

MACHINE SPECIFICATIONS

CAPACITY		SW-20II	SW-32II
Max. machining diameter		Ø 20 mm 0.78"	Ø 32 mm 1.25"
Max. turning length per chuck	bush	220 mm 8.66"	315 mm 12.4"
	bushless	50 mm 1.96"	80 mm 3.14"
SPINDLE			
Max. spindle speed		10,000 rpm	7,000 rpm
Motor output ( cont. / 15 min. )		2.2 / 3.7 kW 3 / 5 HP	5.5 / 7.5 kW 7.3 / 10 HP
Min. indexing increment		0.001°	0.001°
SUB SPINDLE			
Max. spindle speed		8,000 rpm	7,000 rpm
Motor output ( cont. / 15 min. )		1.5 / 2.2 kW 2 / 3 HP	2.2 / 3.7 kW 3 / 5 HP
Min. indexing increment		0.001°	0.001°
BUILT-IN SUB SPINDLE ( OPT. )			
Max. spindle speed		10,000 rpm	7,000 rpm
Motor output ( cont. / 15 min. )		2.2 / 3.7 kW 3 / 5 HP	5.5 / 7.5 kW 7.3 / 10 HP
Min. indexing increment		0.001°	0.001°
FEED SYSTEM			
X / Y / Z / XB / ZB axes rapids		30 m/min. 1,181 IPM	30 m/min. 1,181 IPM
Slide way type		Linear guide ways	Linear guide ways
TOOLING SYSTEM			
O.D. tools	Number of tools	6	6
	Shank size	□ 12 mm 1/2"	□ 16 mm 5/8"
I.D. tools	Number of tools	4	4
	Sleeve size	ER16	ER20
	Max. drilling capacity	Ø 10 mm 0.39"	Ø 13 mm 0.51"
	Max. tapping capacity	M8 x P1.25	M12 x P1.75
Cross live tools	Number of tools	5 ~10	5 ~10
	Max. live tooling speed	8,000 rpm	6,000 rpm
	Tooling drive motor	1.2 kW 1.6 HP	1.4 kW 1.8 HP
	Sleeve size	ER16	ER20
	Max. drilling capacity	Ø 8 mm 0.31"	Ø 10 mm 0.39"
	Max. tapping capacity	M6 x P1.0	M8 x P1.25
	Max. end mill capacity	Ø 10 mm 0.39"	Ø 13 mm 0.51"
B-AXIS TOOLING SYSTEM ( OPT. )			
O.D. tools	Number of tools	6	6
	Shank size	□ 12 mm 1/2"	□ 16 mm 5/8"
Cross live tools	Number of tools	2	2
	Sleeve size	ER16	ER20
B-axis live tools	Number of tools	Front : 3 / Rear : 3	Front : 3 / Rear : 3
	Sleeve size	Front : ER16 / Rear : ER11	Front : ER20 / Rear : ER16
	Tooling drive motor	2.2 kW 3 HP	2.2 kW 3 HP
	Max. live tooling speed	8,000 rpm	6,000 rpm
	swivel angle	135° ( T32 without power driven tool ) 120° ( T32 with milling unit ) 90° ( T32 with 3-spindle drilling unit )	135° ( T32 without power driven tool ) 120° ( T32 with milling unit ) 90° ( T32 with 3-spindle drilling unit )

BACKWORKING TOOLING SYSTEM		SW-20II	SW-32II
Rear-end machining capability	Max. chucking diameter	Ø 20 mm 0.78"	Ø 32 mm 1.25"
	Max. length for front ejection	80 mm 3.14"	130 mm 5.11"
	Max. parts projection length	30 mm 1.18"	50 mm 1.96"
Rear-end tools	Number of tools	4	4
	Max. live tooling speed	8,000 rpm	5,000 rpm
	Tooling drive motor	1.0 kW 1.3 HP	1.0 kW 1.3 HP
	Sleeve size	ER16	ER20
	Max. drilling capacity ( I.D. tools )	Ø 8 mm 0.31"	Ø 13 mm 0.51"
	Max. drilling capacity ( live tools )	Ø 5 mm 0.19"	Ø 6 mm 0.23"
	Max. tapping capacity ( I.D. tools )	M8 x P1.25	M10 x P1.25
	Max. tapping capacity ( live tools )	M4 x P0.7	M5 x P0.8
Y2-AXIS BACKWORKING TOOLING SYSTEM ( OPT. )			
Number of tools		8	8
Y2-axis travel		60 mm 2.36"	80 mm 3.14"
Y2-axis rapid		30 m/min. 1,181 IPM	30 m/min. 1,181 IPM
GENERAL			
NC controller		FANUC 31 <i>i</i>	FANUC 31 <i>i</i>
Spindle center height		1,060 mm 41.7"	1,060 mm 41.7"
Coolant tank capacity		260 L 68 gal	425 L 112 gal
Machine dimensions ( L x W x H )		2,710 x 1,500 x 1,750 mm 107" x 60" x 69"	2,915 x 1,700 x 1,795 mm 115" x 67" x 71"
Machine weight		2,850 kg 6,300 lb	3,400 kg 7,500 lb

Specifications are subject to change without notice.



GOODWAY MACHINE CORP.



GOODWAYCNC.com

HEADQUARTERS

No.13, 5<sup>th</sup> Road,  
Taichung Industrial Park,  
Taichung City, 407, Taiwan  
E-mail : goodway@goodwaycnc.com

CENTRAL TAIWAN SCIENCE PARK BRANCH

No. 38, Keyuan Road,  
Central Taiwan Science Park.Taichung,  
Taichung City, 407, Taiwan  
TEL : + 886-4-2463-6000  
FAX : + 886-4-2463-9600

GOODWAY MACHINE ( WUJIANG ) CO.,LTD

No. 4888, East Lake Taihu Avenue, Wujiang  
Economic and Technological Development Zone,  
Jiangsu, China  
Sales Hotline : + 86-512-8286-8068  
Service Hotline : + 86-512-8286-8066  
FAX : + 86-512-8286-8620  
E-mail : goodway@goodwaycnc.cn

SW II SERIES

Multi-tasking SWISS Turning Centers





# MULTI-TASKING SWISS TURNING CENTERS

New generation SW II series was created with the latest machine tool technology and high quality component, also the designed concept is based on "High Speed" and "High Accuracy" of Swiss Turning Center. To overcome the complicate and precise machining, the structure rigidity of SW II series is increased significantly ; moreover, the tooling system can flexible choose B-axis and Y<sub>2</sub>-axis function according to the actual machining requirement. Brand new SWII series can satisfy with your different machining requirement nowadays and future.

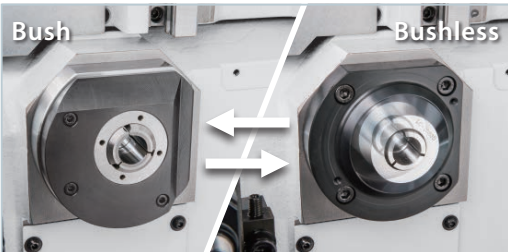
- ▶ The brand new casting structure and optimized tooling system increase 20% cutting rigidity.
- ▶ The movable operating panel with impact resistance and big size screen can provide the convenience and saftey for operator.
- ▶ Reliable machanical ability combine with complete feeding and discharging struture is the best choice for the automatic mass production.



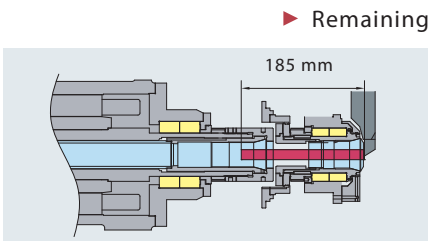
The G.LINC 350 intelligent control system is available on SW-20II ( Opt. )

## Hybrid Guide Bush

Special interface mechanical design of guide bush can be mounting or dismount base on actual situation. It is more flexible in use and save cost on facility and space in the factory.

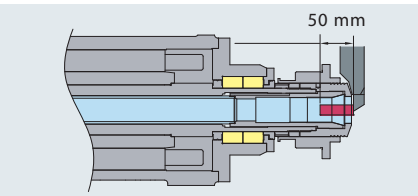


Hybrid guide bush



Bush

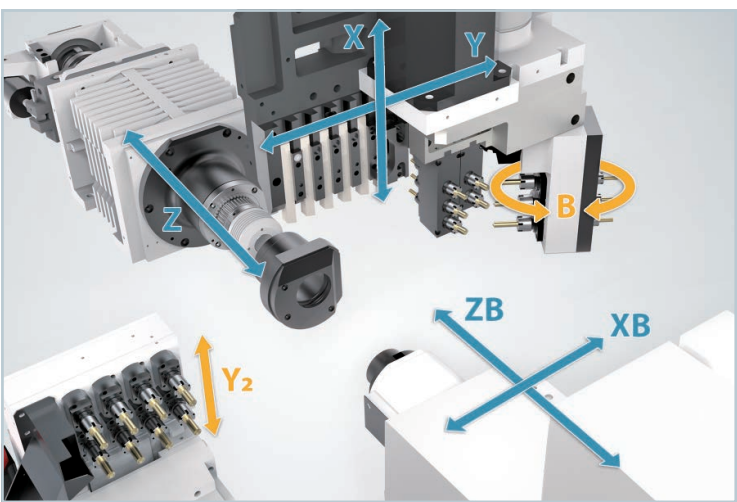
Suitable for long bar work-piece.



Bushless

Suitable for cold working bar or high price raw material.

# HIGH FLEXIBLE TOOL SYSTEM



## Axis System

Feed axis	5-axis	6-axis	7-axis
X-axis	S	S	S
Y-axis	S	S	S
Z-axis	S	S	S
XB-axis	S	S	S
ZB-axis	S	S	S
B-axis	-	S	-
Y <sub>2</sub> -axis	-	-	S

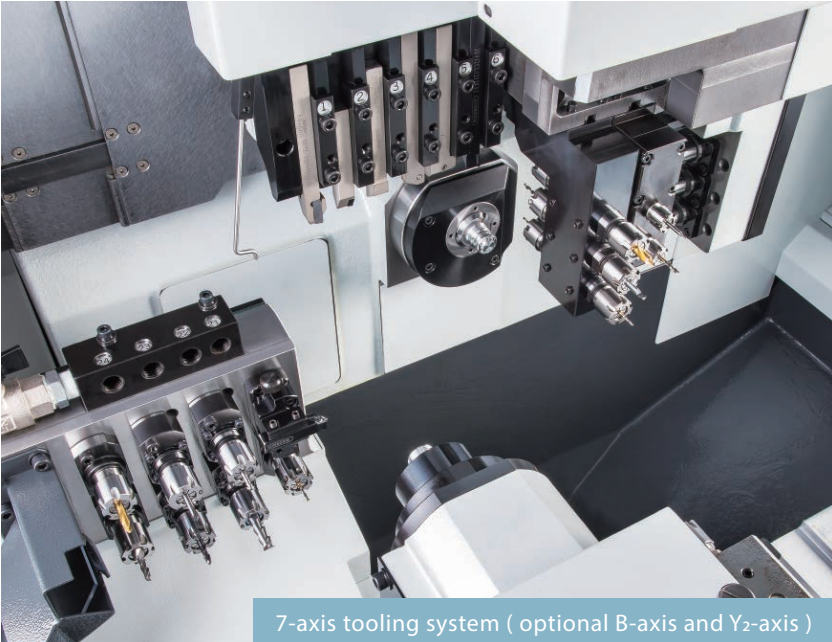
S : Standard - : Not Available



5-axis tooling system

## Tooling System Variations

Tooling System	5-axis	6-axis		7-axis
		B-axis	Y <sub>2</sub> -axis	B & Y <sub>2</sub> axes
O.D. tool	6	6	6	6
I.D. tool	4	-	4	-
Cross live tools	5	2	5	2
B-axis live tools	-	3	-	3
Backworking Tooling System				
Rear-end live tools	4	4	8	8



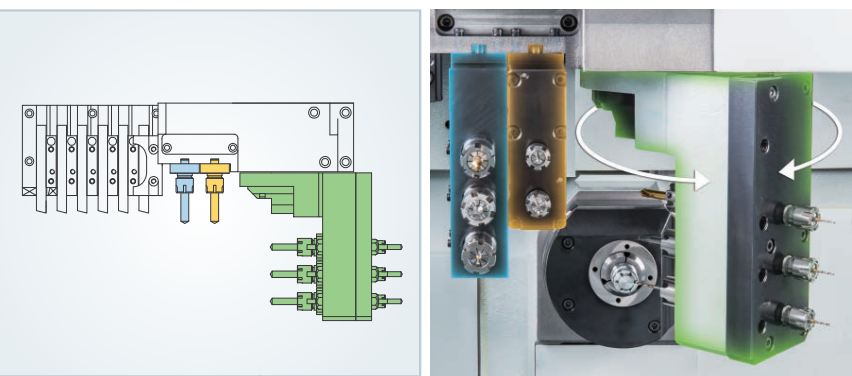
7-axis tooling system ( optional B-axis and Y<sub>2</sub>-axis )



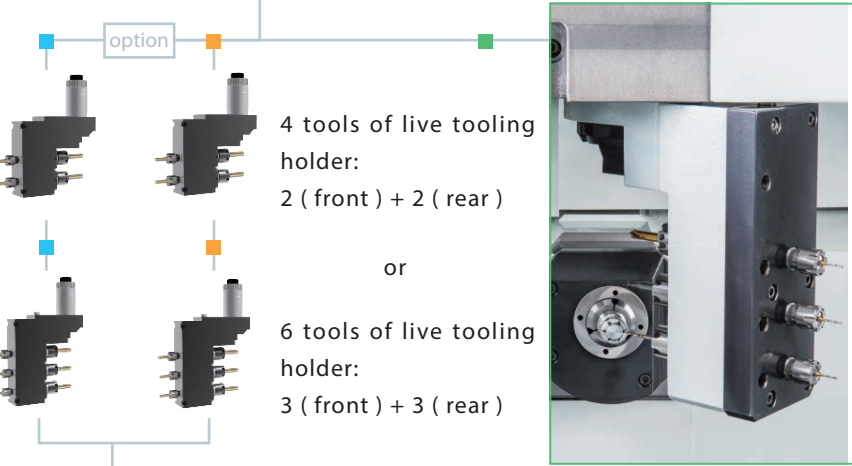
## Deep Hole Drilling ( Opt. )

- ▶ Sub-spindle applied 2 U-Drill devices which can offer deep hole drilling requirement but additional tool position is no needed.
- ▶ With high pressure coolant system, it can ensure the best deep hole drill performance.

# B-AXIS MACHINING CAPABILITY



- ▶ With optional B-axis function, the tooling system can be more flexible to optimize allocation to meet high complicated machining requirement.



- ▶ The B-axis is driven by servo motor, the positioning accuracy can reach 0.001°
- ▶ SWII with B-axis function can machining not only specific angle hole, but high precise continuous contouring.

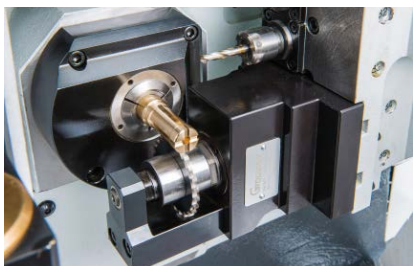
B-axis swivel angle :  
■ 135° ( T32 without power driven tool )  
■ 120° ( T32 with milling unit )  
■ 90° ( T32 with 3-spindle drilling unit )  
Number of tools : 3 ( front ) + 3 ( rear )



Thread Whirling

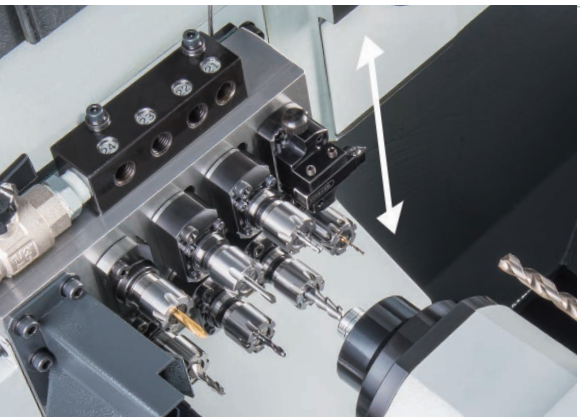


Polygon Turning



Slotting

# Y<sub>2</sub>-AXIS MACHINING CAPABILITY



- ▶ With optional Y<sub>2</sub>-axis function can proceed eccentric drilling, tapping, milling and different kind of complicated machining requirement.
- ▶ Rear-end tool holder is available with 8 tools of ER-16 live tools which driven by 1.0 kW AC servo motor with high torque output.