

Cincom **C16-VII / C16-IX**
CNC-Sliding Head Lathe

The new definition
of precision and speed

CITIZEN



The new definition of precision and speed

Citizen's new generation of CNC sliding head lathes is further advanced with the introduction of the C series which offers simultaneous machining with 3 tools for high productivity, precision and flexibility.

The models C16-VII and C16-IX are based on Citizen's renowned design concept but adopts modular construction enabling flexible customising to meet user demand.

On demand the basic machine C16-VII/5 axes can be expanded with two axes. The additional X-axis of the sub spindle and the Z-axis of the drilling holder enable more efficient simultaneous machining of all workpieces.

- Adaptable modular construction.
- Simultaneous front and back machining with up to 3 tools.
- Improved operator access to tooling area via innovative vertical folding top cover.
- Convenient operation of the machine using the fully positionable control panel.
- Reduced space requirements through compact construction.
- Highest precision achieved due to thermal stability, even in constant use.
- A high number of tools (up to 22) enables one-hit machining of complex parts.

Power driven tools on the vertical holder

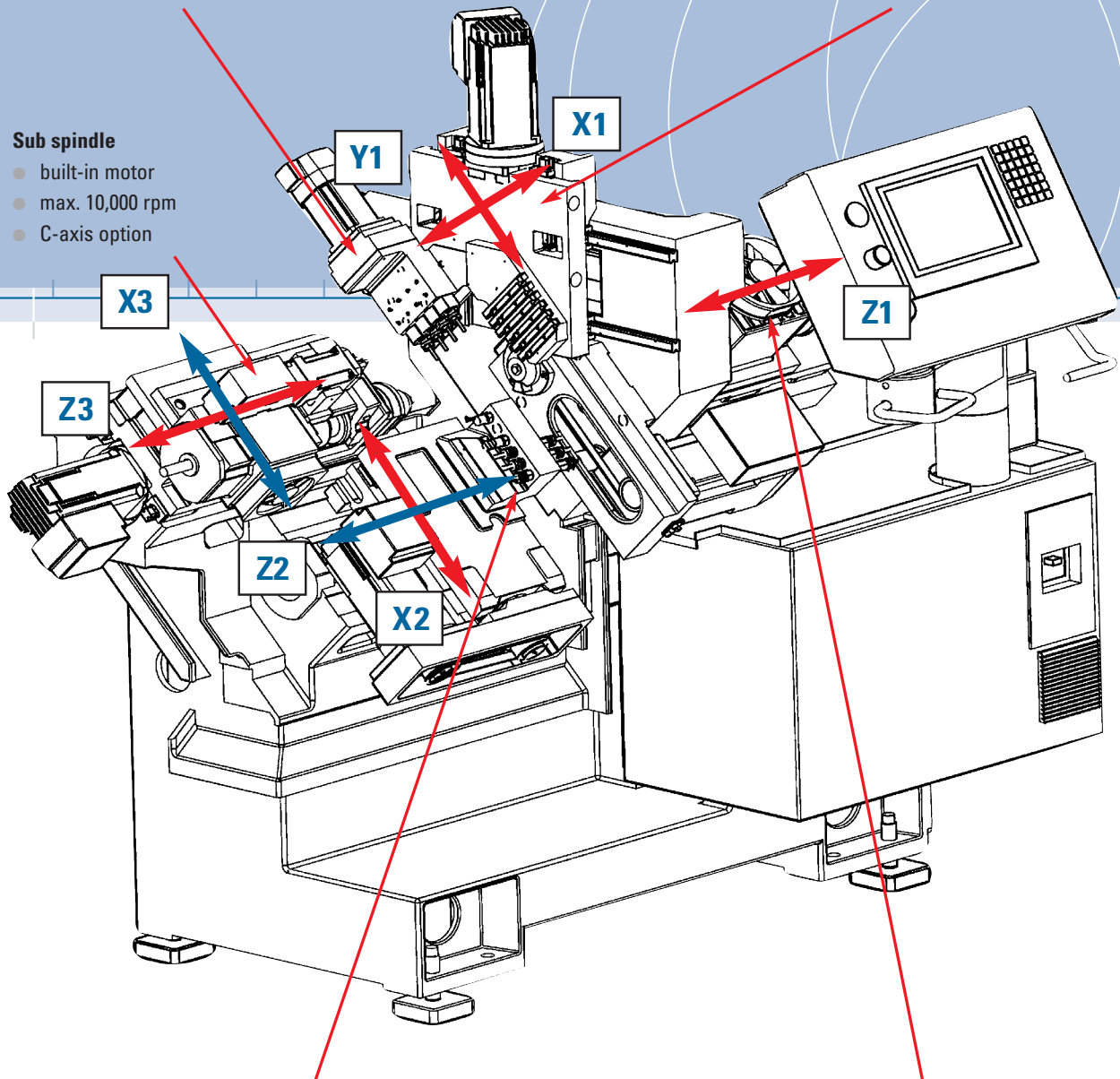
- 4 driven tools – all with 'Y' axis
- 0,75 kW 8,000 rpm
- synchronised (rigid) tapping

Vertical holder (virtual X, Y axis control)

- 6 turning tools
- synchronised driven rotary guide bush by AC spindle motor

Sub spindle

- built-in motor
- max. 10,000 rpm
- C-axis option



End working tool post

- 12 stationary tools
- 6 facing main spindle
- 6 facing sub spindle
- optional face driven power tools (3 front, 3 back)

Main Spindle

- built-in motor
- max. 10,000 rpm
- 15° indexing (locked)
- 1° indexing
- C-axis

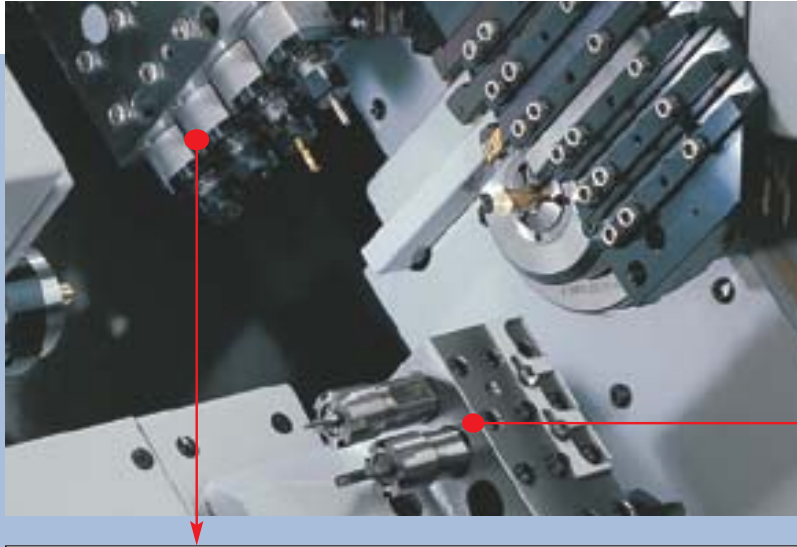


C16-VII



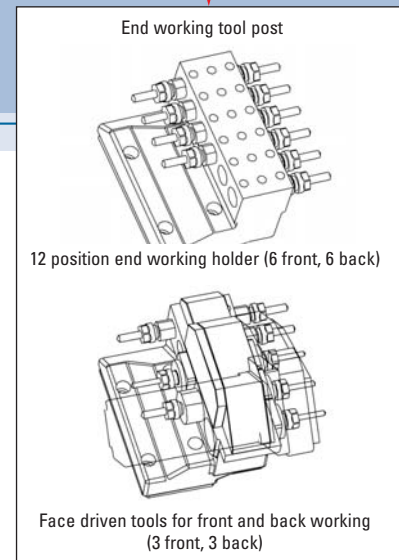
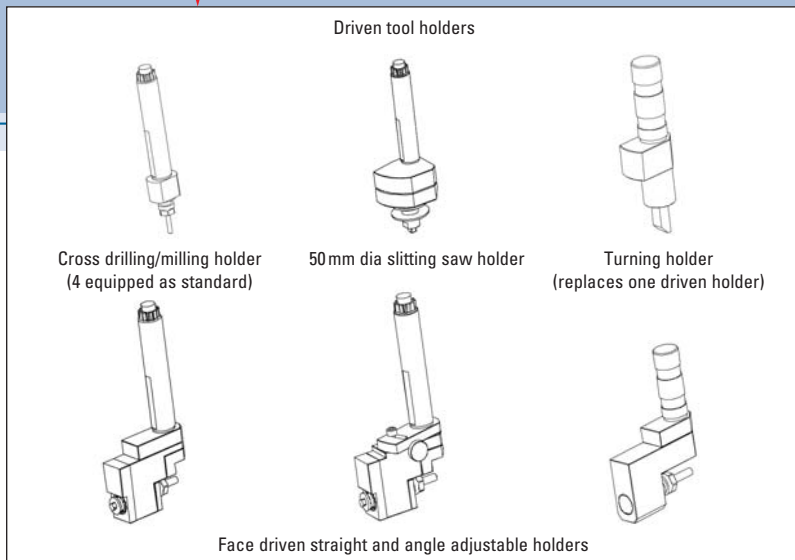
C16-IX

Modular tool configuration



Up to 22 tools ensures high flexibility.

The production of complex parts is simplified, cycle times are reduced.



A machine designed with the operator in mind

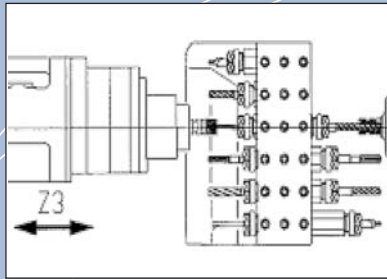


Setting is made easier through improved accessibility to the work area.

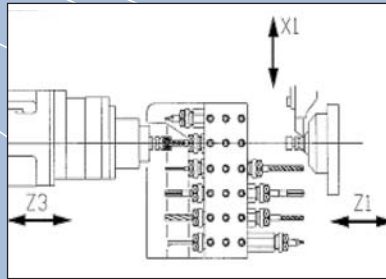
All tool stations are easy to reach.

Changing of collets and guide bushes can be easily and quickly performed due to this improved accessibility.

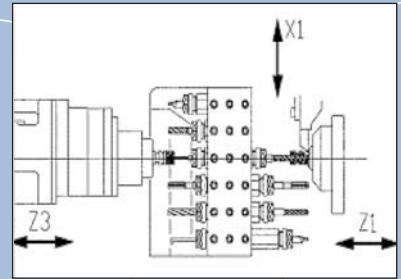
C16-VII



Simultaneous front and back end working.

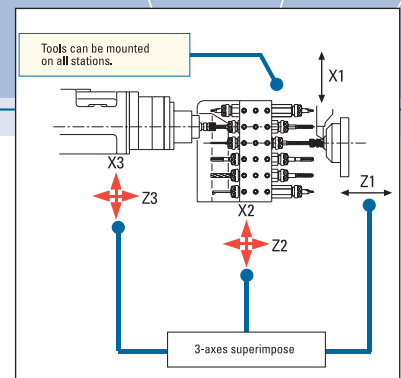
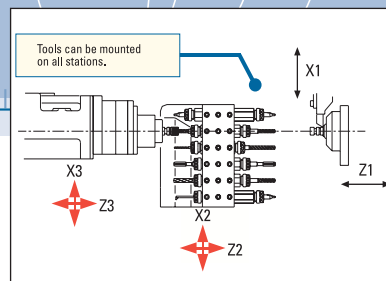
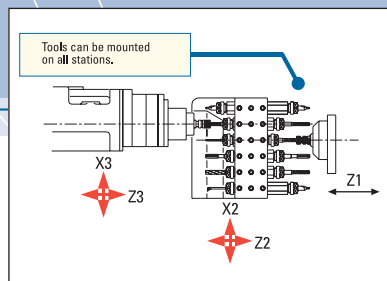


Simultaneous front turning or milling with back drilling or turning.



3 tools simultaneous machining – front turning, front and back drilling.

C16-IX



Windows® display screen features slot for PC card

The fully positionable control console enables the operator to observe the machining area and the program on the monitor at the same time.

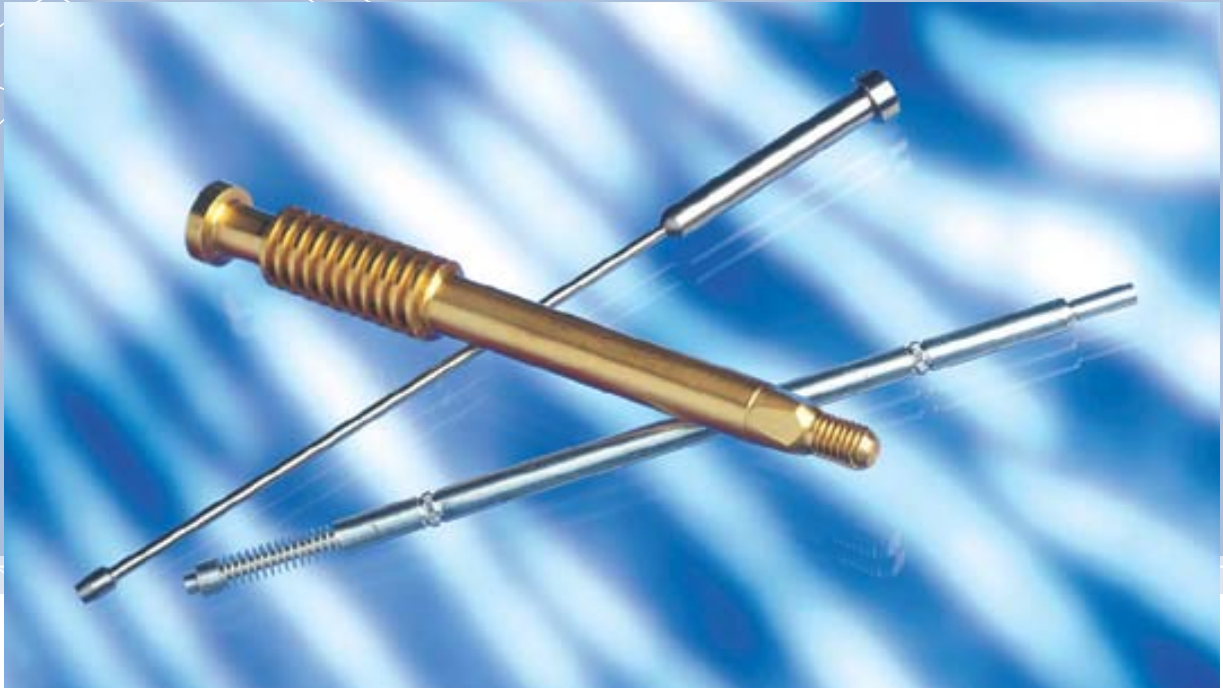
The handwheel feature provides the operator with a safe and convenient means of proving out programs prior to selecting the automatic mode. This is particularly useful for newcomers to CNC operation.

The storage and input of program data is simplified by the PC memory card slot (standard PC card).



Citizen's renowned ease of use, including the program prove-out handwheel, helps operators achieve fast change-overs.

Well thought out accessories and options



Workpiece conveyor (C16 U31 J)

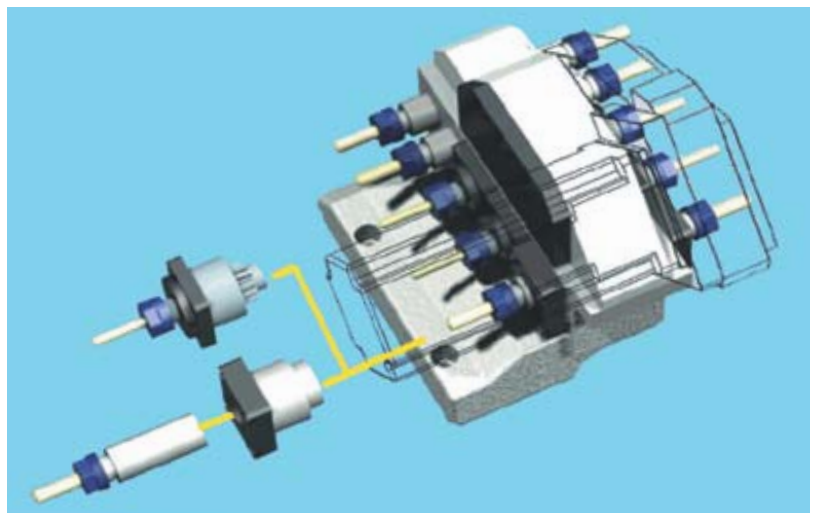
This device removes the workpiece from the machine without any damage and is recommended for unattended operation.

Optional long parts unit (C16 U410B)

Suitable for parts from 90 mm up to 400 mm in length, this device enables the workpiece to be removed from the machine through the rear of the sub-spindle. A gripper unit discharges the component to avoid marking.

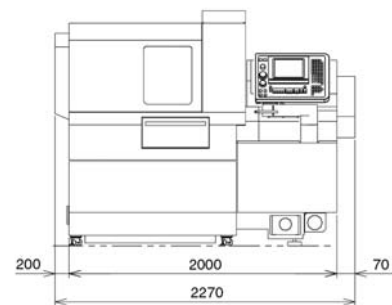
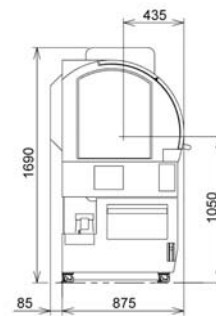
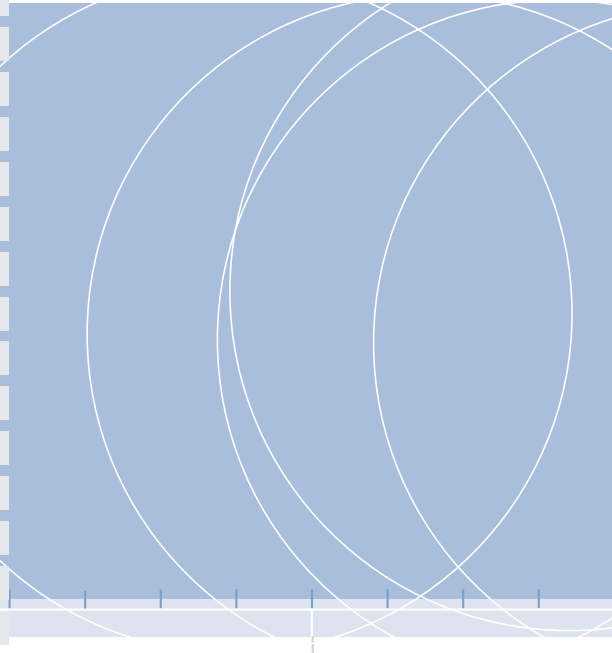
Face driven power tools (C16 U121B)

- up to 3 power driven tools for the front
- up to 3 power driven tools for the back
- 4 fixed end working tools (2 front, 2 back)
- spindle speed 5000 rpm
- easily convertible from driven tools to fixed tools

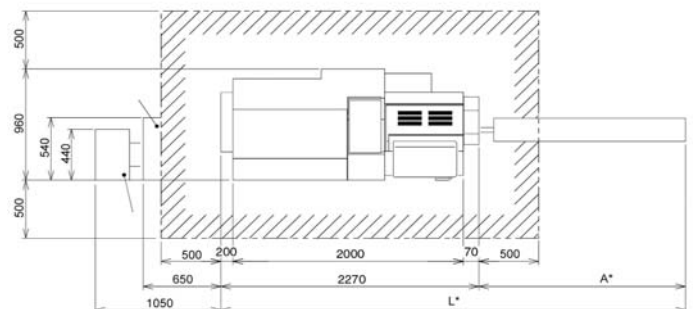


C16-VII / C16-IX Specification

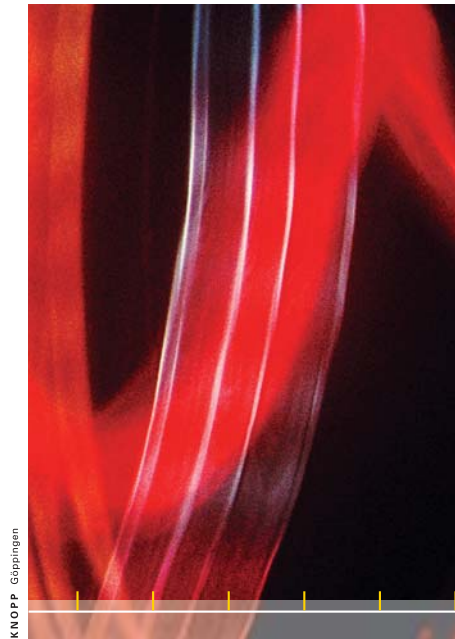
Technical details	Cincom C16-VII	Cincom C16-IX
Main spindle		
Max. machining dia. [mm]	16	16
Max. machining length [mm]	200 (400)	200 (400)
Motor power (built-in motor) [kW]	1,5 / 2,2	1,5 / 2,2
Spindle speed stepless [rpm]	200–10000	200–10000
Spindle indexing, C-axis [°]	0,001	0,001
Spindle through hole [mm]	20	20
Sub spindle		
Max. machining dia. [mm]	16	16
Max. pick-up length [mm]	90	90
Motor power (built-in motor) [kW]	0,4 / 0,75	0,4 / 0,75
Spindle speed stepless [rpm]	200–10000	200–10000
Spindle indexing (C-axis option) [°]	1	1
Power driven tools		
Spindle speed stepless [rpm]	200–8000	200–8000
Motor power (AC servo motor) [kW]	0,75	0,75
Quantity of tools	4	4
Tool system		
Turning tools (10 x 10 x 120) [quantity]	6	6
Inner dia. tools (Front side) [quantity]	6	6
Inner dia. tools (Back side) [quantity]	6	6
Cross driven tools [quantity]	4	4
Collet and guide bush		
Collet for main and sub spindle	F20	F20
Guide bush (Neukomm)	61.002	61.002
Rapid traverses		
All axes [m/min]	20	20
Machine dimensions		
Space requirement (without bar feeder) L/W [mm]	2270 / 960	2270 / 960
Height spindle center [mm]	1050	1050
Machine weight [kg]	1750	1750
Power requirement [kVA]	6	6



Machine layout plan



* L, A: These dimensions vary depending on the bar feeder



KNO P Göppingen

Specifications, technical execution and design features are subject to change without notice.
The photo of the machine may not be exactly the same as the actual product.

Citizen Watch is not responsible for differences between the information in the catalogue
and the actual machine.

The export of this product is subject to an authorization from the government of the exporting country.
Check with the government agency for authorization.

Release date: April 2004

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