



CNC2-Spindle 2-Turret Multi-Turning Center

XYT-51

NEW

Meeting process integration needs from material to product

Improved capability suited to bar work

- A higher motor output power in addition to a larger main spindle through-hole diameter increases the cutting capacity, allowing heavy-duty cutting of large-diameter bar materials. (Maximum bar diameter for main spindle: $\phi 51$ mm, motor output: 18.5/15/11 kW, 13% reduction in spindle acceleration/deceleration time and 50% increase in material removal compared to existing machines)

Higher level of freedom for tooling

- Up to 48 turning tools and 24 power tools can be mounted with a turret half-indexing mechanism. In addition, a bolt mount system (BMT45), the new global standard, is adopted. A wide range of tooling variations realizes machining suitable for your production style.

Easier maintenance and setup for multi-variety, small-quantity production

- The machine body equipped with a slant slide at an angle of 60° enables efficient chip discharge, thereby preventing chip accumulation and increasing the ease of maintenance. Furthermore, the accessibility of the area between the spindles from the front of the machine is improved, helping to lighten setup work.

Machine Specifications

Item		Unit	XYT-51	
			#1 Spindle	#2 Spindle
Capacity	Max. turning diameter	mm	φ190	
	Max. turning length	mm	150(440:One-side operation)	
	Max. bar diameter	mm	φ51	φ42
	Chuck size	inch	Collet,6	
Spindle	Spindle nose	JIS	A2-6	A2-5
	Spindle bearing I.D.	mm	φ100	φ85
	Through-hole on spindle	mm	φ52	φ43
	Spindle speed	min ⁻¹	Max.5,000	
Tool post	Type		12-station turret 24st.	
	Tool shank	mm	□20	
	Boring holder I.D.	mm	φ25	
	Max. stroke	mm	X1:1625 Z1:500 Y:±35 X2:170 Z2:500 A:550	
Power tools	Rapid traverse rate	m/min	X1:18 Z1:30 Y:12 X2:18 Z2:30 A:30	
	Tool storage capacity	pcs.	12(One side)	
	Rotation speed	min ⁻¹	Max.4,000	
	Capacity	mm	Drill φ13	Endmill φ13
C-axis	Tap	mm	M12	
	Rapid traverse rate	deg/min	24,000	
	C-axis motor	kW	AC0.75	
	Spindle motor	kW	AC18.5/15/11	AC9/7.5/5.5
Motors	Feed motor	kW	X1:AC1.8 Z1:AC1.8 Y:AC1.4 X2:AC1.8 Z2:AC1.8 A:AC1.2	
	Coolant motor	kW	AC0.339	
	Hydraulic motor	kW	AC0.75	
	Power tools motor	kW	AC3.7/2.2	
Size	L×W×H	mm	2,995×2,250×2,100	
	Machine weight	kg	7,400	
Total electric capacity		KVA	44	

Standard Accessories

- Boring holder 2sets
- O.D. holder 2sets
- Cut-off holder 1set
- Collet flange(#1, #2) 1set ea.
- Hydraulic chucking Cylinder(#1, #2) ... 1set ea.
- Chuck clamp detector 1set ea.
- Y-axis function(#1 Turret) 1set
- Spindle indexing device(C-axis/#1, #2) ... 1set ea.
- Power tools drive unit(#1, #2) ... 1set ea.
- #2 Spindle 1set
- Spindle through parts ejector device on the #2 spindle ... 1set
- #2 Spindle unloader (OUT conveyor) ... 1set
- Coolant unit(360lit.) 1set
- Service tool kit 1set
- TAKAMAZ Instruction manual ... 1set

Optional Accessories

- Tool holders
- Stroke adjusting cylinder
- Collet chucks
- Hydraulic chucks
- Bar feeder system
- Work set detector
- Cut-off check device
- Chip conveyor(Side)
(Floor type/Spiral type)
- Front air blower
- Rear coolant unit
- Signal light(1-color/2-color/3-color)
- Automatic fire extinguisher
- Automatic power shut-off device
- Special color
- Others*

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

Item	TAKAMAZ & FANUC 32i-B
Controlled axes	8 axes (X1, Z1, C1, Y, X2, Z2, C2, A)
Simultaneously controllable axes	Simultaneous 4 axes
Least input increment	0.001mm (X in diameter)
Least command increment	X: 0.0005mm Z, Y, A: 0.001mm C: 0.001deg
Auxiliary function	M3 digits
Spindle function	S4 digits
Tool function	T4 digits
Tape code	EIA(RS232C) / ISO(840) automatic recognition
Cutting feedrate	1 ~ 7,000mm/min
Command system	Incremental / Absolute
Linear interpolation	G01
Circular interpolation	G02, G03
Cutting feedrate override	0 ~ 150%
Rapid traverse override	F0, 25%, 50%, 100%
Program number	32 characters
Backlash compensation	0 ~ 9,999μm
Program memory capacity	64Kbyte (160m) (Dual systems total)
Tool offsets	99 sets (Dual systems total)
Registered programs	63 pcs. (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	Option
Custom macro	Standard
Additional custom macro common variables	Option
Nose R compensation	G40, G41, G42
Inch / Metric conversion	Option
Programmable data input	G10
Run hour / Parts count display	Option
Extended part program editing	Standard
Multiple repetitive cycle	G70 ~ G76
Multiple repetitive cycle II	Option
Spindle synchronous control	Standard
Sub-spindle torque skip	Standard
Y-axis offset	Standard
Canned drilling cycle	Standard
Constant surface speed control	G96, G97
Continuous thread cutting	G32
Variable lead thread cutting	Option
Thread cutting retract	Option
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	Standard
Cylindrical interpolation	Standard
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
Spindle orientation	Standard
Abnormal load detection	Standard
Overlap Cutting Process	Standard
Balance cut	G68, G69
Manual handle trace	Standard
Automatic data backup	Max.3
Automatic screen deletion function	Standard
TAKAMAZ management support function	Work / Tool counter, Tool load monitor, Others
TAKAMAZ maintenance functions	Standard
FANUC set of manuals	DVD-ROM

Optional Specifications

Tool life management	
Multiple M codes in one block	Max. 3
RS232C	
Manual guide i	
Helical interpolation	
FANUC instruction manual	Bound

*These cannot be used together.



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