

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	<b>φ180mm</b>
Max. turning length	<b>190mm</b>
Max. bar diameter	<b>φ26mm</b>
Tool post type	<b>8-station turret</b>
Rapid traverse rate	<b>X: 12/Z: 18 m/min</b>
Spindle motor	<b>AC 7.5/5.5kW</b>
Dimensions (L×W)	<b>1,150×1,360mm</b>
Controller	<b>TAKAMAZ &amp; FANUC</b>

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

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



## XL-150

Chuck size **8** inch

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

“Surprise the World with  
Hidden Creativity”



## **XL-200**

**8**

Max. turning diameter	<b>φ340mm</b>
Max. turning length	<b>720mm</b>
Max. bar diameter	<b>(φ65mm)</b>
Tool post type	<b>12-station turret</b>
Rapid traverse rate	<b>X : 18/Z : 24 m/min</b>
Spindle motor	<b>AC 11/7.5kW(18.5/15kW)</b>
Dimensions (L×W)	<b>2,900×1,845mm</b>
Controller	<b>TAKAMAZ &amp; FANUC</b>

( ) : Option

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



# XC·XT·XL

## series

# TAKAMAZ

[www.takamaz.co.jp](http://www.takamaz.co.jp)

### TAKAMATSU MACHINERY CO.,LTD.

■HEAD OFFICE & PLANT  
1-8 ASAHIGAOKA HAKUSAN-CITY ISHIKAWA JAPAN. 924-8558 TEL +81-(0)76-274-1403 FAX +81-(0)76-274-8530

### TAKAMATSU MACHINERY USA INC.

■CHICAGO HEAD OFFICE  
1280 LANDMEIER ROAD ELK GROVE VILLAGE, IL 60007 USA TEL +1-(0)847-981-8577 FAX +1-(0)847-981-8599  
■CINCINNATI OFFICE  
5233 MUHLHAUSER ROAD, WEST CHESTER TOWNSHIP, OH 45011 USA TEL +1-(0)513-870-9777 FAX +1-(0)513-870-0325  
■GREENVILLE OFFICE  
506 MATRIX PARKWAY PIEDMONT, SC 29673 USA TEL +1-(0)847-981-8577

### TAKAMAZ MACHINERY EUROPE GmbH

INDUSTRIEGEBIET, DIEPENBROICH 27 D-51491 OVERATH, GERMANY  
TEL +49-(0)2206-866-150 FAX +49-(0)2206-866-123

### TAKAMAZ MACHINERY (HANGZHOU) CO.,LTD.

■HANGZHOU HEAD OFFICE  
NO.6800, JIANGDONG 3RD ROAD, JIANGDONG INDUSTRIAL PARK, XIAOSHAN, HANGZHOU, ZHEJIANG, CHINA  
TEL +86-(0)571-8287-9709 FAX +86-(0)571-8215-3732  
■GUANGZHOU OFFICE  
ROOM 1316, NO.2, KEHUI FOURTH STREET, NO.99 OF SCIENCE ROAD, LUOGANG DISTRICT, GUANGZHOU  
TEL +86-(0)20-8210-9921 FAX +86-(0)20-8210-9921

### TAKAMATSU MACHINERY (THAILAND) CO.,LTD.

■BANGKOK HEAD OFFICE  
888/59 MOO 9, TAMBOL BANGPLA, AMPHUR BANGPLEE, SAMUTPRAKARN PROVINCE, THAILAND  
TEL +66-(0)2-136-7831 FAX +66-(0)2-136-7834  
■EASTERN SEABOARD BRANCH  
848/14 MOO 3, TAMBOL BO WIN, AMPHUR SIRACHA, CHONBURI 20230  
TEL +66-(0)38-182-509 FAX +66-(0)38-182-510

### TP MACHINE PARTS CO.,LTD.

128/345 MOO 1 THEPARAK ROAD, BANGSAOTHONG SUBDISTRICT, BANGSAOTHONG DISTRICT, SAMUTPRAKARN  
TEL +66-(0)2-706-3820 FAX +66-(0)2-706-3822

### PT.TAKAMAZ INDONESIA

JL. FESTIVAL BOULEVARD BLOK AA 11 NO.30.31 GRAND WISATA TAMBUN, BEKASI 17510  
TEL +62-(0)21-8261-6431 FAX +62-(0)21-8261-6430

### TAKAMAZ MACHINERY MEXICO,S.A.DE C.V.

AVENIDA DE LOS INDUSTRIALES 522, LOCAL 4, INDUSTRIAL JULIAN DE OBREGON, 37290 LEON, GUANAJUATO MEXICO  
TEL +52-477-784-0468

### TAKAMATSU MACHINERY VIETNAM CO.,LTD

NO.25, NGUYEN LUONG BANG, TAN PHU WARD, DISTRICT 7, HO CHI MINH CITY, VIETNAM  
TEL +84-(0)28-5417-3917 FAX +84-(0)28-5417-3919

#### Precautions Related to Foreign Exchange and Foreign Trade Control Laws

This product (machine and ancillary equipment) may fall under the category of controlled goods by the foreign exchange and foreign trade control laws.

As such, the exportation must be authorized by the Japanese government as stipulated in the laws. This product is manufactured in accordance with the regulations and standards that prevail in the country or region of destination.

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



This brochure is made from 60% recycled paper.

19.07.3B(0)

CNC Multi-Turning Center

# XXY series



**TAKAMAZ**



CNC Multi-Turning Center

# XY series

From Blank to Finish with a Single Switch!

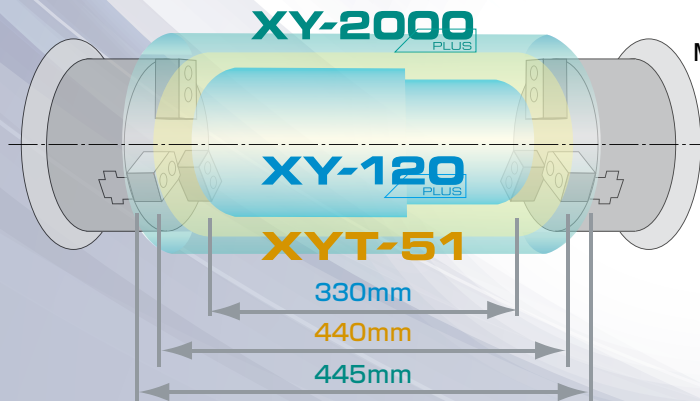
# The answer is here. it's XY series !

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.

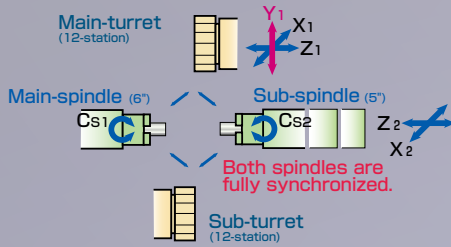


# XY-120 PLUS

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.

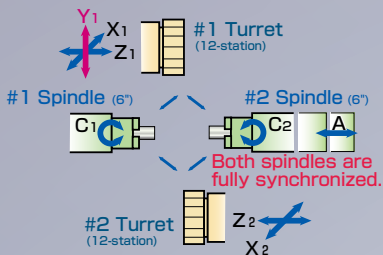
Compared to conventional machines, higher-grade motors are used to achieve an OD turning area of 0.87 mm<sup>2</sup> (10% increase) on the main-spindle side and 0.5 mm<sup>2</sup> (13% increase) on the sub-spindle side.

※Cutting amount×Feedrate.



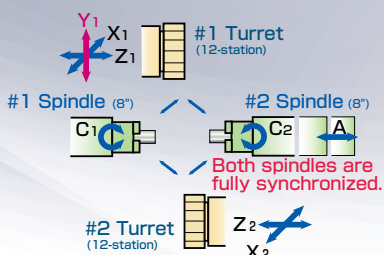
# XYT-51 NEW

Suited to bar work up to max.  $\phi 51$  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.



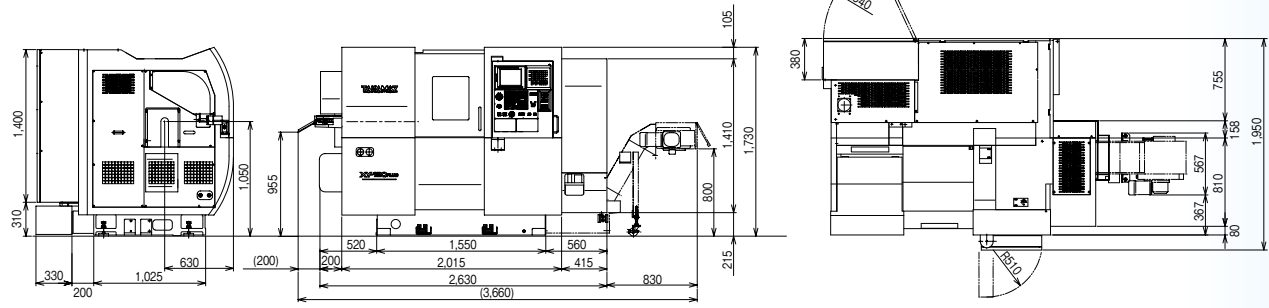
# XY-2000 PLUS

Suitable for bar materials of  $\phi 65$  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.



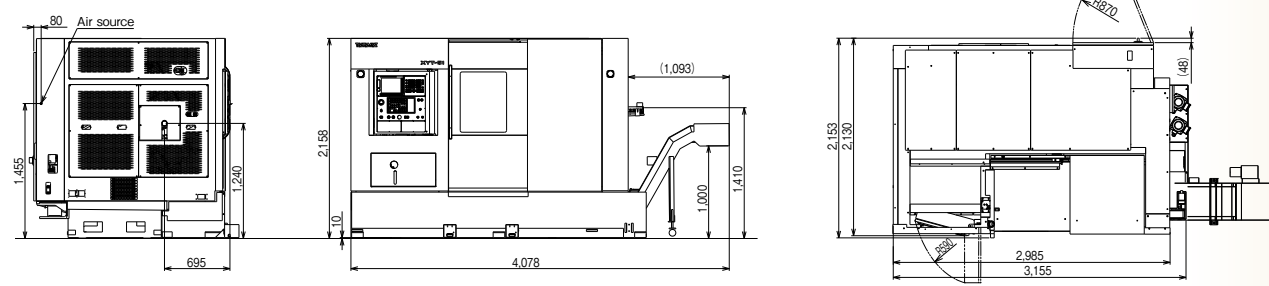
Machines shown in the photos are in standard color. Environmentally friendly powder coating is applied.

## XY-120 PLUS



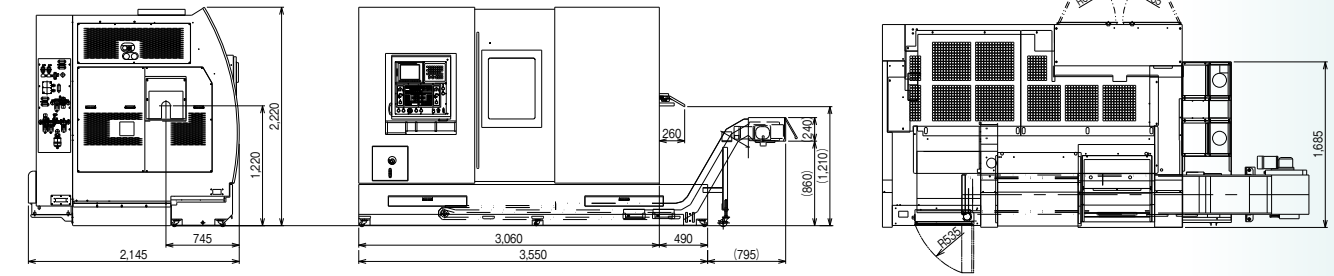
Unit(mm)

## XYT-51



Unit(mm)

## XY-2000 PLUS



Unit(mm)



[www.takamaz.co.jp](http://www.takamaz.co.jp)

### TAKAMATSU MACHINERY CO.,LTD.

■HEAD OFFICE & PLANT  
1-8 ASAHIGAOKA HAKUSAN-CITY ISHIKAWA JAPAN. 924-8558 TEL +81-(0)76-274-1403 FAX +81-(0)76-274-8530

### TAKAMATSU MACHINERY USA INC.

■CHICAGO HEAD OFFICE  
1280 LANDWEIER ROAD ELK GROVE VILLAGE, IL 60007 USA TEL +1-(0)847-981-8577 FAX +1-(0)847-981-8599  
■CINCINNATI OFFICE  
5233 MULHAUSER ROAD, WEST CHESTER TOWNSHIP, OH 45011 USA TEL +1-(0)513-870-9777 FAX +1-(0)513-870-0325  
■GREENVILLE OFFICE  
506 MATRIX PARKWAY PIEDMONT, SC 29673 USA TEL +1-(0)847-981-8577

### TAKAMAZ MACHINERY EUROPE GmbH

INDUSTRIEGEBIET, DIEPENBROICH 27 D-51491 OVERATH, GERMANY  
TEL +49-(0)2206-866-150 FAX +49-(0)2206-866-123

### TAKAMAZ MACHINERY (HANGZHOU) CO.,LTD.

■HANGZHOU HEAD OFFICE  
NO.6800, JIANGDONG 3RD ROAD, JIANGDONG INDUSTRIAL PARK, XIAOSHAN, HANGZHOU, ZHEJIANG, CHINA  
TEL +86-(0)571-8287-9709 FAX +86-(0)571-8215-3732  
■GUANGZHOU OFFICE  
ROOM 1316, NO.2, KEHUI FOURTH STREET, NO.99 OF SCIENCE ROAD, LUOGANG DISTRICT, GUANGZHOU  
TEL +86-(0)20-8210-9921 FAX +86-(0)20-8210-9921

### TAKAMATSU MACHINERY (THAILAND) CO.,LTD.

■BANGKOK HEAD OFFICE  
888/59 MOO 9, TAMBOL BANGPLA, AMPHUR BANGPLEE, SAMUTPRAKARN PROVINCE, THAILAND  
TEL +66-(0)2-136-7831 FAX +66-(0)2-136-7834  
■EASTERN SEABOARD BRANCH  
848/14 MOO 3, TAMBOL BO WIN, AMPHUR SIRACHA, CHONBURI 20230  
TEL +66-(0)38-182-509 FAX +66-(0)38-182-510

### TP MACHINE PARTS CO.,LTD.

128/345 MOO 1 THEPARAK ROAD, BANGSAOTHONG SUBDISTRICT, BANGSAOTHONG DISTRICT, SAMUTPRAKARN  
TEL +66-(0)2-706-3820 FAX +66-(0)2-706-3822

### PT.TAKAMAZ INDONESIA

JL. FESTIVAL BOULEVARD BLOK AA 11 NO.30.31 GRAND WISATA TAMBUN, BEKASI 17510  
TEL +62-(0)21-8261-6431 FAX +62-(0)21-8261-6430

### TAKAMAZ MACHINERY MEXICO,S.A.DE C.V.

AVENIDA DE LOS INDUSTRIALES 522, LOCAL 4, INDUSTRIAL JULIAN DE OBREGON, 37290 LEON, GUANAJUATO MEXICO  
TEL +52-477-784-0468

### TAKAMATSU MACHINERY VIETNAM CO.,LTD

NO.25, NGUYEN LUONG BANG, TAN PHU WARD, DISTRICT 7, HO CHI MINH CITY, VIETNAM  
TEL +84-(0)28-5417-3917 FAX +84-(0)28-5417-3919

### Precautions Related to Foreign Exchange and Foreign Trade Control Laws

This product (machine and ancillary equipment) may fall under the category of controlled goods by the foreign exchange and foreign trade control laws. As such, the exportation must be authorized by the Japanese government as stipulated in the laws. This product is manufactured in accordance with the regulations and standards that prevail in the country or region of destination.

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



This brochure is made from 60% recycled paper.

CNC Spindle Slide  
Precision Lathe

# XXW series



**TAKAMAZ**



CNC **2**-Spindle **2**-Slide Precision Lathe

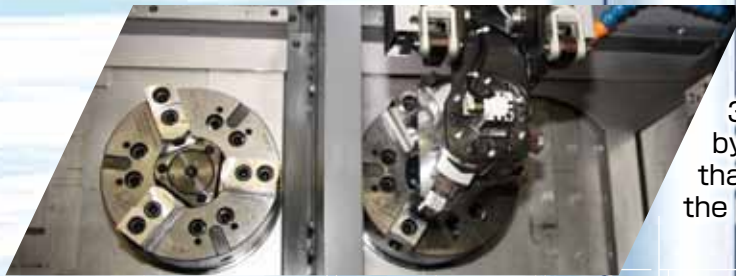
# XW series

*Full Lineup of **2**-Spindle and **2**-Slide Lathe Machines!*



From the original spindle parallel structure, a high rigidity, compact and high precision design is achieved. This qualifies as an expert model for durability on mass production system.

*Simultaneous same process machining*



“Work in process” is no longer in inventory. The loader is equipped with a 3-axis servo that is realized by a flexible line structure that leads to reduction of the production line.

*Simultaneous machining of both sides of the part*



Depending on the production requirements, separate left and right cutting is possible.

*Independent production form*





※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.



XW-60/60M



※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

# XW-200



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	
		ΣIW30*	ΣIW30H*	ΣIGTH60	ΣIGTH60(High speed type)	ΣIGTH150	ΣIGTH200			
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 Work Dimension	Diameter x Length (Reference)	φ30×40		φ60×60	φ55(φ60)×60	φ150×50		φ200×120	φ200×220	
	Weight	0.3(One side)		1.0(One side)		3.0(One side)		8.0(One side)		
Shoulder (Traverse axis : Z)	Drive System	Servomotor								
	Stroke	Depends on specifications								
	Rapid Traverse Rate	m/min	80	150	120	170		100		
Forward/ Backward axis : X	Drive System	Servomotor								
	Stroke	—		200	235				—	
	Rapid Traverse Rate	m/min	—		45	35		30		
Arm (Vertical axis: Y)	Drive System	Servomotor								
	Stroke	mm	250	240	590		690	760	780	
	Rapid Traverse Rate	m/min	80	150	125	170	125		80	
Hand	Drive System	Air cylinder								
	Angle	deg.	—			90				
	Jaw Stroke	mm	9(One side)	—	10(One side)		16(One side)		12(One side)	
Hand Type		Parallel Hand	Pivoting open/close hand	ΣIGTH dedicated L Hand						

※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

# CSL 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.

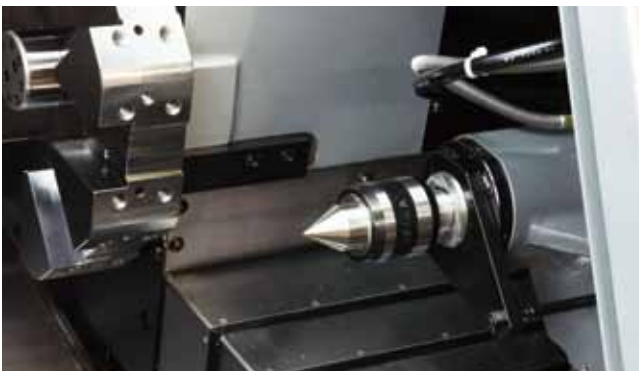
## Operator-friendly design

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



# GSL series

## TAKAMAZ

### TAKAMATSU MACHINERY CO.,LTD.

#### ■HEAD OFFICE & PLANT

1-8 ASAHIGAOKA HAKUSAN-CITY ISHIKAWA JAPAN. 924-8558 TEL +81-(0)76-274-1403 FAX +81-(0)76-274-8530

### TAKAMATSU MACHINERY USA INC.

#### ■CHICAGO HEAD OFFICE

1320 LANDMEIER ROAD ELK GROVE VILLAGE, IL 60007 USA TEL +1-(0)847-981-8577 FAX +1-(0)847-981-8599

#### ■CINCINNATI OFFICE

5233 MUHLHAUSER ROAD, WEST CHESTER TOWNSHIP, OH 45011 USA TEL +1-(0)513-870-9777 FAX +1-(0)513-870-0325

#### ■GREENVILLE OFFICE

506 MATRIX PARKWAY PIEDMONT, SC 29673 USA TEL +1-(0)847-981-8577

### TAKAMAZ MACHINERY EUROPE GmbH

INDUSTRIEGEBIET, DIEPENBROICH 27 D-51491 OVERATH, GERMANY  
TEL +49-(0)2206-919-3960 FAX +49-(0)2206-865-123  
TEL +49-(0)2206-866-150

[www.takamaz.co.jp](http://www.takamaz.co.jp)

### TAKAMAZ MACHINERY (HANGZHOU) CO.,LTD.

#### ■HANGZHOU HEAD OFFICE

NO.6800, JIANGDONG 3RD ROAD, JIANGDONG INDUSTRIAL PARK, XIAOSHAN, HANGZHOU, ZHEJIANG, CHINA  
TEL +86-(0)571-8287-9709 FAX +86-(0)571-8215-3732

#### ■GUANGZHOU OFFICE

ROOM 1316, NO.2, KEHUI FOURTH STREET, NO.99 OF SCIENCE ROAD, LUOGANG DISTRICT, GUANGZHOU  
TEL +86-(0)20-8210-9921 FAX +86-(0)20-8210-9921

### TAKAMATSU MACHINERY (THAILAND) CO.,LTD.

888/59 MOO 9, TAMBOL BANGPLA, AMPHUR BANGPLEE, SAMUTPRAKARN PROVINCE, THAILAND  
TEL +66-(0)2-136-7831-3 FAX +66-(0)2-136-7834

### TP MACHINE PARTS CO.,LTD.

128/345 MOO 1 THEPARAK ROAD, BANGSAOTHONG SUBDISTRICT, BANGSAOTHONG DISTRICT, SAMUTPRAKARN  
TEL +66-(0)2-706-4514 FAX +66-(0)2-706-4955

### PT.TAKAMAZ INDONESIA

JL. FESTIVAL BOULEVARD BLOK AA 11 NO.30.31 GRAND WISATA TAMBUN, BEKASI 17510  
TEL +62-(0)21-8261-6431 FAX +62-(0)21-8261-6430

●Distributed by:

#### Precautions Related to Foreign Exchange and Foreign Trade Control Laws

This product (machine and ancillary equipment) may fall under the category of controlled goods by the foreign exchange and foreign trade control laws.

As such, the exportation must be authorized by the Japanese government as stipulated in the laws

This product is manufactured in accordance with the regulations and standards that prevail in the country or region of destination.

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

R80



This brochure is made from 80% recycled paper.

17.04.2B(0)

CNC 1 Spindle 2 Turret  
Precision Lathe

# X-S7000

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
<b>Capacity</b>			
Max. turning diameter	mm	φ225	
Max. turning length	mm	700 *1	625
Max. bar diameter	mm	(φ51)	(φ65)
Chuck size	inch	8	8 (10)
<b>Spindle</b>			
Spindle nose	JIS	A2-6	A2-8
Spindle bearing I.D.	mm	φ100	φ120
Through-hole on spindle	mm	φ51	φ65
Spindle speed	min <sup>-1</sup>	Max.3,500	Max.3,500(3,000)
<b>Tool post</b>			
Type		10-station x2	
Tool shank	mm	□25	
Boring holder I.D.	mm	φ40	
Max. stroke	mm	X : 115	Z : 650
Rapid traverse rate	m/min	X : 16	Z : 30
<b>Motors</b>			
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	
Hydraulic motor	kW	AC0.75 x 2	
Tail motor	kW	AC1.4	
<b>Size</b>			
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 φ100 spindle. ( ) : Option  
 \*2 A spindle motor of AC18.5/15kW is mounted for the 3,500min<sup>-1</sup> spindle.

## Standard Accessories

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

## Optional Accessories

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

\* 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	φ90	
Quill stroke	mm	20(Oil pressure)	
Tailstock stroke	mm	350(Servo motor)	
Rapid traverse rate	min <sup>-1</sup>	12	
Max.thrust	kN	4	

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	0~9999μm
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



### TAKAMATSU MACHINERY CO.,LTD.

■ HEAD OFFICE & PLANT  
 1-8 ASAHIGAOKA HAKUSAN-CITY ISHIKAWA JAPAN. 924-8558 TEL +81-(0)76-274-1403 FAX +81-(0)76-274-8530

### TAKAMATSU MACHINERY USA INC.

■ CHICAGO HEAD OFFICE  
 1320 LANDMEIER ROAD ELK GROVE VILLAGE, IL 60007 USA TEL +1-(0)847-981-8577 FAX +1-(0)847-981-8599

■ CINCINNATI OFFICE  
 5233 MUHLHAUSER ROAD, WEST CHESTER TOWNSHIP, OH 45011 USA TEL +1-(0)513-870-9777 FAX +1-(0)513-870-0325

### TAKAMAZ MACHINERY EUROPE GmbH

INDUSTRIEGEBIET, DIEPENBROICH 27 D-51491 OVERATH, GERMANY  
 TEL +49-(0)2206-919-3960 FAX +49-(0)2206-865-123  
 TEL +49-(0)2206-866-150

### TAKAMAZ MACHINERY (HANGZHOU) CO.,LTD.

■ HANGZHOU HEAD OFFICE  
 NO.6800, JIANGDONG 3RD ROAD, JIANGDONG INDUSTRIAL PARK, XIAOSHAN, HANGZHOU, ZHEJIANG, CHINA  
 TEL +86-(0)571-8287-9709 FAX +86-(0)571-8215-3732

■ GUANGZHOU OFFICE  
 ROOM 1316 NO.2, KEHUJ FOURTH STREET, NO.99 OF SCIENCE ROAD, LUOGANG DISTRICT, GUANGZHOU  
 TEL +86-(0)20-8210-9921 FAX +86-(0)20-8210-9921

### TAKAMATSU MACHINERY (THAILAND) CO.,LTD.

888/17 MOO 19 BANGPLEE-DAMRU ROAD., BANGPLEEYAI, BANGPLEE, SAMUTPRAKARN 10340  
 TEL +66-(0)2-382-5372 FAX +66-(0)2-382-5373

### PT.TAKAMAZ INDONESIA

JL. FESTIVAL BOULEVARD BLOK AA 11 NO.30,31 GRAND WISATA TAMBUN, BEKASI 17510  
 TEL +62-(0)21-8261-6431 FAX +62-(0)21-8261-6430

<http://www.takamaz.co.jp/>

● Distributed by:

#### Precautions Related to Foreign Exchange and Foreign Trade Control Laws

This product (machine and ancillary equipment) may fall under the category of controlled goods by the foreign exchange and foreign trade control laws.

As such, the exportation must be authorized by the Japanese government as stipulated in the laws

This product is manufactured in accordance with the regulations and standards that prevail in the country or region of destination. The user must not export, sell, or relocate the product, to any country with different regulations or standards.



This brochure is made from 80% recycled paper.