

CB-36Y2M DIRECT DRIVE

FIXED HEAD CNC LATHES

Solve your complex precision parts machining problem.

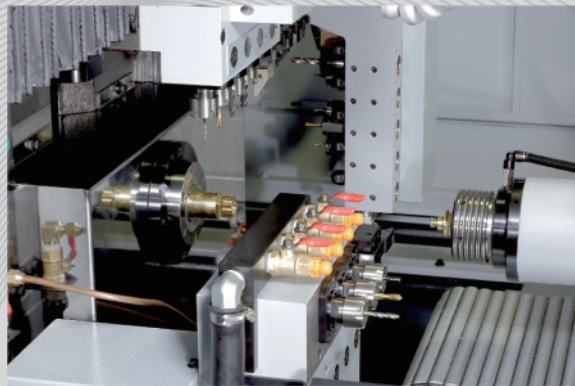
- + Y2 Axis for Back Machining
- + Back Milling Device
- + Chip Breaking Functionality
- + Sliding Head without Guide Bush



Make Complicated Parts In One Operation

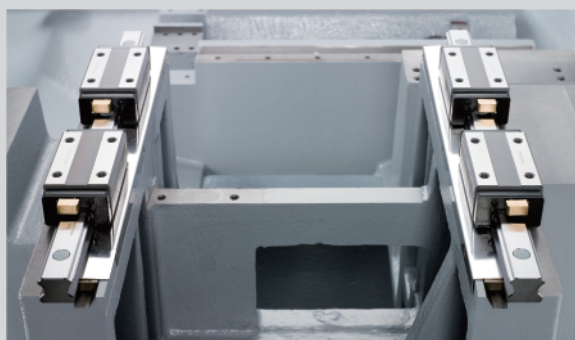
Enhanced roundness and accuracy are achieved, as there are no gears or belts causing vibrations.

- + Ø36 mm bar capacity
- + Collet chucking system
- + Sliding headstock design
- + A combination of main and sub-spindle
- + PC-based control
- + Linear guides on axes
- + X-Y-Z-axis rapid traverses 30m/min
- + Finished parts catcher and conveyor
- + Y2 Axis for Back Machining



A Most Versatile CNC Lathes

The CB will fully meet your expectations. No matter what operation—turning, milling, drilling, tapping, cutting and back machining, the CB does it all in one setup. It can bring higher efficiency and greater profitability.



Roller-type Linear Guide

Each axes are moves by two precision roller type linear guides, that are combined with extra large span between linear guides for outstanding stability and positioning accuracy.

Powerful Chip Breaking Functionality

Chip Breaking functionality solves the problem of chips entangling around the cutting tool and workpiece, reducing the need for tool retraction to clear chips significantly, thus enhancing machining efficiency.

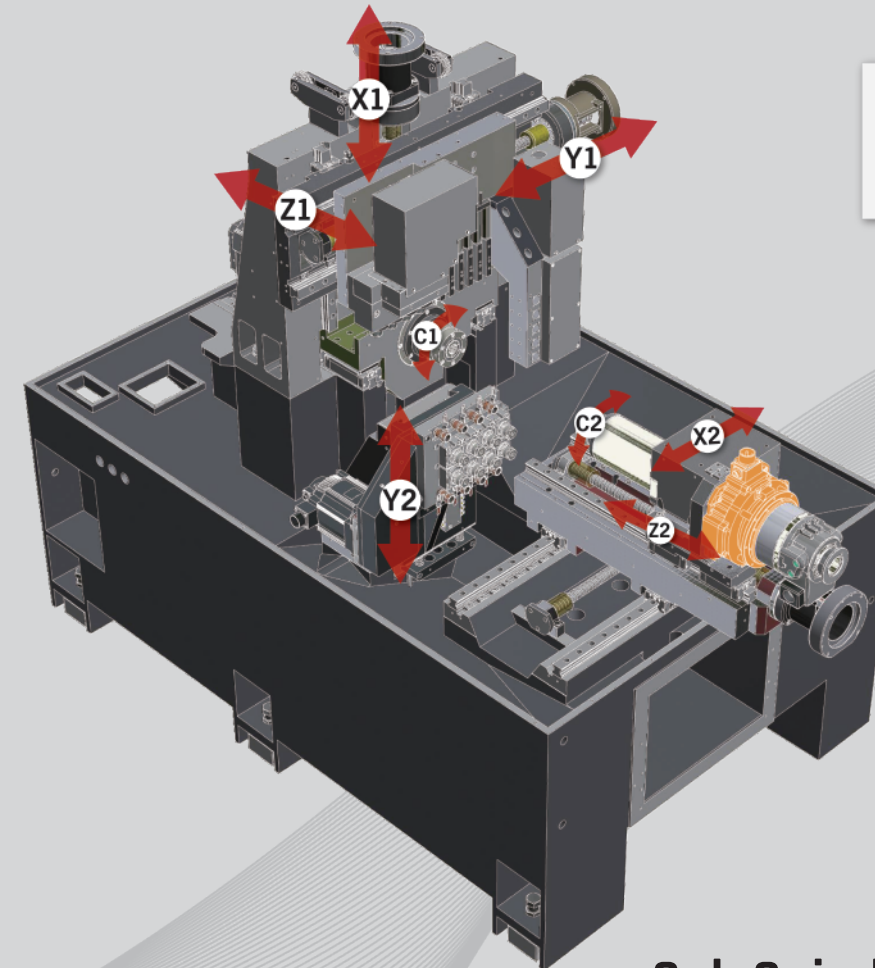


Without Chip Breaking

With Chip Breaking

The Front Side Tooling System

The front side features multiple tools suitable for complex parts, with 4+3 live tools driven by a servo motor, accommodating 6 O.D. tools and 5 I.D. tools.



X1/Y1/Z1 axis
 + Motor : 1.5 / 1.0 / 1.0 kw
 + Rapid : 30m/min

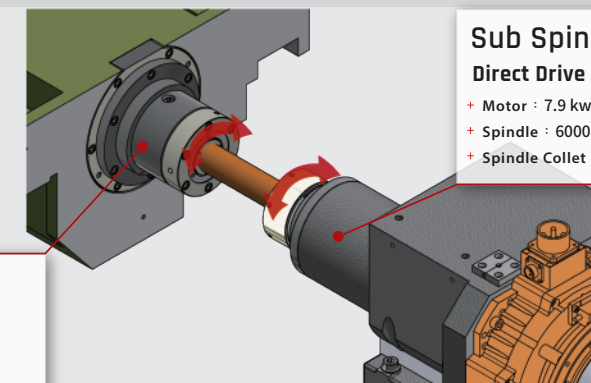
X2/Y2/Z2 axis
 + Motor : 1.0 / 0.75 / 1.0 kw
 + Rapid : 30 m/min
 + Y2 Rapid : 5 m/min

Back side Machining

- + Back milling device is capable of performing milling, drilling and tapping operations for the back side of a part.
- + Maximum live tooling speed is 6,000 rpm.
- + 8 live tools are driven by 2.2 kw servo motor.

Sub Spindle Tooling System

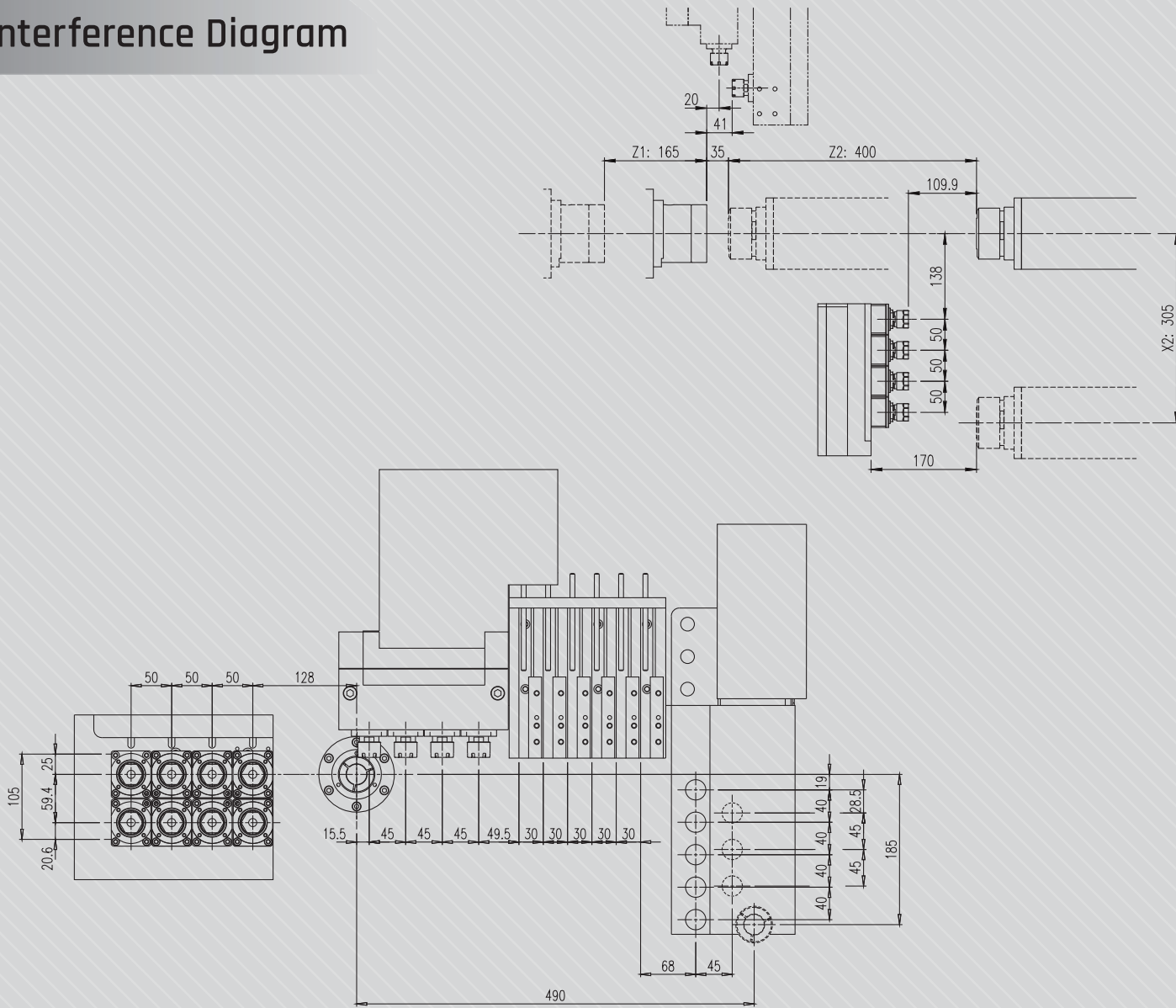
The sub spindle tooling system provides 8 ER-20 live tools, it can be converted into internal turning tools or fixed tool holders. Combined with the sub spindle's Y2 and C-axis functions, it enables more complex turning and milling operations.



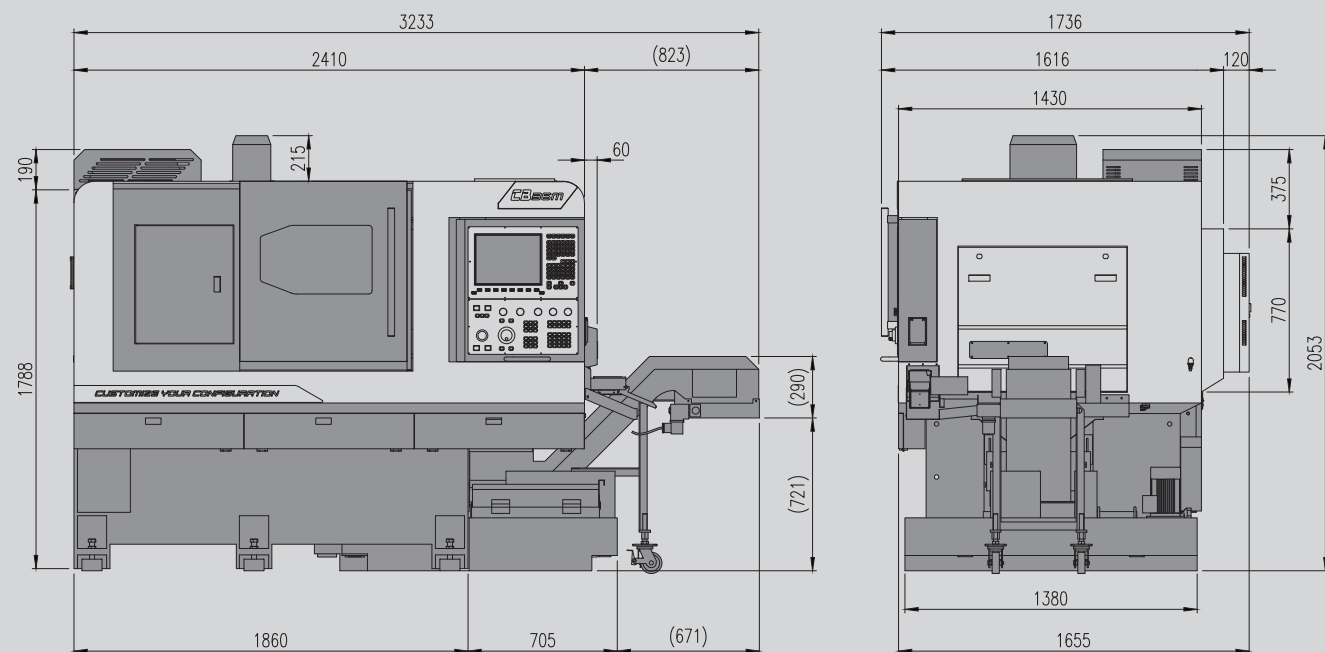
Sub Spindle Direct Drive
 + Motor : 7.9 kw
 + Spindle : 6000 rpm
 + Spindle Collet : 171E(TRB-36)

Spindle Direct Drive
 + Motor : 7.9 kw
 + Spindle : 6000 rpm
 + Spindle Collet : 171E(TRB-36)

Interference Diagram



Machine Dimensions



Machine Specifications

CB-36M

CB-36Y2M

Capacity	Syntec	Mitsubishi	Syntec
Controller	Syntec	Mitsubishi	Syntec
Axis Travel			
X1 / X2-axes travel	185 / 290 mm		185 / 305 mm
X1 / X2-axes servo motor	1.5 / 1.0 kw		1.5 / 1.0 kw
Z1/Z2/Y1/Y2 -axes travel	165/ 285/ 490 / - mm		165 / 400 / 490 / 105 mm
Z1/Z2/Y1/Y2-axes servo motor	Z1/Z2:1.0 / Y1:1.0 / - kw		1.0 / 1.0 / 1.0 / 0.75 kw
X / Y / Z-axes rapid traverse	30 m/min		30m/min
Y2 Rapid travel speed	-		5 m/min
Spindle			
Spindle Bore	Ø43 mm		Ø43 mm
Max. bar feeding dia.	Ø36 mm		Ø36 mm
Spindle servo motor	7.9 kw		7.9 kw
Max. spindle speed	6000rpm		6000 rpm
Collet of spindle	TRB-36		TRB-36
C-axis index positioning	0.001°		0.001°
No. of O.D. turning tool	6 pcs (Op: 5 pcs)		6 pcs (Op: 5 pcs)
O.D. turning tool size	□ 12 mm (Op: □ 16 mm)		□ 12 mm (Op: □ 16 mm)
No. of I.D. turning tool	5 pcs		5 pcs
I.D. turning tool size	Ø25mm		Ø25mm
Sub Spindle			
Sub Spindle Bore	Ø43 mm		Ø43 mm
Max. bar feeding dia.	Ø36 mm		Ø36 mm
Sub spindle servo motor	7.9 kw		7.9 kw
Max. sub spindle speed	6000 rpm		6000 rpm
Collet of sub spindle	TRB-36		TRB-36
C-axis index positioning	0.001°		0.001°
I.D. turning tool size	Ø25 mm		Ø25 mm
Spindle Live Tooling			
No. of Radial live tooling	4 pcs		4 pcs
Radial tooling size	ER-20		ER-20
Radial live tooling servo motor	1.5 kw		1.5 kw
Max. radial live tooling speed	6000 rpm		6000 rpm
No. of Axial live tooling	3 pcs		3 pcs
Axial tooling size	ER-20		ER-20
Axial live tooling servo motor	0.75 kw		0.75 kw
Max. axial live tooling speed	6000 rpm		6000 rpm
Sub Spindle Live Tooling			
No. of Axial live tooling	4 pcs		8 pcs
Axial tooling size	ER-20		ER-20
Axial live tooling servo motor	0.75 kw		2.2 kw
Max. axial live tooling speed	6000 rpm		6000 rpm
Hydraulic & Coolant Motor			
Hydraulic motor	1 HP / 0.75 kw		1 HP / 0.75 kw
Spindle upper flush pum	1 HP / 0.75 kw		1 HP / 0.75 kw
Tool coolant pump	1 HP / 0.75 kw		1 HP / 0.75 kw
Tank Capacity			
Hydraulic tank	46 L		46 L
Coolant tank	240 L		240 L
Machine Specification			
Voltage stabilizer / Transformer	220 V / 20 KVA		220 V / 31 KVA
Machine size (L x W x H) (includes chip conveyor)	3029 x 1612 x 2151mm		3233 x 1655 x 2053mm
Machine N.W. (includes chip conveyor)	4000 kg		4000 kg

Standard Accessories

- + Tool Kit & Box
- + Drilling Shaft ER-20
- + Collet Chuck Device
- + Auto Bar Feeder Interface
- + Finished Parts Catcher & Conveyor
- + Auto Power Breaker
- + Radial Live Tooling Device
- + Axial Live Tooling Device

- + Back Side Live Tooling Device
- + Sub Spindle Finished Parts Ejector
- + Air Conditioner for Electrical Cabinet
- + Cutting Fluid Pump
- + Cutting Fluid Inspection Device
- + Sub Spindle Air-blowing Device

Optional Accessories

- + Screw Type Chip Conveyor & Cart
- + Steel Belt Chip Conveyor & Cart
- + Voltage Stabilizer / Transformer
- + High Pressure Coolant Device
- + Gripper Device
- + Bar Feeder
- + Oil Skimmer
- + Oil Mist Collector