CITIZEN

Cincom

L32

Sliding Headstock Type CNC Automatic Lathe

The new L32 - an 'icon' reinvented

With a legacy as one of the best-selling Cincom machines, the next-generation L32 is launched with 4 models in modular design. Ranging from a 7-axis machine with excellent cost performance to a high-end machine equipped with B axis and back tool post Y axis, you can select the machine according to the functions you require. A wide range of modular tooling ensures that the new L32 is both versatile and flexible to meet your production demands into the future.

L32 machine configuration

Front spindle
8,000min^{-1}
Motor: 3.7/7.5 kW
Max. machining length: 320 mm/ chucking (GB)

Rotary tools on the gang tool post
6,000min^{-1} (Max)
4,500min^{-1} (rating)
Motor: 1.0kW

B type IX/X11

Rotary tools on the opposite tool post *Optional
6,000min^{-1} (Max)
3,000min^{-1} (rating)
Motor 1.0kW

Y2 type X/X11

Back spindle
8,000min^{-1}
Motor: 2.2/3.7kW

Back tool post rotary tools
6,000min^{-1} (Max)
3,000min^{-1} (rating
Motor: 1.0kW

	Type VIII	Type IX	Type X	Type XII
B Axis (rotary tools on the gang tool post)	n/a	std	n/a	std
Y2 axis (back tool post Y axis)	n/a	n/a	std	std
Rotary tools on the opposite tool post	op	op	op	op
Rotary tools on the back tool post	std	std	std	std

L32 Type XII example tooling
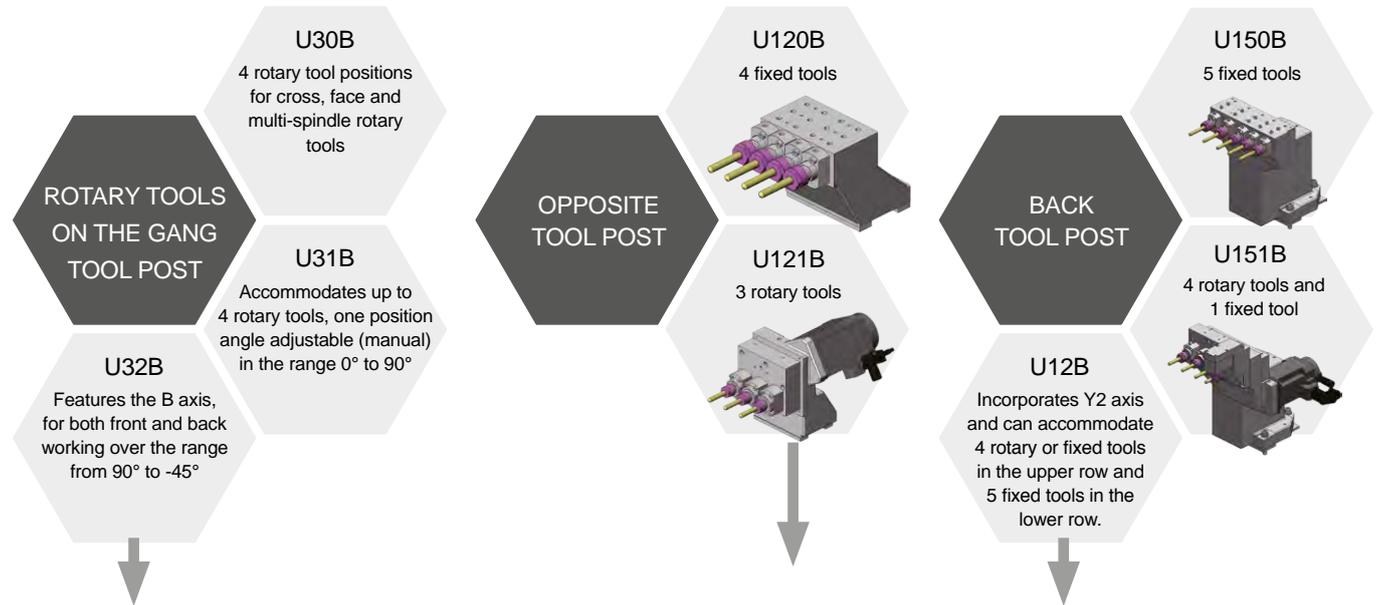

Non-guide bush type
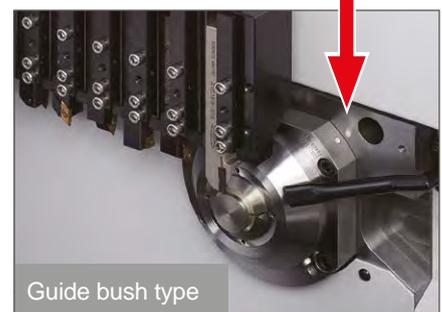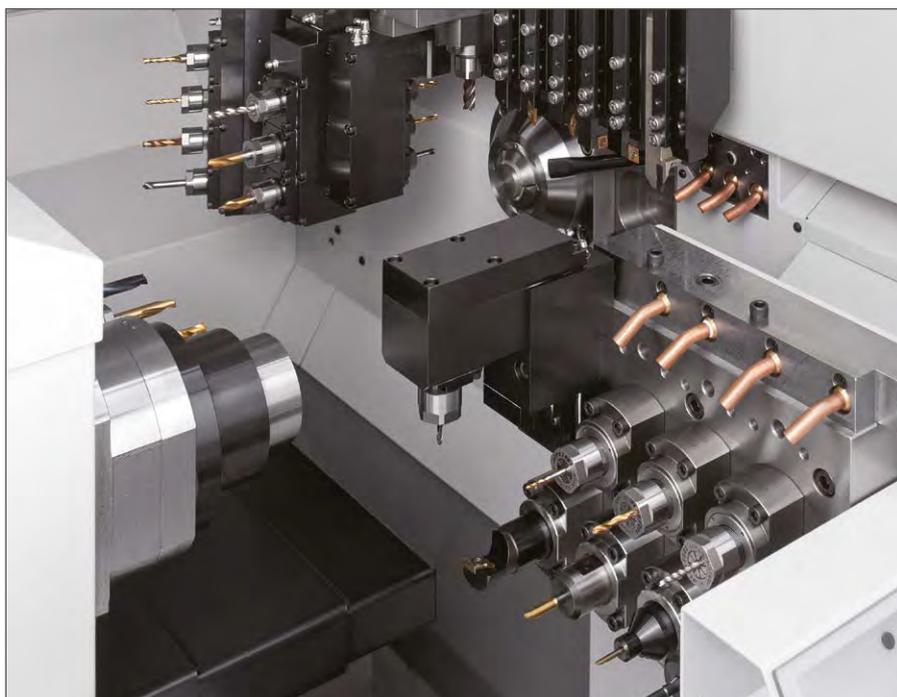
Guide bush type

Switchable between guide bush mode or non-guide bush mode.
Can be switched by operator in 30 mins.

Stable, powerful and highly productive with versatility of modular design

With the current shift in manufacturing industry, the requirement is for variable batch machining of diverse workpiece shapes and sizes. In order to meet this requirement, Citizen has introduced modular design to the new L32 thus enabling our customers to optimise their manufacturing by selecting the functions to achieve the ideal machine configuration for their needs.

Configure the machine to meet your requirements

ROTARY TOOLS ON THE GANG TOOL POST

U30B
4 rotary tool positions for cross, face and multi-spindle rotary tools

U31B
Accommodates up to 4 rotary tools, one position angle adjustable (manual) in the range 0° to 90°

U32B
Features the B axis, for both front and back working over the range from 90° to -45°

OPPOSITE TOOL POST

U120B
4 fixed tools

U121B
3 rotary tools

BACK TOOL POST

U150B
5 fixed tools

U151B
4 rotary tools and 1 fixed tool

U12B
Incorporates Y2 axis and can accommodate 4 rotary or fixed tools in the upper row and 5 fixed tools in the lower row.

U32B (B axis: rotary tools on the gang tool post)

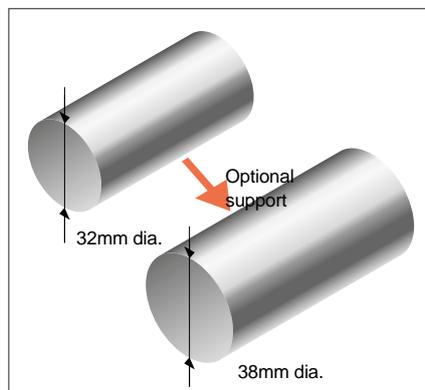**U121B (Rotary tools on the opposite tool post)**

U12B (Back tool post incorporating Y2 axis)
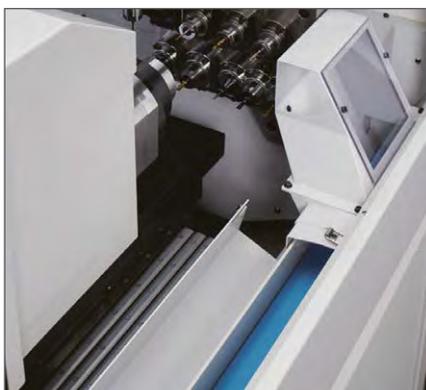
Workpiece conveyor equipped as standard

Discharge of workpieces is to the front left of the machine.

Optional support

32mm dia.

38mm dia.

32mm dia. maximum bar as standard; 38mm dia. as option

Supply of bar stock up to 38mm dia. is supported as an option. The machining length per chucking is 320mm in both capacities. A wide range of workpieces can be machined.

Extra wide door

The operator door can be flipped up to provide access to the interior of the machining area through a very large opening, allowing convenient access for tool setting and other adjustments.

Machine specification

Item	L32			
	Type VIII	Type IX	Type X	Type XII
	(L32-1M8)	(L32-1M9)	(L32-1M10)	(L32-1M12)
Max. machining diameter (D)	ø32mm (ø38mm^{OP})			
Max. machining length (L)	GB: 320mm/1chucking GBL: 2.5D			
Max. front drilling diameter	ø12mm			
Max. front tapping diameter	M12			
Spindle through-hole diameter	ø39mm			
Main spindle speed	Max.8,000min^{-1}			
Max. chuck diameter of the back spindle	ø32mm			
Max. protrusion length of the back spindle workpiece	80mm		65mm	
Max. protrusion length	150mm		140mm	
Max. drilling diameter for the back spindle	ø10mm			
Max. tapping diameter for the back spindle	M10			
Back spindle speed	Max.8,000min^{-1}			
Gang rotary tool				
Max. drilling diameter	ø10mm			
Max. tapping diameter	M8			
Spindle speed	Max.6,000min^{-1} (Rating:4,500min^{-1})			
Back tool post rotary tool *1				
Max. drilling diameter	ø8mm			
Max. tapping diameter	M6			
Spindle speed	Max. 6,000min^{-1} (Rating:3,000min^{-1})			
Front rotary tool *2				
Max. drilling diameter	ø8mm			
Max. tapping diameter	M6			
Spindle speed	Max.6,000min^{-1} (Rating:3,000min^{-1})			
Number of tools to be mounted max	19-30	26-36	24-44	30-40
Gang turning tool	6	6	6	6
Gang rotary tool	4-6	7-11	5-13	7-11
Front drilling tool	4-9	4-14	4-16	4-9
Back drilling tool	5-11	9-15	9-20	13-19
Tool size				
Gang turning tool	16×130mm			
Sleeve	ø25.4mm			
Chuck and bushing				
Main spindle collet chuck	FC081-M (FC251-M:ø38 spec.)			
Back spindle collet chuck	FC081-M (FC251-M:ø38 spec.)			
Rotary tool collet chuck	ER11, ER16			
Chuck for drill sleeves	ER11, ER16			
Guide bushing	FG531-M (FG581-M:ø38 spec.)			
Rapid feed rate				
All axes (except Y2)	32m/min			
Y2 axis	-		24m/min	
Motors				
Spindle drive	3.7/7.5kW			
Gang tool post rotary tool drive	1.0kW			
Back spindle drive	2.2/3.7kW			
Back tool post rotary tool drive *1	1.0kW			
Front rotary tool drive *2	1.0kW			
Coolant oil	0.4kW			
Lubricating oil	0.003kW			
Centre height	1,050mm			
Rated power consumption	13.2KVA			
Full-load current	36A			
Main breaker capacity	60A			
Air pressure and air flow rate for pneumatic devices	0.5MPa, 64.2NL			
Weight	2,850kg		2,900kg	

*1 type VIII, Type IX back tool post rotary tool is optional

*2 front rotary tool drive unit is optional

Special accessories

Main spindle chucking unit	Cut-off breakage detector
Back spindle chucking unit	Workpiece separator
Gang rotary tool driving unit	Lighting
Coolant unit (with level detector)	Rotary guide bushing drive unit
Lubricating oil supply unit (with level dectector)	
Main spindle coolant unit	Machine relocation detector
Back tool post rotary unit *type X, XII	Door lock

Special accessories

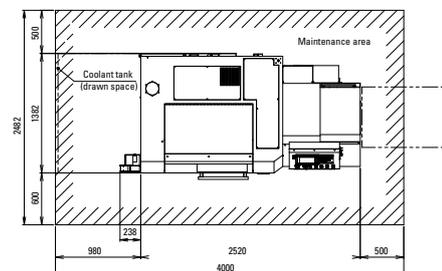|	
Rotary guide brushing unit	Back rotary tool unit *type VIII, IX
Knock-out jig for through-hole workpiece	
Signal lamp	Chip conveyor
3-colour signal tower	Medium-pressure coolant unit
Front rotary tool unit	Coolant flow rate detector

Standard NC functions

CINCOM SYSTEM M70LPC-VU (Mitsubishi)	
Synch tapping phasing function	8.4 inch color LCD
Interference check function	USB slot
Spindle speed change detector	
Program storage capacity : 40m (approx. 16KB)	
Constant surface speed control function	
Tool offset pairs : 40	Automatic power-off function
Product counter indication (up to 8 digits)	
Main spindle indexing at 1° intervals	
Operating time display function	On-machine program check function
Machine operation information display	Nose radius compensation
B axis control function *type IX,XII	Eco indication
Back spindle chasing function	

Special NC functions

Variable lead thread cutting	Tool offset pairs : 80
Arc threading function	Back machining program skip function
Chamfering, corner R	Tool life management I
Geometric function	Tool life management II
Multiple repetitive cycle for turning	
Program storage capacity 600m (approx. 240KB)	
Spindle synchronized function	External memory program driving
Spindle C-axis function	Submicron commands
Milling interpolation	User macros
Back spindle 1°indexing function	Helical interpolation function
Back spindle C-axis function	Slant helical interpolation function
Canned cycle drilling	Hob function
Rigid tapping function	Polygon function
High speed Rigid tapping function	Inch command
Differential speed rotary tool function	Sub inch command
Optional block skip (9 sets)	Network I/O function

L32 Standard machine

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