Intelligent Equipment

Since 1928

2025 Catalog

Double Column Machining Center

ZOPO CNC
DCMC INTRODUCTION

Focus On Industry Application DCMC

Advanced Concept
- Professional R&D team
- Humanized design appearance
- Top brands of core functional components

High Stability and High Reliability
- Casting aging treatment
- First-class processing equipment
- Machine building SOP and accuracy inspection

Abundant Product Ranges
- 3 series / 7 categories / 150+ models
- Diversified spindle / customized configuration
- Comprehensive industry application capabilities

CONTENTS

Design Concept

ZOPO SP series double column machining center adopts advanced design concept, combined with Finite Element Analysis(FEA), which can effectively reduce the deformation of the machine during machining, and improve the machining accuracy and accuracy retention at the same time.

The optimal design of span ratio of machine bed and ribs well reinforced large castings that guarantee the overall rigidity and strength of machine. The overall appearance design make operation and maintenance easy with comprehensive study of ergonomics, especially optimized design of waterproof and chip removal system.

Modular designed machines provide various machining characteristics to fulfill diverse machining conditions.

I Series (Basic Model)
High Cost Performance

- X travel: 1650-6200mm
- Y travel: 1100-2900mm
- Z travel: 600-1000mm
- Columns distance: 1250-3000

II Series (Upgraded Model)
High Application Capability

- X travel: 3200-12500mm
- Y travel: 2250-5500mm
- Z travel: 1000-1500mm
- Columns distance: 1900-3600

III Series(Large & Complex)
High End & Customization

- X travel: 2600-20000mm
- Y travel: 1900-5500mm
- Z travel: 800-1500mm
- Columns distance: 2000-5000

Building Concept

Casting Aging Treatment

All castings are made of high-strength gray cast iron with vibration absorption ability, and are subjected to natural aging treatment and vibration aging to ensure that the internal stress is fully released, ensures the long-term stability and reliability of the machine accuracy.

First-class Processing Equipment

Imported high-quality precision machines ensure the machining accuracy of components from the beginning, thus ensuring the stability and consistency of machines in mass production.

Manual Scraping

All movable parts are manually scrapped and the scraping skill is inherited and developed in assembling. The spindle case contact surface, motor connection plate, bearing supporters, slider fixed surface and contact surface of beam and columns are all manually scrapped to ensure the assembling accuracy and increase the machine rigidity.

Machine Building SOP and Accuracy Inspection

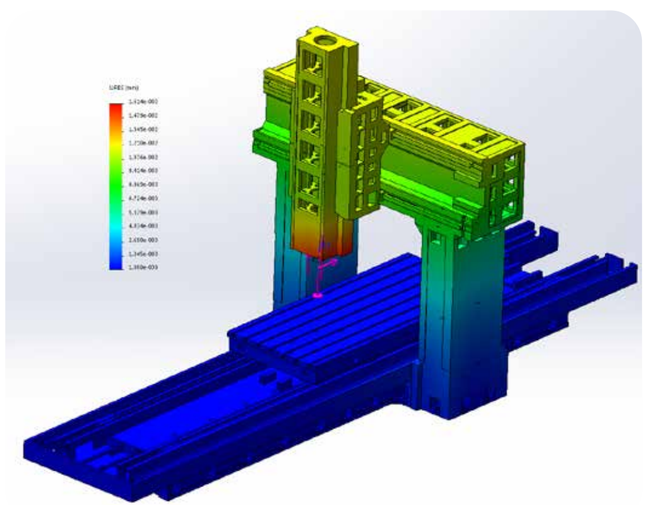
The full closed-loop inspection on the static accuracy and dynamic accuracy of machine, advanced inspection equipment ensures machines' performance.

Design Structure

ZOPO double column machining center adapts to the structural characteristics of traditional gantry products with strong rigidity and wide processing range, it integrates advanced technical elements and pursues the development concept of high efficiency, high precision, energy saving. It's suitable for processing different sizes of various materials such as aluminum alloy, cast iron, steel, etc.

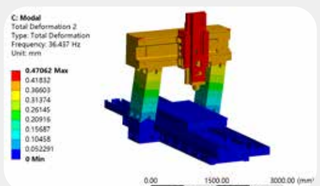
Finite Element Analysis(FEA)

All Components are designed by using finite element analysis. The optimal layout of the structure and the use of high-quality cast iron materials provides high stability and good vibration.



Thermal Structural Analysis

ZOPO uses Thermal Structural Analysis to reduce and control the spindle thermal deformation.

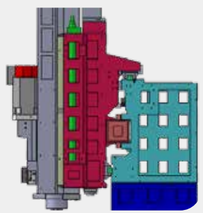


Adaptive Function

ZOPO's adaptive function automatically adjusts machining parameters and tool path according to the material, shape and other characteristics of the workpiece, which can improve the machining efficiency.

Beam & Spindle Case

Advanced beam and saddle design makes the overall center of gravity of the spindle box shift backward; the best central symmetrical spindle box design and well-designed reinforcement ribs have excellent bending resistance to ensure the stability of the machine.



Additional Support for Long Travel Ball Screws

Long-travel ball screw auxiliary support (x axis length over 4m) improves moving parts stability by reducing ball screw deformation.

Transmission Design

The guideway adopts imported large-size roller guideway and is equipped with widened heavy-duty slide block to maintain the stability of machine movement.

Spindle Unit

All series are standard with imported spindle unit. It is stable and reliable to choose mechanical spindles that spindle speed is from 4000rpm to 12000rpm. Built-in spindles can be applied when spindle speed is above 15000rpm, which can achieve high speed with high precision.

Built-in spindle

Mechanical spindle

ZOPO Value

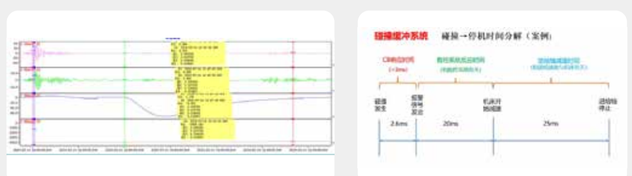
ZOPO consists of 2+ R&D departments, 3+ cooperative institutions, 100+ professional design and R&D engineers, 10+ years overseas study experience and 20+ new products every year.

Thermal Compensation Function

The temperature compensation function reduces machine heat engine time and energy consumption. Besides, the processing accuracy and batch stability of the product are improved, and the rejection rate is reduced.

Collision Buffer Function

ZOPO has complete key solutions which can effectively reduce the damage and losses caused by the bumping tool to the spindle.

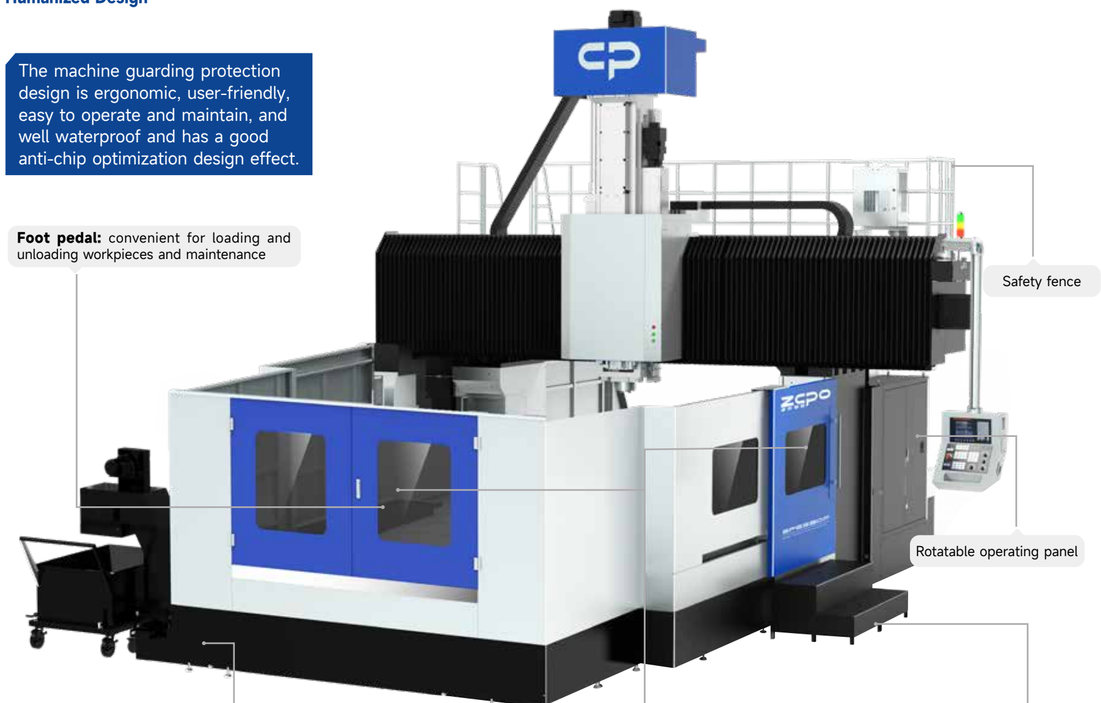


Secondary Software Development

ZOPO application department cooperates with control system company and develops secondary software, like tool life management, external tool management, tool break detection function, PLC alarm list view etc.

Humanized Design

The machine guarding protection design is ergonomic, user-friendly, easy to operate and maintain, and well waterproof and has a good anti-chip optimization design effect.

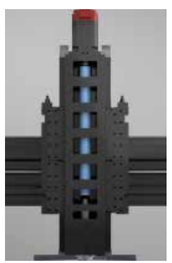


SP-I Series Double Column Machining Center - Basic Model

SP-I is the first generation double column machining center. With more than 10 years market proven, it becomes the most popular high cost performance series and widely used in small and medium-sized molds, general machinery, auto parts, oil pipelines, rail transportation and other industries.

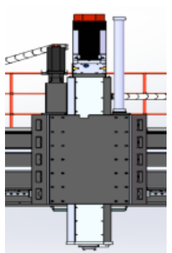
Diversified Spindle Drive

Belt



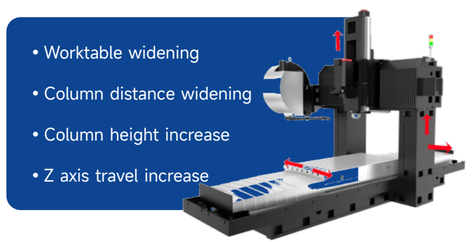
Direct

Gearhead

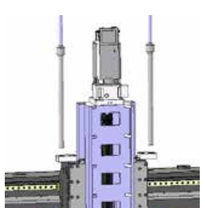


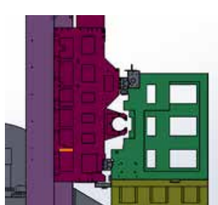
Square Ram

The rich derivative parameters endow our machines with super - strong adaptability.



Double balance cylinder and ladder designed beam can achieve rigidity cutting, compact structure with quick installation.





SP-I Series Specifications

		SP1016	SP1020	SP1325	SP1330	SP1525	SP1530	SP1540	SP1820
Working range									
X axis travel	mm	1650	2050	2600	3100	2600	3100	4100	2200
Y axis travel	mm	1100	1100	1400	1400	1650	1650	1650	1850
Z axis travel	mm	600	600	800	800	800	800	800	1000
Distance from table surface to spindle nose	mm	160-760	160-760	160-960	160-960	160-960	160-960	160-960	260-1260
Distance between two columns	mm	1250	1250	1400	1400	1650	1650	1650	2000
Worktable									
Worktable length	mm	1600	2000	2500	3000	2500	3000	4000	2000
Worktable width	mm	1000	1000	1300	1300	1500	1500	1500	1800
Max. loading bearing of table	kg	3500	4000	6000	7000	6000	7000	8000	10000
T slot size	mm	7-22*125	7-22*125	7-22*160	7-22*160	9-22*160	9-22*160	9-22*160	11-22*160
Spindle									
Transmission type		Belt	Belt	Belt	Belt	Belt	Belt	Belt	Belt
Main motor power(FANUC)	kW	15/18.5 (wide area)	15/18.5 (wide area)	15/18.5 (wide area)	15/18.5 (wide area)	15/18.5 (wide area)	15/18.5 (wide area)	15/18.5 (wide area)	15/18.5 (wide area)
Spindle speed	rpm	8000	8000	6000	6000	6000	6000	6000	6000
Rated Spindle torque (FANUC)	N·m	143	143	143	143	143	143	143	143
Spindle taper		BT50	BT50	BT50	BT50	BT50	BT50	BT50	BT50
Feed									
Rapid feed speed(X/Y/Z)	m/min	20/20/10	20/20/10	10/10/10	10/10/10	10/10/10	10/10/10	10/10/10	10/10/10
Max.feed speed	m/min	10	10	10	10	10	10	10	10
Accuracy									
Positioning accuracy(Whole Length)	mm	0.025/ 0.015/0.016	0.025/ 0.015/0.016	0.025/ 0.015/0.016	0.028/ 0.015/0.016	0.025/ 0.016/0.016	0.028/ 0.016/0.016	0.030/ 0.016/0.016	0.025/ 0.018/0.020
Re-positioning accuracy(Whole Length)	mm	0.014/ 0.012/0.008	0.014/ 0.012/0.008	0.014/ 0.012/0.008	0.014/ 0.012/0.008	0.014/ 0.012/0.008	0.014/ 0.012/0.008	0.014/ 0.012/0.008	0.014/ 0.012/0.008
Machine									
Machine dimension	mm	6000*4500*4100	6800*4500*4100	7800*5000*5000	8800*5000*5000	7900*5000*5100	8800*5000*5100	10800*5000*5100	7000*5800*5500
Machine weight	T	18	19	22.5	23	24	26	28	28

Note: Specifications are subject to change without notice.

SP1830	SP1840	SP1850	SP2230	SP2240	SP2250	SP2260	SP2530	SP2540	SP2550	SP2560
3200	4200	5200	3200	4200	5200	6200	3200	4200	5200	6200
1850	1850	1850	2250	2250	2250	2250	2900	2900	2900	2900
1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
260-1260	260-1260	260-1260	220-1220	220-1220	220-1220	220-1220	220-1220	220-1220	220-1220	220-1220
2000	2000	2000	2400	2400	2400	2400	3000	3000	3000	3000
3000	4000	5000	3000	4000	5000	6000	3000	4000	5000	6000
1800	1800	1800	2000	2000	2000	2000	2500	2500	2500	2500
12000	14000	16000	12000	15000	18000	22000	15000	18000	22000	25000
11-22*160	11-22*160	11-22*160	11-22*160	11-22*160	11-22*160	11-22*160	11-28*200	11-28*200	11-28*200	11-28*200
Belt	Belt	Belt	Gearhead	Gearhead	Gearhead	Gearhead	Gearhead	Gearhead	Gearhead	Gearhead
15/18.5 (wide area)	15/18.5 (wide area)	22/26	15/18.5 (wide area)	15/18.5 (wide area)	22/26	22/26	22/26	22/26	22/26	22/26
6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000
143	143	140	572	572	560	560	560	560	560	560
BT50	BT50	BT50	BT50	BT50	BT50	BT50	BT50	BT50	BT50	BT50
10/10/10	10/10/10	10/10/10	10/10/10	10/10/10	10/10/10	10/10/10	10/10/10	10/10/10	10/10/10	10/10/10
10	10	10	10	10	10	10	10	10	10	10
0.028/ 0.018/0.020	0.030/ 0.018/0.020	0.034/ 0.018/0.020	0.028/ 0.020/0.020	0.030/ 0.020/0.020	0.034/ 0.020/0.020	0.036/ 0.020/0.020	0.028/ 0.022/0.020	0.030/ 0.022/0.020	0.034/ 0.022/0.020	0.036/ 0.022/0.020
0.014/ 0.012/0.008	0.014/ 0.012/0.008	0.014/ 0.012/0.008	0.014/ 0.012/0.008	0.014/ 0.012/0.008	0.014/ 0.012/0.008	0.014/ 0.012/0.008	0.014/ 0.012/0.008	0.014/ 0.012/0.008	0.014/ 0.012/0.008	0.014/ 0.012/0.008
9000*5800*5500	10400*5800*5500	12400*5800*5500	9100*6200*5500	10400*6200*5500	12400*6200*5500	15000*6200*5500	9000*6800*5700	10400*6800*5700	12400*6800*5700	15000*6800*5700
32	35.5	39	33.5	37	41	44.5	39	42.5	46	50

SP-I Series Configurations

Model	SP1016	SP1020	SP1325	SP1330	SP1525	SP1530	SP1540	SP1820	SP1830
Spindle transmission									
Belt BT50-8000rpm	●	●	○	○	○	○	○	○	○
Belt BT50-6000rpm	X	X	●	●	●	●	●	●	●
Direct BT50-6000rpm	X	X	○	○	○	○	○	○	○
Gearbox BT50-6000rpm	○	○	○	○	○	○	○	○	○
Gearhead BT50-6000rpm	X	X	○	○	○	○	○	○	○
Direct BT40-12000rpm	X	X	○	○	○	○	○	○	○
Cooling system									
Cutting coolant system(processing)	●	●	●	●	●	●	●	●	●
Spindle ring coolant	○	○	○	○	○	○	○	○	○
Air blast of spindle	●	●	●	●	●	●	●	●	●
CTS(With simple beam protection)	○	○	○	○	○	○	○	○	○
Oil cooling system	●	●	●	●	●	●	●	●	●
Disc type oil-water separator	●	●	●	●	●	●	●	●	●
ATC tool exchange									
ATC-24T	○	○	○	○	○	○	○	○	○
ATC-30T	○	○	○	○	○	○	○	○	○
ATC-40T	○	○	○	○	○	○	○	○	○
ATC-60T	○	○	○	○	○	○	○	○	○
Electrical parts									
Door interlock	○	○	○	○	○	○	○	○	○
Automatic door	○	○	○	○	○	○	○	○	○
Working light	●	●	●	●	●	●	●	●	●
Second working light	○	○	○	○	○	○	○	○	○
Warning light	●	●	●	●	●	●	●	●	●
Stabilizer	○	○	○	○	○	○	○	○	○
Electrical box light	○	○	○	○	○	○	○	○	○
Heat exchange system	●	●	●	●	●	●	●	●	●
Cabinet air conditioning	○	○	○	○	○	○	○	○	○
External protective guard									
Four-side protect	●	●	●	●	●	●	○	●	●
Four-piece protect	X	X	X	X	X	X	●	X	X
Fully sealed protect	○	○	○	○	○	○	○	○	○
Mechanical									
Column heightening 200mm	○	○	○	○	○	○	○	○	○
Column heightening 300mm	○	○	○	○	○	○	○	○	○
Column heightening 400mm	X	X	○	○	○	○	○	○	○
Columns widening 200mm	X	X	○	○	○	○	○	○	○
Columns widening 400mm	X	X	X	X	X	X	X	X	○
Columns widening 600mm	X	X	X	X	X	X	X	X	X
Z-axis travel Lengthening 200mm	X	X	○	○	○	○	○	X	X
Z-axis travel Lengthening 250mm	X	X	X	X	X	X	X	○	○
Others									
4th/5th axis	○	○	○	○	○	○	○	○	○
Workpiece measurement	○	○	○	○	○	○	○	○	○
Tool length measurement	○	○	○	○	○	○	○	○	○

Note: ● standard ○ optional X unavailable

SP1840	SP1850	SP2230	SP2240	SP2250	SP2260	SP2530	SP2540	SP2550	SP2560
○	○	○	○	○	○	○	○	○	○
●	●	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○
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○	○	●	●	●	●	●	●	●	●
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●	●	●	●	●	●	●	●	●	●
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●	●	●	●	●	●	●	●	●	●
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●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●
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●	●	●	●	●	●	●	●	●	●
○	○	○	○	○	○	○	○	○	○
○	○	●	○	○	○	●	○	○	○
●	●	X	●	●	●	X	●	●	●
○	○	○	○	○	○	○	○	○	○
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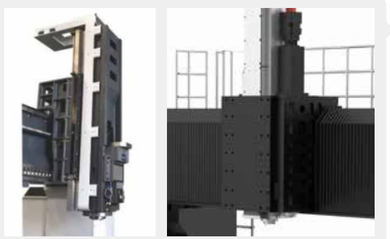
○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○
X	X	X	X	X	X	○	○	○	○
X	X	X	X	X	X	X	X	X	X
○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○

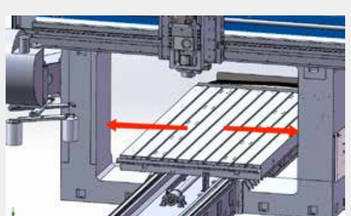
SP-II Series Double Column Machining Center - Upgraded Model

SP-II series is the upgraded design double column machining center.All models are featured with optimized machine structure. With high speed and large torque, it's the preferred choice of customers who pursue high-efficiency process, like energy, construction machinery, rail transit etc.

II Series is standard with gearhead spindle with 1:4 torque increase.

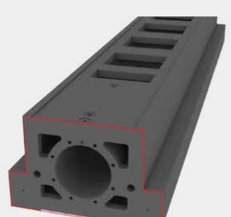


II Series with wider column distance and wider X axis guideway layout improve the machine rigidity and processing range.



II Series with longer beam bring a broader range of machining, especially with optional milling head.

II Series with large section of box guideway enhances 20% rigidity.



SP-II Series Specifications

		SP1525II	SP1530II	SP1540II	SP1830II	SP1840II	SP1850II
Working range							
X axis travel	mm	2600	3100	4100	3200	4200	5200
Y axis travel	mm	1900	1900	1900	2400	2400	2400
Z axis travel	mm	800	800	800	1000	1000	1000
Distance from table surface to spindle nose	mm	120-920	120-920	120-920	220-1220	220-1220	220-1220
Distance between two columns	mm	1900	1900	1900	2400	2400	2400
Worktable							
Worktable length	mm	2500	3000	4000	3000	4000	5000
Worktable width	mm	1500	1500	1500	1800	1800	1800
Max. loading bearing of table	kg	9000	10000	12000	12000	14000	16000
T slot size	mm	7-22*200	7-22*200	7-22*200	9-22*200	9-22*200	9-22*200
Spindle							
Transmission type		Gearhead	Gearhead	Gearhead	Gearhead	Gearhead	Gearhead
Main motor power (FANUC)	kW	15/18.5 (wide area)	15/18.5 (wide area)	15/18.5 (wide area)	15/18.5 (wide area)	15/18.5 (wide area)	22/26
Spindle speed	rpm	6000	6000	6000	6000	6000	6000
Rated Spindle torque (FANUC)	N·m	572	572	572	572	572	560
Spindle taper		BT50	BT50	BT50	BT50	BT50	BT50
Feed							
Rapid feed speed (X/Y/Z)	m/min	15/15/10	15/15/10	15/15/10	15/15/10	15/15/10	10/15/10
Max.feed speed	m/min	8	8	8	8	8	8
Accuracy							
Positioning accuracy (Whole Length)	mm	0.025/0.018/0.016	0.028/0.018/0.016	0.030/0.018/0.016	0.025/0.020/0.016	0.030/0.020/0.016	0.034/0.020/0.016
Re-positioning accuracy(Whole Length)	mm	0.014/0.012/0.008	0.014/0.012/0.008	0.014/0.012/0.008	0.014/0.012/0.008	0.014/0.012/0.008	0.014/0.012/0.008
Machine							
Machine dimension	mm	7900*6000*5000	8800*6000*5000	10800*6000*5000	8800*6200*5500	10800*6200*5500	12800*6200*5500
Machine weight	T	26	28	30	34	37.5	41

Note: Specifications are subject to change without notice.

SP2030II	SP2040II	SP2050II	SP2060II	SP2530II	SP2540II	SP2550II	SP2560II
3200	4200	5200	6200	3200	4200	5200	6200
2800	2800	2800	2800	3600	3600	3600	3600
1000	1000	1000	1000	1000	1000	1000	1000
220-1220	220-1220	220-1220	220-1220	220-1220	220-1220	220-1220	220-1220
2800	2800	2800	2800	3600	3600	3600	3600
3000	4000	5000	6000	3000	4000	5000	6000
2000	2000	2000	2000	2500	2500	2500	2500
12000	15000	18000	22000	15000	18000	22000	25000
9-22*200	9-22*200	9-22*200	9-22*200	11-28*200	11-28*200	11-28*200	11-28*200
Gearhead	Gearhead	Gearhead	Gearhead	Gearhead	Gearhead	Gearhead	Gearhead
15/18.5 (wide area)	15/18.5 (wide area)	22/26	22/26	22/26	22/26	22/26	22/26
6000	6000	6000	6000	6000	6000	6000	6000
572	572	560	560	560	560	560	560
BT50	BT50	BT50	BT50	BT50	BT50	BT50	BT50
15/15/10	15/15/10	10/15/10	10/15/10	12/15/10	12/15/10	10/15/10	10/15/10
8	8	8	8	8	8	8	8
0.025/0.022/0.016	0.030/0.022/0.016	0.034/0.022/0.016	0.036/0.022/0.016	0.025/0.030/0.016	0.030/0.030/0.016	0.034/0.030/0.016	0.036/0.030/0.016
0.014/0.012/0.008	0.014/0.012/0.008	0.014/0.012/0.008	0.014/0.012/0.008	0.014/0.018/0.008	0.014/0.018/0.008	0.014/0.018/0.008	0.014/0.018/0.008
8800*6600*5500	10800*6600*5500	12800*6600*5500	16000*6600*5500	8800*7400*5700	10800*7400*5700	12800*7400*5700	16000*7400*5700
35.5	39	43	46.5	41	44.5	48	52

SP-II Series Configurations

Model	SP1525II	SP1530II	SP1540II	SP1830II	SP1840II	SP1850II	SP2030II
Spindle transmission							
Gearhead BT50-6000rpm	●	●	●	●	●	●	●
Gearhead BT50-8000rpm	○	○	○	○	○	○	○
Square ram BT50-6000rpm	X	X	X	○	○	○	○
Square ram BT50-4000rpm (CTS)	X	X	X	○	○	○	○
Cooling system							
Cutting coolant system	●	●	●	●	●	●	●
Spindle ring coolant	○	○	○	○	○	○	○
Air blast of spindle	●	●	●	●	●	●	●
CTS (BT50-4000rpm)	○	○	○	○	○	○	○
Disc type oil-water separator	●	●	●	●	●	●	●
ATC tool exchange							
ATC-24T	○	○	○	○	○	○	○
ATC-30T	○	○	○	○	○	○	○
ATC-40T	○	○	○	○	○	○	○
ATC-60T	○	○	○	○	○	○	○
Electrical parts							
Door interlock	○	○	○	○	○	○	○
Automatic door	○	○	○	○	○	○	○
Working light	●	●	●	●	●	●	●
Second working light	○	○	○	○	○	○	○
Warning light	●	●	●	●	●	●	●
Stabilizer	○	○	○	○	○	○	○
Cabinet light	○	○	○	○	○	○	○
Cabinet air conditioning	●	●	●	●	●	●	●
External protective guard							
Four-side protect	●	○	○	○	○	○	○
Four-piece protect	X	●	●	●	●	●	●
Fully sealed protect	○	○	○	○	○	○	○
Mechanical							
Column heightening 200mm	○	○	○	○	○	○	○
Column heightening 300mm	○	○	○	○	○	○	○
Column heightening 400mm	○	○	○	○	○	○	○
Z-axis travel Lengthening 200mm	○	○	○	X	X	X	X
Z-axis travel Lengthening 250mm	X	X	X	○	○	○	○
Others							
4th/5th axis	○	○	○	○	○	○	○
Linear scale	○	○	○	○	○	○	○
Workpiece measurement	○	○	○	○	○	○	○
Tool length measurement	○	○	○	○	○	○	○

SP2040II	SP2050II	SP2060II	SP2530II	SP2540II	SP2550II	SP2560II
●	●	●	●	●	●	●
○	○	○	○	○	○	○
○	○	○	○	○	○	○
○	○	○	○	○	○	○
●	●	●	●	●	●	●
○	○	○	○	○	○	○
●	●	●	●	●	●	●
○	○	○	○	○	○	○
●	●	●	●	●	●	●
○	○	○	○	○	○	○
○	○	○	○	○	○	○
○	○	○	○	○	○	○
○	○	○	○	○	○	○
○	○	○	○	○	○	○
○	○	○	○	○	○	○
●	●	●	●	●	●	●
○	○	○	○	○	○	○
●	●	●	●	●	●	●
○	○	○	○	○	○	○
○	○	○	○	○	○	○
●	●	●	●	●	●	●
○	○	○	○	○	○	○
●	●	●	●	●	●	●
○	○	○	○	○	○	○
○	○	○	○	○	○	○
○	○	○	○	○	○	○
○	○	○	○	○	○	○
X	X	X	X	X	X	X
○	○	○	○	○	○	○
○	○	○	○	○	○	○
○	○	○	○	○	○	○
○	○	○	○	○	○	○
○	○	○	○	○	○	○

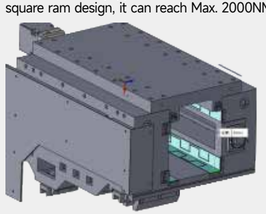
Note: ● standard ○ optional X unavailable

SP-L II Series Double Column Machining Center - Heavy Load Model

SP-L II series are high-performance products developed for the energy, engineering machinery and other industries. They combine heavy load and large torque, and are suitable for customers who pursue high-efficiency processing needs.

Ram Design

Full series are equipped with 210mm diameter spindle. Combined with **460*460** mm square ram design, it can reach Max. 2000NM torque for high rigidity processing.



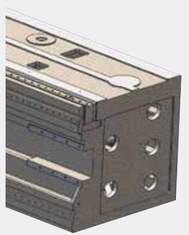
Four Guideway Design

Full series are designed with widened bed and 4 guideways for X axis, which increases 20% high load of worktable.

Thicken Beam Design

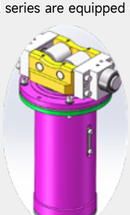
Full series beam features a reinforced design, making it 20% heavier than comparable products on the market.

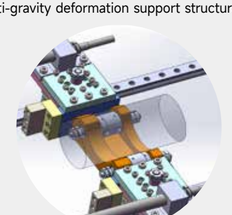
Full series adopts 3 guideways on Y axis which can improve heavy cutting capacity.



Additional Support for Ball Screw

The full series are equipped with anti-gravity deformation support structure unit.





SP-L II Series Specifications

		SP2040L-RII	SP2050L-RII	SP2060L-RII	SP2550L-RII
Working range					
X axis travel	mm	4200	5200	6200	5200
Y axis travel	mm	3200	3200	3200	3700
Z axis travel	mm	1250	1250	1250	1250
Distance from table surface to spindle nose	mm	250-1500	250-1500	250-1500	250-1500
Distance between two columns	mm	2800	2800	2800	3300
Worktable					
Worktable length	mm	4000	5000	6000	5000
Worktable width	mm	2000	2000	2000	2500
Max. loading bearing of table	kg	22000	24000	26000	26000
T slot size	mm	22	22	22	28
Spindle					
Transmission type		Gearbox	Gearbox	Gearbox	Gearbox
Main motor power(FANUC)	kW	30/37	30/37	30/37	30/37
Square ram size	mm	460*460	460*460	460*460	460*460
Spindle speed	rpm	3000	3000	3000	3000
Spindle torque	N·m	2110/2600	2110/2600	2110/2600	2110/2600
Spindle taper		BT50	BT50	BT50	BT50
Feed					
Rapid feed speed (X/Y/Z)	m/min	15/15/12	15/15/12	12/15/12	12/15/12
Max.feed speed	m/min	8	8	8	8
Accuracy					
Positioning accuracy(Whole Length)	mm	0.022/0.018/0.016	0.025/0.018/0.016	0.028/0.018/0.016	0.025/0.02/0.016
Re-positioning accuracy(Whole Length)	mm	0.016/0.012/0.012	0.018/0.012/0.012	0.02/0.012/0.012	0.018/0.015/0.012
Machine					
Machine weight	T	50	55	61	66

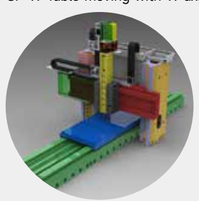
Note: Specifications are subject to change without notice.

SP2560L-RII	SP2580L-RII	SP3050L-RII	SP3060L-RII	SP3080L-RII	SP30100L-RII
6200	8200	5200	6200	8200	10200
3700	3700	4200	4200	4200	4200
1250	1250	1250	1250	1250	1250
250-1500	250-1500	250-1500	250-1500	250-1500	250-1500
3300	3300	3800	3800	3800	3800
6000	8000	5000	6000	8000	10000
2500	2500	3000	3000	3000	3000
32000	36000	32000	36000	42000	45000
28	28	28	28	28	28
Gearbox	Gearbox	Gearbox	Gearbox	Gearbox	Gearbox
30/37	30/37	30/37	30/37	30/37	30/37
460*460	460*460	460*460	460*460	460*460	460*460
3000	3000	3000	3000	3000	3000
2110/2600	2110/2600	2110/2600	2110/2600	2110/2600	2110/2600
BT50	BT50	BT50	BT50	BT50	BT50
12/15/12	10/15/12	12/15/12	12/15/12	10/15/12	10/15/12
8	6	8	8	6	6
0.028/0.02/0.016	0.033/0.02/0.016	0.025/0.024/0.016	0.028/0.024/0.016	0.033/0.024/0.016	0.038/0.024/0.016
0.02/0.015/0.012	0.022/0.015/0.012	0.018/0.016/0.012	0.02/0.015/0.012	0.022/0.016/0.012	0.024/0.016/0.012
74	88	82	90	102	110

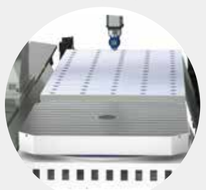
SP III Series Double Column Machining Center-Customization Model

SP III series are heavy-duty and heavy-cutting double column machining centers developed for users in industries such as metallurgy, mining, heavy machinery, and engineering machinery. In order to meet customer's complex machining requirements, the machine can choose optional W axis type, Bridge type, Column moving type and Five axis linkage head.

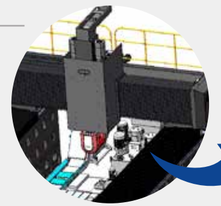
SP-W Table moving with W axis type machining center



SP-WG heavy-duty column moving type machining center



Heavy duty rotary table (optional)



SP-BU gantry-type five-axis machining center

Multiple A/C swing heads

Industry Applications

wind electricity

ship industry

heavy industry

automobile die

SP-W III Series
Table Moving With W Axis Type Specifications

		SP2040WM1-R III	SP2040WL-R III	SP2050WM1-R III	SP2050WL-R III	SP2060WM1-R III	SP2060WL-R III	SP2550WM1-R III	SP2550WL-R III
Working range									
X axis travel	mm	4200	4200	5200	5200	6200	6200	5200	5200
Y axis travel	mm	3400	3400	3400	3400	3400	3400	3900	3900
Z axis travel	mm	1000	1250	1000	1250	1000	1250	1000	1250
W axis travel	mm	1250	1250	1250	1250	1250	1250	1250	1250
Distance from table surface to spindle nose	mm	300-2550	50-2550	300-2550	50-2550	300-2550	50-2550	300-2550	50-2550
Distance between two columns	mm	3000	3000	3000	3000	3000	3000	3500	3500
Worktable									
Worktable length	mm	4000	4000	5000	5000	6000	6000	5000	5000
Worktable width	mm	2000	2000	2000	2000	2000	2000	2500	2500
Max. loading bearing of table	kg	20000	22000	22000	24000	24000	26000	25000	26000
T slot size	mm	22	22	22	22	22	22	28	28
Spindle									
Transmission type		Gearbox	Gearbox	Gearbox	Gearbox	Gearbox	Gearbox	Gearbox	Gearbox
Main motor power(FANUC)	kW	30/37	30/37	30/37	30/37	30/37	30/37	30/37	30/37
Square ram size	mm	400*400	460*460	400*400	460*460	400*400	460*460	400*400	460*460
Spindle speed	rpm	4500	3000	4500	3000	4500	3000	4500	3000
Spindle torque	N·m	1290/1550	2110/2600	1290/1550	2110/2600	1290/1550	2110/2600	1290/1550	2110/2600
Spindle taper		BT50	BT50	BT50	BT50	BT50	BT50	BT50	BT50
Feed									
Rapid feed speed(X/Y/Z)	m/min	15/15/12/2	15/15/12/2	15/15/12/2	15/15/12/2	15/15/12/2	15/15/12/2	15/15/12/2	15/15/12/2
Max.feed speed	m/min	8	8	8	8	8	8	8	8
Accuracy									
Positioning accuracy(Whole Length)	mm	0.022/0.018/ 0.014/0.016	0.022/0.018/ 0.016/0.016	0.025/0.018/ 0.014/0.016	0.025/0.018/ 0.016/0.016	0.028/0.018/ 0.014/0.016	0.028/0.018/ 0.016/0.016	0.025/0.02/ 0.014/0.016	0.025/0.02/ 0.016/0.016
Re-positioning accuracy(Whole Length)	mm	0.016/0.012/ 0.010/0.012	0.016/0.012/ 0.012/0.012	0.018/0.012/ 0.010/0.012	0.018/0.012/ 0.012/0.012	0.02/0.012/ 0.010/0.012	0.02/0.012/ 0.012/0.012	0.018/0.015/ 0.010/0.012	0.018/0.015/ 0.012/0.012
Machine									
Machine weight	T	73	75	78	80	83	85	89	91

SP2560WM1-R III	SP2560WL-R III	SP2580WM1-R III	SP2580WL-R III	SP3060WM1-R III	SP3060WL-R III	SP3080WM1-R III	SP3080WL-R III	SP30100WM1-R III	SP30100WL-R III
6200	6200	8200	8200	6200	6200	8200	8200	10200	10200
3900	3900	3900	3900	4400	4400	4400	4400	4400	4400
1000	1250	1000	1250	1000	1250	1000	1250	1000	1250
1250	1250	1250	1250	1250	1250	1250	1250	1250	1250
300-2550	50-2550	300-2550	50-2550	300-2550	50-2550	300-2550	50-2550	300-2550	50-2550
3500	3500	3500	3500	4000	4000	4000	4000	4000	4000
6000	6000	8000	8000	6000	6000	8000	8000	10000	10000
2500	2500	2500	2500	3000	3000	3000	3000	3000	3000
30000	32000	35000	36000	35000	36000	40000	42000	45000	45000
28	28	28	28	28	28	28	28	28	28
Gearbox	Gearbox	Gearbox	Gearbox	Gearbox	Gearbox	Gearbox	Gearbox	Gearbox	Gearbox
30/37	30/37	30/37	30/37	30/37	30/37	30/37	30/37	30/37	30/37
400*400	460*460	400*400	460*460	400*400	460*460	400*400	460*460	400*400	460*460
4500	3000	4500	3000	4500	3000	4500	3000	4500	3000
1290/1550	2110/2600	1290/1550	2110/2600	1290/1550	2110/2600	1290/1550	2110/2600	1290/1550	2110/2600
BT50	BT50	BT50	BT50	BT50	BT50	BT50	BT50	BT50	BT50
12/15/12/2	12/15/12/2	10/15/12/2	10/15/12/2	12/15/12/2	12/15/12/2	10/15/12/2	10/15/12/2	10/15/12/2	10/15/12/2
8	8	6	6	8	8	6	6	6	6
0.028/0.02/ 0.014/0.016	0.028/0.02/ 0.016/0.016	0.033/0.02/ 0.014/0.016	0.033/0.02/ 0.016/0.016	0.028/0.024/ 0.014/0.016	0.028/0.024/ 0.016/0.016	0.033/0.024/ 0.014/0.016	0.033/0.024/ 0.016/0.016	0.038/0.024/ 0.014/0.016	0.038/0.024/ 0.016/0.016
0.02/0.015/ 0.010/0.012	0.02/0.015/ 0.012/0.012	0.022/0.015/ 0.010/0.012	0.022/0.015/ 0.012/0.012	0.02/0.016/ 0.010/0.012	0.02/0.016/ 0.012/0.012	0.022/0.016/ 0.010/0.012	0.022/0.016/ 0.012/0.012	0.024/0.016/ 0.010/0.012	0.024/0.016/ 0.012/0.012
97	99	107	110	110	112	125	127	133	135

Standard:

CNC system FANUC 0i-MF plus(3), 10.4" display, operation panel and handheld operation unit, electrical cabinet (heat exchanger as standard), spindle air blowing, cooling system, lubrication system, pneumatic system, hydraulic system, slide balancing system, double screw + chain chip removal system, machine guideway protection cover.

Note: Specifications are subject to change without notice.

Optional:

Precision improvement items: magnetic scale, linear scale, rigid tapping; Processing range expansion items: 5T/m²/15T/m²/20T/m² worktable load-bearing, X-axis travel increase; Automation improvement items: 24T (disc) 32T (chain) 40T (chain) 40T (vertical and horizontal) 60T (vertical and horizontal) tool magazine; Function expansion items: 20/30/50/70 Bar CTS; Safety improvement items: Y-axis optional rust-proof metal telescopic protective cover; System options: Siemens/Heidenhain/HNC CNC system; Automatic line options: automatic door/fixture cleaning (water blowing, air blowing; Other options: Y-axis guideway, chip trolly position, foundation sinking, screw center cooling, nut bearing cooling, coaxiality compensation and thermal compensation and other precision compensation.

SP-G III Series
Column Moving Type Specifications

		SP3080GM1-R III	SP3080GL-R III	SP30120GM1-R III	SP30120GL-R III	SP30160GM1-R III	SP30160GL-R III	SP4080GM1-R III
Working range								
X axis travel	mm	8200	8200	12200	12200	16200	16200	8200
Y axis travel	mm	4400+Head Travel	4500+Head Travel	4400+Head Travel	4500+Head Travel	4400+Head Travel	4500+Head Travel	5400+Head Travel
Z axis travel	mm	1250	1500	1250	1500	1250	1500	1250
Distance from table surface to spindle nose	mm	350-1600	500-2000	350-1600	500-2000	350-1600	500-2000	350-1600
Distance between two columns	mm	4300	4300	4300	4300	4300	4300	5300
Worktable								
Worktable length	mm	8000	8000	12000	12000	16000	16000	8000
Worktable width	mm	3000	3000	3000	3000	3000	3000	4000
Max.loading bearing of table	T/m2	5	10	5	10	5	10	5
T slot size	mm	28	36	28	36	28	36	28
Spindle								
Transmission type		Gearbox	Gearbox	Gearbox	Gearbox	Gearbox	Gearbox	Gearbox
Main motor power (FANUC)	kW	30/37	30/37	30/37	30/37	30/37	30/37	30/37
Square ram size	mm	400*400	460*460	400*400	460*460	400*400	460*460	400*400
Spindle speed	rpm	4500	3000	4500	3000	4500	3000	4500
Spindle torque	N·m	1290/1550	2110/2600	1290/1550	2110/2600	1290/1550	2110/2600	1290/1550
Spindle taper		BT50	BT50	BT50	BT50	BT50	BT50	BT50
Feed								
Rapid feed speed (X/Y/Z)	m/min	16/16/12	16/16/12	16/16/12	16/16/12	16/16/12	16/16/12	16/16/12
Max.feed speed	m/min	8	8	8	8	8	8	8
Accuracy								
Positioning accuracy (Whole Length)	mm	0.012/2000/ 0.026/0.016	0.012/2000/ 0.026/0.02	0.012/2000/ 0.026/0.016	0.012/2000/ 0.026/0.02	0.012/2000/ 0.026/0.016	0.012/2000/ 0.026/0.02	0.012/2000/ 0.03/0.016
Re-positioning accuracy(Whole Length)	mm	0.025/0.018/0.012	0.025/0.018/0.014	0.028/0.018/0.012	0.028/0.018/0.014	0.032/0.018/0.012	0.032/0.018/0.014	0.025/0.02/0.012
Machine								
Machine weight	T	100	105	120	127	140	150	105

SP4080GL-R III	SP40120GM1-R III	SP40120GL-R III	SP40160GM1-R III	SP40160GL-R III	SP50120GL-R III	SP50160GL-R III	SP50160GXL-R III
8200	12200	12200	16200	16200	12200	16200	16200
5500+Head Travel	5400+Head Travel	5500+Head Travel	5400+Head Travel	5500+Head Travel	6500+Head Travel	6500+Head Travel	6600+Head Travel
1500	1250	1500	1250	1500	1500	1500	1500
500-2000	350-1600	500-2000	350-1600	500-2000	500-2000	500-2000	500-2000
5300	5300	5300	5300	5300	6300	6300	6400
8000	12000	12000	16000	16000	12000	16000	16000
4000	4000	4000	4000	4000	5000	5000	5000
10	5	10	5	10	10	10	10
36	28	36	28	36	36	36	36
Gearbox	Gearbox	Gearbox	Gearbox	Gearbox	Gearbox	Gearbox	Gearbox
30/37	30/37	30/37	30/37	30/37	30/37	30/37	60/75
460*460	400*400	460*460	400*400	460*460	460*460	460*460	500*500
3000	4500	3000	4500	3000	3000	3000	2000
2110/2600	1290/1550	2110/2600	1290/1550	2110/2600	2110/2600	2110/2600	3200/4000
BT50	BT50	BT50	BT50	BT50	BT50	BT50	BT50
16/16/12	16/16/12	16/16/12	16/16/12	16/16/12	16/12/12	16/12/12	12/12/12
8	8	8	8	8	8	8	8
0.012/2000/ 0.03/0.02	0.012/2000/ 0.03/0.016	0.012/2000/ 0.03/0.02	0.012/2000/ 0.03/0.016	0.012/2000/ 0.03/0.02	0.012/2000/ 0.035/0.02	0.012/2000/ 0.035/0.02	0.012/2000/ 0.035/0.02
0.025/0.02/0.014	0.028/0.02/0.012	0.028/0.02/0.014	0.032/0.02/0.012	0.032/0.02/0.014	0.028/0.022/0.014	0.032/0.022/0.014	0.032/0.022/0.014
110	125	132	145	155	140	165	190

Standard:

CNC system FANUC 0i-MF plus(1), 10.4" display, operating panel and handheld operating unit, electrical cabinet (heat exchanger as standard), spindle air blowing, cooling system, lubrication system, pneumatic system, hydraulic system, slide balancing system, double chain chip removal system, machine guideway protection cover.

Note: Specifications are subject to change without notice.

Optional:

Precision improvement items: magnetic scale, linear scale, rigid tapping; Processing range expansion items: 5T/m^2//15T/m^2//20T/m^2 worktable load-bearing, X-axis travel increase; Automation improvement items: 24T (disc) 32T (chain) 40T (chain) 40T (vertical and horizontal) 60T (vertical and horizontal) tool magazine; Function expansion items: 20/30/50/70 Bar CTS; Safety improvement items: Y-axis optional rust-proof metal telescopic protective cover; System options: Siemens/Heidenhain/HNC CNC system; Automatic line options: automatic door/fixture cleaning (water blowing, air blowing; Other options: Y-axis guideway, chip trolly position, foundation sinking, screw center cooling, nut bearing cooling, coaxiality compensation and thermal compensation and other precision compensation.

SP-WG III Series
Column Moving With W Axis Type Specifications

		SP3080WGM1-R III	SP3080WGL-R III	SP30120WGM1-R III	SP30120WGL-R III	SP30160WGM1-R III	SP30160WGL-R III	SP4080WGM1-R III
Working range								
X axis travel	mm	8500+Head Travel	8500+Head Travel	12500+Head Travel	12500+Head Travel	16500+Head Travel	16500+Head Travel	8500+Head Travel
Y axis travel	mm	4800+Head Travel	4800+Head Travel	4800+Head Travel	4800+Head Travel	4800+Head Travel	4800+Head Travel	5800+Head Travel
Z axis travel	mm	1250	1500	1250	1500	1250	1500	1250
W axis travel		1500	1500	1500	1500	1500	1500	1500
Distance from table surface to spindle nose	mm	300-3050	50-3050	300-3050	50-3050	300-3050	50-3050	300-3050
Distance between two columns	mm	4400	4400	4400	4400	4400	4400	5400
Worktable								
Worktable length	mm	8000	8000	12000	12000	16000	16000	8000
Worktable width	mm	3000	3000	3000	3000	3000	3000	4000
Max. loading bearing of table	T/m2	10	10	10	10	10	10	10
T slot size	mm	28	36	28	36	28	36	28
Spindle								
Transmission type		Gearbox	Gearbox	Gearbox	Gearbox	Gearbox	Gearbox	Gearbox
Main motor power(FANUC)	kW	30/37	30/37	30/37	30/37	30/37	30/37	30/37
Square ram size	mm	400*400	460*460	400*400	460*460	400*400	460*460	400*400
Spindle speed	rpm	4500	3000	4500	3000	4500	3000	4500
Spindle torque	N·m	1290/1550	2110/2600	1290/1550	2110/2600	1290/1550	2110/2600	1290/1550
Spindle taper		BT50	BT50	BT50	BT50	BT50	BT50	BT50
Feed								
Rapid feed speed(X/Y/Z)	m/min	12/16/12/2	12/16/12/2	12/16/12/2	12/16/12/2	12/16/12/2	12/16/12/2	12/16/12/2
Max.feed speed	m/min	6	8	6	8	6	8	6
Accuracy								
Positioning accuracy	mm	0.012/2000/ 0.026/0.016/0.018	0.012/2000/ 0.026/0.02/0.018	0.012/2000/ 0.026/0.016/0.018	0.012/2000/ 0.026/0.02/0.018	0.012/2000/ 0.026/0.016/0.018	0.012/2000/ 0.026/0.02/0.018	0.012/2000/ 0.03/0.016/0.018
Re-positioning accuracy	mm	0.025/0.018/ 0.012/0.015	0.025/0.018/ 0.014/0.015	0.028/0.018/ 0.012/0.015	0.028/0.018/ 0.014/0.015	0.032/0.018/ 0.012/0.015	0.032/0.018/ 0.014/0.015	0.025/0.02/ 0.012/0.015
Machine								
Machine weight	T	145	150	160	170	180	185	150

SP4080WGL-R III	SP40120WGM1-R III	SP40120WGL-R III	SP40160WGM1-R III	SP40160WGL-R III	SP50120WGL-R III	SP50160WGL-R III	SP50160WGXL-R III
8500+Head Travel	12500+Head Travel	12500+Head Travel	16500+Head Travel	16500+Head Travel	12500+Head Travel	16500+Head Travel	16500+Head Travel
5800+Head Travel	5800+Head Travel	5800+Head Travel	5800+Head Travel	5800+Head Travel	6800+Head Travel	6800+Head Travel	6800+Head Travel
1500	1250	1500	1250	1500	1500	1500	1500
1500	1500	1500	1500	1500	1500	1500	1500
50-3050	300-3050	50-3050	300-3050	50-3050	50-3050	50-3050	50-3050
5400	5400	5400	5400	5400	6400	6400	6400
8000	12000	12000	16000	16000	12000	16000	16000
4000	4000	4000	4000	4000	5000	5000	5000
10	10	10	10	10	10	10	10
36	28	36	28	36	36	36	36
Gearbox	Gearbox	Gearbox	Gearbox	Gearbox	Gearbox	Gearbox	Gearbox
30/37	30/37	30/37	30/37	30/37	30/37	30/37	60/75
460*460	400*400	460*460	400*400	460*460	460*460	460*460	500*500
3000	4500	3000	4500	3000	3000	3000	2000
2110/2600	1290/1550	2110/2600	1290/1550	2110/2600	2110/2600	2110/2600	3200/4000
BT50	BT50	BT50	BT50	BT50	BT50	BT50	BT50
12/16/12/2	12/16/12/2	12/16/12/2	12/16/12/2	12/16/12/2	12/12/12/2	12/12/12/2	12/12/12/2
8	6	8	6	8	6	6	6
0.012/2000/ 0.03/0.02/0.018	0.012/2000/ 0.03/0.016/0.018	0.012/2000/ 0.03/0.02/0.018	0.012/2000/ 0.03/0.016/0.018	0.012/2000/ 0.03/0.02/0.018	0.012/2000/ 0.035/0.02/0.018	0.012/2000/ 0.035/0.02/0.018	0.012/2000/ 0.035/0.020.018
0.025/0.02/ 0.014/0.015	0.028/0.02/ 0.012/0.015	0.028/0.02/ 0.014/0.015	0.032/0.02/ 0.012/0.015	0.032/0.02/ 0.014/0.015	0.028/0.022/ 0.014/0.015	0.032/0.022/ 0.014/0.015	0.032/0.022/ 0.014/0.015
155	170	180	190	200	190	215	245

Standard:

CNC system FANUC 0i-MF plus(1), 10.4" display, operating panel and handheld operating unit, electrical cabinet (heat exchanger as standard), spindle air blowing, cooling system, lubrication system, pneumatic system, hydraulic system, slide balancing system, double chain chip removal system, machine guideway protection cover.

Note: Specifications are subject to change without notice.

Optional:

Precision improvement items: magnetic scale, linear scale, rigid tapping; Processing range expansion items: 5T/m^3//15T/m^3//20T/m^3 worktable load-bearing, X-axis travel increase; Automation improvement items: 24T (disc) 32T (chain) 40T (chain) 40T (vertical and horizontal) 60T (vertical and horizontal) tool magazine; Function expansion items: 20/30/50/70 Bar CTS; Safety improvement items: Y-axis optional rust-proof metal telescopic protective cover; System options: Siemens/ Heidenhain/HNC CNC system; Automatic line options: automatic door/fixture cleaning (water blowing, air blowing; Other options: Y-axis guideway, chip trolly position, foundation sinking, screw center cooling, nut bearing cooling, coaxiality compensation and thermal compensation and other precision compensation.

SP-BU III Series
5 Axis Bridge Type Specifications

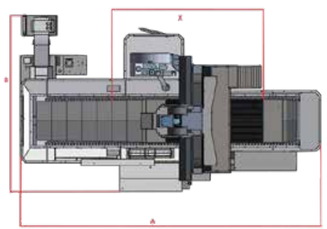
		SP2040BU	SP2060BU	SP2080BU	SP2540BU	SP2560BU
Working range						
X axis travel	mm	4200	6200	8200	4200	6200
Y axis travel	mm	2200	2200	2200	2700	2700
Z axis travel	mm	1000	1000	1000	1000	1000
Distance from table surface to spindle nose	mm	50-1050	50-1050	50-1050	50-1050	50-1050
Distance between two columns	mm	3000	3000	3000	3500	3500
A axis	Deg	±105	±105	±105	±105	±105
C axis	Deg	±360	±360	±360	±360	±360
Worktable						
Worktable length	mm	4000	6000	8000	4000	6000
Worktable width	mm	2000	2000	2000	2500	2500
Max. loading bearing of table	T/ m^2	5	5	5	5	5
T slot size	mm	22×250	22×250	22×250	22×250	22×250
Spindle						
Transmission type		Motorized	Motorized	Motorized	Motorized	Motorized
Main motor power(FANUC)	kW	37/46 (S1/S6)	37/46 (S1/S6)	37/46 (S1/S6)	37/46 (S1/S6)	37/46 (S1/S6)
Square ram size	mm	420*420	420*420	420*420	420*420	420*420
Spindle speed	rpm	24000	24000	24000	24000	24000
Spindle torque	N·m	60/73 (S1/S6)	60/73 (S1/S6)	60/73 (S1/S6)	60/73 (S1/S6)	60/73 (S1/S6)
Spindle taper		HSK-A63	HSK-A63	HSK-A63	HSK-A63	HSK-A63
Feed						
Rapid feed speed(X/Y/Z)	m/min	36/36/36	36/36/36	36/36/36	36/36/36	36/36/36
Accuracy						
Positioning accuracy(X/Y/Z)	mm	0.022/0.016/0.01	0.028(0.014/2000)/0.016/0.01	0.034(0.014/2000)/0.016/0.01	0.022/0.018/0.01	0.028(0.014/2000)/0.018/0.01
Positioning accuracy A/C	Deg	8/8	8/8	8/8	8/8	8/8
Re-positioning accuracy(X/Y/Z)	mm	0.015/0.01/0.008	(0.01/2000)/0.01/0.008	(0.01/2000)/0.01/0.008	0.015/0.012/0.008	(0.01/2000)/0.012/0.008
Re-positioning accuracy A/C	Deg	5/5	5/5	5/5	5/5	5/5
Machine						
Machine dimension	mm	8400*6500*4900	10800*6500*4900	13200*6500*4900	8400*7000*4900	10800*7000*4900
Machine weight	T	55	67	80	57	69

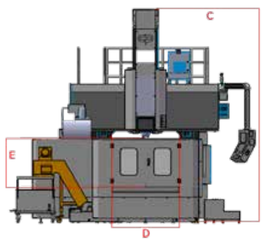
Note: Specifications are subject to change without notice.

SP2580BU	SP3040BU	SP3060BU	SP3080BU	SP4060BU	SP4080BU	SP40100BU
8200	4200	6200	8200	6200	8200	8200
2700	3200	3200	3200	4200	4200	4200
1000	1000	1000	1000	1000	1000	1000
50-1050	50-1050	50-1050	50-1050	50-1050	50-1050	50-1050
3500	4000	4000	4000	5000	5000	5000
±105	±105	±105	±105	±105	±105	±105
±360	±360	±360	±360	±360	±360	±360
8000	4000	6000	8000	6000	8000	8000
2500	3000	3000	3000	4000	4000	4000
5	5	5	5	5	5	5
22×250	22×250	22×250	22×250	22×250	22×250	22×250
Motorized	Motorized	Motorized	Motorized	Motorized	Motorized	Motorized
37/46 (S1/S6)	37/46 (S1/S6)	37/46 (S1/S6)	37/46 (S1/S6)	37/46 (S1/S6)	37/46 (S1/S6)	37/46 (S1/S6)
420*420	420*420	420*420	420*420	420*420	420*420	420*420
24000	24000	24000	24000	24000	24000	24000
60/73 (S1/S6)	60/73 (S1/S6)	60/73 (S1/S6)	60/73 (S1/S6)	60/73 (S1/S6)	60/73 (S1/S6)	60/73 (S1/S6)
HSK-A63	HSK-A63	HSK-A63	HSK-A63	HSK-A63	HSK-A63	HSK-A63
36/36/36	36/36/36	36/36/36	36/36/36	30/30/30	30/30/30	30/30/30
0.034(0.014/2000)/0.018/0.01	0.022/0.02/0.01	0.028(0.014/2000)/0.02/0.01	0.034(0.014/2000)/0.02/0.01	0.028(0.014/2000)/0.022/0.01	0.034(0.014/2000)/0.022/0.01	0.04(0.014/2000)/0.022/0.01
8/8	8/8	8/8	8/8	8/8	8/8	8/8
(0.01/2000)/0.012/0.008	0.015/0.013/0.008	(0.01/2000)/0.013/0.008	(0.01/2000)/0.013/0.008	(0.01/2000)/0.015/0.008	(0.01/2000)/0.015/0.008	(0.01/2000)/0.015/0.008
5/5	5/5	5/5	5/5	5/5	5/5	5/5
13200*7000*4900	8400*7500*4900	10800*7500*4900	13200*7500*4900	10800*8500*4900	13200*8500*4900	15800*8500*4900
82	59	72	86	77	92	108

Machine Size

Standard Cover Design





A Machine length
B Machine width
C Machine max. Height
D Distance of two columns
E Max distance from spindle nose to table top
X X travel

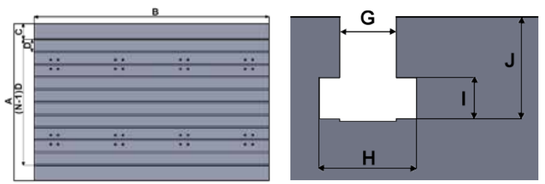
Unit:mm

Model	A	B	C	D	E
SP1016	6000	4000	4100	1250	760
SP1020	6800	4000	4100	1250	760
SP1325	7800	5500	5000	1400	960
SP1330	8800	5500	5000	1400	960
SP1525	7900	5800	5100	1650	960
SP1530	8800	5800	5100	1650	960
SP1540	10800	5800	5100	1650	960
SP1820	7000	6000	5500	2000	1260
SP1830	8800	6000	5500	2000	1260
SP1840	10800	6000	5500	2000	1260
SP1850	12800	6000	5500	2000	1260
SP2230	8800	6400	5500	2400	1220
SP2240	10800	6400	5500	2400	1220
SP2250	12800	6400	5500	2400	1220
SP2260	16000	6400	5700	2400	1220
SP2530	8800	7200	6000	3000	1220
SP2540	10800	7200	6000	3000	1220
SP2550	12800	7200	6000	3000	1220
SP2560	17500	7200	6000	3000	1220

Model	A	B	C	D	E
SP1525II	7900	6000	5100	1900	920
SP1530II	8800	6000	5100	1900	920
SP1540II	10800	6000	5100	1900	920
SP1830II	8800	6200	5500	2400	1220
SP1840II	10800	6200	5500	2400	1220
SP1850II	12800	6200	5500	2400	1220
SP2030II	8800	6600	5500	2800	1220
SP2040II	10800	6600	5500	2800	1220
SP2050II	12800	6600	5500	2800	1220
SP2060II	16000	6600	5700	2800	1220
SP2530II	8800	7500	6000	3600	1220
SP2540II	10800	7500	6000	3600	1220
SP2550II	12800	7500	6000	3600	1220
SP2560II	17500	7500	6000	3600	1220

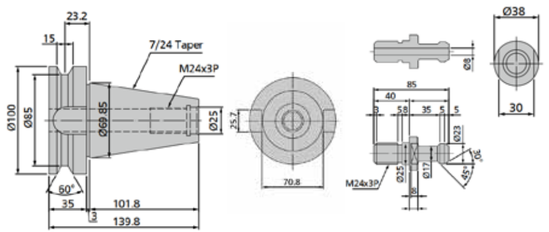
Note: Specifications are subject to change without notice.

Worktable Size



Type \ Size (mm)	A	B	C	D	G	H	I	J	N
SP1016	1000	1600	125	125	22	38	16	40	7
SP1020	1000	2000	125	125	22	38	16	40	7
SP1325	1300	2500	170	160	22	38	16	40	7
SP1330	1300	3000	170	160	22	38	16	40	7
SP1525	1500	2500	110	160	22	38	16	40	9
SP1530	1500	3000	110	160	22	38	16	40	9
SP1540	1500	4000	110	160	22	38	16	40	9
SP1820	1800	2000	100	160	22	38	16	40	11
SP1830	1800	3000	100	160	22	38	16	40	11
SP1840	1800	4000	100	160	22	38	16	40	11
SP1850	1800	5000	100	160	22	38	16	40	11
SP2230	2000	3000	140	160	22	38	16	40	13
SP2240	2000	4000	140	160	22	38	16	40	13
SP2250	2000	5000	140	160	22	38	16	40	13
SP2260	2000	6000	140	160	22	38	16	40	13
SP2530	2500	3000	250	200	28	46	22	50	11
SP2540	2500	4000	250	200	28	46	22	50	11
SP2550	2500	5000	250	200	28	46	22	50	11
SP2560	2500	6000	250	200	28	46	22	50	11

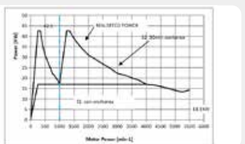
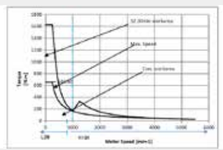
Tool Holder and Pull Studs-BT50



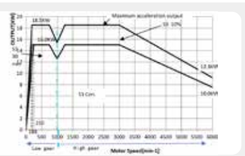
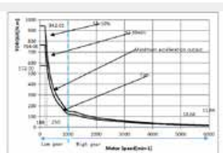
Type \ Size (mm)	A	B	C	D	G	H	I	J	N
SP1525 II	1500	2500	150	200	22	38	16	40	7
SP1530 II	1500	3000	150	200	22	38	16	40	7
SP1540 II	1500	4000	150	200	22	38	16	40	7
SP1830 II	1800	3000	100	200	22	38	16	40	9
SP1840 II	1800	4000	100	200	22	38	16	40	9
SP1850 II	1800	5000	100	200	22	38	16	40	9
SP2030 II	2000	3000	200	200	22	38	16	40	9
SP2040 II	2000	4000	200	200	22	38	16	40	9
SP2050 II	2000	5000	200	200	22	38	16	40	9
SP2060 II	2000	6000	200	200	22	38	16	40	9
SP2530 II	2500	3000	250	200	28	46	22	50	11
SP2540 II	2500	4000	250	200	28	46	22	50	11
SP2550 II	2500	5000	250	200	28	46	22	50	11
SP2560 II	2500	6000	250	200	28	46	22	50	11

Spindle Power Torque Diagram

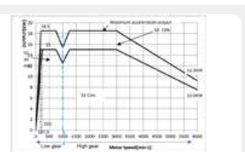
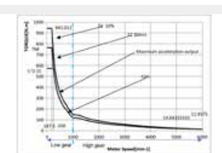
6000rpm Gearhead /Gearbox Spindle

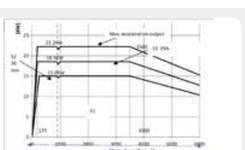
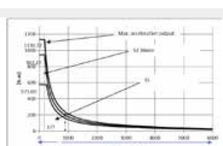
Siemens Motor 1PH8137

Fanuc Motor βiIP30-8000

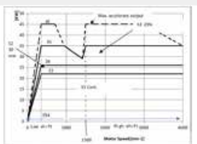
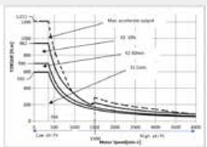



Fanuc Motor αil 22-8000

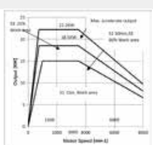
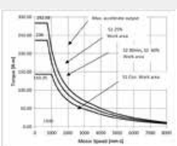
Mitsubishi Motor SJ-DN18.5

4000rpm Gearbox Spindle with CTS (1:5 ratio)

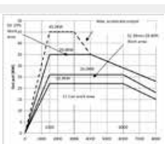
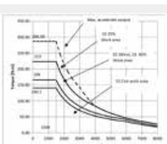



Fanuc Motor αil 22-8000

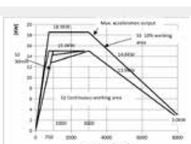
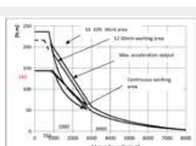
6000rpm Belt Type Spindle

Mitsubishi Motor SJ-DN18.5

Fanuc Motor αil 22-8000

Fanuc Motor βiIP30-8000

ZOPO Application

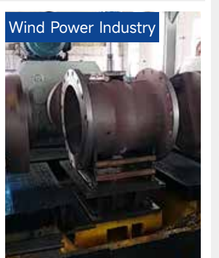
With excellent machining performance and rich optional configuration, ZOPO double column machining centers are able to meet the complex machining needs.

Automobile Industry



Petroleum Industry

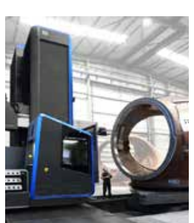

Wind Power Industry



General Industry

Battery Tray

Automobile Die


Milling Head Information

Manual 90 degree milling head

- Head installation to spindle realized through manual adjustment and locked by screws;
- Angle adjustment realized by screws loosening ;
- Tool clamping/unclamping realized by manual installation and locked by pull stud;
- 5 degree indexing toothed disc optional.

Milling head tool holder	BT50
Max.power	38kW
Max.speed	2000rpm
Max.torque	1000N.M
Head installing	Manual
Tool clamping/unclamping	Manual
Head rotating	C axis manual

Manual extension milling head(300mm)

- Head installation to spindle realized through manual adjustment and locked by screws;
- Angle adjustment realized by screws loosening ;
- Tool clamping/unclamping realized by manual installation and locked by pull stud;
- 500mm/700mm extension length optional.

Milling head tool holder	BT50
Max.power	38kW
Max.speed	2000rpm
Max.torque	1000N.M
Head installing	Manual
Tool clamping/unclamping	Manual
Head rotating	C axis manual

Bidirectional right angle milling head

- Head installation to spindle realized through manual adjustment and locked by screws;
- Angle adjustment realized by screws loosening ;
- Tool clamping/unclamping realized by manual installation and locked by pull stud;
- One time one tool installed only, two sides processing one calibration enough .
- 5 degree indexing toothed disc optional.

Milling head tool holder	BT50
Max.power	38kW
Max.speed	2000rpm
Max.torque	1000N.M
Head installing	Manual
Tool clamping/unclamping	Manual
Head rotating	C axis manual

Manual 2 axes milling head

- Head installation to spindle realized through manual adjustment and locked by screws;
- Angle adjustment realized by screws loosening ;
- Tool clamping/unclamping realized by manual installation and locked by pull stud;
- 5 degree indexing toothed disc optional.

Milling head tool holder	BT50
Max.power	38kW
Max.speed	2000rpm
Max.torque	1000N.M
Head installing	Manual
Tool clamping/unclamping	Manual
Head rotating	A/C axis manual

Semi-automatic 90 degree milling head

- Head installation to spindle realized through manual adjustment and locked by screws;
- Angle adjustment realized by screws loosening ;
- Head rotation with 5 degree indexing(optional with 2.5 degree) realized by manual adjustment and hydraulically locked.

Milling head tool holder	BT50
Max.power	38kW
Max.speed	2500rpm
Max.torque	1000N.M
Head installing	Manual
Tool clamping/unclamping	Automatic
Head rotating	Manual
Head locked	Automatic

Automatic 90 degree milling head

- Head installation to spindle realized through automatic engaging with upper module;
- Head rotation with 5 degree indexing(optional with 2.5 dgree) , fully automatic;
- Tool clamping/ unclamping realized by buttons operation;

Milling head tool holder	BT50
Max.power	38kW
Max.speed	3500rpm
Max.torque	1000N.M
Head installing	Automatic
Tool clamping/unclamping	Automatic
Head rotating	Automatic

Semi-automatic 2 axes milling head

- Head installation to spindle realized through automatic clamping with upper module;
- Head rotation with 2.5 degree indexing. C axis automatic rotation, A axis manual rotation, C axis locked hydraulically and A axis locked manually.
- Tool clamping/unclamping realized by manual installation and locked by pull stud.

Milling head tool holder	BT50
Max.power	38kW
Max.speed	3000rpm
Max.torque	1000N.M
Head installing	Automatic
Tool clamping/unclamping	A axis manual
Head rotating	A axis manual/ C axis automatic
Head locked	A axis manual/ C axis automatic

Automatic 2 axes milling head

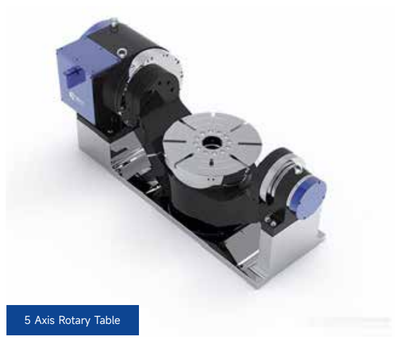
- Head installation to spindle realized through automatic engaging with upper module;
- Head rotation with 2.5 degree indexing , A/C axes rotation fully automatic;
- A axis tool clamping/ unclamping fully automatic.

Milling head tool holder	BT50
Max.power	38kW
Max.speed	3500rpm
Max.torque	1000N.M
Head installing	Automatic
Tool clamping/unclamping	A axis automatic
Head rotating	A axis automatic C axis automatic
Head locked	A axis automatic C axis automatic

Linear Scale

Laser Probe

CTS

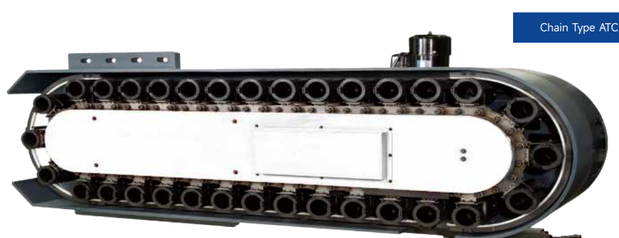


5 Axis Rotary Table

Gearbox

4 Axis Rotary Table

Chain Type ATC

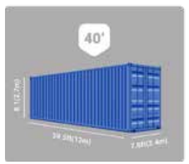


Vertical / Horizontal ATC

Loading Information

Standard container

High cube container



Flat rack container

	20FR	40FR	40HQ	20GP	40GP
SP1016			√	√	
SP1020			√	√	
SP1325			√ √		
SP1330			√ √		
SP1525			√ √	√	
SP1530			√ √	√	
SP1540			√ √	√	
SP1820	√		√ √		
SP1830	√		√ √		
SP1840	√		√ √	√	
SP1850	√		√ √	√	
SP2230	√		√ √		
SP2240	√		√ √		√
SP2250	√		√ √		√
SP2260	√		√ √ √		
SP2530		√	√ √		
SP2540	√	√	√	√	
SP2550	√	√	√ √		
SP2560	√	√	√ √	√	

	20FR	40FR	40HQ	20GP	40GP
SP1525II			√ √		
SP1530II			√ √		
SP1540II			√ √	√	
SP1820II	√		√ √		
SP1830II	√		√ √		
SP1840II	√		√ √	√	
SP1850II	√		√ √	√	
SP2030II	√		√ √		
SP2040II	√		√ √	√	
SP2050II	√		√ √		√
SP2060II	√		√ √ √		
SP2530II		√	√ √		
SP2540II	√	√	√	√	
SP2550II	√	√	√ √		
SP2560II	√	√	√ √	√	

ZOPO Intelligent Equipment Co., Ltd.

No.269 Huangshan Road, Huizhou District,Huangshan City, Anhui Province, China

www.zopocnc.com