

CNC 2 Spindle 2 Turret CNC Precision Lathe

XWT-8

TAKAMAZ

Future-oriented 2-Spindle, 2-Turret Precision Lathe with Broad Market Applicability



energy
saving

NEW

Large-sized Touch Panel for Improved Operability

A 21.5-inch touch panel providing excellent visibility is adopted for better operating convenience during setup.

The 3-screen multi-display allows the operator to switch among screens depending on the operation purpose.

The home screen makes operation status information including the "start conditions", "estimated time to machine stop", "production progress" and "machine operating status" available on a single screen for more efficient checking. In addition, traceability data is saved to track changes in the machining status of individual workpieces and other information to help run facilities smoothly.



Shorter Loading Times

Installing a new loader system has increased the rapid traverse speed on all axes. The shortest loading time is 10% faster than on existing models, at 5.5 seconds. This increases productivity from workpiece supply to unloading.

The loader is available with optional "lightweight specifications", where new materials are used in place of steel in the structure to increase speed and suppress vibration.

Introduction of a New 3-axis Loader System

All the functions that simplify loader setup have been applied to a 3-axis loader system.

For improved operability, this system is centrally managed by using the same controller for the machine and loader.

The handle retrace function enables confirmation of operations with a high level of safety.

Incorporating the loader operations into NC programs allows flexibility in handling

the operation and timing changes associated with workpiece setup changes. These functions result in improved operability and productivity.

Reductions in Machining Defects and Energy Consumption

TAKAMAZ's proprietary "Thermony[®]" thermal displacement correction system can predict the effects of changes in temperature on finish dimensions under various conditions of use and environmental conditions and apply corrections to curtail machining defects. In addition, adopting an air-cooled construction in the central part of the machine where heat sources are concentrated makes cooling water unnecessary, reducing running costs and energy consumption.

The machine has a hybrid slideway configuration, with a sliding friction guideway on the X axis for high rigidity and a roller friction guideway on the Z axis for high positioning accuracy. This improves machining performance and reduces consumption of lubricating oil.

Machine Specifications

Item		Unit	XWT-8
Capacity	Optimum turning diameter	mm	φ 150×80
	Max. turning diameter	mm	φ 280
	Max. turning length	mm	180
	Chuck size	inch	8
Spindle	Spindle nose	JIS	A ₂ -6
	Spindle bearing I.D.	mm	φ 100
	Through-hole on spindle	mm	φ 61
	Spindle speed	min ⁻¹	4,000
Tool post	Type		8-station turret
	Max. Tool Size	mm	□25, φ40
	Max. stroke	mm	X:150 Z:180
	Rapid traverse rate	m/min	X:24 Z:24
Motors	Spindle motor	kW	AC 11/7.5
	Feed motor	kW	X:1.2 Z:1.8
	Coolant motor	kW	0.25×2
	Hydraulic motor	kW	0.75×2
Size	L×W×H	mm	1,890(Overall width 2,250)×2,187×2,400(Overall height 2,935)
	Machine weight	kg	5,800
	Coolant capacity	L	180
	Total electric capacity	KVA	33
Controller Specifications			FANUC Oi-TF Plus

Loader Specifications

Item		Unit	FGT(FANUC)
Capacity	Workpiece diameter	mm	φ 150×80
	Weight capacity(One side)	kg	3.0
Loader body	Drive method		Servomotor(Rack and Pinion)
	Axis stroke	mm	X:235 Y:690 Z:Depends on specifications.
	Rapid traverse rate	m/min	X:45 Y:160 Z:180
Hand	Drive method		Air chuck
	Swing angle	deg.	90
	Finger stroke(One side)	mm	16

Standard Accessories

- ☐ Boring holder 4 sets
☐ O.D. holder 4 sets
☐ Thermory® (Thermal displacement system)
☐ Hydraulic chucking cylinder ... 2 sets
☐ Power chucks(8 inch) 2 sets
☐ Thread cutting unit
 (Including constant surface speed control) ... 2sets
☐ Coolant unit 2sets
☐ Work light 2sets
☐ Service tool kit 1 set
☐ TAKAMAZ Instruction manual ... 1 set

Optional Accessories

- ☐ Chucking systems
☐ Rear Chip conveyor
 (Floor type/Spiral type)
☐ Front air blower
☐ Rear coolant unit
☐ Special coolant pump
☐ Signal light(1-tier/2-tier/3-tier)
☐ Automatic fire extinguisher
☐ Automatic power shut-off device

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

Controller Specifications

Item	FANUC Oi-TF Plus Type O FANUC Loader Specifications
Controlled axes	2 axes (X,Z) ×2
Simultaneously controllable axes	Simultaneous 2 axes×2
Least input increment	0.001mm (X in diameter)
Least command increment	X:0.0005mm Z:0.001mm
Auxiliary function	M3 digits
Spindle function	S4 digits
Tool function	T4 digits
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	4digits
Backlash compensation	0~9,999 μm
Program memory capacity	2Mbytes (5,120m) (Dual systems total)
Tool offsets	64 sets×2
Registered programs	1,000 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 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
Direct drawing dimension programming	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	USB,SD card,CF card,Ethernet
Alarm message	Standard
Graphic display	Standard
Conversational programming with graphic function	Standard
Abnormal load detection	Standard
Manual handle trace	Standard
Automatic data backup	Standard
Automatic screen deletion function	Max. 3
Energy-saving level selection function	Standard
TAKAMAZ Operating system	Machine stoppage warning,Traceability,Others
TAKAMAZ management support function	Standard
TAKAMAZ maintenance functions	Work/Tool counter,Tool load monitor,Others
FANUC set of manuals	DVD-ROM

Optional Controller Specifications

Input/Output interface	RS232C
Tool life management	○
Multiple M codes in one block	Max. 3
Spindle orientation	Standard
Camera image display function	○
Friction compensation with digital measuring device	○
Daily report output function	○
Operation status monitoring app	○
Network 1/F	○
FANUC set of manuals	Bound

TAKAMAZ

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

