Cincom B12-VI

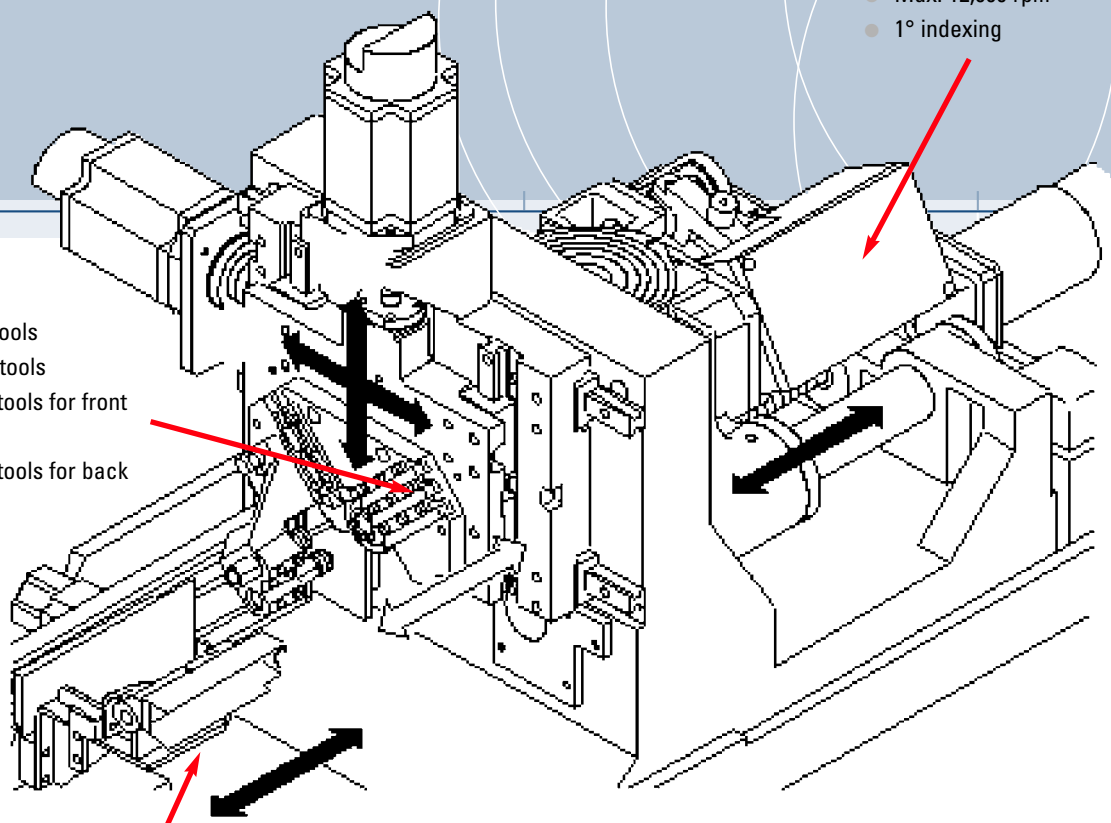
Maximum efficiency – Minimum footprint

The Cincom B 12-VI is designed to replace cam-controlled lathes. This series combines the speed and compact design of cam-control with all the flexibility, precision and convenience of CNC sliding head lathes. Innovative technology is used throughout, so the advantages are considerable. Minimal setup and tooling times figure high on the list, as do machining speeds on a par with the world of cam-control. The net results are high productivity at low cost.

Performance features at a glance:

- Ultra-smooth main spindle with high speed, built-in motor offering up to 12,000 rpm. Run-up to full speed in 1 second.
- Super-fast tool movements with digital servo control. Takes 5 turning tools and 3 end-working tools making the B 12 the fastest sliding head lathe available.
- Outstanding speed and precision due to the elimination of hydraulics and pneumatics. Servo motors are used throughout, so the Cincom B12-VI boasts excellent machining speeds with idle times pared to the absolute minimum.
- Sub-spindle for pipless part-off and back-working with 3 tools
- Suitable for machining either simple or complex parts.
- Extremely user-friendly, ideal for newcomers to CNC.
- Small footprint. Take out that old cam-controlled lathe and wheel in the new Cincom.
- Attractive price. Well below that of the cam-controlled competition.

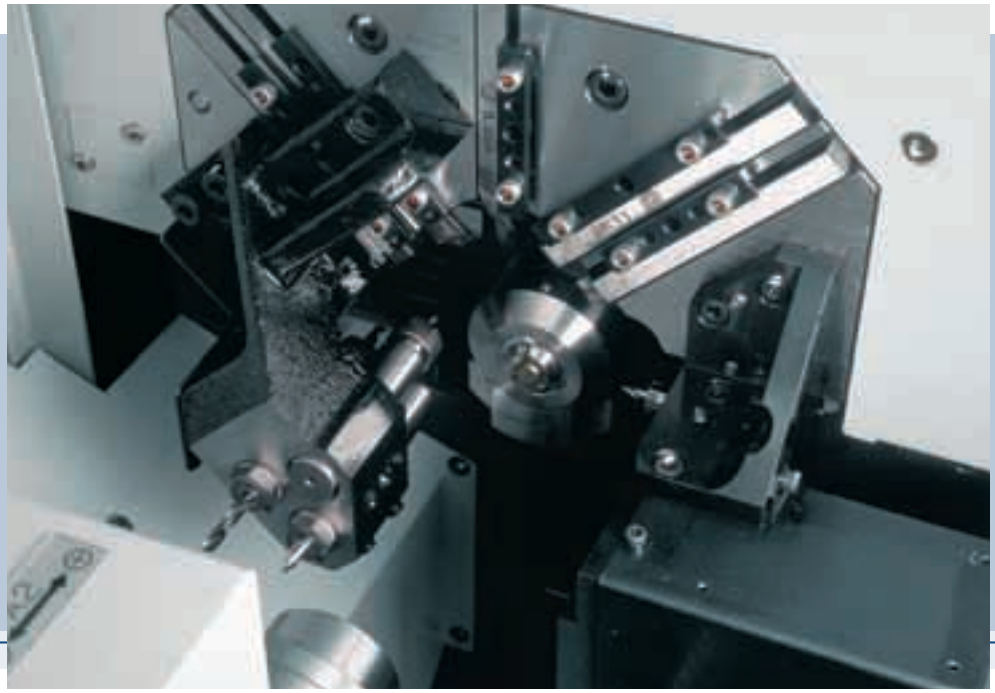
Main spindle
- Built-in motor
- Max. 12,000 rpm
- 1° indexing



Tool holders
- 2 driven tools
- 5 turning tools
- 3 drilling tools for front operation
- 3 drilling tools for back operation

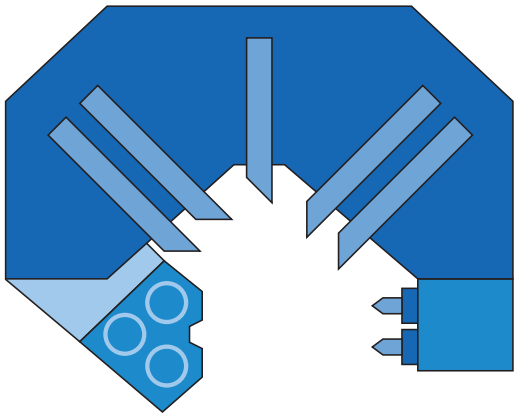
Sub spindle
- Max. 7,000 rpm

Machine Concept



Machine Concept

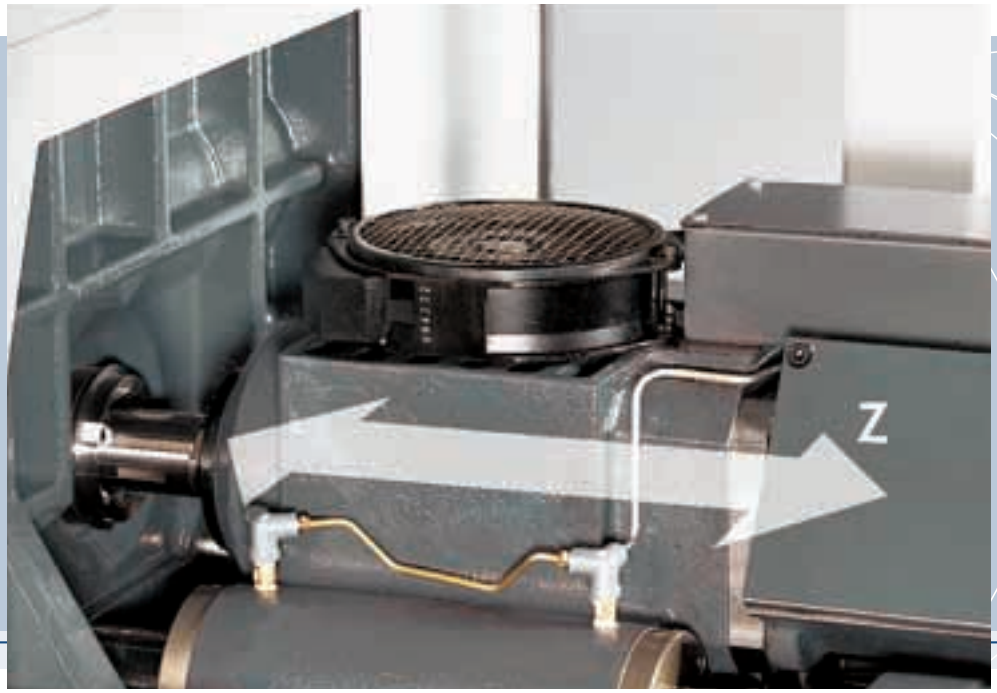
The speed and compact construction of the Cincom B12 series make it the ideal alternative to cam-controlled lathes.
For all-round machining and pipless part-off, the B12-VI version is supplied with a fully equipped sub-spindle with servo controlled collet actuation.
This sub-spindle is now capable of producing complex contours such as tapers or radii.



Number of tools

- Driven tools: 2
- Turning tools: 5
- Drilling tools:
  3 (front) 3 (back)

Drive Technology



Main Spindle Drive

Drive technology

The main spindle drive is designed as a high-speed built-in motor. The main drive, for example, accelerates to the maximum speed of 12,000 rpm in less than 1 second.
This means that relatively simple machined workpieces can be finished in incredibly rapid machining times.
Another key factor is the quick traverse of the X, Y and Z axes, which reduces idle times to the absolute minimum.

All movements, including chucking on the main and sub-spindles are carried out by means of intelligent, digital, AC servos. Elimination of hydraulics and pneumatics dramatically increases reliability and minimises maintenance requirements.
Due to the extremely compact design of the drive technology, no additional electrical cabinet is required.

CNC System

The CNC System

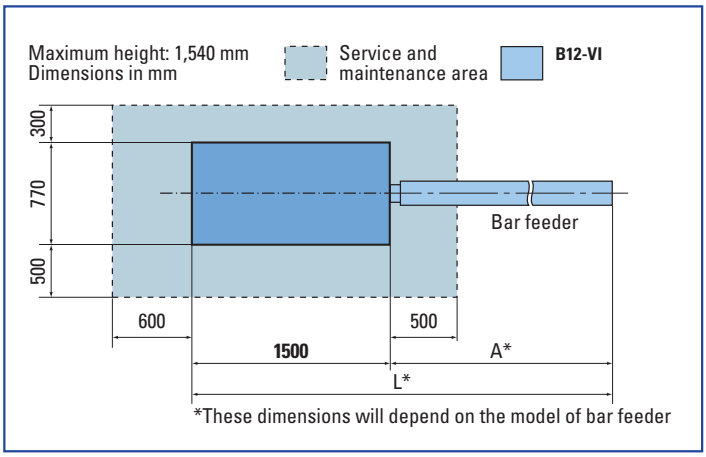
The Cincom B12-VI is fitted with the FANUC 18TC control unit. The control panel and display screen are set out so that newcomers to CNC or operators transferring from cam-controlled

machines can quickly and easily adapt to the new machine.
A special, electronic hand-wheel is used for simple checking of the CNC program, allowing rapid identification and elimination of errors.
Programming is implemented in accordance with ISO standards. Simple and convenient to operate. Start production immediately.

Main features of the CNC System

- Automatic referencing
- Software-controlled tooling
- Machine shutdown if a fault occurs
- Background input/editing
- RSC 232 interface
- Diagnostic function

Layout plan



Specification Cincom B12-VI

Technical data	Cincom B12-VI
Main spindle	
Max. machining diameter [mm]	12
Max. machining length without re-chucking [mm]	135
with synchronous guide bush [mm]	65
Drive rating [kW]	2,2
Spindle speed range [rpm]	100–12000
	(8000 with synchronous guide bush)
Main spindle indexing	1°
Spindle through hole [mm]	14
Sub-spindle	
Max. chuck diameter [mm]	12
Max. back-work length [mm]	120
AC sub-spindle motor rating [kW]	0,5
Spindle speed range [rpm]	100–7000
Tool system	
External machining (turning, 10 x 10 x 100 mm)	5
Internal machining (turning, drilling, Ø 20 mm)	3
Back machining (Ø 20 mm)	3
Driven tools	**2**
Speed [rpm]	100–4500
Drive rating [kW]	0,2
Collets and guide bush	
Collets for main and sub-spindles	F16
Guide bush (Neukomm)	166.001
Rapid traverse rates	
X, Y axes [m/min]	21
Z1, Z2 axes [m/min]	15
Machine dimensions	
Space requirement (without bar feeder) LxW [mm]	1500 x 770
Spindle height from floor [mm]	1000
Machine weight [kg]	1400
Power requirement (without bar feeder) [kVA]	4

Our ongoing research and development effort mean that some of the technical information provided here may have already been overtaken by advancements.The illustrations have been selected for their informative content. They may contain special equipment which is not included in the standard scope of supply.

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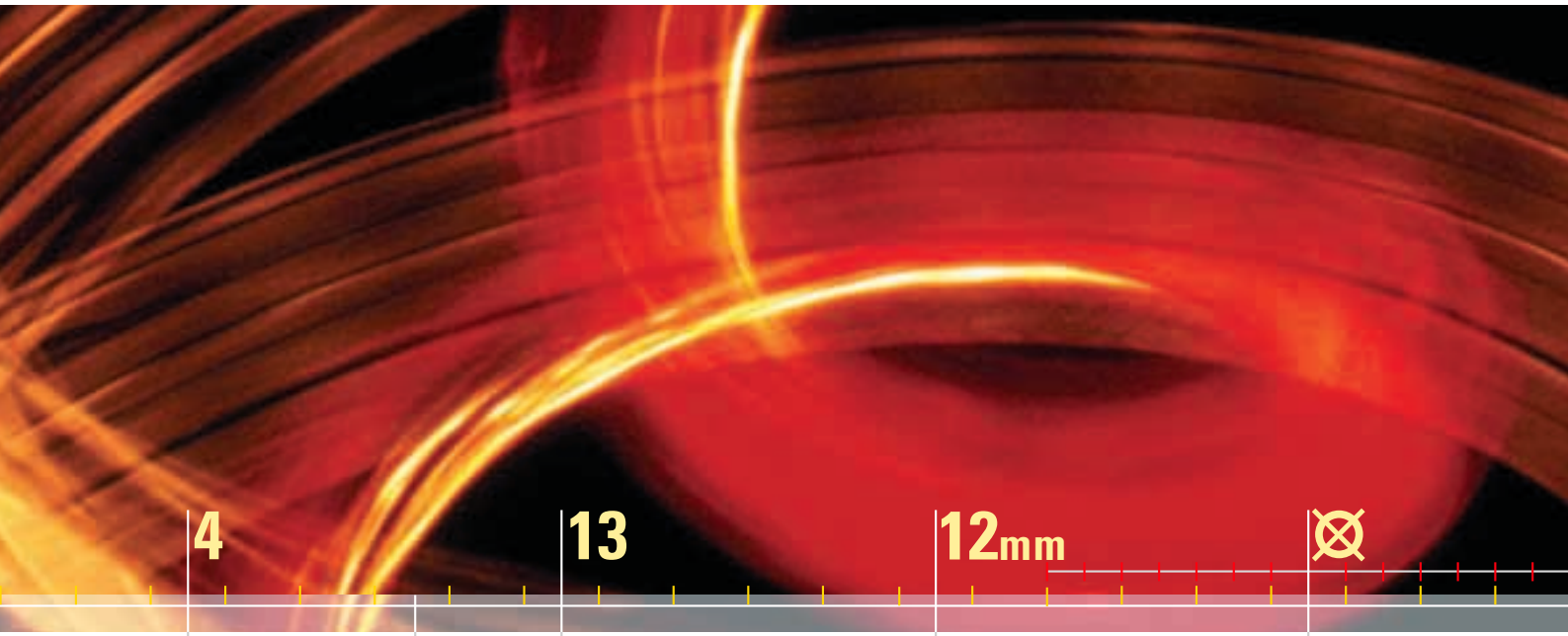

Axis | Tools | Bar diameter | Sub-spindle

Cincom B12-VI
CNC-Sliding Head Lathe

Maximum efficiency-
Minimum footprint

CITIZEN