CITIZEN

Cíncom B12/16E

Sliding Headstock Type CNC Automatic Lathe



Cincoms B series - A worldwide best selling, low cost model now in 16mm capacity

The B series having been very popular worldwide is now revamped with 16mm capacity. Renowned for it's speed, accuracy and high reliability at extremely low running cost it retains the same tool layout as before.

The rigidity of the back headstock has been improved and preprocessing of the control gives shortest cycle times.

Citizens famous ease of use have been catered for with our program check function via the handwheel.

Preprocessing

Running the calculations in NC programs in advance shortens the processing time during operation, which helps to cut cycle times.

Tool layout compensating for thermal displacement

Virtual XY axis control is used to achieve a tool layout that is not too focused on the ball screw axis. This suppresses the effects of thermal displacement and makes it possible to maintain high accuracy during continuous machining.

On-machine program check function

This is for running a program in the forward or reverse direction using the manual pulse handle while checking the machine operations. NC programs can be checked intuitively and in an easy-to-understand manner.

Full NC functions

A wealth of functions generally treated as options, like canned cycle drilling, direct input of drawing dimensions, and user macros, are featured as standard NC functions.

A range of optional accessories

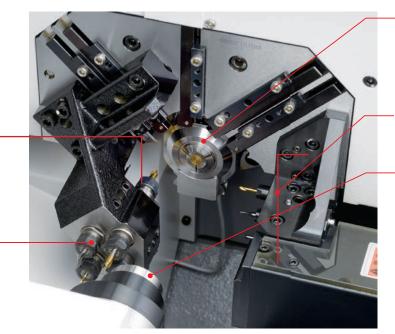
A wide range of optional accessories are available, means that you can change the specifications according to your needs.

Power tool upgrade

The power tool unit has been upgraded to 3 spindles with rigid tapping now standard.



B16E type VI tooling example



Front Spindle

B12E Max. spindle speed: 12,000min⁻¹
When using an RGB: 8,000min⁻¹
B16E Max. spindle speed: 10,000min⁻¹
When using an RGB: 8,000min⁻¹
Max. drilling diameter: 6mm

Rotary Tools:

Max. rotational speed: 4,500min⁻¹
Max. drilling diameter: 5mm

Back Spindle:

Max. spindle speed: 6,000min⁻¹
Max. drilling diameter: 5mm

Drill Sleeve Holder
This holder can mount four
drilling tools as standard.
19.05°P and 20 gauges
are available.

Tooling patterns

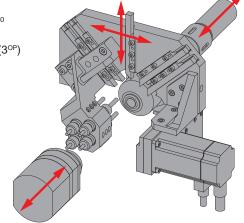
B12/16E type VI

Turning tools :5 10

Rotary tools on the gang tool post :2 (3°°)

Front drilling tools :4

Back drilling tools :4





NC program transfer

NC programs can be input and output via USB memory stick, CompactFlash card or RS232 connection.



Product chute

The back spindle retracts and ejects the workpiece into the chute, which drops it to the product receiver box.



Chip receiver box

The chip receiver box is easily drawn out for efficient cleaning.



Coolant tank

The coolant tank has a large capacity of 117 liters and can be moved easily when carrying out maintenance.

Machine specification

Item	B12E	B16E	Standard accessories
	VI(B12E-1F6)	VI(B16E-1F6)	Main spindle chucking device
Maximum machining diameter (D)	12mm	16mm	Back spindle chucking device *only V & VI
Maximum machining length (L)	135 mm/1 chucking (60mm/1 chucking with RGB)		Workpiece separator *only I & II
(tap, die)	20mm		Coolant device (with level detector)
Spindle through-hole diameter			Lubricating oil supply unit (with level detector)
Main spindle speed	12,000min ⁻¹ (8,000min ⁻¹ with RGB)	10,000min ⁻¹ (8,000min ⁻¹ with RGB)	2 Gang rotary tool driving devices *only II & VI
Spindle speed of the gang rotary tool	4,500min ⁻¹	4,500min ⁻¹	Machine relocation detector
Max. chuck diameter of back spindle	12mm	16mm	Door lock function
Max. protrusion length of the		<u>'</u>	
back spindle workpiece	30mm	30mm	Special accessories
Maximum protrusion length	135mm	135mm	Fixed guide bushing device
Back spindle speed	6,000min ⁻¹	6,000min ⁻¹	Rotary guide bushing device
Number of tools to be mounted	15	15	Coolant flow rate detector
Turning tools on the gang tool post	5	5	Signal lamp
Cross rotary tools	2 (3 ^{OP})	2 (3 ^{OP})	Lighting
Tools for front drilling	4	4	End-face rigid tapping device *only I & II
Tools for back drilling	4	4	Back spindle long workpiece
Tool size			device *only V & VI
Tool (gang tool post)	10×120mm or 60mm		Knock-out jig for through-hole
Sleeve	20mm (19.05mm ^{OP)}		workpiece *only V & VI
Chuck and bushing			
Main spindle collet chuck	F16	F20	Standard NC functions
Back spindle collet chuck	F16	F20	NC unit dedicated to the B1216E series
Rotary tool collet chuck	ER8	ER8	8.4 inch colour liquid crystal display (LCD)
Chuck for drill sleeves	ER8DER11		Operating time display
Guide bushing	B212	B238	Preparation functions
Rapid feed rate			Main spindle speed change detector
X and Y axes	21m/min		Corner chamfering/ rounding function
Z axis	15m/min		Canned drilling cycle
A2 axis	15m/min	15m/min	Nose R compensation function
Motors			Direct input of on-drawing dimensions
Spindle drive	2.2/3.7kW		Main spindle constant surface speed control
Tool spindle drive	0.5kW	0.5kW	Program storage capacity : 40m (approx.16KB)
Back spindle drive	1.0kW	1.0kW	Tool offset pairs : 64 pairs
Coolant oil	0.18kW	1.000	Product counter indication (up to 8 digits)
Centre height	1000mm		Automatic power-off function
Rated power consumption	5.2kVA	5.2kVA	Multiple repetitive cycle
Full-load current	20A	20A	User macro
		20A	Continuous threading function
Main braker capacity	30A		•
Air pressure and air flow rate for	0.5MPa.20NI/min (May 50NI/min)		On-machine program check function
pneumatic devices	0.5MPa-30Nl/min (Max.50Nl/min)	44501-	Program prior analysis function
Weight	1150kg	1150kg	0 11107 4
			Special NC functions
			Program strage capacity 2500m (approx.1MB)
			Sub-micron command function
			Front end-face rigid tapping function
			Tool spindle rigid tapping function *only II & VI
			Tool spindle end-face rigid tapping
			function *only I & II
			Hobbing and polygon machining
			function (A) *only I & II
			Hobbing and polygon machining
			function (B) *only II & VI
			Front-back simultaneously machining
			function *only V & VI
			Main spindle indexing at 1°intervals *only II & VI
			Simplified Z-A2 axes synchronization
			function *only V & VI



CITIZEN MACHINERY CO., LTD.

Japan Citizen Machinery Co Ltd

4017-6 Miyota, Miyota-machi, Kitasaku-gun,

Nagano-ken, 389-0206, Japan **Europe - Germany** Citizen Machinery Europe GmbH

Mettinger Strasse 11, D-73728 Esslingen, Germany **Europe - UK**Citizen Machinery UK Ltd

K Citizen Machinery UK Ltd 1 Park Avenue, Bushey, WD23 2DA, UK Tel: 81-267-32-5901 Fax: 81-267-32-5908

Tel: 49-711-3906-100 Fax: 49-711-3906-106

Tel: 44-1923-691500 Fax: 44-1923-691599

www.citizenmachinery.co.uk

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