck size **6** Inch

Max.turning diameter	φ 180mm
Max.turning length	190mm
Max.bar diameter	Solid
Tool post type	8-station turret
Rapid traverse rate	X:12 Z:18 m/min
Spindle motor	AC 5.5/3.7 kW
Dimensions(L×W)	1,400 × 1,390 mm
Controller	TAKAMAZ & FANUC

Leading the World in Cost Performance



GSL-15 PLUS

Chuck size **8** Inch

Max.turning diameter	φ 310mm
Max.turning length	300mm
Max.bar diameter	Solid
Tool post type	8-station turret
Rapid traverse rate	X:18 Z:24 m/min
Spindle motor	AC 7.5/5.5 kW
Dimensions(L×W)	1,875 (With tailstock:1,990) × 1,680 mm
Controller	TAKAMAZ & FANUC

This is the Launch of a Universal Machine of Global Standards with Refined Utility and Endurance.

Simultaneous attainment of low costs and high reliability

Simplifying the structure realizes low costs and provides differentiation from existing machines. What is more, high reliability is maintained because, from parts to assembly, manufacture is completely done in Japan while achieving low costs.

Operator-friendly design

Excellent accessibility, with a spindle center height of 980 mm and a distance from the front of 315 mm, along with a low machine ceiling height of 1,400 mm, release operators from feeling constricted and allow even short-statured operators to work without strain. Maintainability is also improved by adopting a fixed-type coolant tank that can be cleaned inside simply by removing the lid.



Equipped with a tailstock unit

The tailstock unit allows shaft work to be handled as well.



Item		Unit	
Tailstock	Pointed End		MT - 4
	Quill O.D.	mm	φ56
	Quill stroke	mm	85
	Tailstock stroke	mm	220
	Max. thrust	kN	3.5

CNC1Spindle2Turret
Precision Lathe

X-S700

CNC PRECISION LATHE X-S700

TAKAMAZ

With the twin turret design,
the ultimate shaft machining is achieved.

CNC **1**Spindle **2**Turret Precision Lathe

X-S700

This is a space saving machine and suitable for machining camshaft and crankshaft.

With the adoption of 1-spindle and 2-turret design,
it is a unique structure that provides uniform and high accuracy machining by balance cutting.



Machine Specifications

	Item	Unit	X-S700	
			A type	B type
Capacity	Max. turning diameter	mm	$\phi 225$	
	Max. turning length	mm	700 *1	625
	Max. bar diameter	mm	($\phi 51$)	($\phi 65$)
	Chuck size	inch	8	8 (10)
Spindle	Spindle nose	JIS	A2-6	A2-8
	Spindle bearing I.D.	mm	$\phi 100$	$\phi 120$
	Through-hole on spindle	mm	$\phi 51$	$\phi 65$
	Spindle speed	min ⁻¹	Max.3,500	Max.3,500(3,000)
Tool post	Type		10-station x2	
	Tool shank	mm	$\square 25$	
	Boring holder I.D.	mm	$\phi 40$	
	Max. stroke	mm	X : 115 Z : 650	
Motors	Rapid traverse rate	m/min	X : 16 Z : 30	
	Spindle motor	kW	AC15/11	AC15/11(18.5/15)*2
	Feed motor	kW	X : AC1.4 Z : AC1.8	
	Coolant motor	kW	AC0.39 x 2, AC0.62 x 1	
Size	Hydraulic motor	kW	AC0.75 x 2	
	Tail motor	kW	AC1.4	
	L x W x H	mm	1,960 x 1,720 x 1,830	
	Machine weight	kg	5,400	5,500
	Total electric capacity	KVA	35	35(42)

*1 Possible through separate vertical machining when using a shift O.D. holder in a $\phi 100$ spindle. (): Option

*2 A spindle motor of AC18.5/15kW is mounted for the 3,500min⁻¹ spindle.

Standard Accessories

- | | |
|--|--|
| ☐ Clamp block 20sets | ☐ Hydraulic unit 1set |
| ☐ Coolant block(For reverse cutting tools) ... 20sets | ☐ Thread cutting unit 1set |
| ☐ Hydraulic power chuck (8"/Solid) ... 1set | ☐ Coolant unit (110 lit.) 1set |
| ☐ Hydraulic chucking cylinder 1set | ☐ Service tool kit 1set |
| ☐ Tailstock 1set | ☐ TAKAMAZ instruction manual ... 1set |

Optional Accessories

- | | |
|--|---|
| ☐ Tool holders | ☐ Automatic power shut-off device |
| ☐ Chucking system | ☐ Rear coolant unit |
| ☐ Alloyed clamp holder for vibrations suppression | ☐ Signal light (1-color/2-color/3-color) |
| ☐ Special spindle speed (3,000min ⁻¹) | ☐ TAKAMAZ loader system |
| ☐ Center rest unit | ☐ Rear chip conveyor |
| ☐ Storage-type work rest device | (Spiral type/Floor type) |
| ☐ Spindle indexing device (Electrical/Mechanical) | ☐ Special coolant pump |
| ☐ Chuck clamp detector | ☐ Special color |
| ☐ Automatic door system (Auto door/Shutter) | ☐ Others* |
| ☐ Front air blower | |

* For more information on attachments, consult our sales representative.

Tail stock

Item	Unit	A type	B type
Front taper		MT-4	MT-5
Quill O.D.	mm	$\phi 90$	
Quill stroke	mm	20 (Oil pressure)	
Tailstock stroke	mm	350 (Servo motor)	
Rapid traverse rate	min ⁻¹	12	
Max.thrust	kN	4	

Controller Specifications

Item	TAKAMAZ & FANUC Oi-TD
Controlled axes	5 axes (X1, X2, Z1, Z2, A)
Simultaneously controllable axes	Simultaneous 2 axes (x2)
Least input increment	0.001mm (X in diameter)
Least command increment	X : 0.0005mm Z : 0.001mm
Auxiliary function	M-code 3 digit
Spindle function	S-code 4 digit
Tool function	T-code 4 digit
Tape code	EIA(RS232C)/ISO(840) automatic recognition
Cutting feedrate	1~5,000mm/min
Command system	Incremental/Absolute
Linear interpolation	G01
Circular interpolation	G02, G03
Cutting feedrate override	0~150%
Rapid traverse override	F0, 100%
Program number	4 digits
Backlash compensation	0~9999 μ m
Program memory capacity	1Mbyte (2,560m)
Tool offsets	128 sets
Registered programs	800 pcs.
Tool geometry/Wear offset	Standard
Canned cycle	G90, G92, G94
Radius designation on arc	Standard
Tool offset measurement input	Standard
Background editing	Standard
Direct drawing dimension programming	Standard
Custom macro	Standard
Additional custom macro common variables	#100~#199, #500~#999
Pattern data input	Standard
Nose R compensation	G40, G41, G42
Inch/Metric conversion	G20/G21
Programmable data input	G10
Run hour/Parts count display	Standard
Extended part program editing	Standard
Multiple repetitive cycle	G70~G76
Multiple repetitive cycle II	Pocket-shaped
Canned drilling cycle	Standard
Constant surface speed control	G96, G97
Continuous thread cutting	G32
Variable lead thread cutting	G34
Thread cutting retract	Standard
Clock function	Standard
Help function	Standard
Alarm history display	50 pcs.
Self-diagnosis function	Standard
Sub-program call	Up to 10 loops
Decimal point input	Standard
2nd reference point return	G30
Work coordinate system setting	G50, G54~G59
Stored stroke check 1	Standard
Stored stroke check 2,3	Standard
Input/Output interface	RS232C, Memory card, Ethernet
Alarm message	Standard
Graphic display	Standard
Conversational programming with graphic function	Standard
Abnormal load detection	Standard
Balance cut	G68, G69
Manual handle trace	Standard
Automatic data backup	Max. 3
Automatic screen deletion function	Standard
TAKAMAZ option functions	Work/Tool counter, Tool load monitor, Other
TAKAMAZ maintenance functions	Standard
FANUC set of manuals	CD-ROM

Optional Controller Specifications

Tool life management	
Spindle orientation	
Multiple M codes in one block	Max. 3
Dynamic graphic function	
FANUC instruction manual	Bound

TAKAMAZ

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