

TXseries

TX-75

**Super-Small Type Precision
CNC Turret Lathe**

■ It is the stable high-speed high precision in the good small turret lathe of operativity, and is efficiency up.

With excellent operability and performance, opens up new turret lathe's possibilities. Since making its first appearance in 1994, the [TX-70 series] has evolved over the years. Now, the series is renovated.



※ Photo shows a machine with options.

■ Operation

Totally new design, easy-to-use operation panel, an excellent structure for maintenance.

■ Low price

All these high performances at reasonable prices.
We will contribute to low costs for customers.

■ Processing precision example

Processing condition

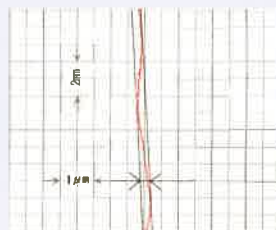
Machined material : BsBM
Spindle speed : 3000rpm
Feed : 0.03mm rev
Cutting depth : 0.02mm(dius diameter)
Tool used : Compax Nose R0.3

■ Roundness

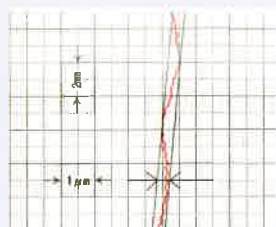


0.2µm

■ Straightness



Outside diameter surface / 0.3µm

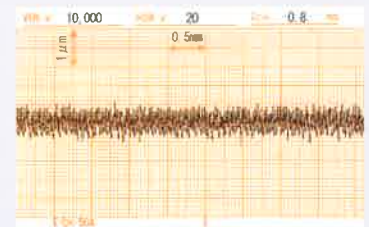


End face / 0.35µm

■ Finished surface roughness



Outside diameter surface



End face

■ Characteristic

■ High-speed

The biggest advantage of the compact complex CNC turret lathe is zippy, efficient, smooth tool reaching, which significantly reduces the cycle time.

■ High-precision

The unique high-precision main spindle of KITAMURA MACHINE WORKS is well known. However, we reduced the cycle time by adoption of high-acceleration servomotor and latest high-speed CNC, comparing to the former model. Without compromise, we have improved the "scraped finish" that can only be achieved with traditional KNC technology and craftsmanship. We provide you with the most stable precision for many years. Furthermore, an NC order 0.1µ comes standard, Smoother taper/R processing was made possible.

■ Less space

One of the least space in this class of machines.

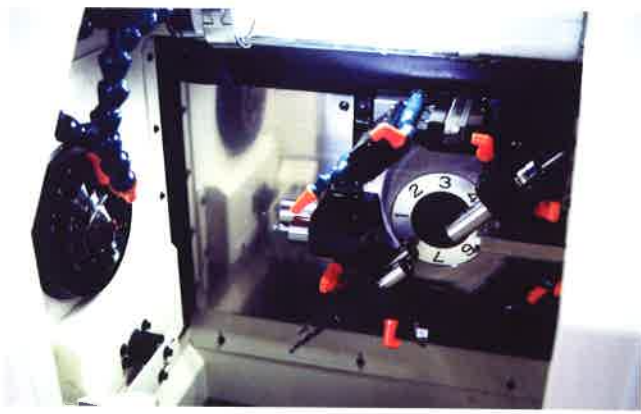
■ Special specifications

A great number of special accessories available for customers.

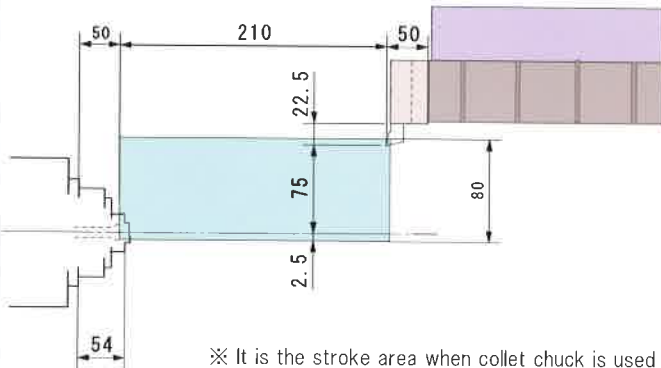
■ Specifications

The CNC software options come standard, which generally are necessary. Examples are program storage length 1280M and multiple repetitive cycles. Special specifications are partly removed.

Tooling Area



- Effective stroke X axis 80mm
Z axis 210mm



Tool Holder

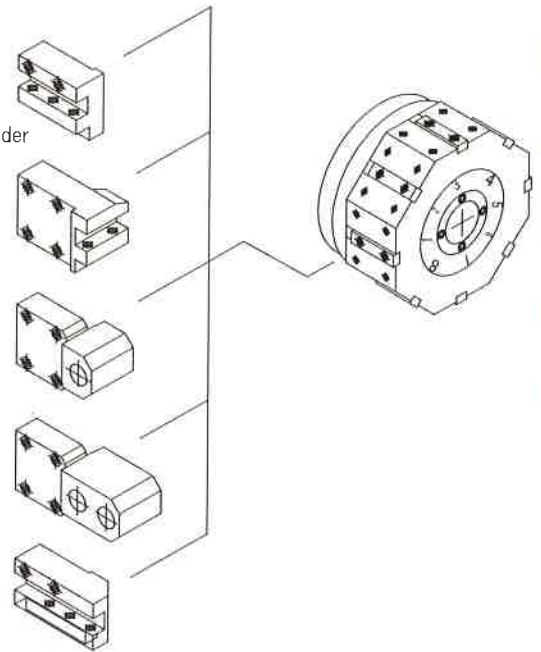
T-120
Outer Diameter Holder

T-110
End Face Holder

T-130B
Boring Holder

T-130A
Boring Holder

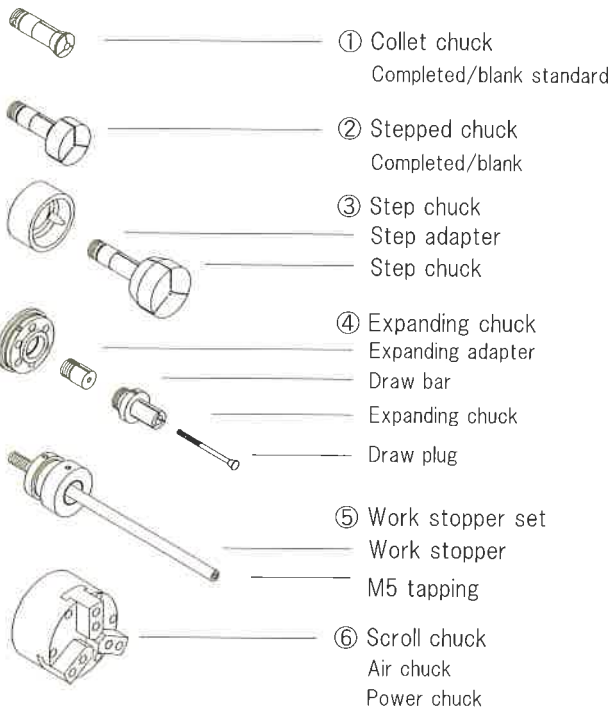
T-120L
Cutting Off Holder



Work Sample



Chucks



- ※ ① is standard specification and others are all options.
- ※ ① ~ ⑤ can be used with lever type chucking system (standard chucking system)

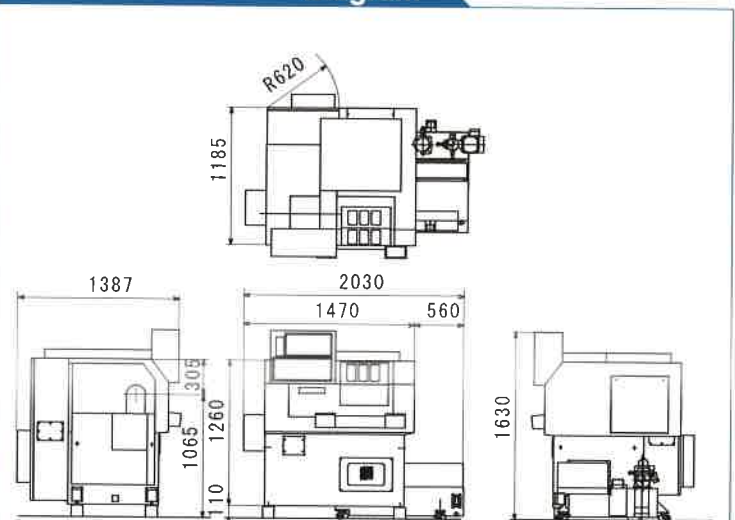
● Others chuck

- Super precision air chuck
- S type collet chuck
- Vacuum chuck

● Others chucking system

- Rotary air cylinder open/closed center
- Rotary hydraulic cylinder open/closed center

Outline Dimensional Diagram



※ Rear specification is possible for coolant unit.

Machine Specifications

Capacity	Max turning diameter (Chuck work)	φ 80mm
	Max turning diameter (Bar work)	φ 25mm
	Max turning length	50mm
Spindle	Spindle speed	MAX,6,000min ⁻¹
	Number of spindle speed ranges	Step-less(S4 digits)
	Through hole diameter	MAX. φ 25mm
Turret slide	Number of tools	8
	Indexing time	0.5sec/1pos
	Tool size	16mm
Rapid traverse	X-axis rapid traverse	16m/min
	Z-axis rapid traverse	20m/min
Travel of tool slide	X-axis travel	80mm
	Z-axis travel	210mm
Motors	Spindle drive motor	3.7/5.5kW
	Feed motors (X/Z)	X:0.75kW Z:1.2kW
	Turret index	1.2kW
etc.	Required electric power	3 φ AC200V50/60HZ 10KVA
	Height of machine	1,630mm
	Height from floor to spindle center	1,065mm
	Floor space	1,770 × 1,337mm
	Mass of machine	Approx.1,000kg

Standard Accessories

- Hydraulic chuck unit
- Collet chuck blank
- Hydraulic unit
- Coolant device with chiptank(Spindle side 250W , Tool side H/p 400W)
- Work light
- Tools and toolbox
- Machine mount

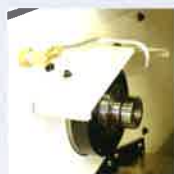
CNC Standard Specifications

Control unit	KNC & FANUC Oi - TD	
Controlled axes	Simultaneously controllabel 2 axes,2 axis in manual mode	
Input method	MDI keyboard input,combined use of absolute/incremental programming	
Program memory capacity	1280m tape	
Interpolation	Linear,taper,circular,threading	
Least input increment	0.0001mm	
Least command increment	X axis	0.00005mm
	Z axis	0.0001mm
Tool offset	Geometry	±999.9999
	Wear	±9.9999
Tool offset pairs	64pairs	
Number of registerable programs	400parts	
Manual handle feed	0.5/0.1/0.01/0.001mm	
Auxiliary function	M3(Multiple commands 3),S4,T4 digits	
Feed rate override	0~150%	
Rapid trverse override	F0,25,50,100%	
Input/output interface	RS232C/Memory card	
Display language	Japanese/English/Traditional Chinese/Simplified Chinese/French/German/Italian/Spanish/Korean	

Others Specifications

- Canned cycles (G90,G92,G94)
- Inch/metric conversion
- Multiple repetitive cycles (G70~G76)
- Background editing
- Run hour and parts count display
- Graphic function
- Canned cycles for drilling (G80~G89)
- Variable lead threading (G34)
- Custom macro B
- Extended part program editing
- Sequence number search
- Unexpected disturbance torque detection
- Programmable data input (G10)
- G code system B
- Constant surface speed control
- Direct drawing dimension programming
- Tool nose radius compensation
- Conversational programming with graphic function
- Threading retract
- Directory display of floppy cassette
- Workpiece coordinate system (G52~G59)
- Adding of custom macro common variables
- Multiple repetitive cycle II

Example optional specifications



Air blow



Oil temp controller



Chip conveyor



Signal Tower



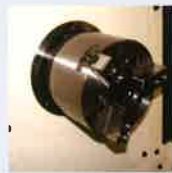
Chuck Foot switch



Work preset counter



Collet chuck type S



Power chuck



Precision air chuck



Simple bar feeder



NC Servo Loader



Parts conveyor



Work stocker



Oil mist collector



Parts catcher

- Variety chucks
- Variety tool holders
- Oil mist spray
- Parts feeder
- Operation panel language English/Chinese
- Variety robots & Loader
- Auto door
- Spindle motor power up
- Spindle Through hole diameter up
- High pressure coolant pump
- Spindle inner coolant
- Variety bar feeder system

※Please feel free to contact us for other options of customization to your specifications.

※The above specifications may be different from the photograph.

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