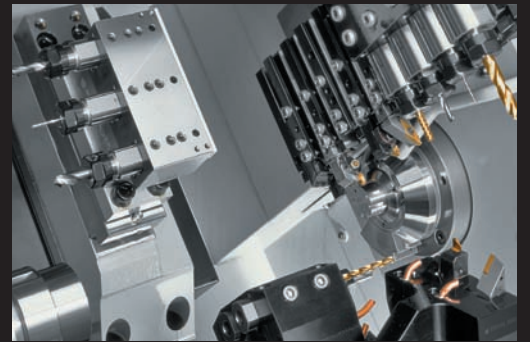


CITIZEN®

Cincom

Sliding Headstock Type CNC Automatic Lathe

M32 Y Axis



Leading the Way with Superior Value and Technology

Cincom M32

Y Axis

The addition of the Y axis to the M32 turret allows for more sophisticated and highly productive machining functions. This Y axis turret feature, combined with the gang tool Y axis provides tooling and machining capabilities not possible in other Swiss type turning centers.

Multi-axes/Multi-line Control System

The multi-axes/multi-line control system, which controls 2 spindles and 3 tool posts, achieves absolute synchronization control of ALL axes with less idle time. The operator can program without any considerations for complicated movements of synchronization or superimpose functions.

High Performance Windows-based NC

The machine is equipped with a higher performance CPU than previous M series machines. Shorter computing time and higher speed macros achieve less cycle time.

Less preparation/cycle time with these new functions

- High speed program check function (option)
- The program check without any mechanical movement is available. In addition, time estimation is also available.
- High speed threading function (option/under development)
- The threading at high speed is possible without longer incomplete thread
- High speed rigid tapping function (option/under development)
- Less cycle time with high speed reverse movement

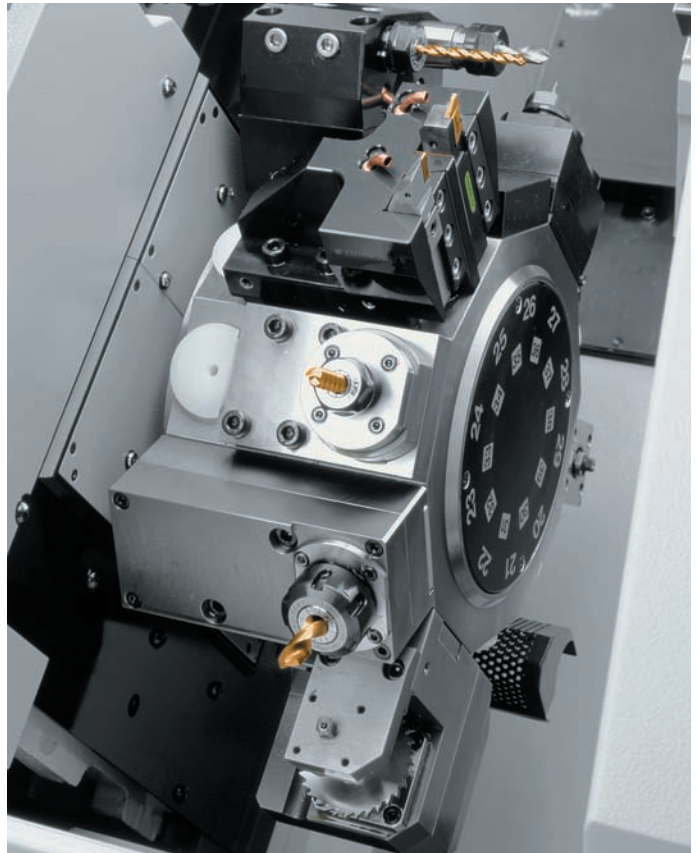
Secondary Machining Functions

Various machining functions are available for every machining need. Main spindle C axis is available as standard and following functions are available as an option.

- Back spindle 1 degree indexing function and C axis function
- Rigid tapping functions (main spindle, back spindle and tool spindle are available)
- Milling interpolation function
- Differential speed rotary tool function
- Hobbing, polygon and thread milling functions

Multi tool simultaneous machining for high productivity

Unique machine construction and intelligent servo control make the machining of precision work pieces in minimal cycle time possible. 3 tool posts construction allows machining with up to 3 tools on main and back spindle simultaneously.

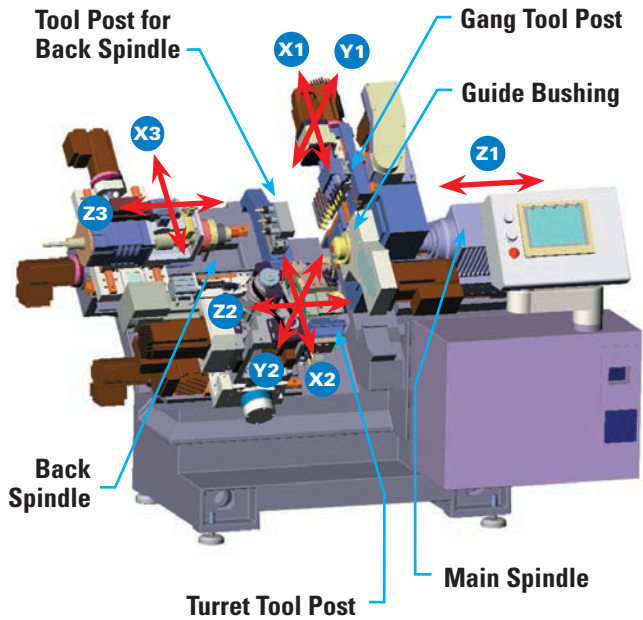


The turret tool post with Y axis

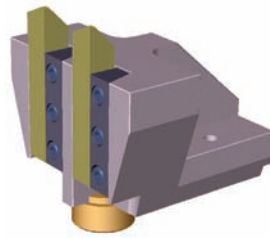
Complex Part Configurations Possible

The turret tool post, well known for its versatility, has been improved. New tool holders (shown right) increase the capacity for the number of mountable tools.

- Several tools can be mounted together in one tool holder on one turret station
- Less idle time due to tool changes without turret index
- Operators can adjust the height of turning and milling tools easily with the tool offset function
- The flexibility of milling operations becomes greater
- The machine has more flexibility for complex parts

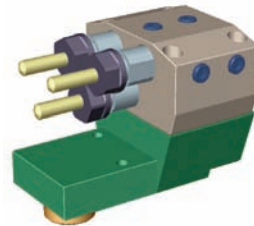


1 Y axis tooling system



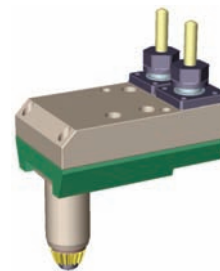
**Double turning holder
CTF1116**

Byte size 16×16×90mm
Includes coolant nozzle



**Triple sleeve holder
CDF901**

Sleeve size ϕ 25.4mm
Includes coolant nozzle



**Double cross spindle
KSC510**

Chuck type ER16

M332-U151B (Optional)

2-Rotary spindles can be mounted, as well as 1 station for a fixed ID tool. Fixed type sleeve holders can be mounted in Live tool stations by use of a sleeve adapter.



2 High Performance Windows-based NC



Flexible Operation Panel

The operation panel's user friendly man-machine interface makes the machine easy to operate.

M32 On-Line Communications

A PC-based controller connects by modem to the Cincom website. This can be used to remotely trouble-shoot, review programs, obtain on-line help and to download software or monitor performance.



Machine specifications	
Item	M32Y
Max. machining diameter	φ32 mm (1.25")
Max. machining length	320 mm (12.5")
Max. front drilling diameter	φ12 mm (.47")
Max. front tapping size (with tap and die)	M10
Spindle through-hole diameter	φ36 mm (1.41")
Main spindle speed	200-8,000 rpm
Max. drilling diameter for rotary tool spindle	
Gang tool post	φ7 mm (.27")
Turret	φ10 mm (.39")
Max. tapping diameter for rotary tool spindle	
Gang tool post	M6
Turret	M8
Rotary spindle speed	
Gang tool post	200-5,000 rpm
Turret	200-5,000 rpm
Max. chuck diameter of the back spindle	φ32 mm (1.25")
Max. workpiece length for the front side collection from the back spindle	145 mm (5.7")
Max. drilling diameter in the back machining process	φ10 mm (.39")
Max. tapping diameter in the back machining process	M8
Back spindle speed	200-7,000 rpm
Number of tools to be mounted	22
Turning tools on the gang tool post	5
Rotary tools on the gang tool post	4
Tools on the turret	10 (indexed at 20)
Tools on the back tool post	3
Tool size	
Gang tool post (tool)	16×16×130 mm (.625×.625×5.11")
Turret (tool)	16×16×90 mm (.625×.625×3.54")
Turret (sleeve)	φ25.4 mm (1")
Back tool post (sleeve)	φ25.4 mm (1")
Rapid feed rate	
X1, Y1, Z1, X2, Z2, X3, Z3 axis	20 m/min (65.62 ft/min)
Y2 axis	8 m/min (26.25 ft/min)
Motors	
Main spindle drive	3.7/5.5 KW
Tool spindle drive (gang tool post)	1.0 KW
Tool spindle drive (turret)	0.75/1.5 KW
Back spindle drive	1.5/2.2 KW
Cutting oil	0.4 KW
Center height	1,132 mm (44.57")
Weight	3,100 Kg (6,834 lbs)

Standard NC functions

NC unit dedicated to the Cincom M series
 10.4" color LCD display
 Operating time display
 Preparation functions
 Corner chamfering/rounding function
 On-machine program check function
 Main spindle speed change detection function
 Main spindle chasing function
 Program work area capacity equivalent to 20m tape
 Thread cutting canned cycle
 Tool offset pairs 40
 Main spindle C-axis function
 Main spindle 1 degree indexing function
 Back spindle constant surface speed control function
 Product counter display: Up to 8 digits
 Nose R compensation function
 Three-dimensional interference check function
 Back spindle speed change detection function
 Main spindle constant surface speed control function
 Automatic power-off function
 Program storage capacity equivalent to 40m tape
 Multiple repetitive cycle for turning
 Back spindle 1 degree indexing function
 Back spindle chasing function
 User macro

Standard accessories

Rotary guide bushing drive unit
 Guide bushing device
 Main spindle chucking device
 Coolant device (level detection function)
 Servo motor driven knock-out device for back machining
 Door switch
 Workpiece separator
 Back spindle chucking device
 Lubrication device (level detection function)
 Rotary tool spindle on gang tool post
 Rotary tool spindle drive unit on turret

Optional NC functions

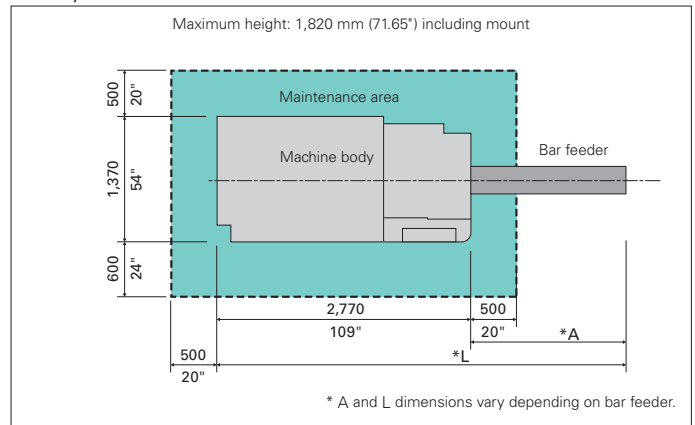
Synchronized tapping function
 Back spindle C-axis function
 Differential rotary tool function
 Sub-inch command
 Helical interpolation function
 Inclined helical interpolation function
 Milling interpolation function
 Spindle synchronization control function
 Tool life management
 Canned drilling cycle
 Polygon function
 Hobbing function

Optional accessories

Rotary tool spindle drive unit for back face machining
 Workpiece conveyor
 Cutoff tool breakage detector
 Chip conveyor
 Automatic tool setting device
 Back long workpiece machining device

The above specifications may not apply to product sold in the US or other countries. Please contact your local Citizen distributor for actual machine quotation.

Floor layout



CITIZEN The World Leader in CNC Swiss Turning

Marubeni Citizen-Cincom Inc.

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