

**Features:**

- Feeding axes and tailstock guideway adopt high rigidity 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
- Adopt high precision pre-stretched ball screw, high transmission rigidity
- S300H/300MH/300YH adopt hydraulic tailstock, tailstock quill move, tailstock body be moved by hook of slide board and automatic hydraulic lock
- S300SMH/300SYH adopt high precision electro-spindle as Sub-spindle
- S300H: 12T hydraulic-servo tool turret+tailstock; S300MH: 12T powered tool turret+CS axes+tailstock; S300YH: 12T powered tool turret+YS axes+tailstock; S300SMH: 12T powered tool turret+CS axes+Sub-spindle; S300SYH: 12T powered tool turret+YS axes+Sub-spindle



BOX guideway



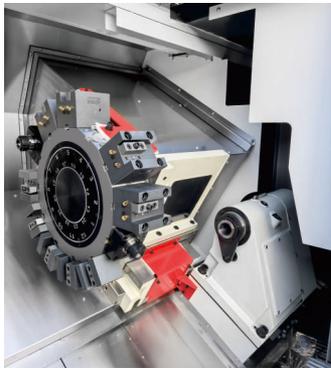
S300MH 300YH CS axes with hydraulic brake



A2-11 spindle with 12" chuck



S300H own-made 12T hydraulic-servo turret



S300MH own-made 12T BMT65 powered tool turret



S300MH SAUTER 12T VDI40 powered tool turret



SCHNEIDER brand electricity parts



FANUC 0i TF CNC controller

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
Lubrication system	TAIWAN-ISHAN	Synchronous belt	USA-GATES
Rotary oil cylinder&chuck	TAIWAN-AUTOGRIP/KOREA-SAMCHULLY	Nuts	TAIWAN-YINSH
Hydraulic parts	TAIWAN/JAPAN	Shaft coupling	GERMANY-R+W/MAYR

Standard configuration:

- SIEMENS/FANUC CNC controller
- Hydraulic chuck

Optional configuration:

- Tool setting probe

Specification:							
Item	Specification	Unit	BL-S300H	BL-S300MH	BL-S300YH	BL-S300SMH	BL-S300SYH
Capacity	Max. swing dia. over bed	mm	Φ695	Φ695	Φ750	Φ695	Φ750
	Max. swing dia. over slide	mm	Φ420	Φ420	Φ350	Φ420	Φ350
	Max. turning length(A2-8 10" chuck) (Distance from chuck face to turret face)	mm	840/1140/1540/ 2040/3040	820/1120/1520/ 2020/3020	835/1135/1535/ 2035/3035	760/1060/1460/ 1960/2960	760/1060/1460/ 1960/2960
	Max. turning length(A2-11 12" chuck)* (Distance from chuck face to turret face)	mm	815/1115/1515/ 2015/3015	795/1095/1495/ 1995/2995	810/1110/1510/ 2010/3010	735/1035/1435/ 1935/2935	735/1035/1435/ 1935/2935
	Max. turning dia.	mm	Φ500	Φ460	Φ460	Φ460	Φ460
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"*				
Spindle C axes division accuracy	Deg	/	0.001°	0.001°	0.001°	0.001°	
Sub-spindle	Sub-spindle transmission type	/	Electro-spindle, direct-drive				
	Sub-spindle bore	mm	Φ66				
	Sub-spindle end type	/	A2-6				
	Sub-spindle max. speed	rpm	1500/5000				
	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	24				
X/Y/Z axes	Sub-spindle travel (for main spindle A2-8; A2-11*)	mm	825/1125/1525/2025/3025; 800/1100/1500/2000/3000				
	X/Z axes guideway type	/	BOX guideway				
	X axes travel	mm	250+20	255+15	260+10	255+15	260+10
	Y axes travel	mm	/	/	±50	/	±50
	Z axes travel(A2-8 10" chuck)	mm	850/1150/1550/ 2050/3050	850/1150/1550/ 2050/3050	845/1145/1545/ 2045/3045	810/1110/1510/ 2010/3010	810/1110/1510/ 2010/3010
	Z axes travel(A2-11 12" chuck)*	mm	825/1125/1525/ 2025/3025	825/1125/1525/ 2025/3025	800/1100/1500/ 2000/3000	785/985/1485/ 1985/2985	785/985/1485/ 1985/2985
	X/Z axes rapid moving speed	m/min	24				
Y axes rapid moving speed	m/min	/	/	12	/	12	
Tool turret	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*
Live tool max. speed	rpm	/	6000	6000	6000	6000	
Tailstock	Tailstock quill travel	mm	120				
	Tailstock rapid move speed	m/min	15				
	Tailstock quill taper	/	MT5#				
	Tailstock guideway	/	BOX guideway				
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	0.006/0.008				
	Positioning accuracy(Y)	mm	/	0.008	/	/	0.008
	Repeat positioning accuracy(X/Z)	mm	/	0.003/0.005	/	/	0.005
Others	Repeat positioning accuracy(Y)	mm	/	0.005	/	/	0.005
	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	
	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	