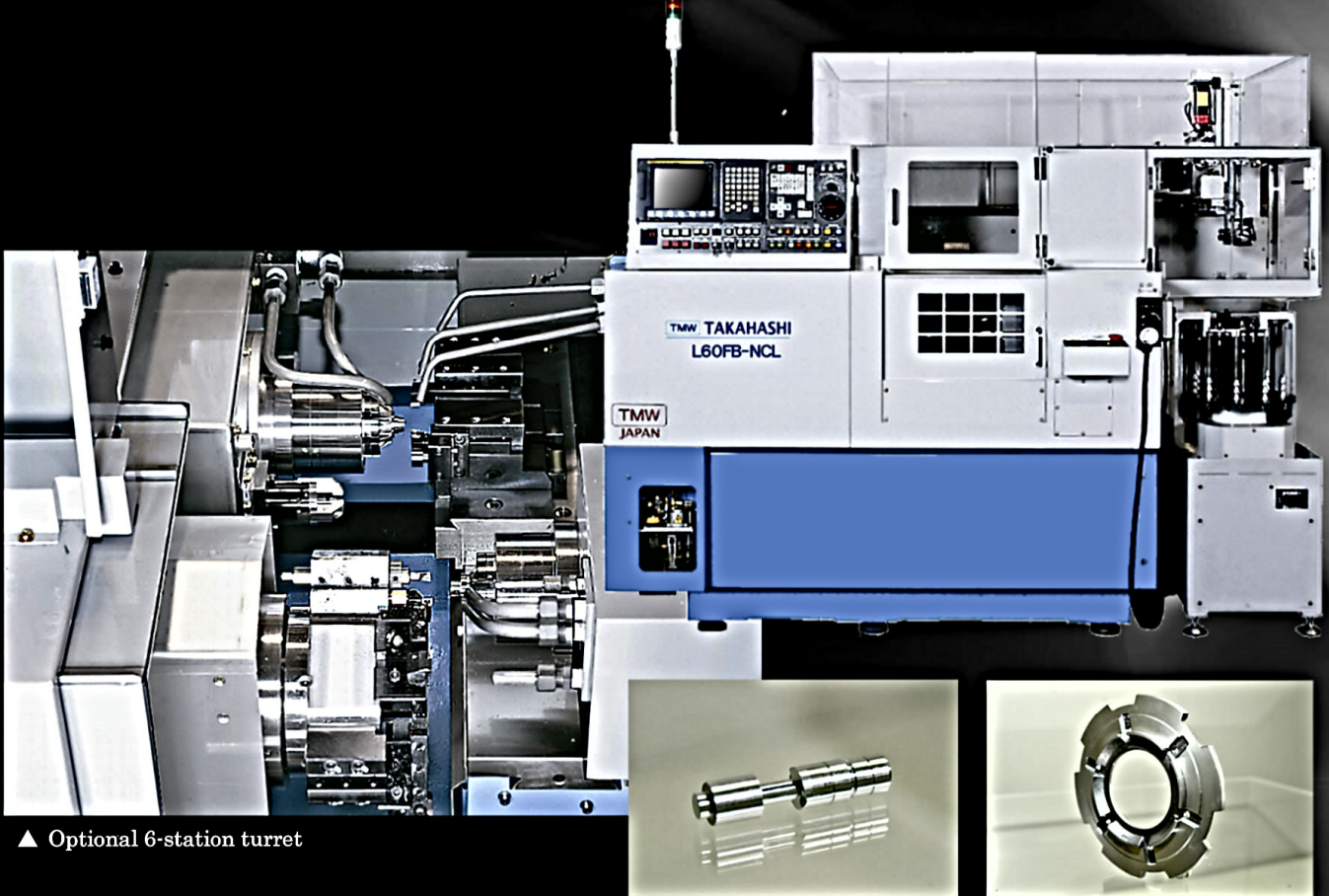


TWIN SPINDLE 6-AXIS CONTROL PRECISION CNC LATHE
WITH 3-AXIS CNC GANTRY LOADER

L60FB-NCL



▲ Optional 6-station turret

The 4-axis slides controlled CNC lathe with main and sub-spindles enables both of front and back turning operations simultaneously. This machine is suitable for manufacturing a large quantity of HDD motor, automotive and other high precision components. Optional 6-station turret for sub-spindle is available as an option.

Vibration free turning is ensured by the independent construction design of X, Z slide-ways for main and sub-spindles.

SPINDLE & HEADSTOCK

Both main and sub-spindles are driven by built-in type spindle motors for smooth and stable turning at all range of speed.

The spindles are suspended on super precision ceramic ball bearings to ensure minimum heat generation and long life at high spindle speed.

X, Z-AXIS SLIDES

X-and Z-axis guide ways are of dovetail structure. Turcite sheets are employed on the slide-ways and finished by scraping in very high accuracy.

This concept offers smooth contour machining and high responsibility as well as rigidity.

■ MACHINE STANDARD SPECIFICATIONS

Specifications	Unit	L60FB-NCL
Capacity	Max. turnable O.D.	mm(in) 50(1.968)
	Max. turnable length	mm(in) 50(1.968)
	Main max chuck size	inch 4
	Sub max chuck size	inch 4
Main spindle	Nose configuration	φ 55(2.165) flat
	Thru-hole dia	mm(in) Tubeless
	Bearing I.D.	mm(in) 60(2.362)
	Max. speed	min ⁻¹ (rpm) 15,000
	Motor(30min/cont)	kw(HP) Built-in spindle 2.2/1.5(2.9/2)
Sub spindle	Nose configuration	φ 48(1.889) flat
	Thru-hole dia	mm(in) Tubeless
	Bearing I.D.	mm(in) 55(2.165)
	Max. speed	min ⁻¹ (rpm) 10,000
	Motor(30min/cont)	kw(HP) Built-in spindle 3.7/1.5(4.9/2)
Tool Post	X1 axis	Standard Gang Type
	X2 axis	option 6st turret
		AC servo Index
		mm(in) Holder Max. □ 16(0.6)
Slide	Travel	mm(in) X1-axis 265(10.433)
		X2-axis 350(13.779)
		Z1-axis 235(9.251)
		Z2-axis 250(9.842)
	Rapid	mm/min (IPM) X1-axis 16,000(629.92)
		X2-axis 16,000(629.92)
		Z1-axis 16,000(629.92)
		Z2-axis 16,000(629.92)
	Servomotor	kw(HP) X1-axis 1.0(1.3)
		X2-axis 2.5(3.3)
		Z1-axis 2.5(3.3)
		Z2-axis 1.0(1.3)
Motor	Coolant pump	kw(HP) 0.4+0.6(0.5+0.8)
Machine size	Height	mm(in) 1,900(74.803)
	Floor space (W × D)	mm(in) 2,340 × 1,845(92.125 × 72.637)
	Weight	kg(lb) 3,100(6,835)

■ CNC UNIT STANDARD SPECIFICATIONS

Specifications	Unit	FANUC Series 31i
Control	Control	3systems(for Front Turn, Back Turn and Loader)
	Controlled axis	9Axes(X1, Z1, C1, X2, Z2, C2, X3, Z3, Y3)
		Simultaneously controllade axis 9axes(automatic mode)
	Spindle control	2
	Cs contouring control	C1, C2
	Least movement increment	mm(in) Loader
Feed function	Least input increment	mm(in) Loader
	Feed rate override	0~150%(10%increments)
	Feed rate range(manual)	0~1,260mm/min(16steps)
	Rapid traverse override	12.5/25/50/100%(4steps)
	Feed per min./Feed per rev.	G98/G99
	Reference point return	G28
Programming	High speed skip function	G31
	Max. programmable dimensions	±9 digits (12digits for R, I, J, K)
	Chamfering/comer R	C&R command on the comer program
	Programmable data input	G10
	Sub program	Upto 10nesting
	Custom macro	100pcs.
Auxiliary/ Spindle Speed function	Canned Cycle	Turning/threading cycles
	Hole machining canned cycle	G83~G89. G80(cancel)
	Radius designation on arc	R command
	M function	Max 3 pairs on single block
	Constant surface speed control	G96. G97
	Spindle orientation	M10
Offset	Rigid tapping	M29. G84/G88
	Tool & offset command	T4digits
	Tool offset amount memory	99
	Tool geometry/wear compensation	Separate page of the offset
	Tool nose radius compensation	G40. G41. G42
	Measuring function	Offset amount direct input
Editing function	Additional part program storage (total amount)	Edit function
	Number of registerable programs (total amount)	63pcs.
	Expand tape editing	Delete, past, copy and move
	Memory card editing	63
	Memory card interface	Interface to CNC memory
	Display	8.4 inch color LCD
Setting and display	Alarm history display	Max. 60pcs.
	History of operation	Memorizing the operation
	Run hour and parts count display	Preset at setting screen
	Servo guide display	Display of current servo conditions
	Language select	English/Japanese/Chinese/Korean/e.t.c

■ STANDARD ACCESSORIES

- 3axis CNC controllid gantry loader 1set
- 2" air chucks and jaws for load/unload 1set
- Transfer chuck to loader with chuck jaws 1set
- Spindle chilling system 1set
- Lubrication system 1set
- Splash guard (with automatic open/close window for loader) 1set
- Coolant unit 1set
- Coolant unit 1set
- Work counter 1set
- Signal tower 1set
- Work light 1set
- Coolant blow system 1set
- Hand tools 1set
- Automatic circuit breakert 1set

■ OPTINAL ACCESSORIES

- Tray changer
- Indexing stacker
- Work supply/discharge conveyor
- Pallet changer
- Chip conveyor
- Automatic fier extinguisher
- Oil mist collector
- Coolant temperature controllet
- Linear scale unit
- Air blow system
- Tool counter

● Due to continual research and improvement, the above specifications are subject to change without notice.

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