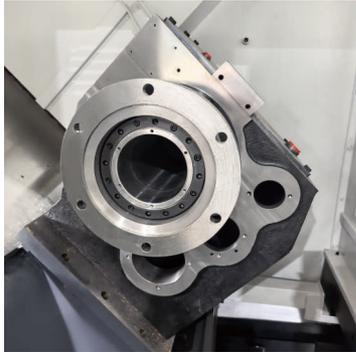


**Features:**

- Feeding axes and tailstock guideway adopt high rigidity BOX guideway
- Adopt similar structure as JAPANESE machine, adopt mono-block(S500H/500MH: 45°, S500YH: 30°+30°Y axes) 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 gear box spindle, 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
- Adopt hydraulic tailstock, tailstock quill move, tailstock body be moved by hook of slide board and automatic hydraulic lock
- S500H: 12T hydraulic-servo tool turret+tailstock; S500MH: 12T powered tool turret+CS axes+tailstock; S500YH: 12T powered tool turret+interpolation YS axes+tailstock

JAPAN TECHNOLOGY, 15"/18"/21" CHUCK, 12T TOOL TURRET, HEAVY-DUTY TYPE, BOX GUIDEWAY



Spindle with gear box(uncompleted)



Machine inside



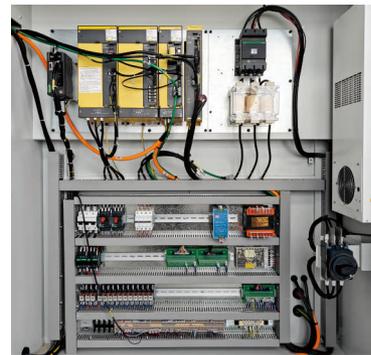
Hydraulic chuck



SAUTER 12T BMT75 powered tool turret



Hydraulic tailstock



Electricity cabinet



FANUC 0i TF CNC controller

### Main parts list:

Item	Brand	Item	Brand
CNC controller	JAPAN-FANUC	Coolant pump	Joint-venture
Servo driver&motor	JAPAN-FANUC	Breaker	FRANCE-SCHNEIDER
Spindle bearing	JAPAN-NSK/SWEDEN-SKF	AC contactor	FRANCE-SCHNEIDER
Tool turret	Own-made/GERMANY-SAUTER(GPM)	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:

- FANUC 0i TF(1) CNC controller
- Hydraulic chuck

### Optional configuration:

- Tool setting probe

Specification:										
Item	Specification	Unit	BL-S500H		BL-S500MH		BL-S500YH			
Capacity	Max. swing dia. over bed	mm	Φ830							
	Max. swing dia. over slide	mm	Φ650		Φ650		Φ620			
	Max. turning length	mm	1100/1600/2100/ 3100/4100/5100	1050/1550/2050/ 3050/4050/5050	985/1485/1985/ 2985/3985/4985	935/1435/1935/ 2935/3935/4935	925/1425/1925/ 2925/3925/4925	875/1375/1875/ 2875/3875/4875		
	Standard turning dia.	mm	Φ330(12T: Φ270*)		Φ300		Φ300			
	Max. turning dia.	mm	Φ780		Φ700		Φ620			
Spindle	Spindle bore	mm	Φ126	Φ205	Φ126	Φ205	Φ126	Φ205		
	Spindle end type	/	A2-11	A2-15	A2-11	A2-15	A2-11	A2-15		
	Spindle bearing I.D.	mm	Φ170	Φ260	Φ170	Φ260	Φ170	Φ260		
	Spindle speed	rpm	2000/1500*	1200	2000/1500*	1200	2000/1500*	1200		
	Spindle max. bar through dia.	mm	Φ115	Φ180	Φ115	Φ180	Φ115	Φ180		
	Spindle motor power	kw	22/26(30/37*)	30/37	22/26(30/37*)	30/37	22/26(30/37*)	30/37		
	C axes division	°	/		0.001		0.001			
	Spindle chuck size	"	15"/18"*	21"	15"/18"*	21"	15"/18"*	21"		
	X/Y/Z axes	X/Y/Z axes guideway type	/	BOX guideway						
		X axes travel	mm	390+20						
Y axes travel		mm	/		/		±80			
Z axes travel		mm	1150/1650/2150/3150/4150/5150	1150/1650/2150/3150/4150/5150	1150/1650/2150/3150/4150/5150	1150/1650/2150/3150/4150/5150	1048/1548/2048/3048/4048/5058			
X axes rapid moving speed		m/min	12							
Y axes rapid moving speed		m/min	/		/		6			
Z axes rapid moving speed		m/min	20/16/16/12/12/12		20/16/16/12/12/12		20/16/12/12/12/12			
X axes motor		kw	4(FANUC)		4(FANUC)		7(FANUC)			
Y axes motor		kw	/		/		7(FANUC)			
Z axes motor		kw	4/4/7/7/7/7 (FANUC)	7(FANUC)	4/4/7/7/7/7 (FANUC)	7(FANUC)	7(FANUC)	7(FANUC)		
Tool turret	Tool turret type	/	Hydraulic-servo tool turret		BMT75 powered tool turret		BMT75 powered tool turret			
	Tool qty	/	10T(12T*)		12T		12T			
	Vicinal tool changing time	s	0.5							
	Farthest tool changing time	s	1.3							
	Index motor	kw	1.2							
	Live tool motor	kw	/		5.5/7.5(7.5/11*)		5.5/7.5(7.5/11*)			
	Turning tool holder size	mm	32x32							
	Boring bar holder size	mm	Φ50(60*)		Φ50		Φ50			
Tailstock	Live tool max. speed	rpm	/		4000		4000			
	Tailstock quill travel	mm	120(150*)							
	Tailstock quill dia.	mm	Φ120(160*)							
	Tailstock quill taper	/	MT5# Rotary type (MT6#*)							
	Tailstock guideway	/	BOX guideway							
Accuracy	Tailstock movement	mm	1000/1500/2000/3000/4000/5000	1000/1500/2000/3000/4000/5000	1000/1500/2000/3000/4000/5000	1000/1500/2000/3000/4000/5000	915/1415/1915/2915/3915/4915			
	Ex-circle finish turning accuracy	/	IT6							
	Finish turning roughness	mm	Ra 0.4 ~ 1.6							
	Finish turning roundness	mm	≤0.003							
	Positioning accuracy(X/Y/Z)	mm	0.005/none/0.008		0.005/none/0.008		0.005/0.008/0.008			
Others	Repeat positioning accuracy(X/Y/Z)	mm	0.003/none/0.004		0.003/none/0.004		0.003/0.004/0.004			
	Coolant pump motor	w	1000							
	Coolant pump flow	m³/h	5							

\* As option