 **Machinery**
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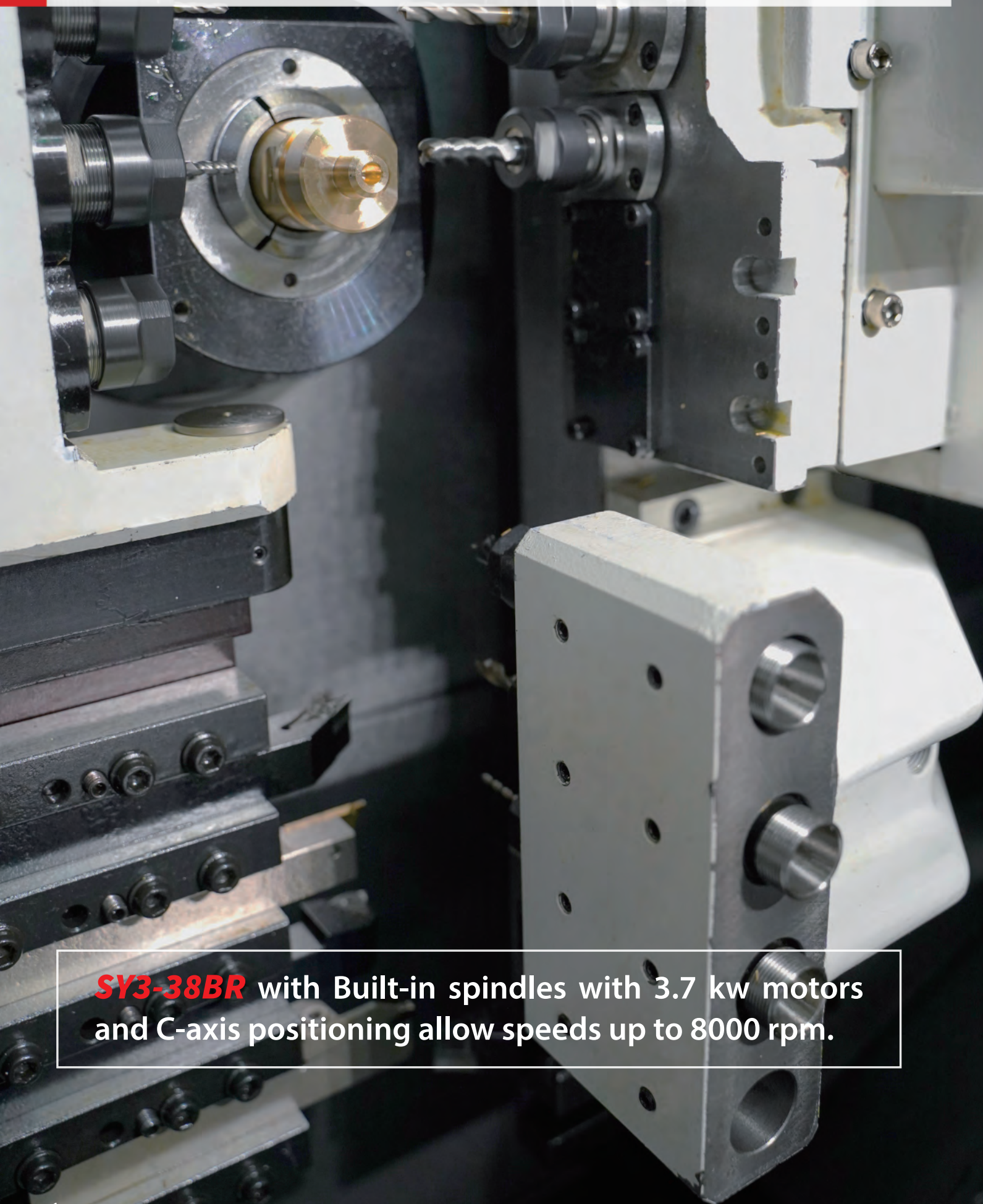
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SY3-38BR

THREE CHANNEL SWISS TYPE CNC LATHE

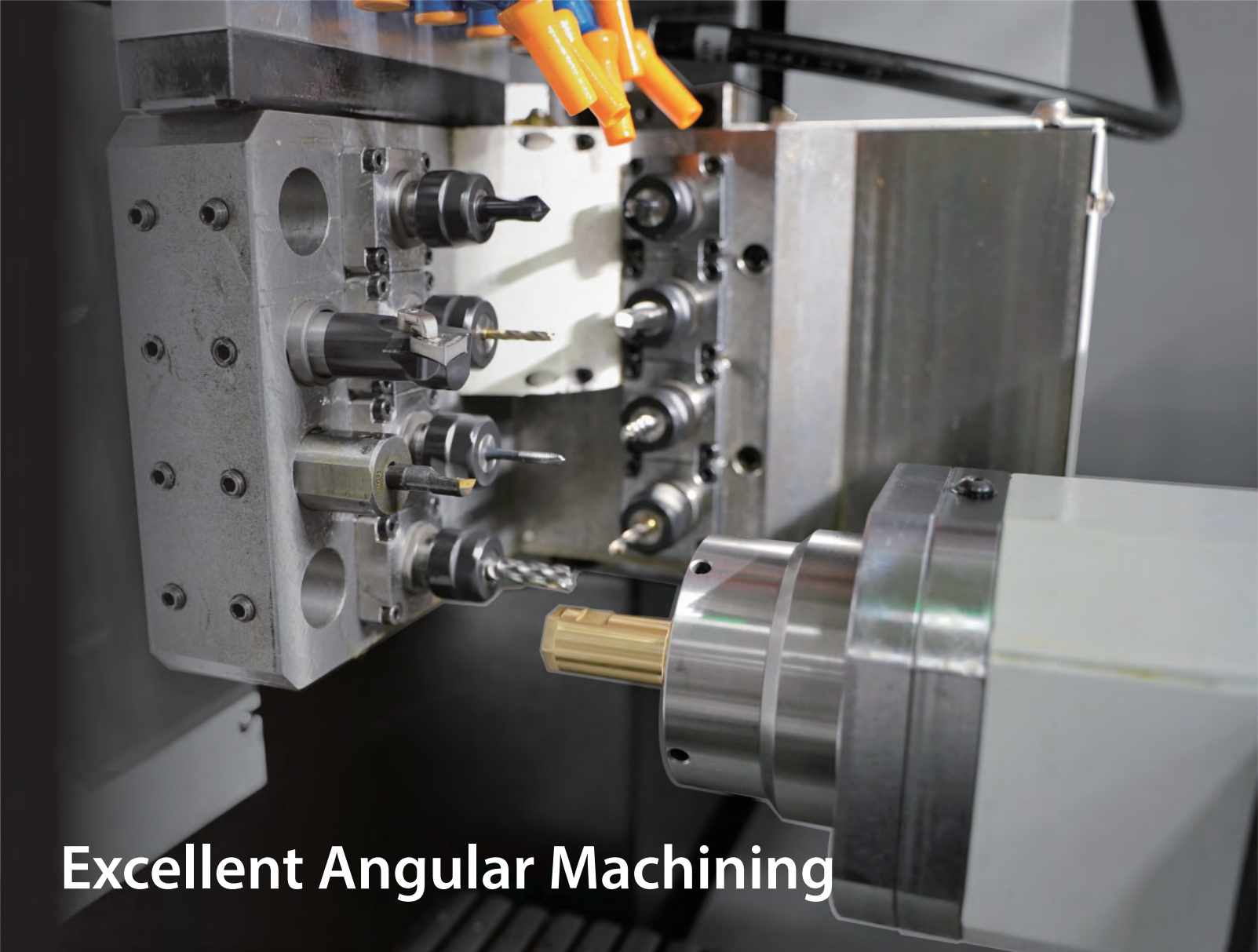
- + 11 axis with double spindle and 3Y axis
- + 0-90° B-Axis live tooling
- + Removable Rotary Guide Bush

Three-channel operation allows simultaneous **front and back machining**

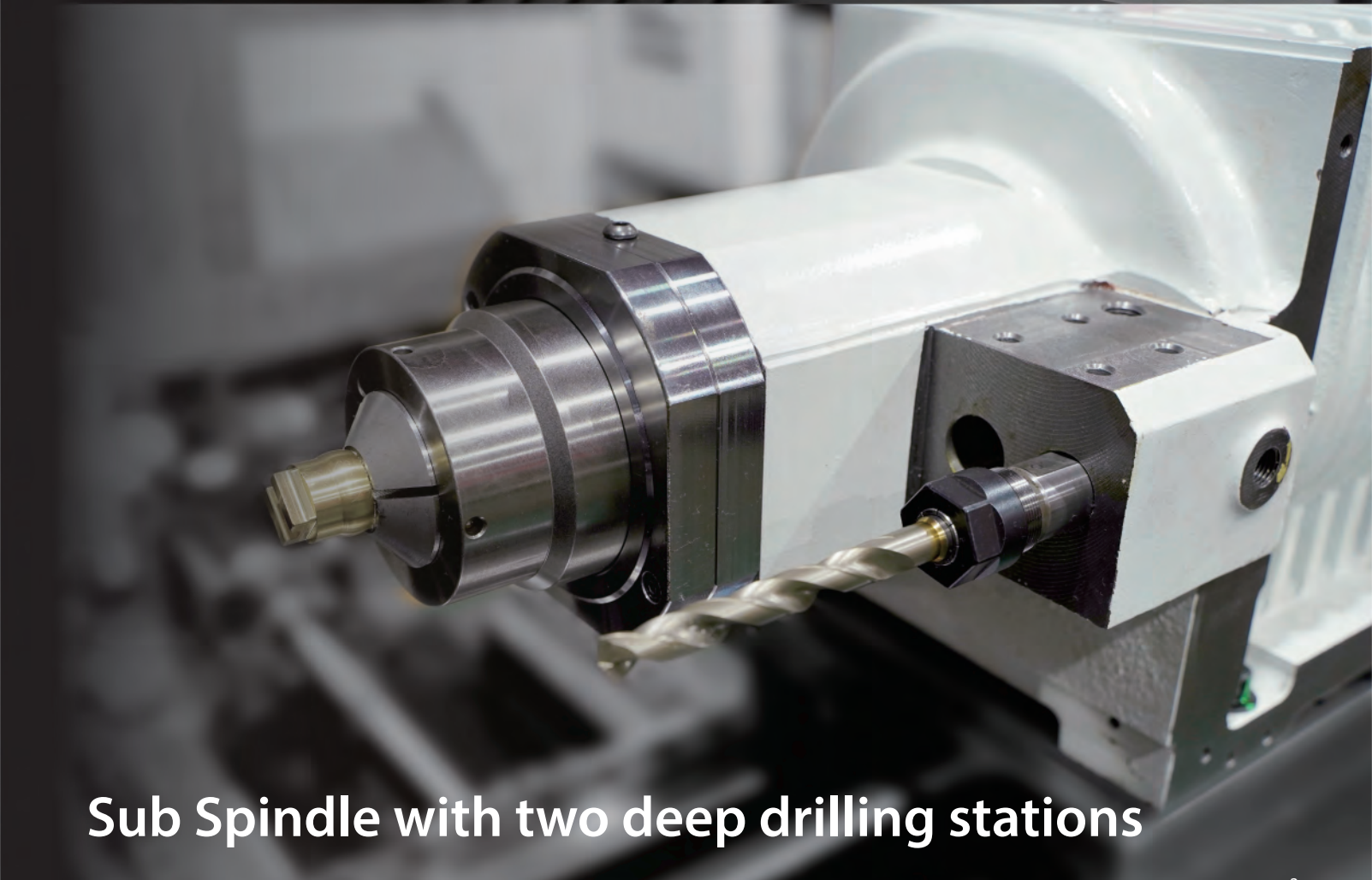


SY3-38BR with Built-in spindles with 3.7 kw motors and C-axis positioning allow speeds up to 8000 rpm.

Excellent Angular Machining

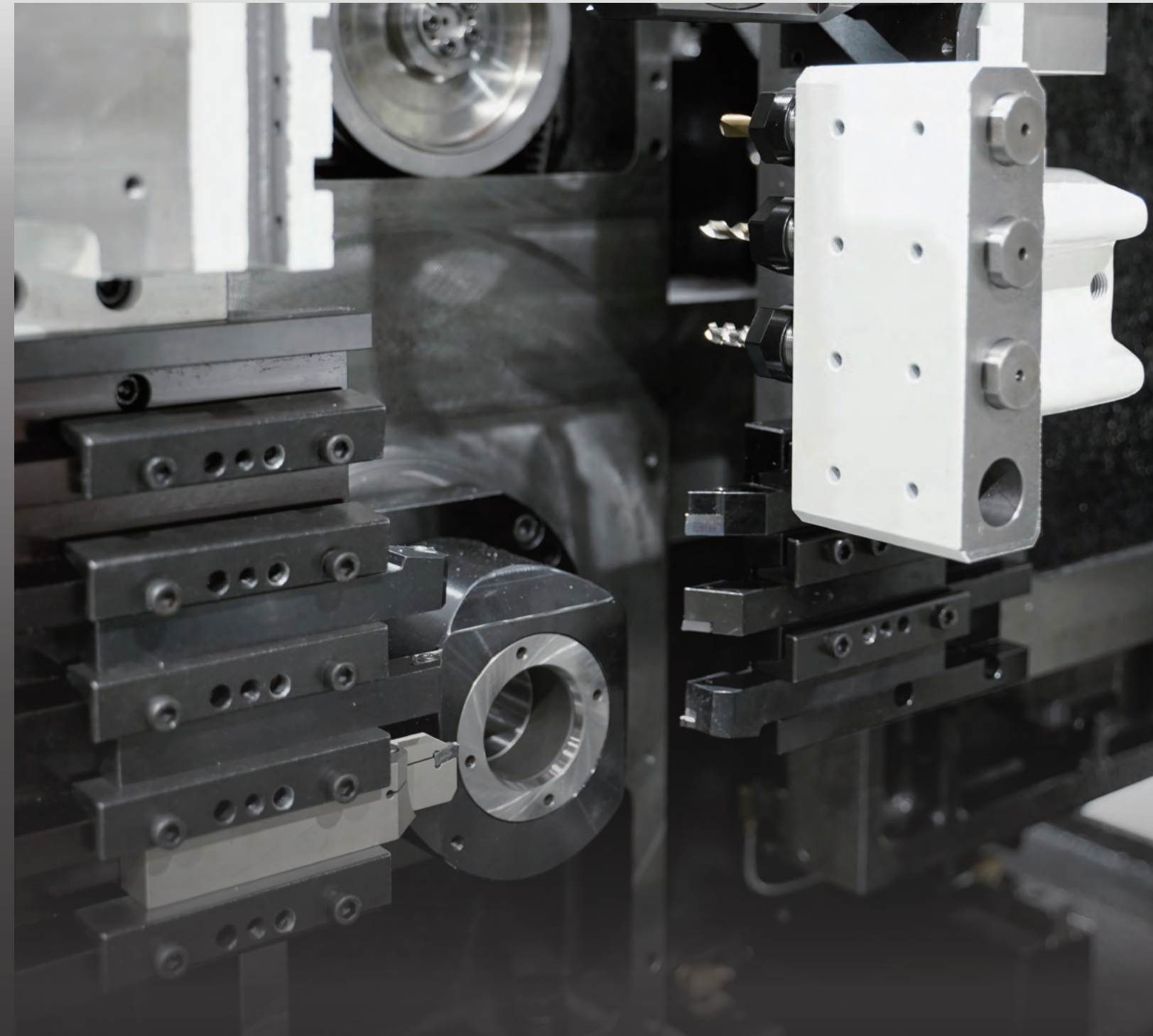
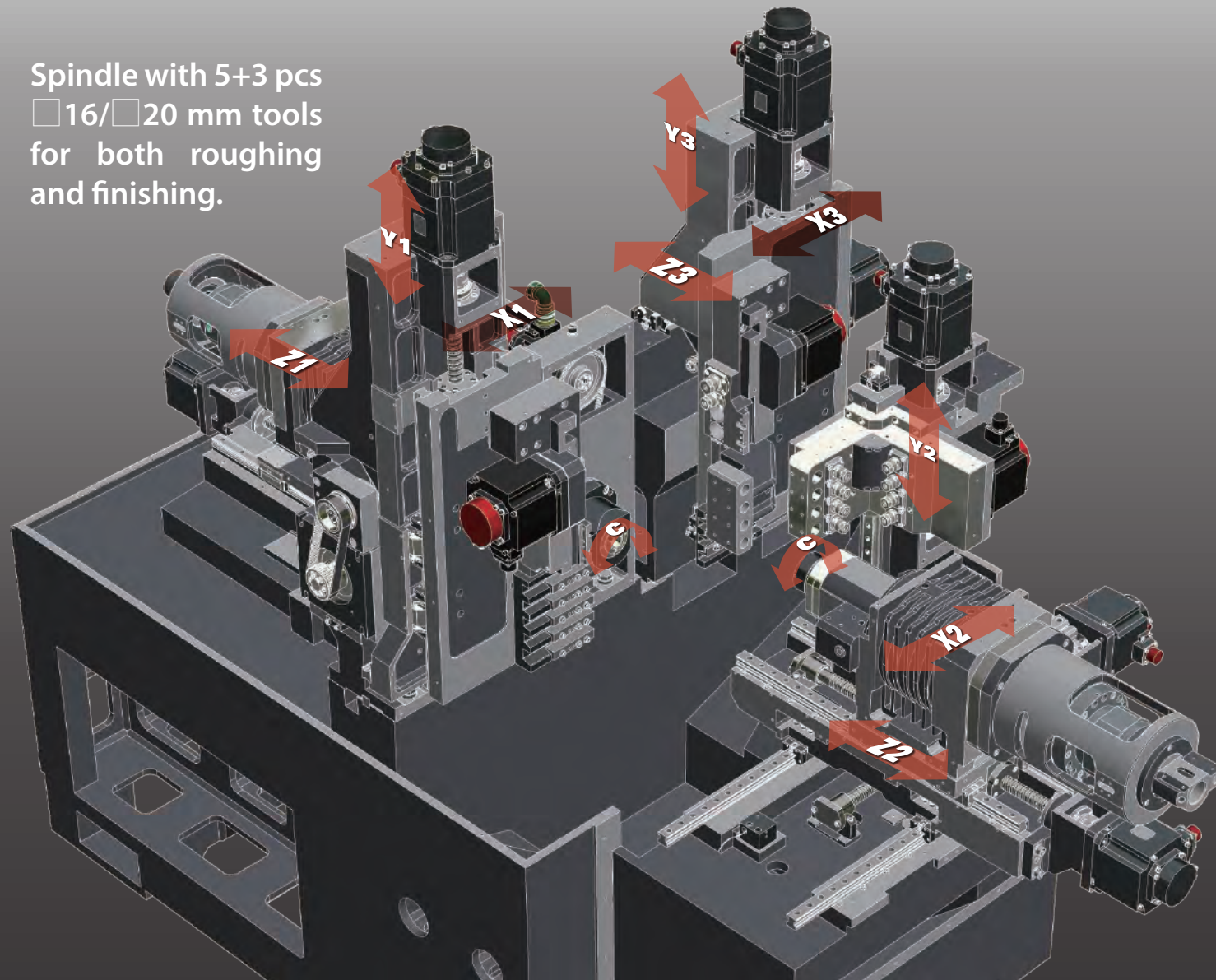


Sub Spindle with two deep drilling stations

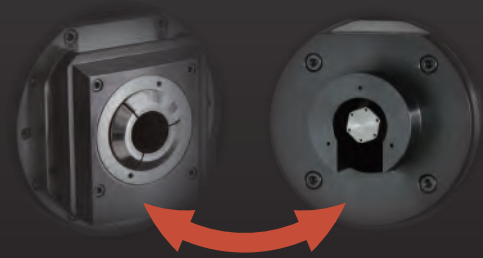


Double-gang tool post structure

Spindle with 5+3 pcs
 □16/□20 mm tools
 for both roughing
 and finishing.



Removable Rotary Guide Bush



You can select between guide bush or without guide bush, to find the most suitable way to process the long or short workpiece.

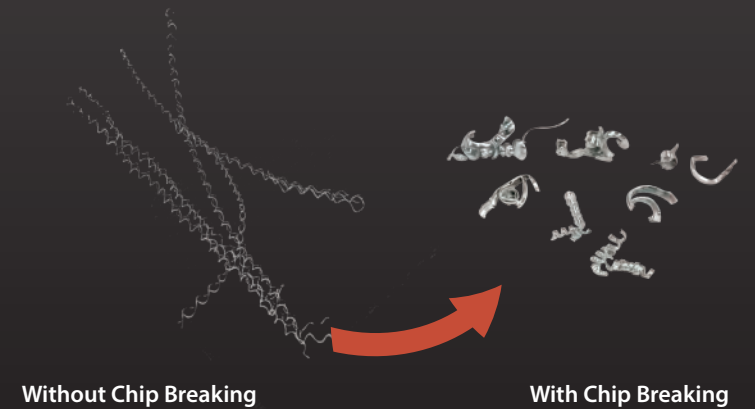
Thermal compensation



Thermal compensation ensures stable performance and accurate positioning over extended periods of continuous operation.

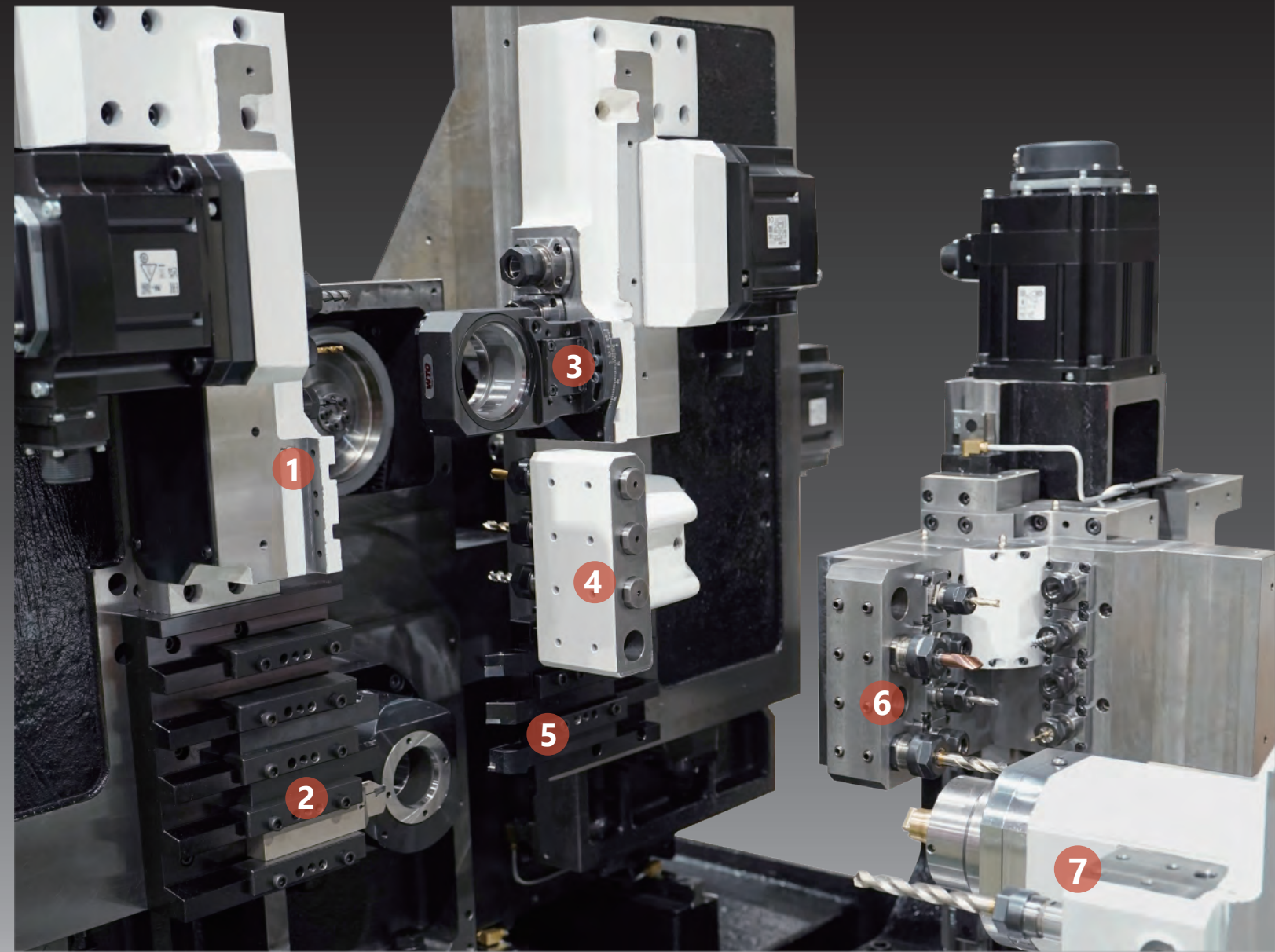
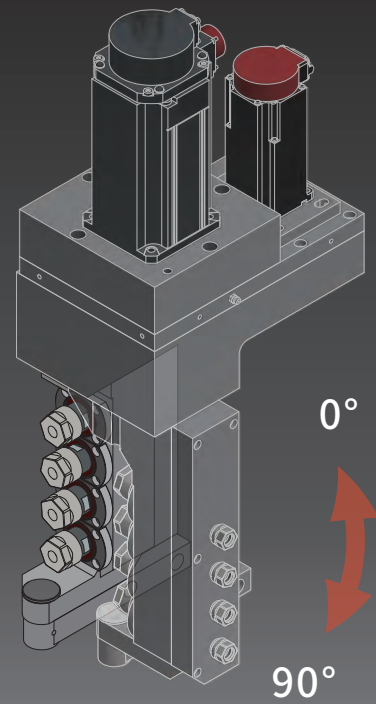
Powerful Chip Breaking Functionality

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.



0-90° B Axis with any angle positioning cutting

The B Axis (OP) with 0-90° any angle Positioning cutting. This enhances flexibility and machining efficiency, allowing more complex parts to be completed.



Spindle Tools

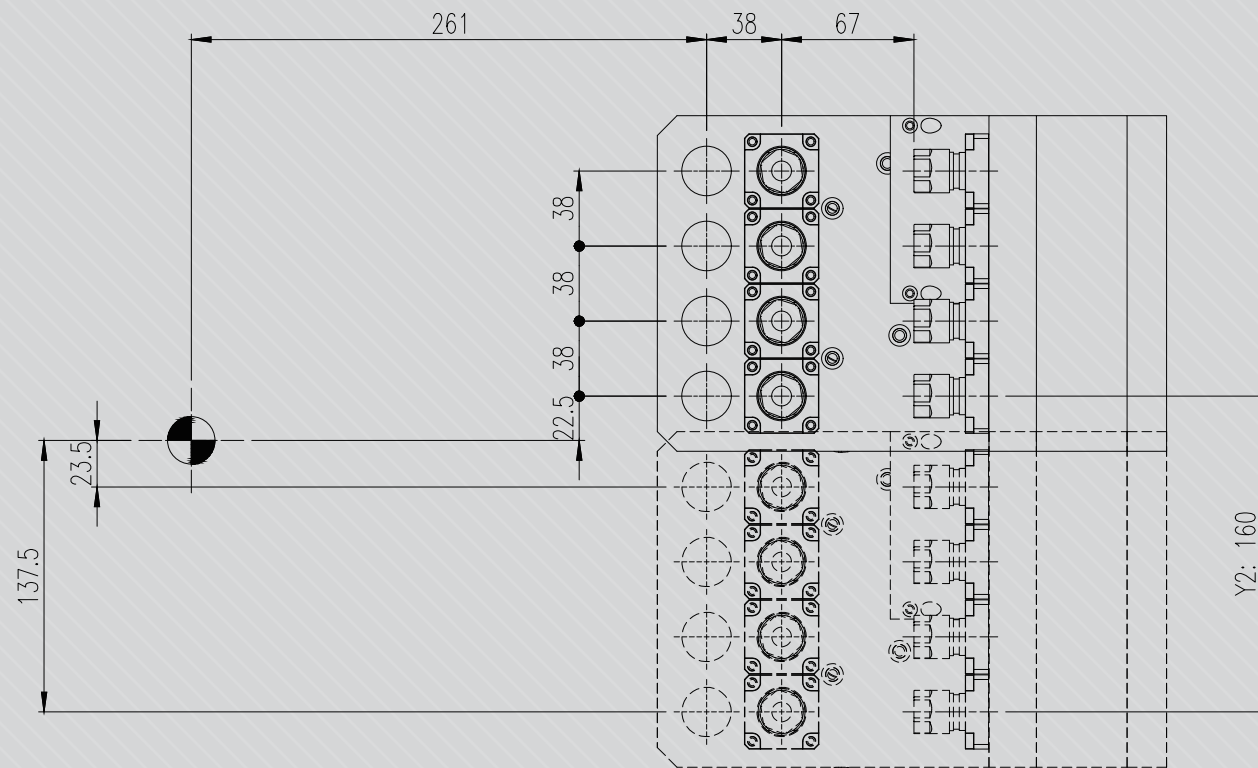
- 1** Radial Milling Tool Positions*5
 - Live tool holder ER-20*1, ER-16*2
 - Expandable live holder ER-20*2
- 2** O.D Tool Positions*5
 - □16*4, □20*1
- 3** Radial Milling Tool Positions*4
 - Live tool holder ER-20*1, ER-16*1
 - Expandable live holder ER-20*2
- 4** I.D Tool Positions Ø22*4
- 5** O.D Tool Positions □16*3

Sub Spindle Tools

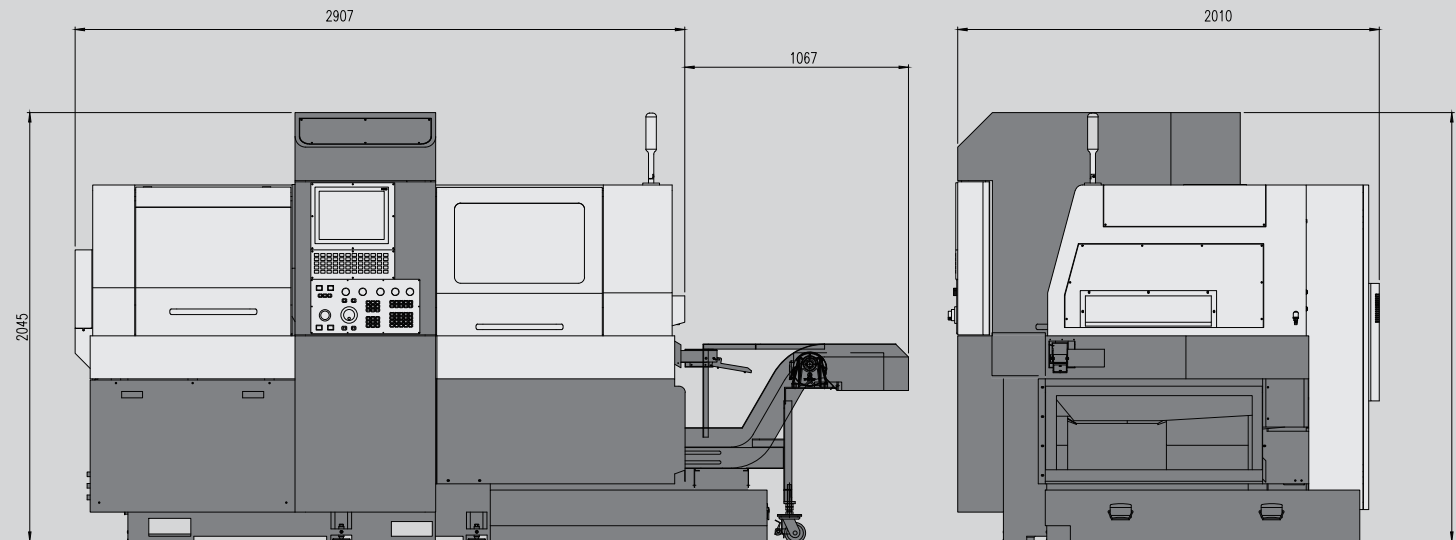
- 6** I.D Tool Positions Ø25*4
Axial Milling Tool Positions ER-16*4
Radial Milling Tool Positions ER-16*4
- 7** Deep drilling holder station Ø22*2

Interference Diagram

+ View C



Machine Specifications



Control Unit	SY3-38BR	
Controller	Syntec	Mitsubishi
Axis Travel		
X1 / Y1 / Z1 Axis Travel (Activity guide bush)	58.5 / 368 / 310 (With) mm 58.5 / 368 / 80 (Without) mm	
X1 / Y1 / Z1 Axis Motor	1.1 / 1.7 / 1.1 kw	1.0 / 1.5 / 1.0 kw
X1 / Y1 / Z1 Axis Rapid travel speed	5 / 30 / 30 m/min	
X2 / Y2 / Z2 Axis Travel	383 / 160 / 380 mm	
X2 / Y2 / Z2 Axis Motor	1.1 / 1.7 / 1.1 kw	1.0 / 1.5 / 1.0 kw
X2 / Y2 / Z2 Axis Rapid travel speed	30 m/min	
X3 / Y3 / Z3 Axis Travel	67.5 / 376 / 40 mm	
X3 / Y3 / Z3 Axis Motor	1.1 / 1.7 / 1.1 kw	1.0 / 1.5 / 1.0 kw
X3 / Y3 / Z3 Axis Rapid travel speed	5 / 30 / 5 m/min	
Spindle		
Max. Turning Dia. (Activity guide bush)	Ø32(With) / Ø38(Without) mm	
Max. Turning Length (Activity guide bush)	300(With) / 80(Without) mm	
Max. Spindle Speed	8000 rpm	
Center Height	1082	
Spindle Collet (Activity guide bush)	TD-32(With) / TRB-42(Without)	
Spindle Servo Motor	3.7 kw	
C-Axis Index Positioning	0.001°	
No. of O.D Tools / Size	5 (□16*4, □20*1) + 3*□16	
No. of I.D Tools	4 pcs	
No. of I.D Size	Ø22	
Spindle LiveTooling		
No. of Radial Live Tools / Size	3 (ER-20*1, ER-16*2) + 2 (ER-20*1, ER-16*1)	
Spindle Live Tooling Motor	2.5 kw	2.2 kw
Max. Speed	6000 rpm	
(OP) B-axis Tooling / Size	ER16*4 + ER11*4	
(OP) B-axi Tooling Motor	1.5 kw	
(OP) B-axis Max. Speed	6000 rpm	
Sub Spindle		
Max. Turning Dia.	Ø38	
Max. Sub pindle Speed	8000 rpm	
Spindle Collet	TRB-42	
Sub spindle servo motor	3.7 kw	
C-Axis Index Positioning	0.001°	
No. of I.D Tools	4	
No. of I.D Size	Ø25	
Sub Spindle Live Tooling		
No. of Sub Spindle Deep Drilling Tool Holder	2 pcs	
No. of Sub Spindle Deep Drilling Tool Size	ER-16	
No. of Axial Tools	4 pcs	
No. of Axial Size	ER-16	
No. of Radial Live Tool	4 pcs	
No. of Radial Live Size	ER-16	
Sub Spindle Live Tooling Motor	2.5 kw	2.2 kw
Max. Speed	6000 rpm	
Hydraulic		
Hydraulic Motor	1HP / 0.75 kw	
Hydraulic Tank	20L	
Coolant pump		
Spindle Upper Flush Pump	1.6HP / 1.24 kw	
Tool Coolant Pump	1.6HP / 1.24 kw	
Main / Sub Spindle Cooling	Oil-cooling	
Machine		
Voltage stabilizer / Transformer	40 KVA	
Machine Size (LxWxH)	3974x2010x2045 mm	

Standard Accessories

- + Tool kit & Box
- + Rotary Guide Bush
- + Collet Chuck Device
- + Auto Bar Feeder Interface
- + Cutting Fluid Pump
- + Auto Power Breaker
- + Axial Live Tooling Device
- + Radial Live Tooling Device
- + Back Side Live Tooling Device
- + Sub Spindle Finished Parts Ejector
- + Air Conditioner for Electrical Cabinet
- + Finished Parts Catcher & Conveyor
- + Cutting Fluid Inspection Device
- + Sub Spindle Air-blowing Device

Optional Accessories

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