

**Features:**

- Feeding axes adopt high precision ROLLER type linear guideway, tailstock adopt BOX guideway
- Adopt similar structure as JAPANESE machine, adopt 30° mono-block slant design, high rigidity, good machining flexibility
- Adopt JAPAN technology, designed by JAPAN engineer, most parts adopt GERMANY/JAPAN/TAIWAN brand
- Adopt modularization design, has strong extended function, easy for various especial configuration choice, such as tool setter etc
- Adopt HT300 resin sand cast iron, after aging treatment and FEA analysis, small distortion, good torsional strength, good heat stability
- Base adopt multilayer strengthening rib, ensure bed's strength and stability
- Adopt box-type spindle structure, has strong rigidity and good thermal stability. Spindle assembly has been dynamically balanced with high precision
- Spindle motor adopt high performance servo motor, big output torque, high speed, wide adjustment range
- The turret adopts three-piece end gear disc, no need to lift the tool plate during tool changing and ensure high tool changing speed. The turret body is directly connected to the linear guideway's slider to obtain better cutting rigidity
- Adopt high precision pre-stretched ball screw, high transmission rigidity
- S300/300M/300Y adopt hydraulic tailstock, tailstock quill move, tailstock body be moved by hook of slide board on BOX guideway
- S300SM/300SY adopt high precision electro-spindle as Sub-spindle
- S300:12T hydraulic-servo tool turret+tailstock; S300M: 12T powered tool turret+CS axes+tailstock; S300Y: 12T powered tool turret+YS axes+tailstock; S300SM:12T powered tool turret+CS axes+Sub-spindle; S300SY:12T powered tool turret+YS axes+Sub-spindle



S300 Mono-block slant bed



S300Y SY interpolation Y axes



Spindle CS axes and hydraulic brake



A2-11 spindle with 12" power chuck



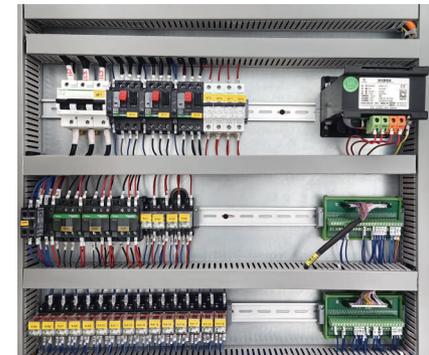
12T hydraulic-servo tool turret



12T own-made powered tool turret



S300SY YS axes and sub-spindle



SCHNEIDER brand electricity parts

Main parts list:

Item	Brand	Item	Brand
CNC controller	GERMANY-SIEMENS/JAPAN-FANUC	Coolant pump	JOINT-VENTURE
Servo driver&motor	GERMANY-SIEMENS/JAPAN-FANUC	Breaker	FRANCE-SCHNEIDER
Spindle bearing	JAPAN-NSK/SWEDEN-SKF	AC contactor	FRANCE-SCHNEIDER
Tool turret	OWN-MADE/GERMANY-SAUTER	Relay	JAPAN-OMRON
Ball screw	TAIWAN-PMI/HIWIN	DC switch power supply	FRANCE-SCHNEIDER
Ball screw bearing	JAPAN-NSK/SWEDEN-SKF	Terminal block	GERMANY-WEIDMULLER
Linear guideway	TAIWAN PMI/HIWIN	Synchronous belt	USA-GATES
Lubrication system	TAIWAN-ISHAN	Nuts	TAIWAN-YINSH
Rotary oil cylinder&chuck	TAIWAN-AUTOGRIP/KOREA-SAMCHULLY	Shaft coupling	GERMANY-R+W/MAYR
Hydraulic parts	TAIWAN/JAPAN		

Standard configuration:

- SIEMENS/FANUC CNC controller
- Hydraulic chuck

Optional configuration:

- Tool setting probe

Specification:

Item	Specification	Unit	BL-S300	BL-S300M	BL-S300Y	BL-S300SM	BL-S300SY
Capacity	Max. swing dia. over bed	mm	Φ670	Φ670	Φ650	Φ695	Φ650
	Max. swing dia. over slide	mm	Φ400	Φ400	Φ395	Φ395	Φ395
	Max. turning length(A2-8 10" chuck) (Distance from chuck face to turret face)	mm	840/1140/1540/ 2040/3040	830/1130/1530/ 2030/3030	800/1100/1500/ 2000/3000	800/1100/1500/ 2000/3000	800/1100/1500/ 2000/3000
	Max. turning length(A2-11 12" chuck) (Distance from chuck face to turret face)*	mm	815/1115/1515/ 2015/3015	805/1105/1505/ 2005/3005	775/1075/1475/ 1975/2975	775/1075/1475/ 1975/2975	775/1075/1475/ 1975/2975
	Max. turning dia.	mm	Φ500	Φ510	Φ510	Φ510	Φ510
Spindle	Spindle transmission type	/	Mechanical spindle, belt-drive				
	Spindle bore	mm	Φ91/Φ127*				
	Spindle end type	/	A2-8/A2-11*				
	Spindle speed	rpm	3500/2500*				
	Spindle max. bar through dia.	mm	Φ75/Φ91*				
	Spindle motor power	kw	15/18.5(FANUC, rated torque A2-8 spindle:143Nm, A2-11 spindle:220Nm)				
	Spindle motor transmission ratio	/	1:2				
	Spindle chuck size	"	A2-8 spindle:10" A2-11 spindle: 12"/15"*				
Sub-spindle	Spindle C axes division accuracy	Deg	/	0.001°	0.001°	0.001°	0.001°
	Sub-spindle transmission type	/	Electro-spindle, direct-drive				
	Sub-spindle bore	mm	Φ63				
	Sub-spindle end type	/	A2-6				
	Sub-spindle rated/max. speed	rpm	2000/4500				
	Sub-spindle max. bar through dia.	mm	Φ52				
	Sub-spindle motor power	kw	18.8(FANUC)				
	Sub-spindle chuck size	"	8"				
	Sub-spindle rapid moving speed	m/min	30				
X/Y/Z axes	Sub-spindle travel (for main spindle A2-8; A2-11*)	mm	865/1165/1565/2065/3065; 840/1140/1540/2040/3040				
	X/Z axes guideway type	/	ROLLER type LINEAR guideway				
	X axes travel	mm	250+20	255+15	255+15	255+15	255+15
	Y axes travel	mm	/	/	±50	/	±50
	Z axes travel(A2-8 10" chuck)	mm	850/1150/1550/2050/3050			825/1125/1525/2025/3025	
	Z axes travel(A2-11 12" chuck)*	mm	825/1125/1525/2025/3025			800/1100/1500/2000/3000	
	X/Z axes rapid moving speed	m/min	30				
Tool turret	Y axes rapid moving speed	m/min	/	/	12	/	12
	Tool turret type	/	Hydraulic-servo tool turret	BMT65 Powered tool turret	BMT65 Powered tool turret	BMT65 Powered tool turret	BMT65 Powered tool turret
	Tool qty	/	12T				
	Vicinal tool changing time	s	0.3				
	Farthest tool changing time	s	0.9				
	Turning tool holder size	mm	25x25				
	Boring bar holder size	mm	Φ40	Φ40/Φ50*	Φ40/Φ50*	Φ40/Φ50*	Φ40/Φ50*
Tailstock	Live tool max. speed	rpm	/	4000(6000*)	4000(6000*)	4000(6000*)	4000(6000*)
	Tailstock quill travel	mm	120				
	Tailstock rapid move speed	m/min	10				
	Tailstock quill taper	/	MT5#				
	Tailstock guideway	/	BOX guideway(hydraulic tailstock), LINEAR guideway(servo tailstock)				
Accuracy	Ex-circle finish turning accuracy	/	IT6				
	Finish turning roughness	mm	Ra 0.4 ~ 1.6				
	Finish turning roundness	mm	≤0.003				
	Positioning accuracy(X/Z)	mm	0.005/0.008				
	Positioning accuracy(Y)	mm	/	/	0.008	/	0.008
	Repeat positioning accuracy(X/Z)	mm	0.002/0.004				
	Repeat positioning accuracy(Y)	mm	/	/	0.004	/	0.004
Others	Coolant pump motor	w	1350				
	Coolant pump flow	m³/h	6				
	Overall size	mm	3550/3850/4520/5020/ 6020x2030x1790	3550/3850/4520/5020/ 6020x2030x1790	3550/3850/4520/5020/ 6020x2030x1900	3650/3950/4620/5120/ 6120x2030x1790	3650/3950/4620/5120/ 6120x2030x1900
	N.W.	kg	6250/6850/7250/ 7800/8750	6300/6900/7300/ 7850/8800	6700/7300/7700/ 8300/9300	6700/7300/7700/ 8300/9300	6900/7500/7900/ 8500/9500

* As option