

Bush

Z₁ stroke : 320

Z_s stroke : 325

158

62

50

50

X_s stroke : 376

70

Bushless

Z₁ stroke : 95

Z_s stroke : 325

158

62

50

50

X_s stroke : 376

70

Technical drawings of the 3000 Series Machine showing front, side, and rear views with dimensions in millimeters.

Front View Dimensions:

- Overall width: 4,388
- Overall height: 3,320
- Top left width: 230
- Top middle width: 2,840
- Bottom left width: 468
- Bottom middle width: 3,320
- Bottom right width: 600
- Radius: R900

Side View Dimensions:

- Overall width: 3,364
- Bottom left width: 230
- Bottom middle width: 330
- Bottom right width: 1,580
- Bottom far right width: 880

Rear View Dimensions:

- Overall width: 1,427
- Overall height: 2,140
- Bottom width: 1,305
- Right side height: 1,878

MACHINE SPECIFICATIONS

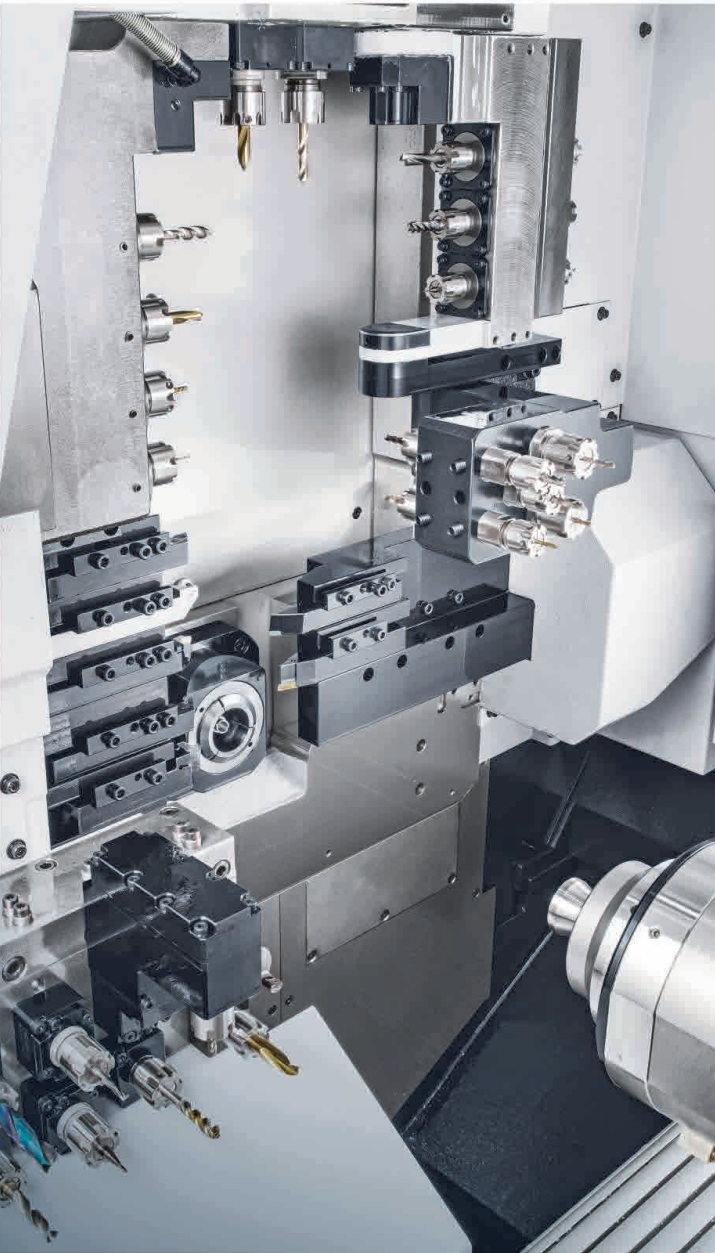
Specifications are subject to change without notice.



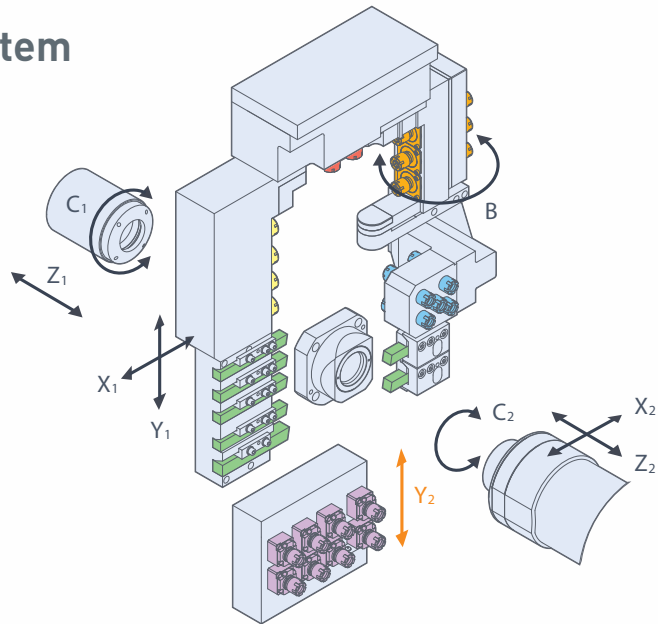
MULTI-TASKING SWISS TURNING CENTERS

Packed with a high-rigidity gantry type tool system structure and powerful composite functionalities, Goodway SK-38 series offers unprecedented machining capabilities, assisting you in overcoming any mass production demands for large diameters and intricate workpiece patterns.

- Featuring up to 9-axis control, enabling simultaneous 4-axis machining.
- Maximum machining diameter : Ø38 mm (bush) / Ø42 mm (bushless).
- Gantry type tool system structure is advantageous for evenly bearing the torque load of cutting, maximizing the structural rigidity of the tool system.
- The B-axis live tool holder can execute four-axis simultaneous contour milling, meeting the machining requirements of complex-shaped workpieces.
- The back working tool holder equipped with the Y2-axis allows for greater flexibility in tool system scheduling, thereby enhancing production efficiency through overlapping machining processes.



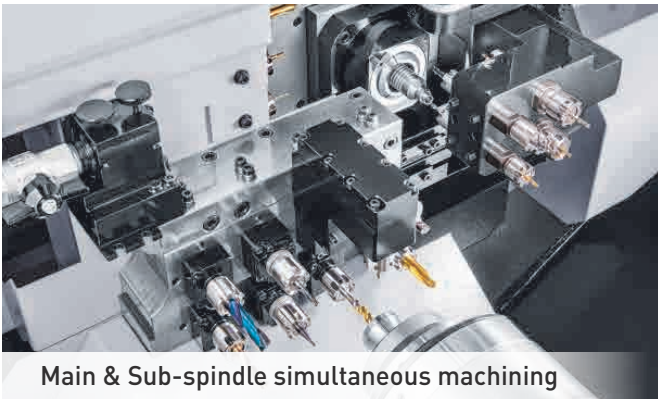
Axis System



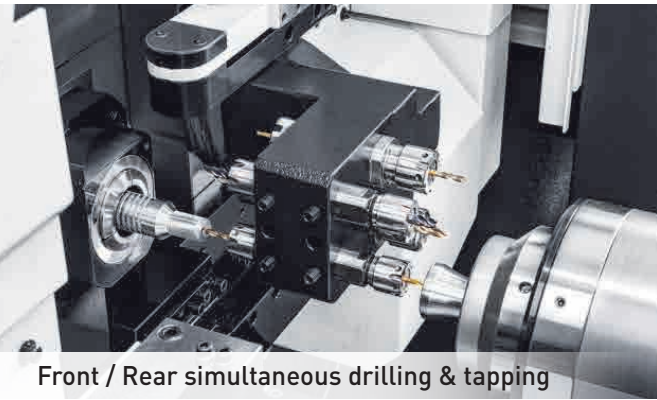
Tooling System	Number
O.D. tool	7
I.D. tool	10 ^{*1}
Cross live tool	4
Replaceable tools	2
B-axis live tools	6 ^{*2}
Backworking Tooling System	
Rear-end live tools	8

*1 : 5 [Front] + 5 [Rear]
*2 : 3 [Front] + 3 [Rear]

MACHINING VARIATIONS



Main & Sub-spindle simultaneous machining



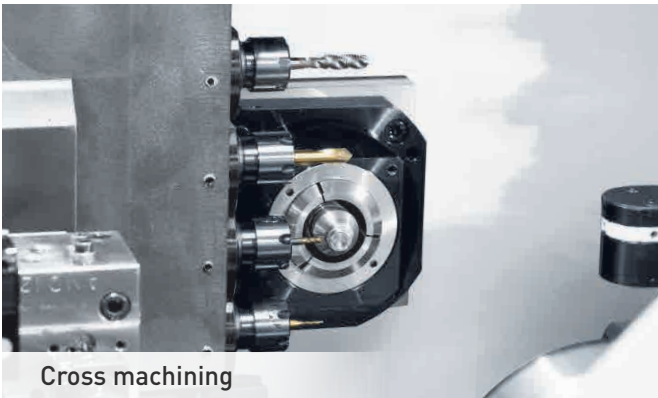
Front / Rear simultaneous drilling & tapping



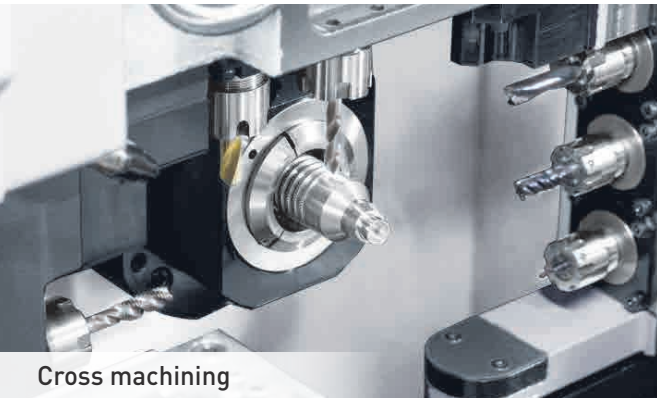
Front off-center drilling & tapping



Rear off-center drilling & tapping



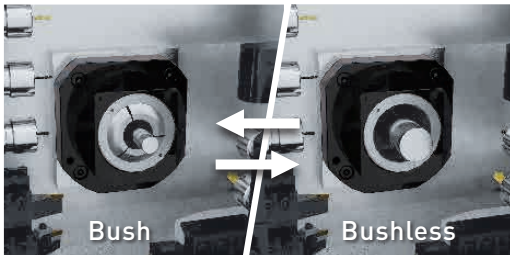
Cross machining



Cross machining

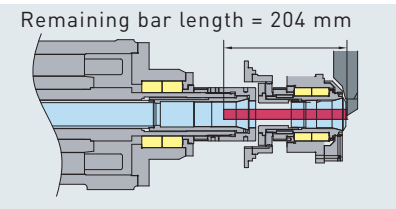
Hybrid Guide Bush

The specially designed interface mechanism allows the SK-38 series to instantly disassemble or install bush as needed. Utilizing the bush machining mode provides stable support for workpieces, making it suitable for processing slender workpieces. Conversely, employing the bushless machining mode can significantly reduce remnants, maximizing the utilization of the bar material.



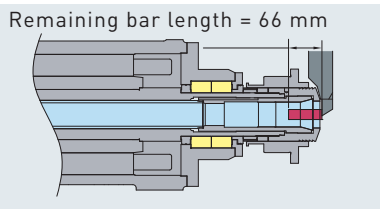
Bush

Bushless



Bush

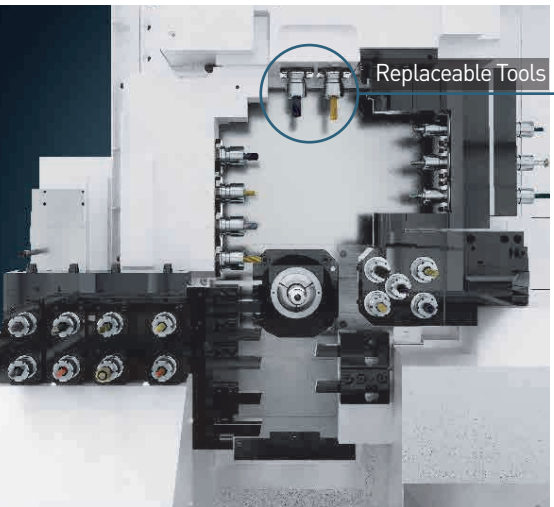
Suitable for long bar work-piece.



Bushless

Suitable for cold working bar or high price raw material.

Flexible Tool System



Thread whirling



Deep hole drilling

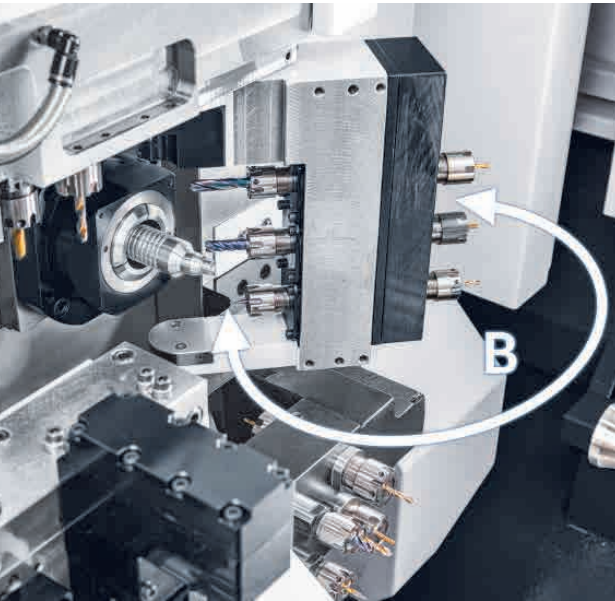


Polygon machining

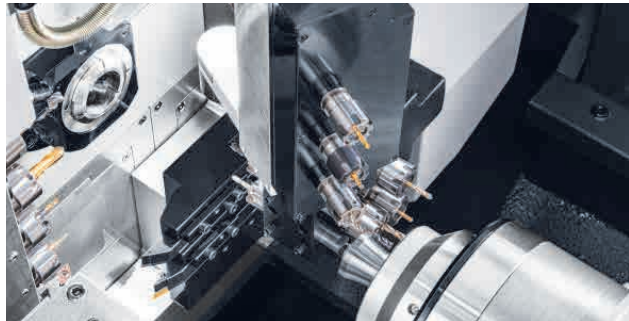


Slotting

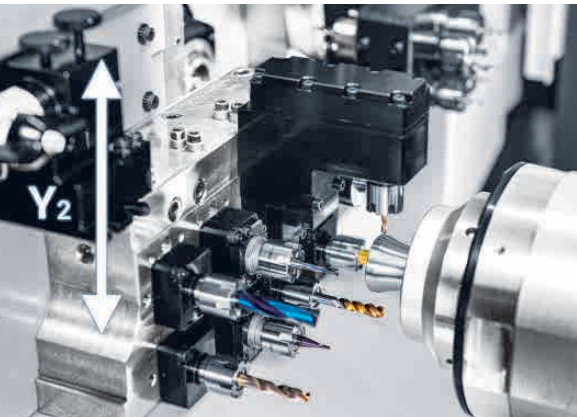
Ultimate B-axis Control Function



- B-axis control capability enables the tool holder to perform milling, drilling, and tapping at inclined angles, as well as execute four-axis simultaneous contour milling.
- The high-resolution angle encoder ensures precise indexing of the B-axis within a range of 135° (min. indexing increment: 0.001°).



Y2-axis Machining Capability



- Y2-axis control function enables off-center drilling, tapping, and milling on the rear-end of workpieces, meeting the machining requirements of various complex-shaped workpieces.
- 69 mm Y2-axis travel design, the back working tool holder can accommodate up to 8 ER16 living tools or be equipped with a 90° live tool holder as needed.
- The live tools are driven by AC servo motor, capable of delivering ample power output with high torque.