

CNC1-Spindle 2-Turret Precision Lathe

XTT-500**NEW**

2-Turret Lathe Combining Rigidity/ High Output with Space Savings!!

Offering both cutting performance and compactness

- The high-rigidity spindle with $\phi 100$ mm bearings is equipped with a high-output (15/11 kW) spindle motor. Square box-way slides are adopted in addition to the established robust machine construction, so heavy-duty cutting capability and accuracy can be maintained over long periods. The compact design offers a machine opening of 1,695 mm while assuring sufficient stroke for shaft work with a Z-axis travel of 450 mm. <The machine width is comparable to single-turret TAKAMAZ lathes>

Diverse options supporting shaft work, and labor savings at setup changes

- The tailstock unit adopts a new, highly rigid construction, and develops powerful thrust using hydraulic drive. The tailstock travel position is detected by a linear encoder that coordinates with cutting programs to help reduce the man-hours spent on setup work. The steady rest unit allows the workpiece support position to be set in a programmable manner by servo drive, while there is a full range of other options providing further support for high-load cutting, including $\phi 120$ mm spindle bearings and an MT-5 tailstock.

Improved maintainability

- A large maintenance door with an opening width of 500 mm is provided, allowing the operator to work in a generous space in the machine. In addition, a sub-slide door with the same opening width of 500 mm is provided at the right side of the machine where mechanical elements such as the turret and tailstock unit are concentrated. An extensive maintenance area can be secured in a one-touch operation. <Lessen the operator's burden during maintenance on the machine>

Highly compatible with automation

- A new type of 3-axis loader with a hand suitable for shaft work having a weight capacity of 8 kg is adopted. In combination with highly customizable TAKAMAZ peripheral devices, diverse user needs can be accommodated. Sufficient space is secured in the machine to allow the use of an existing line gantry loader made by other than TAKAMAZ, and the slanted turret slide reduces the overall machine height, thus enabling loader setup changes at a low height.

Machine Specifications

Item		Unit	XTT-500
Capacity	Max. turning diameter	mm	φ210
	Max. turning length	mm	450
	Max. bar diameter	mm	φ42, φ51(φ65)
	Chuck size	inch	8(10)
Spindle	Spindle nose	JIS	A2-6(A2-8)
	Spindle bearing I.D.	mm	φ100(φ120)
	Through-hole on spindle	mm	φ52(φ66)
	Spindle speed	min ⁻¹	Max.4,000(3,500)
Tool post	Type		8-station turret×2
	Tool shank	mm	□25
	Boring holder I.D.	mm	φ32
	Max. stroke	mm	X:105 Z:450
	Rapid traverse rate	m/min	X:18 Z:24
Motors	Spindle motor	kW	AC15/11(18.5/15)
	Feed motor	kW	X:AC1.2 Z:AC1.8
	Coolant motor	kW	AC0.4×2
	Hydraulic motor	kW	AC1.5
	L×W×H	mm	1,695×1,830×1,850
Size	Machine weight	kg	4,500
Total electric capacity		KVA	26

() : Option

Standard Accessories

- Clamp block.....16sets
- Coolant block(For reverse cutting tools)....16sets
- Hydraulic chucks(8 inch-Solid)....1set
- Hydraulic chucking cylinder(Solid)....1set
- Hydraulic unit.....1set
- Chuck clamp detector.....1set
- Thread cutting unit
(Including constant surface speed control)....1set
- Coolant unit (170 lit.).....1set
- Work light.....1set
- Service tool kit.....1set
- TAKAMAZ instruction manual....1set

Optional Accessories

- Tool holders
- Collet chucks
- Hydraulic chucks
- Alloyed Clamp Holder for vibrations suppression
- Special spindle speed(3,500min⁻¹)
- Center rest unit
- Storage-type work rest device
- TAKAMAZ loader system
- Spindle indexing device(Electrical/Mechanical)
- Tailstock
- Power tools drive unit
- Rear chip conveyor
(Floor type/Spiral type)
- Front air blower
- Rear coolant unit
- Signal light(1-color/2-color/3-color)
- Automatic power shut-off device
- Automatic door system(Auto door./Shutter)
- Special color
- Others**

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

Tailstock

Item	Unit	XTT-500
Front taper		MT-4(MT-5)
Quill O.D.	mm	φ105
Tailstock stroke	mm	350(Hydraulic)
Max. thrust	kN	5.5

Loader Specifications

Item	Unit	XTT-500(3 axes):1 unit
Loadable workpiece diameter×Length	mm	φ25~φ70×400
Weight capacity	kg	8.0 (one side)
Rapid traverse rate	m/min	X:30 Z:100 Y:80

Item	TAKAMAZ & FANUC Oi-TF
Controlled axes	4 axes (X1, X2, Z1, Z2)
Simultaneously controllable axes	Simultaneous 2 axes (X 2)
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 file name	32 characters
Backlash compensation	0~9999μm
Program memory capacity	1Mbyte (2,560m) (Dual systems total)
Tool offsets	128 sets (Dual systems total)
Registered programs	800pcs. (Dual systems total)
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
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
Rigid tapping	For Power Tool only
Polar coordinate interpolation	For Power Tool only
Cylindrical interpolation	For Power Tool only
Stored stroke check 1	Standard
Stored stroke check 2,3	Standard
Input/output interface	USB Flash Memory, 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, Others
TAKAMAZ maintenance functions	Standard
FANUC set of manuals	DVD-ROM

Optional Specifications

Input/Output interface	RS232C
Tool life management	
Multiple M codes in one block	Max. 3
Spindle orientation	1 set/6 set
Dynamic graphic display	
FANUC instruction manual	Bound



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