

CNC Precision Lathe

TAKAMAZ

TOP-TURN II



■ Loader mounted

Most Basic Tandem-Type Lathe Revamped



■ Standard

■ Improved and Enhanced Functions

The control system has been updated to incorporate the most up-to-date functions in the standard specifications for improved working efficiency.

■ High-Speed “ΣGH Loader” Mounted (Optional)

The new, high-speed gantry-type “ΣGH loader” with a rapid traverse rate of 155m/min for the travel axis and 125m/min for the vertical axis is mounted to reduce the cycle time.

■ Substantial Options

The main structure has been reviewed to simplify customization by adding the latest Takamatsu loader system and grinding unit.



Machine Specifications

Item		Unit	TOP-TURN II	
			Type A	Type B
Capacity	Max. turning diameter	mm	φ300	
	Max. bar diameter	mm	φ26 (φ35)	φ42
	Chuck size	inch	6	8
	Max. swing over bed	mm	φ300	
Spindle	Swing over slide	mm	φ170	
	Spindle nose	JIS	A2-5	
	Spindle bearing I.D.	mm	φ75	φ85
	Through-hole on spindle	mm	φ46	φ52
Tool post	Spindle speed	min ⁻¹	Max.6,000	Max.4,500
	Type		Horizontal linear	
	Tool shank	mm	□20	
	Boring holder I.D.	mm	φ25	
	Max. stroke	mm	X:300 Z:300	
	Rapid traverse rate	m/min	X:12 Z:18	
	Spindle motor	kW	AC7.5/5.5	
	Feed motor	kW	X:AC1.0 Z:AC1.6	
	Coolant motor	kW	AC0.25	
	Hydraulic motor	kW	AC0.75	
Size	L×W×H	mm	1,820×1,510×1,750	
	Machine weight	kg	1,700	
	Total electric capacity	KVA	16	

() : Option

Loader Specifications

Item	Unit	ΣGH	
Workpiece dimension	Diameter (Max.)	mm	φ80 φ150
	Weight (One side)	kg	1.5
Shoulder (Traverse axis)	Drive system		Servomotor
	Stroke	mm	Depends on spec.
	Rapid traverse rate	m/min	155
Arm (Vertical axis)	Drive system		Servomotor
	Stroke	mm	460
	Rapid traverse rate	m/min	125
Hand rotation	Drive system		Air cylinder
	Angle		180

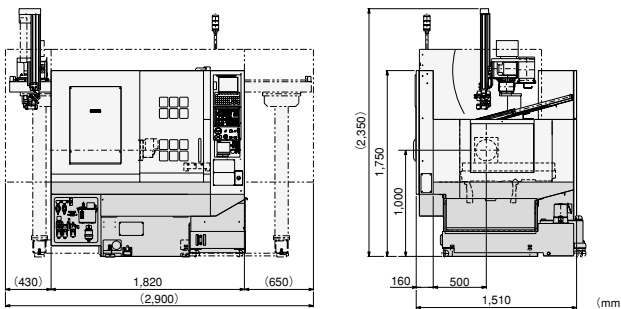
Standard Accessories

- Tool holder 4 sets
- Collet flange 1 pc.
- Tool post base 1 set
- Stroke adjusting hollow hydraulic cylinder 1 set
- Thread cutting unit 1 set
- Coolant unit (100 lit.) 1 set
- Splash guard 1 set
- Service tool kit 1 set
- Instruction manual 1 set

Optional Accessories

- Tool holders
- Collet chucks
- Hydraulic power chuck (8")
- Spindle C-axis function
- TAKAMAZ loader system
- Unloader
- Chip conveyor
- (Spiral type/Floor type)
- Air blower
- Cycle end signal light
- (1-color/2-color/3-color)
- Magnetic counter
- (Total/Preset/Multi)
- Automatic door
- Special color
- Others*

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



Controller Specifications

Item	TAKAMAZ & FANUC
Controlled axes	2 axes (X, Z)
Simultaneously controllable axes	Simultaneous 2 axes
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 5 digit
Tool function	T-code 2 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
Part program storage length	640m
Tool offsets	64 sets
Registered programs	400 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 B	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
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 4 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
Alarm message	Standard
Graphic display	Standard
Conversational programming with graphic function	Standard
Abnormal load detection	Standard

Optional Controller Specifications

Tool life management	
Multiple M codes in one block	Max. 3
Spindle orientation	
Dynamic graphic function	

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