

Boley BC20-VI



High performance with super precision

New 20mm model with enhanced capability

- **Increased bar capacity**
- **Built-in motors for main spindle**
The main spindle is equipped with a 2.2/3.7KW built-in motor and the sub-spindle with a 0.55/1.1KW spindle motor. The built-in motor enables the machine to achieve higher spindle speed with less vibration providing super precision machining with exceptional surface finish.

Increased functionality

- **Rotary tools as standard**
Three rotary tools are mounted on the vertical tool post for cross drilling/milling.

Main spindle 15-degree indexing is also provided as standard.

The standard rotary tools significantly increase the capability of the BC20-VI and the ability to complete complex parts in "one-hit".
- **C-axis function**
The C-axis control function is an option for the main spindle. This function increases the efficiency of secondary machining with rotary tools.

Greater machining flexibility

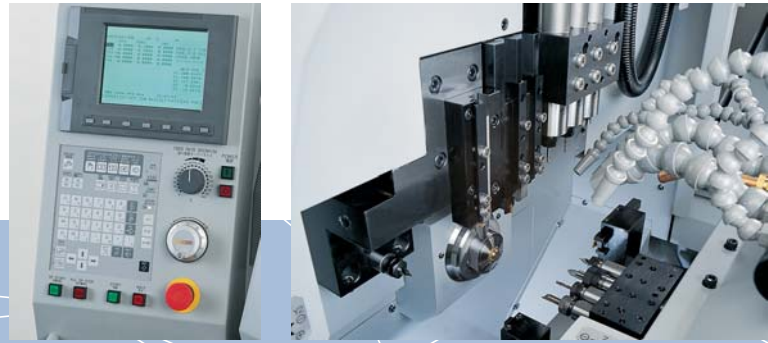
A vertical tool post with 3-axis control (X2, Y2, and Z2) is provided. The vertical tool post on the BC20-VI is now equipped with a Z-axis.

In combination with the X1 and Z1 axes of the horizontal tool post, the new vertical tool post assists greatly in increasing machining flexibility.

Simultaneous machining

Front O/D turning and back drilling operations can be performed simultaneously by synchronising and superimposing control between Z1 and Z2 axes.

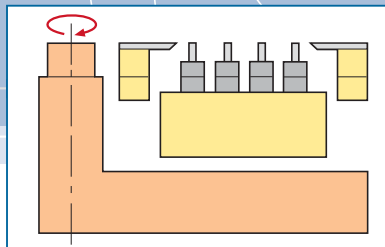
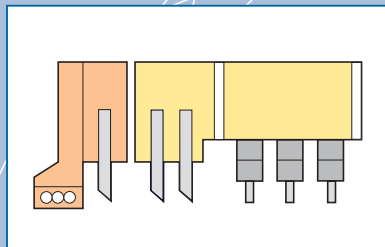
Citizen /Boley have developed software to simplify programming of complex functions such as superimposing and simultaneous axis control.



Display

Tool holder

BC20-VI Tool Posts

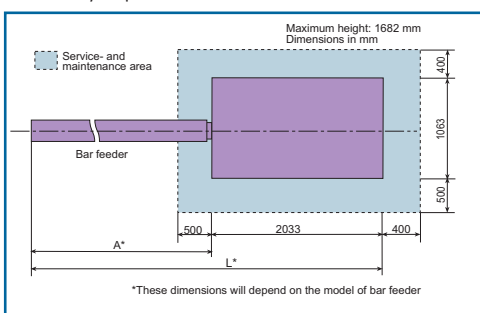


- Tool for front machining
- Tool for back machining

High speed, high productivity, and high precision

- **Innovative twin tool post structure**
Boley developed the twin tool post structure using the high-speed and high-precision features of our gang tool post.
- **High-precision No.1 tool post**
The X1-axis ball screw on No. 1 tool post is supported at both ends. The rigid and secure sliding structure guarantees high tolerance for O/D turning and ID boring, etc.

Machine layout plan



Technical Data

Boley BC20-VI

Main spindle	
Maximum machining diameter [mm]	20
Maximum machining length [mm]	50
Motor power (built-in motor) [kW]	2.2/3.7
Spindle speed, stepless [rpm]	100-10000
Spindle indexing [°]	15 (c-axis option)
Spindle through hole [mm]	24,50
Sub spindle	
Maximum machining diameter [mm]	20
Motor power (AC spindle motor) [kW]	0.55/1.1
Spindle speed, stepless [rpm]	100-8000
Power driven tool	
Spindle speed, stepless [rpm]	100-5000
Motor power (AC servo motor) [kW]	0.4
Quantity of tools	3
Tool system 1	
Turning tools (12 x 12 x 120) [quantity]	2
Inner dia. tools (Front side) [quantity]	4
Tool system 2	
Turning tools (12 x 12 x 120) [quantity]	3
Inner dia. tools (Rear side) [quantity]	3
Cross driven tools [quantity]	3
Collets	
Collet for main spindle	28 DIN 6341
Collet for sub spindle (Neukomm)	40.005
Rapid traverse rates	
All axes [m/min]	20
Machine dimensions	
Space requirement (without bar feeder) L/W [mm]	2033 / 1063
Height spindle center [mm]	1100
Machine weight [kg]	1550
Power requirement [kVA]	6

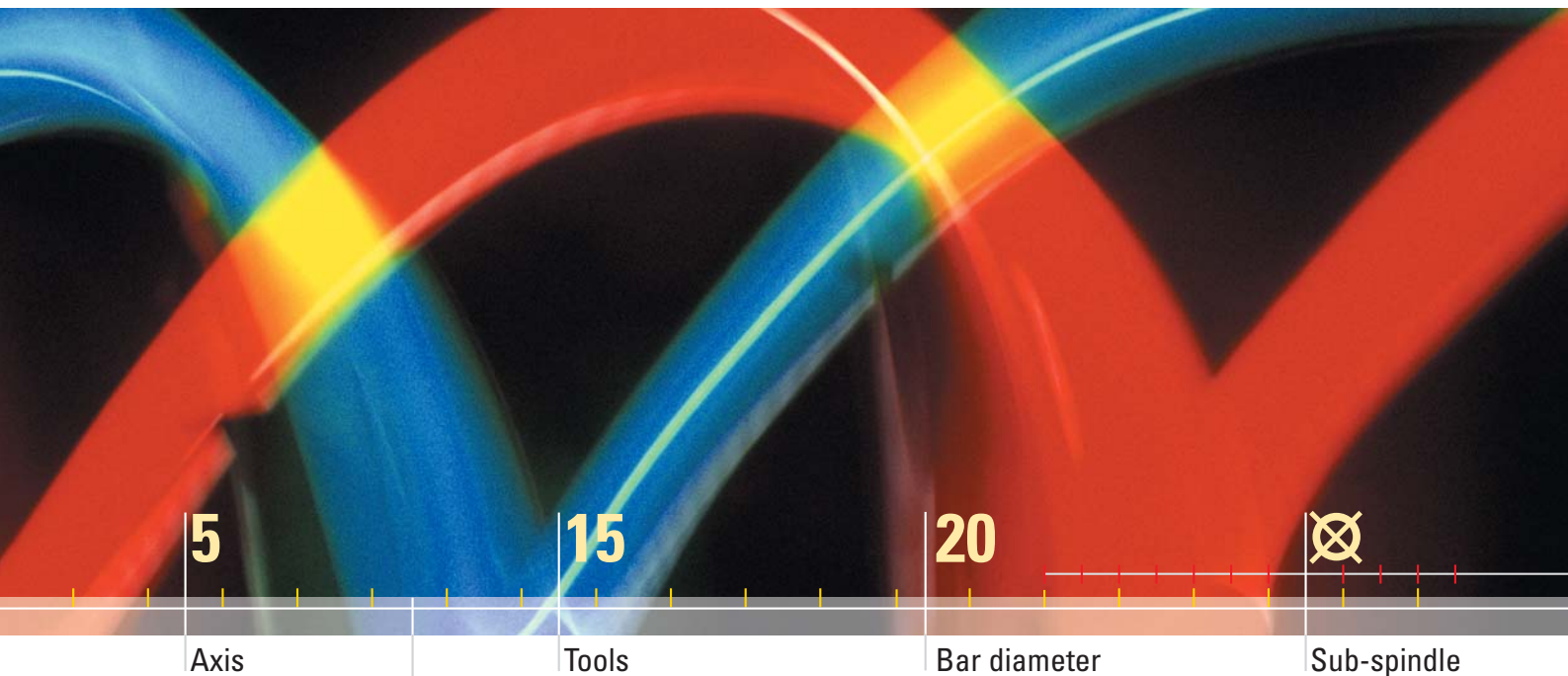
Our ongoing research and development effort mean that some of the technical information provided here may have already been overtaken by advancements. The illustrations have been selected for their informative content. They may contain special equipment which is not included in the standard scope of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



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CNC Fixed Head Lathe

High performance with
super precision

CITIZEN