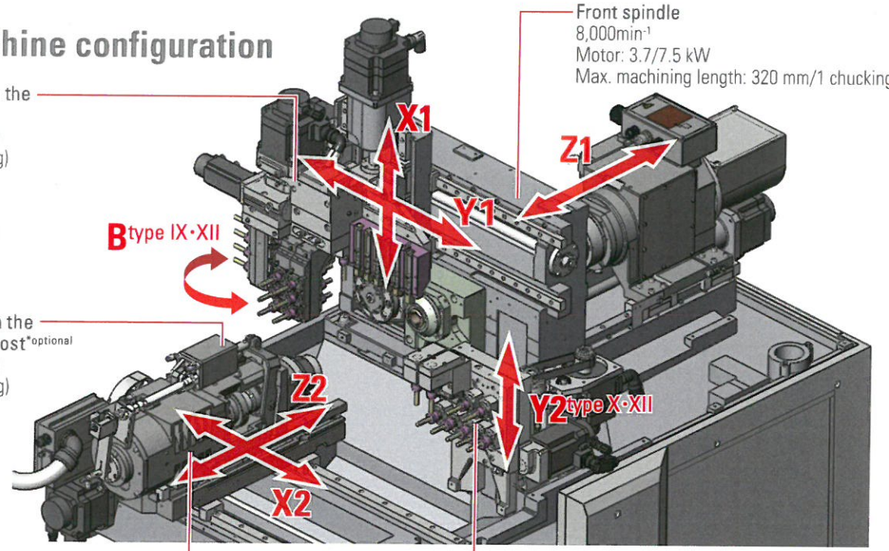
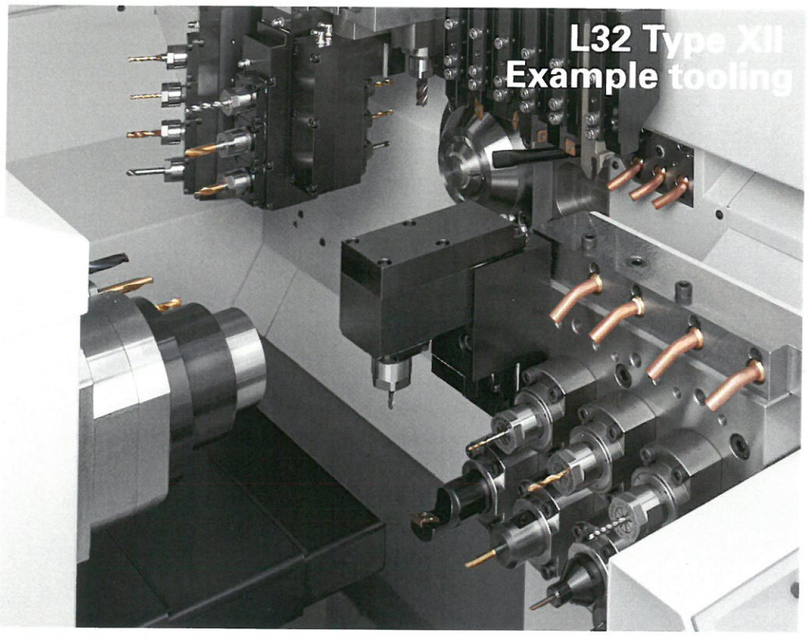
The new L32 - an 'icon' reinvented

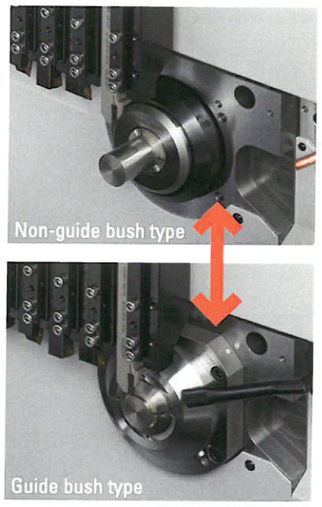
With a legacy as one of the best-selling Cincom machines, the next-generation L32 is launched with 4 models in modular design.
Ranging from a 5-axis machine with excellent cost performance to a high-end machine equipped with B axis and back tool post Y axis, you can select the machine according to the 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



	Type VIII	Type IX	Type X	Type XII
B axis (rotary tools on the gang tool post)	–	○	–	○
Y2 axis (back tool post Y axis)	–	–	○	○
Rotary tools on the opposite tool post	OP	OP	OP	OP
Rotary tools on the back tool post	OP	OP	○	○



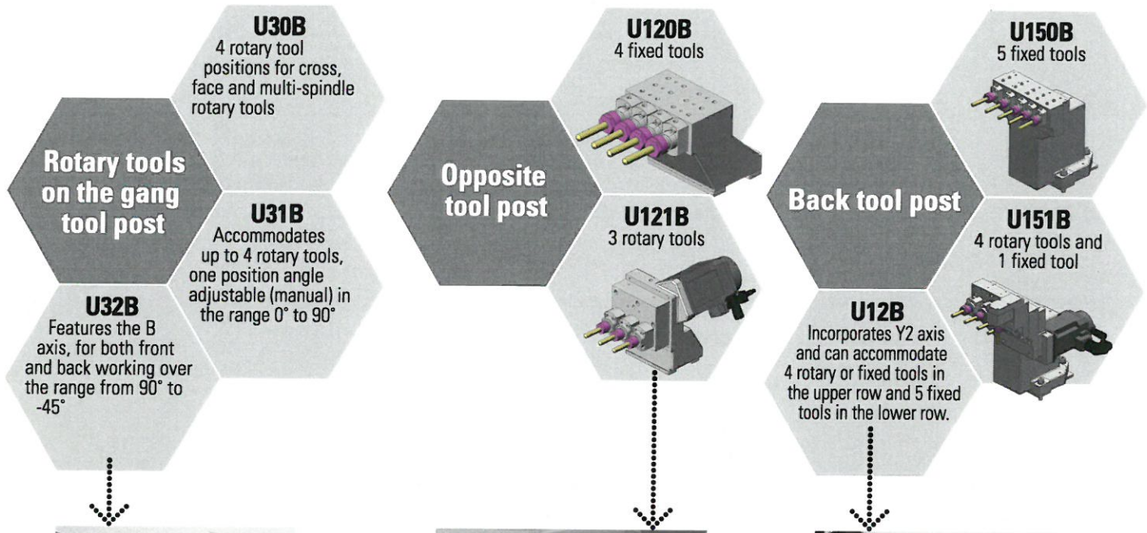


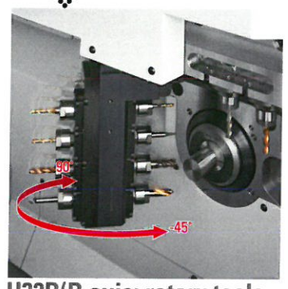
Switchable between guide bush mode or non-guide bush mode
Can be switched by operator in about 30 mins.

Stable, powerful, and highly productive with versatility of modular design

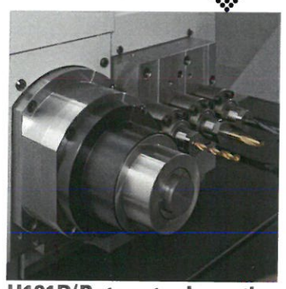
With the current shift in manufacturing industry, the requirement is for variable-lot machining of diverse workpiece shapes and sizes. In order to meet this requirement, Citizen has introduced modular design to the new L32 thus enabling our customers to optimize their manufacturing by selecting the functions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

Function modules that can be combined without restrictions

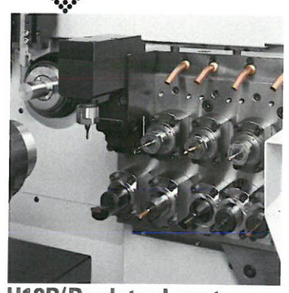




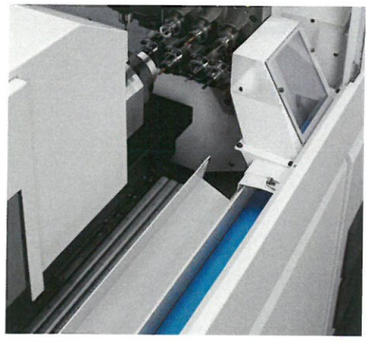
U32B(B axis: rotary tools on the gang tool post)



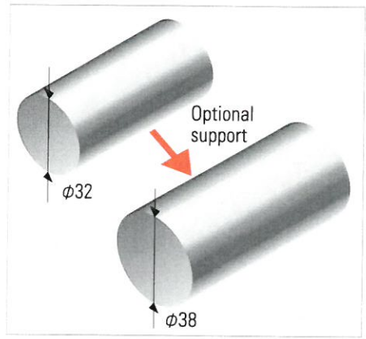
U121B(Rotary tools on the opposite tool post)



U12B(Back tool post incorporating Y2 axis)



Workpiece conveyor equipped as standard
Discharge of workpieces is to the left front of the machine.



φ32mm max. bar as standard; φ38 mm as option
Supply of bar stock up to φ38 mm is supported as an option. The machining length per chucking is 320 mm in both capacities. A wide range of workpieces can be machined.

Extra-wide cover for operator convenience
The operator door can be flipped up to provide access to the interior of the machining area through a very large opening, allowing comfortable and easy access for tool setting and other adjustments.

Machine Specification

Item	L32			
	Type VIII (L32-1M8)	Type IX (L32-1M9)	Type X (L32-1M10)	Type XII (L32-1M12)
Max. machining diameter (D)	ø32mm (ø38mm*2)			
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			
Center 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 rotry tool drive unit is optional

Standard accessories

Main spindle chucking unit	Cut-off tool 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 detector)	Main spindle coolant unit
Machine relocation detector	Back tool post rotary unit *type XII
Door lock	

Special accessories

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

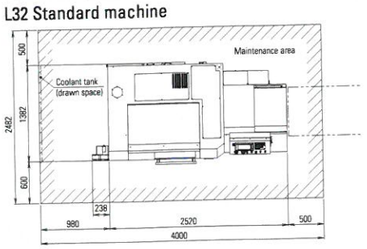
Standard NC functions

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



Environmental Information

Basic Information	Energy usage	Power supply voltage	AC200V
		Electrical power requirement (Max)	13.2kVA
		Required pneumatic pressure	0.5MPa
Environmental Performance Information	Power consumption	Standby power *1	0.320kW
		Power consumption with model workpiece *2*3	0.0133kWh/cycle
		Power consumption value above converted to a CO2 value *4	6.3g/cycle
	Air consumption	Required air flow rate	45NL/min (max.182 NL/min., during air blow)
	Lubricant consumption	At power ON	1.5cc/60min
	Noise level	Value measured based on JIS	78.5dB
Approach to Environmental Issues	Environmental load reduction	RoHS Directive / REACH regulations	Compliant
	Recycling	Indication of the material names of plastic parts	Covered in the instruction manual *5
	Environmental management		We are ISO14001 accredited. We pursue "Green Procurement", whereby we make our purchases while prioritizing goods and services that show consideration for the environment.

*1 : This is the standby power in the idle stop mode (a function that turns servomotor excitation off when it is not necessary, for example during program editing).
*2 : This is the power consumption in program operation (when not cutting) for one of our standard test pieces, shown for the purpose of comparing the environmental performance with that of existing models.
*3 : The average cycle time is 55 sec with the standard test workpiece of our company .
*4 : This is the value converted in accordance with the CHUBU Electric Power CO2 emissions coefficient for 2009 as published by the Ministry of the Environment.
*5 : If polyvinyl chloride (PVC) and fluoric resin are not processed correctly they can generate harmful gases. When recycling these materials, commission a contractor that is capable of processing them appropriately.

CITIZEN

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L32

Sliding Headstock Type CNC Automatic Lathe