

KAWAMURA

KAWAMURA

KAWAMURA MACHINERY

JAPANESE TECHNOLOGY

S SUPER-PRECISE SERIES

FLAT BED CNC LATHE



KAWAMURA MACHINERY(NINGBO) CO.,LTD.

Add.: No. 1818, Shuntai Road, Jiaochuan,Zhenhai District, Ningbo,China. P.C.:315207

www.kawamuracnc.com

Email: sales@kawamuracnc.com

Machines' design and specification are subjected to update without notice

2025A

www.kawamuracnc.com

KAWAMURA MACHINERY(NINGBO) CO.,LTD.



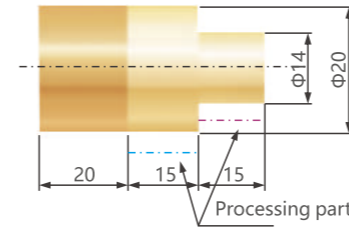
Features:

- Adopt flat bed with BOX guideway, super high accuracy and accuracy holding
- Super compact structure(similar as JAPAN machine)
- Adopt JAPAN technology, designed by JAPAN engineer
- Turning accuracy: ±1 μm
- Min input in controller: 0.1 μm
- Same assembly standard as JAPAN
- Guideway adopt super high quality cast iron with quenching, grinding and scraping, ensure the high precision retaining
- Big X axes and Z axes travel
- Adopt high precision pre-stretched ball screw
- Mount gang tool, can also choose 6T electric tool turret
- Suitable for small workpieces' precise machining
- Can mount right-setting or back-setting chip conveyor

Super-high processing accuracy

- Spindle adopt super precise angular bearing to achieve the high process precision(< 0.2μm for both roundness and surface roughness)

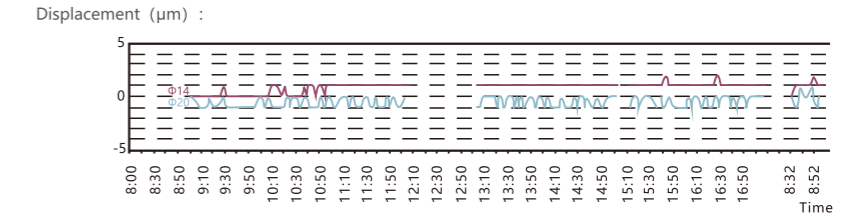
- Test cutting workpiece



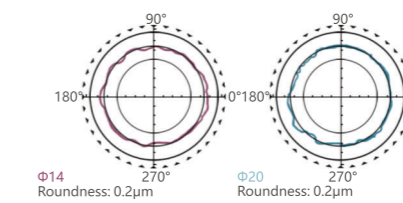
- Processing condition

- Machined material: Hpb59-1
- Spindle speed: 3000rpm
- Feed: 0.03mm/rev
- Cutting depth: 0.1mm(radius diameter)
- Too used: synthetic diamond

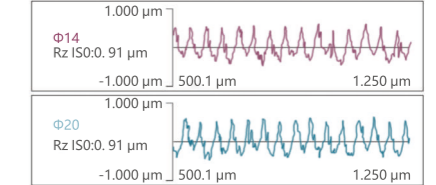
- Dimension accuracy(displacement μm)



- Circularity



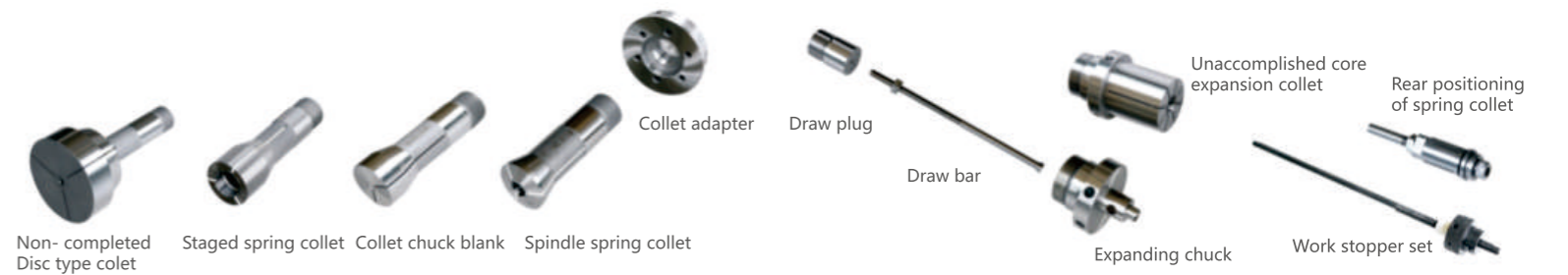
- Surface roughness



Samples of processed workpiece



Various collet chucks



Standard configuration:

- FANUC Oi TF CNC controller
- Pneumatic collet
- Gang tool

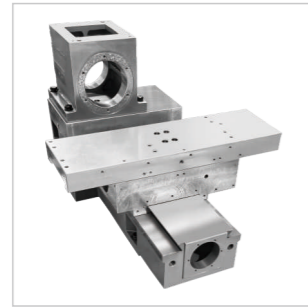
Optional configuration:

- SYNTEC CNC controller
- Various live tool holders
- Bar feeder
- Oil mist collector
- Chip conveyor
- Tailstock
- Parts catcher&conveyor
- Tool back air blowing
- Tool back oil blowing
- Collet slow air blowing
- High pressure
- Air gun
- Bar puller
- Outside counter
- CS contouring control
- Various automation device
- Spindle index positioning locking
- Various pneumatic/hydraulic collet & chuck

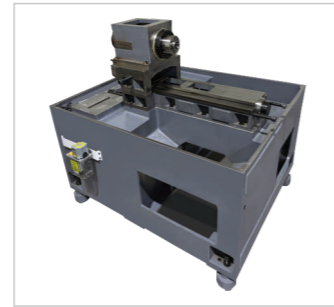
JAPANESE TECHNOLOGY, BOX GUIDEWAY, SUPER-SMALL & HIGH PRECISION



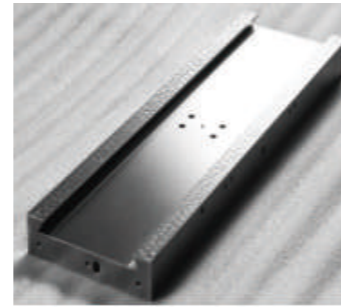
S20H base



S20H high quality cast iron for bed



S30H frame



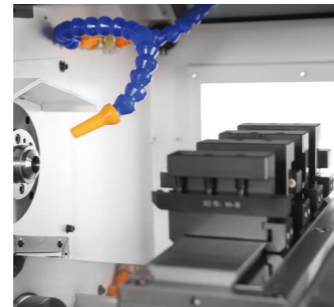
Swallow tail shape BOX guideway



Standard pneumatic clamping



XZ axes BOX guideway with precise scrapping



Precise gang tool device



Right-setting coolant tank



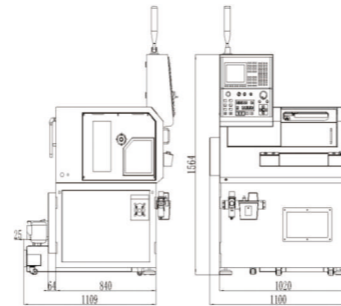
SMC pneumatic parts and LUBE lubrication pump



S20H with automation



FANUC 0i TF CNC controller



S20H dimension

Specification:

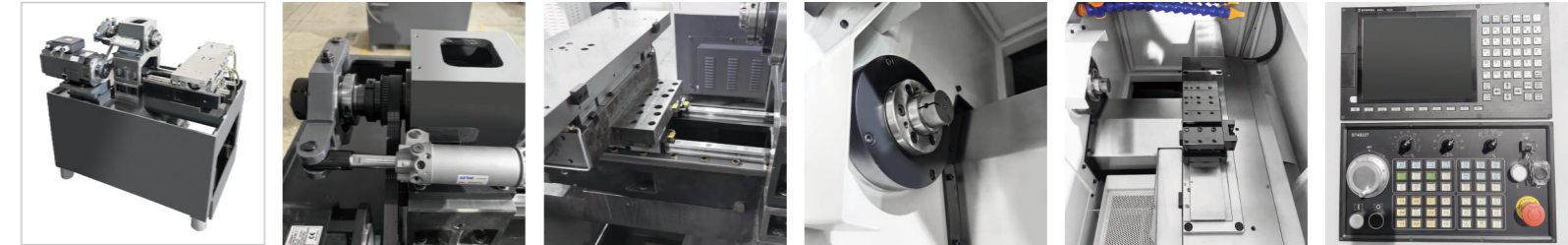
Item	Specification	Unit	BL-S20H	BL-S30H
Capacity	Max. swing dia. over bed	mm	Φ240	Φ280
	Max. swing dia. over slide	mm		Φ120
	Max. turning length	mm		100
	Max. turning dia.	mm		Φ100
Spindle	Max. bar through dia.	mm		Φ20
	Max. spindle speed	rpm		6000
X/Z axes	Spindle motor power	kw		3.7(FANUC)
	X axes travel	mm	200	250
	Z axes travel	mm	180	220
	X/Z axes motor	kw		0.75(FANUC)
	X/Z axes rapid moving speed	m/min		15
	X/Z axes min input unit in controller	mm		0.0001/0.0001
Tool post	X/Z axes min movement unit in controller	mm		0.00005/0.0001
	Tool turret type	/		Gang tool/6T electric tool turret*
Tailstock	Toolshank size	mm		12×12(16×16*), Φ16(20*/25*)
	Tailstock	/		Option
Others	Coolant motor	hp		1/4
	Total power	KVA		6
	Spindle center height	mm	900	960
Overall size	Overall size	mm	1550×1280×1560 (include right-set coolant tank) 1140×1420×1560 (include back-set coolant tank)	1290×1700×1620 (include back-set coolant tank)
	N.W.	kg	800	1400

*As option

Main parts list:

Item	Brand	Item	Brand
CNC controller	JAPAN-FANUC	Ball screw bearing	JAPAN-NSK
X,Z axes driver&motor	JAPAN-FANUC	Lubrication system	JAPAN-LUBE
Spindle driver&motor	JAPAN-FANUC	Pneumatic parts	JAPAN-SMC
Spindle unit	OWN-MADE	Hydraulic parts	TAIWAN/JAPAN
Spindle bearing	JAPAN-NSK P4 class	Coolant pump	JOINT-VENTURE
Tool turret*	OWN-MADE	Electricity parts	FRANCE-SCHNEIDER/JAPAN-FUJI/OMORON
Ball screw	JAPAN-THK	DC switch power supply	TAIWAN-MEANWELL

JAPANESE TECHNOLOGY, LINEAR GUIDEWAY, SUPER-SMALL & HIGH PRECISION



S20L frame Pneumatic clamping device THK ball screw and linear guideway High precise collet High precise gang tool SYNTEC 22TA CNC controller

Specification:

Item	Specification	Unit	BL-S20L	BL-S30L
Capacity	Collet/chuck size	"	4"	5"
	Max. swing dia. over bed	mm		Φ240
	Max. swing dia. over slide	mm	Φ118	Φ135
	Max. turning length	mm	90	100
	Max. turning dia.	mm	Φ90	Φ100
Spindle	Max. distance from tool holder face to collet face	mm		185
	Spindle bore	mm	Φ26	Φ37
	Max. bar through dia.	mm	Φ20	Φ30
	Max. spindle speed	rpm		6000
	Spindle motor power	kw		3.7
X/Z axes	X axes travel	mm	200	260
	Z axes travel	mm		180
	X/Z axes rapid moving speed	m/min		18
	X/Z axes ball screw O.D.	mm		Φ20/25
	X/Z axes min input unit in controller	mm		0.0001/0.0001
Tool post	X/Z axes min movement unit in controller	mm		0.00005/0.0001
	Tool post type	/	Gang tool	Gang tool/8T tool turret*
Others	Toolshank size	mm		12×12(16×16*), Φ25
	Overall size	mm		1200×1520×1500
	N.W.	kg	1100	1200

*As option

Main parts list:

Item	Brand	Item	Brand
CNC controller	JAPAN-FANUC/TAIWAN-SYNTEC	Ball screw bearing	JAPAN-NSK
Servo driver&motor	JAPAN-FANUC/TAIWAN-SYNTEC	Lubrication system	JAPAN-LUBE/TAIWAN BAOTN
Spindle unit	OWN-MADE	Pneumatic parts	TAIWAN-AIRTAC
Spindle bearing	GERMANY-FAG/JAPAN-NSK	Electricity parts	FRANCE-SCHNEIDER/JAPAN-FUJI/GERMANY-WAGO
Ball screw	JAPAN-THK	DC switch power supply	TAIWAN-MEANWELL
Linear guideway	JAPAN-THK		

Standard configuration:

- FANUC Oi TF CNC controller
- Pneumatic collet
- Gang tool

Optional configuration:

- SYNTEC 22TA CNC controller
- Various live tool holders
- Bar feeder
- Chip conveyor
- Parts catcher
- Various pneumatic/hydraulic collet & chuck

Features:

- Adopt flat bed with LINEAR guideway, high accuracy
- Super compact structure (similar as JAPAN machine)
- Adopt JAPAN technology, designed by JAPAN engineer
- Turning accuracy: ±1μm
- Same assembly standard as JAPAN
- Big X axes and Z axes travel
- Adopt high precision ball screw
- Suitable for small workpieces' precise machining