

**TAKAMAZ**

CNC 1-Spindle 1-Turret Precision Lathe

# **GSL-15 PLUS**

**NEW**



## **High Quality, High Performance 8-inch Chucker**

### **Helping to Reduce Initial Costs**

- Cost performance has been further improved by reviewing the number of parts while still satisfying our strict quality standards.

### **Operator-friendly for Everyone**

- A low center of gravity construction based on ergonomics has lessened the burden on the operator.
- Featuring the TAKAMAZ maintenance menu as standard assures excellent maintainability, including shorter recovery time from NC faults thanks to automatic data backup. The startup condition check function is provided as standard to prevent defectives and damage to the machine due to human error. What's more, TAKAMAZ Support Lite (workpiece counter, tool counter, constant wear compensation) can also be equipped. This function can be used on the machine's screen display with no need for external devices.

### **Utilization of IoT**

- Networking machines in a plant and using a program transfer tool (FANUC) enables centralized management of programs. (Note: The customer must prepare the network environment.)

### Machine Specifications

Item		Unit	GSL-15 PLUS	
			Without tailstock	With tailstock
Capacity	Max. turning diameter	mm	φ290	
	Max. turning length	mm	(300)	
	Max. bar diameter	mm	Solid	
	Chuck size	inch	8	
Spindle	Spindle nose	JIS	A2 - 6	
	Spindle bearing I.D.	mm	φ100	
	Through-hole on spindle	mm	φ61	
	Spindle speed	min <sup>-1</sup>	Max.3,500	
Tool post	Type		8-station turret	
	Tool shank	mm	□25(I.D.□20)	
	Boring holder I.D.	mm	φ32	
	Max. stroke	mm	X:175 Z:330	X:160 Z:330
	Rapid traverse rate	m/min	X:18	Z:24
Motors	Spindle motor	kW	AC7.5/5.5	
	Feed motor	kW	X:AC1.2 Z:AC1.8	
	Coolant motor	kW	AC0.4	
	Hydraulic motor	kW	AC0.75	
Tailstock	Pointed End		-	MT-4
	Quill O.D.	mm	-	φ56
	Quill stroke	mm	-	85
	Tailstock stroke	mm	-	220
	Max. thrust	kN	-	3.5
Size	L×W×H	mm	1,875(With tailstock:1,990)×1,680×1,500	
	Machine weight	kg	2,300	2,500
Total electric capacity		KVA	14	

### Standard Accessories

- |   |   |
|---|---|
| <input type="checkbox"/> Boring holder..... 2 sets                    | <input type="checkbox"/> Thread cutting unit                  |
| <input type="checkbox"/> Clamp block ..... 8 sets                     | (Including constant surface speed control) ... 1 set          |
| <input type="checkbox"/> Coolant block ..... 8 sets                   | <input type="checkbox"/> Coolant unit..... 1 set              |
| <input type="checkbox"/> Hydraulic chucks(Solid)..... 1 set           | <input type="checkbox"/> Work light..... 1 set                |
| <input type="checkbox"/> Hydraulic chucking cylinder(Solid) ... 1 set | <input type="checkbox"/> Signal light..... 1 set              |
| <input type="checkbox"/> Hydraulic unit..... 1 set                    | <input type="checkbox"/> TAKAMAZ instruction manual ... 1 set |

### Parts Order

- |  |  |
|--|--|
| <input type="checkbox"/> Tool holders                    | <input type="checkbox"/> Front air blower      |
| <input type="checkbox"/> Rear chip conveyor(Spiral type) | <input type="checkbox"/> Automatic door system |

Item	TAKAMAZ & FANUC Oi-TF
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 4 digit
Tool function	T-code 4 digit
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	F0,100%
Program file name	32 characters
Backlash compensation	0~9,999 μm
Program memory capacity	512Kbyte(1,280m)
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	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
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
Starting condition check function	Standard
Automatic data backup	Standard
TAKAMAZ maintenance functions	Standard
FANUC set of manuals	DVD-ROM

### Optional Specifications (Parts Order)

Tool life management	
Multiple M codes in one block	Max.2
Spindle orientation	1 set/2~6 sets
TAKAMAZ Support Lite	Workpiece counter,Tool counter,Constant wear compensation



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