



- Please understand that the technical specifications and photos of the product may be changed without notice.
- The cutting data in the product manual will change according to the room temperature, cutting materials, cutting conditions, etc. Please note that these data are not guaranteed values.
- Reprinted and copied without authorization is prohibited.

Let's make things better



TAKAZAKI Intelligent Equipment (Lishui) Co., Ltd
Zhejiang TAKAZAKI Intelligent Equipment Manufacturing Co., Ltd

Company Add:

No. 101, Shangxu Road, Nanmingshan Street, Liandu District, Lishui City, Zhejiang Province, China
No. 68, North Chanhe Road, Liushi Town, Yueqing City, Zhejiang Province, China

COMPANY INTRODUCTION

High-end private machine tool manufacturing enterprise integrating scientific research, design, manufacturing and sales

Takazaki Intelligent Equipment (Lishui) Co., Ltd., located in the picturesque Lishui City of Zhejiang Province, is a hi-tech enterprise dedicated to R&D, design, manufacturing and sales of high-end machine tools.

The company has gathered many industry elites, and the technical team accounts for more than half of the total, equipped with cutting-edge production equipment imported from Japan and Germany. We are committed to independent innovation and continuous pursuit of excellence, aiming at building industry-leading intelligent equipment manufacturing capacity. With the craftsmanship spirit of constantly striving for perfection, Takazaki intelligent equipment is steadily moving towards the international arena and striving to become the preferred partner of global customers.



DEVELOPMENT HISTORY

Proven **technical expertise** and **extensive experience** with **outstanding delivery performance** validates **high quality** and **reliability**

2030

The new series V8, V11 lead the future (Target: expected sales volume of 10,000 units/year)

2022

More than 60,000 square meters of new Lishui plant has been put into production

2020

Established Zhejiang TAKAZAKI Intelligent, and successfully developed the first channel grinder

2019

Annual sales of vertical and horizontal machining center more than 1000 units

2007-2008

Successfully developed vertical and horizontal machining centers

2006

Start the production of CNC processing center

1999

As one of the earliest users of machine tools in Taiwan, we began to use engraving and milling machines and machining centers

1989

Engaged in common milling machine, mould and machining



SALES NETWORK
& CERTIFICATES

Spring blossoms and autumn fruits,
the marketing system we have carefully built has now
yielded fruitful results,
The marketing network is spreading like vines across the
country,
As a strong intelligent manufacturer of CNC equipment in
the industry,
We have provided cost-effective products for nearly 30
provinces,
We have taken further steps towards internationalization
Opened a new chapter of close cooperation with countries
in Europe, Southeast Asia and other regions.





PROCESSING
EQUIPMENT

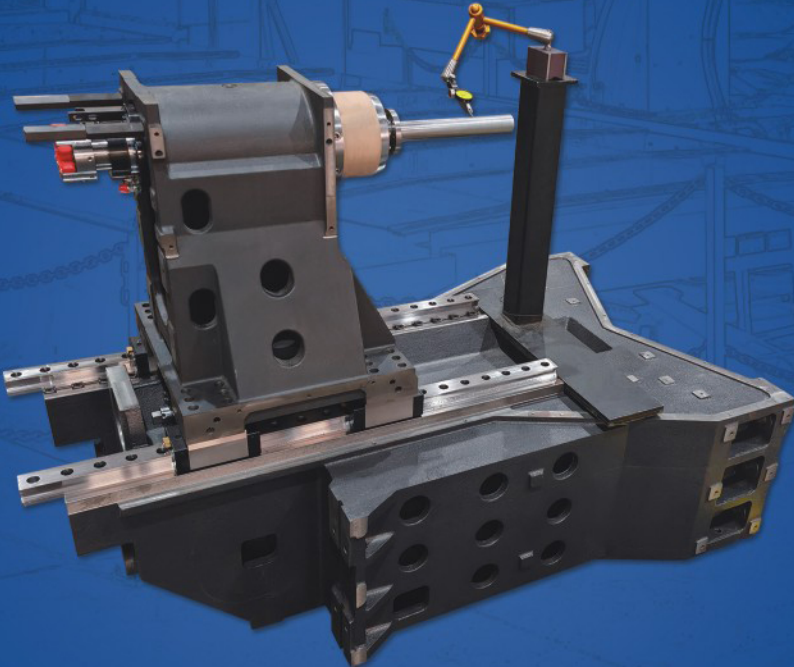
Takazaki Intelligent Equipment (Lishui) Co., Ltd. has elaborately planned and deployed a series of world-class manufacturing equipment, covering Japanese Okuma Longmen pentahedral machine tool and Taiwan Nante, Fuyu guide rail grinding machine and other industry flagship models. With excellent high precision and high performance, these equipment, combined with our strict inspection process, jointly establish the solid foundation of the quality management system to ensure the consistent and highly reliable product quality.

In addition, the company is committed to introducing international leading manufacturing technologies, deeply integrating the cutting-edge achievements of Japan and Germany in the field of high-end equipment manufacturing, and continuously expanding and optimizing its production process chain. These strategic initiatives significantly enhance GA's strength in R&D innovation and production efficiency, enabling us to stay at the forefront in a competitive market environment and to respond fully and flexibly to meet the personalized needs of various customers.



REFINING PROCESS

Using high-quality, precise, and cutting-edge machine tool testing equipment, with guaranteed quality, trustworthy! Our equipment adopts advanced technology and can accurately detect machine tools. Various indicators help you discover and solve potential problems in a timely manner, improve product quality and production efficiency, and embark on a journey of efficient production!



CONTENTS



V High-speed high-precision vertical machining center 10



P Heavy high-precision vertical machining center 12



M Mould vertical machining center 14



T Drilling and tapping machining center 16



G Five-axis machine series 18



HA Heavy Cutting Horizontal Machining 20



HS High-speed horizontal machining 22



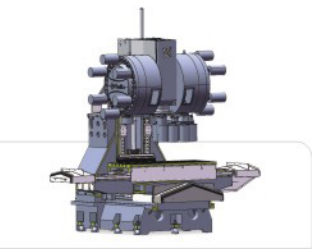
GMT Gantry milling machine 24



S Gantry channel grinder 26



LR Line rail grinder 28



F Non-standard series 30



X Optional configuration 32

V SERIES

High-speed High-precision Vertical Machining Center Series



Product Features

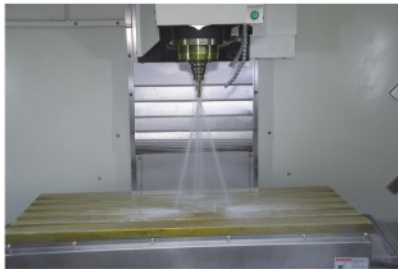
- Fast moving speed: 48M/Min
 - Three-axis acceleration: 0.6G
 - Three-axis servo motor torque: 18/18/28Nm
 - 24T fast tool magazine
- Gas circuit component: SMC, Japan
 - Electrical components: Schneider, France
 - Three-axis: Φ 40-C3 screw rod
 - Three-axis: 35-45-P line rail



V series parameter table

Item	Unit	V8	V9	V11	V13
Table size	mm	1100*430	1100*520	1300*600	1500*650
Scope of processing	mm	800*450	900*560	1100*600	1300*700
T slot size (center distance X slot width X slot number)	mm	125*18*3	100*18*5	100*18*5	100*18*5
Working platform load	kg	500	700	800	1200
X/Y/Z axis stroke	mm	800/450/550	900 / 560 / 600	1100*600*600	1300/700/600
Distance from spindle nose to worktop	mm	150-700	150-750	150-750	150-750(300-900)
Distance between main shaft center and column cover surface	mm	455	565	605	705
Taper of spindle		BT40	BT40 / HSK63A	BT40	BT40/BT50
Spindle speed	rpm	Standard: 8000 (optional: 12000, 18000)	8000/12000/15000	8000(12000)	8000(6000)
Drive mode of spindle		Standard: belt (optional: direct-coupled, electro spindle)	Belt type (Direct -coupled)	Belt type (Direct -coupled)	Belt type (Direct -coupled)
Spindle motor	KW	Standard of SYNTEC system: 15 (SYNTEC direct-coupled: 11)	Standard of FANUC system: 11-15	Standard of SYNTEC system: 16.5	15-18.5(18.5-22)
Continuous rated torque	Nm	SYNTEC system 52.5 (77.8)	71.6 / 52.5	70(105)	95.5(102)
Cutting feed (X\Y\Z)	m/min	1~16	1~16	1~16	1~16
Fast feed (X\Y\Z)	m/min	48/48/48	36/36/36	36/36/36	36/36/36
Positioning accuracy	mm	0.008	0.008	0.008	0.008
Repeated positioning accuracy	mm	0.005	0.005	0.005	0.005
Number of tools	T	24	24	24	24
Tool change mode		Disk cutter arm	Disk cutter arm	Disk cutter arm	Disk cutter arm
Max. tool diameter	mm	φ 80(φ 150)	φ 80(φ 150 adjacent space)	φ 80(φ 150 adjacent space)	φ 80(φ 150 adjacent space)
Maximum tool length	mm	300	300	300	300
Maximum tool weight	kg	7	7	7	8
Tool shank form & rivet		BT40-45°	BT40-45° / HSK63A	BT40-45°	BT40-45°
Tool change time (T-T)	s	1.8	2	2	2.5
Power supply	Kva	15	25	30	35
Machine weight	kg	4300	5500	6200	7500
Floor area (L × W × H)	mm	2240*2346*2826	2500*2700*2900	2910*2800*3000	3480*3370*3370

Product display



P SERIES

Heavy High-precision Vertical Machining Center Series



Product Features

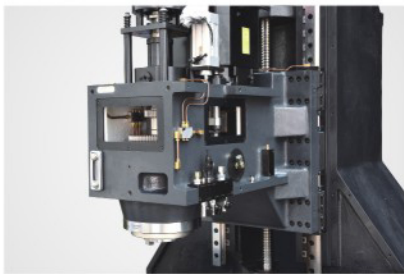
- Gearbox 4x high torque spindle box
- Solid rack structure design
- 14 inch touch screen high response control system
- Equipped with double chain plates for convenient chip removal
- Comes with Z-axis balance system
- Three axis matching high torque servo motor



P series parameter table

Item		Unit	P-1055	P-1160	P-1370	P-1690	P-1890
Work bench	Table size	mm	1300*550	1300*600	1500*650	1800*900	2000*900
	Scope of processing	mm	1000*550	1100*600	1300*700	1600*900	1800*900
	T slot size (center distance X slot width X slot number)	mm	100*18*5	100*18*5	100*18*5	120*22*7	164*22*5
	Working platform load	kg	1200	1200	1600	2000	2500
Travel	X/Y/Z axis stroke	mm	1000/550/600	1100/600/600	1300/700/700	1600/900/800	1800/900/800
	Distance from spindle nose to worktop	mm	150-750(300-900)	150-750(300-900)	150-850(300-1000)	150-950	150-950
	Spindle center to Z-axis shield surface	mm	560	605	710	920	920
Spindle	Taper of spindle		BT40/BT50	BT40/BT50	BT50	BT50	BT50
	Spindle speed	rpm	8000(6000)	8000(6000)	6000	6000	6000
	Drive mode of spindle		Belt type (Gear type 1:4)	Belt type (Directly-coupled type)	Belt type (Gear type 1:4)	Belt type (Gear type 1:4)	Belt type (Gear type 1:4)
Spindle motor	Spindle motor (Fanuc system)	KW	15-18.5(18.5-22)	15-18.5(18.5-22)	15-18.5(18.5-22)	18.5-22(22-26)	22-26
	Torque	Nm	Continuous rated torque is 95.5(118)	Continuous rated torque is 95.5(118)	Continuous rated torque is 95.5(118)	Continuous rated torque is 118(140)	Continuous rated torque is 140(191)
Feed rate	Cutting feed (X/Y/Z)	m/min	1~16	1~16	1~16	1~16	1~16
	Fast feed (X/Y/Z)	m/min	30/30/30	36/36/36	30/30/24	24/24/24	24/24/24
Accuracy	Positioning accuracy	mm	0.005	0.005	0.005	0.005	0.005
	Repeated positioning accuracy	mm	0.003	0.003	0.003	0.003	0.003
Automatic tool change system	Number of tools	T	24	24	24	24	24
	Tool change mode		Disc cutter arm type	Disc cutter arm type	Disc cutter arm type	Disc cutter arm type	Disc cutter arm type
	Max. tool diameter	mm	φ80(φ150 adjacent space)	φ80(φ150 adjacent space)	φ125(φ200 adjacent space)	φ125(φ200 adjacent space)	φ125(φ200 adjacent space)
	Maximum tool length	mm	300	300	350	350	350
	Maximum tool weight	kg	8	8	15	15	15
	Tool shank form		BT40	BT40	BT50	BT50	BT50
	Tool change time (T-T)	s	2.5(T-T)	2.5(T-T)	3.5(T-T)	3.5(T-T)	3.5(T-T)
Other	Power supply	Kva	30	30	40	40	50
	Machine weight	kg	7800	7500	11000	13500	16500
	Floor area (L * W * H - including water tank)	mm	4250*2580*3200	4170*2550*3000	5050*2930*3600	6100*4000*3850	6500*4100*3900

Product display



M SERIES

Mould Vertical Machining Center Series



Product Features

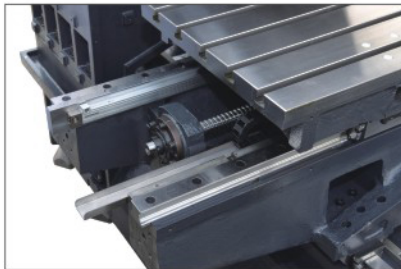
- High precision constant temperature control technology for screw rods
 - 24T, 32T, 40T, 48T, 64T, 80T offers a wide selection of tool quantities and specifications
 - Three axis servo motor torque 18/18/28NM
- High rigidity rack structure design
 - Three axis pre stretched structure
 - Three axis 45 roller P-stage and above guide rail configuration



M series parameter table

Item		Unit	M8	M9	M10
Work bench	Table size	mm	1100*430	1100*520	1300*550
	Scope of processing	mm	800*450	900*560	1000*550
	T slot size (center distance X slot width X slot number)	mm	125*18*3	100*18*5	100*18*5
	Working platform load	kg	500	700	1200
Travel	X/Y/Z axis stroke	mm	800/450/550	900/560/600	1000/550/600
	Distance from spindle nose to worktop	mm	150-700	150-750	150-750
	Spindle center to Z-axis shield surface	mm	455	565	560
Spindle	Taper of spindle		BT40/HSK63A	BT40/HSK63A	HSK63A
	Spindle speed	rpm	12000/15000	8000/12000/15000	15000
	Drive mode of spindle		Directly coupled type	Belt type (Directly-coupled type)	Directly coupled type
Spindle motor	Spindle motor (Fanuc system)	KW	11-15	11-15	11-15
	Torque	Nm	Continuous rated torque is 52.5	Continuous rated torque is 70/52.5	Continuous rated torque is 52.5
Feed rate	Cutting feed (X\Y\Z)	m/min	1-10000	1-16000	1-16000
	Fast feed (X\Y\Z)	m/min	30000	30000/36000	30000
Accuracy	Positioning accuracy	mm	0.005	0.005	0.005
	Repeated positioning accuracy	mm	0.003	0.003	0.003
Automatic tool change system	Number of tools	T	24	24	32
	Tool change mode		Disc cutter arm type	Disc cutter arm type	Disc cutter arm type
	Max. tool diameter	mm	φ 80(φ 150)	φ 80(φ 150)	φ 78(φ 150)
	Maximum tool length	mm	300	300	300
	Maximum tool weight	kg	7	7	7
	Tool shank form		HSK63A	BT40-45°	HSK63A
	Tool change time (T-T)	s	2.0	2.0	2.0
Other	Power supply	Kva	15	25	30
	Machine weight	kg	4500	5500	7600
	Floor area (L * W * H - including water tank)	mm	2240*2346*2826	2500*2700*2900	4250*2580*3200

Product display



T SERIES

Drilling & Tapping Machining Center Series



Product Features

- The brand new series oi-MF (PLUS) adopts the touch screen design, with better operability, and the display and key input operation are further simplified.
 - X-axis multi-piece telescopic cover design, smaller floor space
 - Z-axis 2.2G (load test of S500)
- Large angle protection of Y axis, more smooth chip removal and guiding swarf liquid
 - Z-axis armor shield, better sealing and more reliable protection
 - Standard torque 35Nm (5.5kW)
 - High-torque specification 72Nm (7.5kW)

T series parameter table

	Item	Unit	T-600	T-700	V8F
Work bench	Table size	mm	700*420	800*420	1100*430
	Scope of processing	mm	600*450	700*450	800*450
	T slot size (center distance X slot width X slot number)	mm	14T*3*125	14T*3*125	125*18*3
	Working platform load	kg	250	250	500
Travel	X/Y/Z axis travel	mm	600**450*330	700*450*330	800*450*495
	Distance from spindle nose to worktop	mm	150-480	150-480	150-645
	Distance from spindle center to column track surface	mm	464	464	501
	Taper of spindle		BT30(φ110)	BT30(φ110)	BT40
Spindle	Spindle speed	rpm	12000	12000	12000
	Drive mode of spindle		Directly coupled type	Directly coupled type	Directly coupled type
Spindle motor	Spindle motor (Fanuc system)	KW	5.5	5.5	11
	Torque	Nm	35	35	52.5
Feed rate	Cutting feed (X\Y\Z)	m/min	1-12	1-12	1-10
	Fast feed (X\Y\Z)	m/min	48/48/48	48/48/48	48/48/48
Accuracy	Positioning accuracy	mm	0.008	0.008	0.008
	Repeated positioning accuracy	mm	0.005	0.005	0.005
Automatic tool change system	Number of tools	T	21	21	20
	Tool change mode		Clamp arm type	Clamp arm type	Clamp arm type
	Max. tool diameter	mm	60(adjacent air space 80)	60(adjacent air space 80)	Φ100
	Maximum tool length	mm	250	250	250
	Maximum tool weight	kg	3 Partial load/ 10 full load	3 Partial load/ 10 full load	5
	Tool shank form		BT30	BT30	BT40
	Tool change time (T-T)	s	1.35	1.35	1.5
Other	Power supply	Kva	10	10	15
	Chip removal mode		Rear chip punching	Rear chip punching	Rear chip punching
	Machine weight(Approx.)	kg	2800	3000	4230
	Floor area (L * W * H - including water tank)	mm	1750*2451*2500	1880*2351*2500	2240*2346*2730

Product display



G series parameter table

Item		Unit	G200/5AX	G400/5AX
Five-axis rotary table	Diameter of worktable	mm	Φ200	Φ400
	T-shaped groove	mm	(4) 12H7	(8) 12H7
	Height of rotation center of tilt axis	mm	185	270
	Tilting angle (adjustable)	Deg	Negative 30~positive 120	Negative 30~positive 120
	Reduction ratio tilt axis		1:50	1:50
	Reduction ratio shaft		1:40	1:50
	Maximum rotating speed of workbench	RPM	75	60
Travel	Scope of processing	mm	Φ450X400	Φ720X600
	X/Y/Z travel	mm	1000/550/600	1000/600/700
	Distance between end face of spindle and worktable	mm	Negative 15~positive 535	Positive 50~positive 750
Spindle	Taper hole of spindle		BT40	BT40
	Spindle speed	RPM	12000	18000
	Drive mode of spindle		Direct connection	Electric spindle
Feed	Cutting feed	m/min	12	12
	Rapid feed rate	m/min	36	36
	Allowable cutting force horizontal axial direction	Nm	1400	2300
	Allowable cutting force water cutting shaft	Nm	410	1800
	Table allowable load level	kg	100	255
Tool magazine	Table allowable load tilt	kg	75	200
	Number of tools	T	24	30
	Tool change mode		Disk cutter arm	Disk cutter arm
Accuracy	Minimum Angle Units	Deg	0.001	0.001
	Repetitive precision rotation axis	sec	15"	12"
	Re-precision tilt axis	sec	20"	20"
	Indexing accuracy rotating axis	sec	30"	25"
	Indexing accuracy tilt axis	sec	45"	60"
	Axial positioning accuracy	mm	0.008	0.008
	Axial repeated positioning accuracy	mm	0.004	0.004



Product Features

- Z-axis double-bar balance system
- Full-loop grating ruler control
- Screw rod thermostatic control technology
- Standard tool point following function
- Water outlet of direct connection center: 25kg, 50kg and 75kg
- 14" high performance touch screen system
- User-friendly design for convenient operation
- Electric components are generally equipped with Schneider electric appliances
- 24T servo tool magazine

Product display



HA SERIES

Heavy Cutting Horizontal Machining Series



Product Features

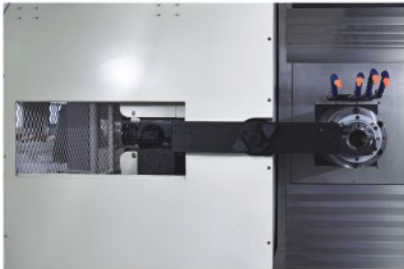
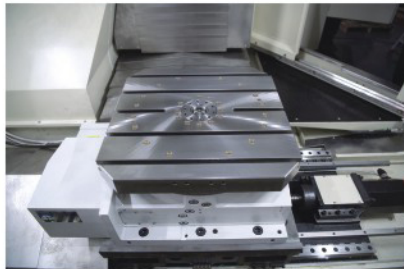
- Reasonable optimization of high performance system matching
- Perfect coordination between mechanical performance and system performance
- Fanuc10.4" large screen (OP15" large screen)
- Large area visual window facilitates observation of processed products
- Efficient and high-precision machining
- Observe the processing condition and effect from multiple angles
- High-precision and high-rigidity Mandrel
- Φ190 Flange type installation belt spindle
- Standard 4-hole annular spray and air curtain protection device



HA series parameter table

Item		Unit	HA63	HA80
Work bench	Table dimensions (length x width)	mm	630*630	800*800
	T-shaped slot (slot number X slot width X slot distance)	mm	5*18*100	7*22*100
	Maximum load of worktable	kg	1200	2500
Travel	X-axis travel (left and right travel of workbench)	mm	1000	1250
	Y axis travel (workbench forward and backward travel)	mm	800	1000
	Z-axis travel (up and down travel of spindle)	mm	800	1000
	Distance between spindle nose and workbench center	mm	195-995	250-1250
	Distance from spindle center to worktable	mm	75-875	75-1075
	Taper hole of spindle		7:24	7:24
Spindle	Transmission mode		Belt type (gear type)	Belt type (gear type)
	Spindle speed	r.p.m	6000	6000
	Motor power of spindle	KW	22-26	22-26
Feed	Fast moving speed of X/Y/Z axis	mm/min	18000	18000
	X/Y/Z axis feed speed	mm/min	1-10000	1-10000
Workpiece	Maximum workpiece height	mm	1300	1500
	Maximum workpiece diameter	mm	1250	1450
Tool magazine	Tool shank form		BT50	BT50
	Tool magazine capacity	PCS	32	40
	Tool magazine form		Horizontal cutter arm type	Horizontal cutter arm type
	Tool change time	s	3.5	3.5
	Max. tool diameter	mm	φ 125(φ 250 adjacent space)	φ 125(φ 250 adjacent space)
	Maximum tool length	mm	350	500
	Maximum tool weight	kg	10(Tool offset 15)	10(Tool offset 15)
	Linear axis positioning accuracy	mm	0.008	0.008
Accuracy	Repeated positioning accuracy of linear axis	mm	0.005	0.005
	Slewing axis segmentation accuracy	arc.sec	10	10
	Repeated positioning accuracy of rotary shaft	arc.sec	2	2
System	Control system		FANUC series Oi-MF(PLUS)	FANUC series Oi-MF(PLUS)
Other	Power supply capacity	KVA	40	50
	Machine dimensions (L * W * H)	mm	5200*4000*3350	5600*4400*3600
	Weight of machine tool	kg	13000	17000

Product display



HS SERIES

High-speed Horizontal Machining Series



Product Features

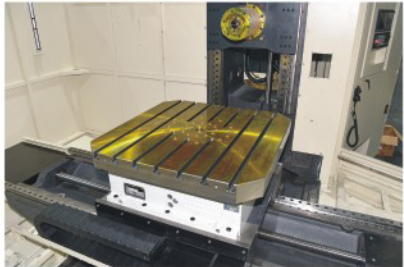
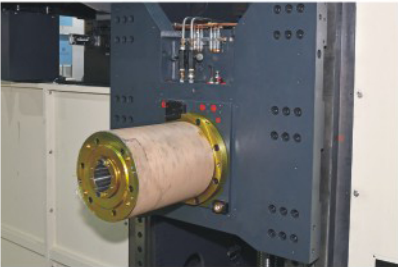
- Structural design of cross slide table, high-speed machining
- Frame structure design is simpler and easier to operate
- Open-type large cover is designed for easier clamping
- More selection of large-capacity tool magazine for 40T-60T-120T
- Gearbox high torque headstock, higher processing efficiency
- More turntable selection of 1/4, 1/1000 degree and one point for one time
- Optional distribution of Fanuc, Mitsubishi and Siemens
- Standard configuration of Japanese SMC gas circuit
- Design of 4 high-strength wire rails on Y axis



HS series parameter table

Item		Unit	HS1055B	HS1812	HS2110
Work bench	Table dimensions (length x width)	mm	500*500	1000*1200	1000*1000
	T-shaped slot (slot number X slot width X slot distance)	mm	5*14*100	100*100(M20*P2.5)	100*100(M20*P2.5)
	Maximum load of worktable	kg	500	3000	3000
Travel	X-axis travel (left and right travel of workbench)	mm	800	1800	2100
	Y axis travel (workbench forward and backward travel)	mm	550	1200	1200
	Z-axis travel (up and down travel of spindle)	mm	550	1200	1000
	Distance between spindle nose and workbench center	mm	120-670	150-1350	150-1350
	Distance from spindle center to worktable	mm	50-600	100-1300	100-1300
	Taper hole of spindle		BT40	7:24	7:24
Spindle	Transmission mode		Electro spindle	Belt type (gear type)	Belt type (gear type)
	Spindle speed	r.p.m	12000	6000	6000
	Motor power of spindle	KW	15	22-26	22-26
Feed	Fast moving speed of X/Y/Z axis	mm/min	36000	18000	18000
	X/Y/Z axis feed speed	mm/min	1-10000	1-10000	1-10000
Workpiece	Maximum workpiece height	mm	800	1800	1600
	Maximum workpiece diameter	mm	700	2200	2200
Tool magazine	Tool shank form		BT40	BT50	BT50
	Tool magazine capacity	PCS	24	60	60
	Tool magazine form		Horizontal cutter arm type	Horizontal cutter arm type	Horizontal cutter arm type
	Tool change time	s	2.4	3.5	3.5
	Max. tool diameter	mm	φ80(φ160 adjacent space)	φ125(φ250 adjacent space)	φ125(φ250 adjacent space)
	Maximum tool length	mm	300	600	600
	Maximum tool weight	kg	15(Tool offset)	10(Tool offset 15)	10(Tool offset 15)
	Linear axis positioning accuracy	mm	0.008	0.008	0.008
Accuracy	Repeated positioning accuracy of linear axis	mm	0.005	0.005	0.005
	Slewing axis segmentation accuracy	arc.sec	10	10	10
	Repeated positioning accuracy of rotary shaft	arc.sec	2	2	2
System	Control system		SYNTEC	FANUC series Oi-MF(PLUS)	FANUC series Oi-MF(PLUS)
	Power supply capacity	KVA	25	50	50
Other	Machine dimensions (L * W * H)	mm	4500*3400*2950	5800*5800*4300	5600*6200*4300
	Weight of machine tool	kg	62000	21000	24000

Product display



GMT series parameter table

Item		Unit	GMT2217	GMT3018	GMT4022
Work bench	Workbench size	mm	2000*1300	3000*1600	4000*2000
	T-slot size (center distance * slot width * number of slots)	mm	7*22*170	9*22*180	9*28*200
	Maximum load capacity of workbench	kg	8000	12000	18000
Travel	X/Y/Z travel	mm	2200/1650/800	3000*2000*960	4000*2200*1000
	Spindle nose end to worktable	mm	250-1050	140-1140	280-1280
Spindle	Spindle taper hole		BT50	BT50	BT50
	Spindle speed	rpm	6000	6000	6000
	Spindle transmission mode		Belt	Belt	Belt
Spindle motor	Spindle motor (Fanuc system)	kw	18.5	22.0	22.0
	Rated torque	Nm	143	220	220
Feed rate	Cutting feed (X/Y/Z axis)	m/min	10	10	10
	Rapid feed (X/Y/Z)	m/min	12	12	12
Accuracy	Positioning accuracy	mm	0.025	0.025	0.025
	Repetitive positioning accuracy	mm	0.015	0.015	0.015
Automatic tool changing system	Number of cutting tools	T	40	40	40
	Power demand	kva	40	45	55
	Chip removal method		Twin screw chain plate	Twin screw chain plate	Twin screw chain plate
	Machine weight	kg	22000	27000	42000
	Floor area (length * width* height - including water tank)	mm	4600*6680*4500	4800*7300*5100	5400*10800*5600

Product display



Product Features

- ◎ Hardened guide rail restricted by four sides shall be adopted
- ◎ The rigidity of the whole machine is strengthened, with strong cutting capacity and stable accuracy
- ◎ Double-screw+front-row chip removal machine, more convenient chip removal
- ◎ BBT50 - Φ 200 high rigid spindle and 6 imported large steel ball bearings are adopted to ensure excellent cutting capacity
- ◎ Optional automatic gate and central water outlet function
- ◎ Z-axis dual dynamic balance bar, providing more long-term stable Z-axis outputity tool magazine for 40T-60T-120T

S SERIES

Gantry Channel Grinder Series



Product Features

- Longmen structure three-axis vertical mill
 - Can grind inner and outer raceways, edges
 - Can grind irregular cams, embroidery shafts, sliders, etc
 - Linear motor shaft control technology
 - Fully closed-loop grating ruler control
- 20,000 to 60,000 RPM high-speed electric spindle
 - The water tank comes standard with paper tape filtration and magnetic separation
 - Circular jumping 0.001um cultivator spindle
 - High strength casting structure design to prevent vibration



S series parameter table

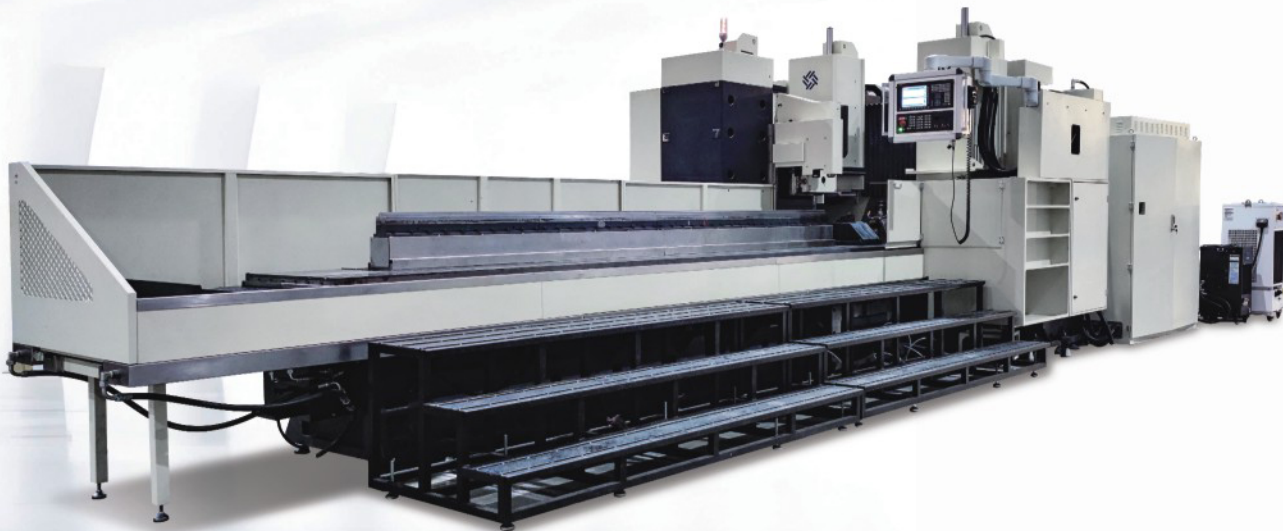
Item	Unit	S-800	S-1000	S-2000
Workbench size	mm	900X420	1000X500	1800X500
Electric permanent magnet sucker	mm	680X200	680X300	1800X400
Maximum load capacity of workbench	kg	300	500	700
X/Y/Z travel	mm	900/320/100	1100/400/180	2050/400/180
Spindle nose end to worktable	mm	40-140	40-220	40-220
Spindle taper hole		Locking of threads	Locking of threads	Locking of threads
Spindle speed	rpm	40000/60000	24000-30000	24000-30000
Spindle transmission mode		Electrospindle	Electrospindle	Electrospindle
Cutting feed (X/Y/Z axis)	m/min	12	12	12
Rapid feed (X/Y/Z)	m/min	12	12	12
Positioning accuracy	mm	0.005	0.005	0.005
Repetitive positioning accuracy	mm	0.003	0.003	0.003
Power demand	kva	15	30	30
Chip removal method		Magnetic separation+ paper tape filtration	Magnetic separation+ paper tape filtration	Magnetic separation+ paper tape filtration
Machine weight	kg	3200	5800	5800
Floor area (length * width* height - including water tank)	mm	2200X3800X2100	2700X4500X2600	2500X6800X2600

Product display



LR SERIES

Line Rail Grinder Series



Product Features

- ◎ Gantry 7-axis rail grinder
 - ◎ Standard high-precision dresser spindle
 - ◎ High-precision linear motor drive of worktable
 - ◎ Full closed-loop control of Hydelhan grating ruler
 - ◎ Standard static spindle 30KW
- ◎ High-power lubrication circulation function of X-axis guide rail
 - ◎ Automatic workpiece straightening
 - ◎ Z-axis with balance bar function
 - ◎ Screw rod cooling constant temperature control function

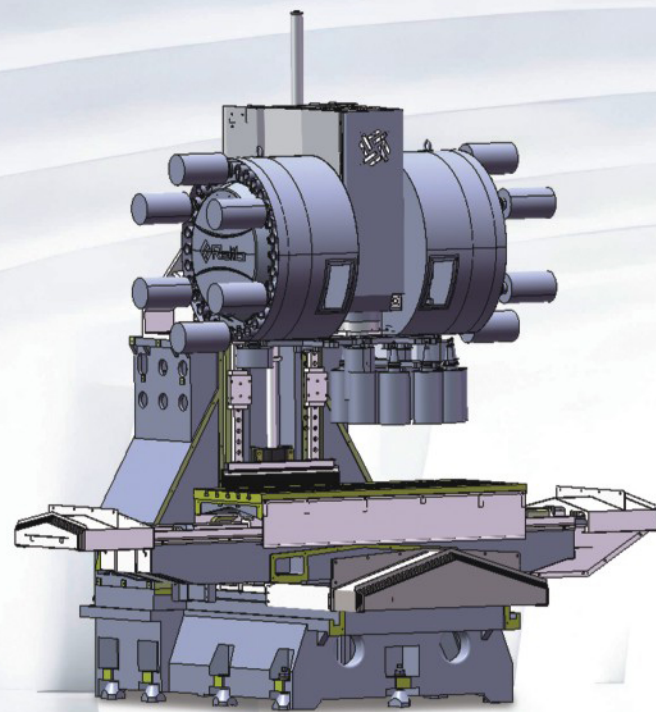


LR series parameter table

	Item	Unit	LR445	LR665
Scope of processing	Area of worktable (front and rear * left and right)	mm	6150*900	7850*900
	Maximum grinding length	mm	4300	6000
	Scope of processing guide rail	mm	20-45	35-65
	Magnetic chuck area	mm	4300*16-36	6000*30-50
	Maximum bearing capacity of magnetic chuck	kg	300	400
	Disk face to center of horizontal trim	mm	405	405
	Opening of double vertical spindle	mm	360-1160	360-1160
	Center distance between vertical and horizontal spindle	mm	575	575
Double spindle	Motor	KW	30 (Below grinding 45)	45
	Type of spindle		Static and dynamic spindle	Static and dynamic spindle
	Spindle speed	rpm	0 ~ 1500	0~1500
	Grinding wheel (inner diameter * thickness * outer diameter)	mm	φ 600 × 18 ~ 65 × φ 304.8	φ 600 × 18~65 × φ 304.8
X feed (table)	Travel	mm	5600	7300
	Track	mm	Type 45 Ball line rail	Type 45 Ball line rail
	Feed rate	m/min	30-50	30-50
	Motor peak thrust	N	6867.7*2=13735.4	6867.7*2=13735.4
	Transmission		Linear motor	Linear motor
Y1\Y2 Feed (vertical double-axis)	Travel	mm	400	400
	Ball screw (diameter * pitch)	mm	50*10	50*10
	Servo motor	KW	2	2
	Movement speed	m/min	6	6
	Minimum setting unit	mm	0.001	0.001
	Track		Type 55 Roller slide rail	Type 55 Roller slide rail
Z1\Z2 up and down (vertical double-shaft)	Travel	mm	200	200
	Ball screw (diameter * pitch)	mm	45*10	45*10
	Servo motor	KW	2	2
	Movement speed	m/min	6	6
	Minimum setting unit	mm	0.001	0.001
	Track		Type 55 Roller slide rail	Type 55 Roller slide rail
Grinding wheel dresser	Diamond Roller (OD * Thickness * ID)	mm	(120*40*52) Size of matching line rail	(120*40*52) Size of matching line rail
	Maximum rotating speed	rpm	2000	2000
	Servo motor	KW	2	2
	Type of spindle		Bearing type spindle	Bearing type spindle
Horizontal auxiliary spindle	Type of spindle		Static and dynamic spindle	Static and dynamic spindle
	Motor	KW	11 (Below grind 45 type)	11 (Below grind 45 type)
	Spindle speed	rpm	0-2000	0-2000
	Grinding wheel size (inner diameter * thickness * outer diameter)	mm	400*50*127	400*50*127
Horizontal spindle Forward and backward feeding (Y3 axis)	Travel	mm	300	300
	Ball screw (diameter * pitch)	mm	40*10	40*10
	Servo motor	KW	2	2
	Movement speed	m/min	6	6
	Minimum setting unit	mm	0.001	0.001
	Track		Type 45 Roller slide rail	Type 45 Roller slide rail
Horizontal spindle Feed up and down (axis Z3)	Travel	mm	300	300
	Ball screw (diameter * pitch)	mm	45*10	45*10
	Servo motor	KW	2	2
	Reduction ratio		1:05	1:05
	Movement speed	m/min	6	6
	Minimum setting unit	mm	0.001	0.001
size	Track	mm	Type 45 Roller slide rail	Type 45 Roller slide rail
	Machine dimensions (without machine accessories)	mm	(14500 L*3300 W*2850 H)	(17500 L*3300 W*2850 H)
	Land occupation space	mm	(15000 L*3500 W*4000 H)	(18000 L*3500 W*4000 H)
	Packing dimensions	mm	Split Goods Issue	Split Goods Issue
	Machine weight (without machine accessories)	kg	Approx. 35000 (subject to final shipment)	Approx. 42000 (subject to final shipment)

NON-STANDARD SERIES

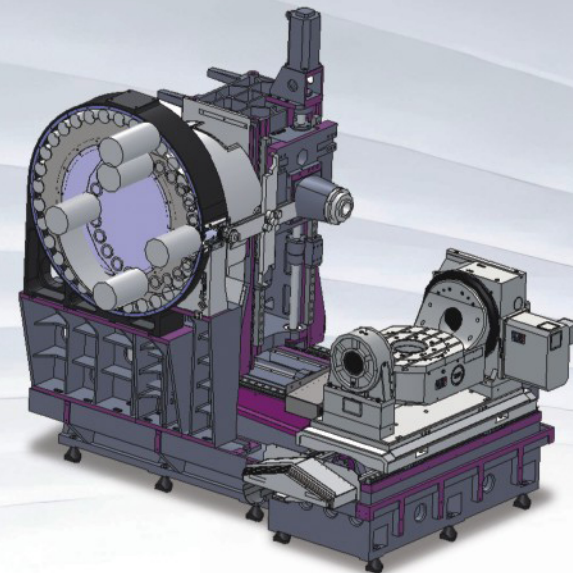
Non-standard series



Double tool magazine vertical machining center

The dual tool magazine design increases the tool magazine capacity of the machine tool, and meets the actual processing conditions of the mold or casting die industry that require large-scale cutter machining.

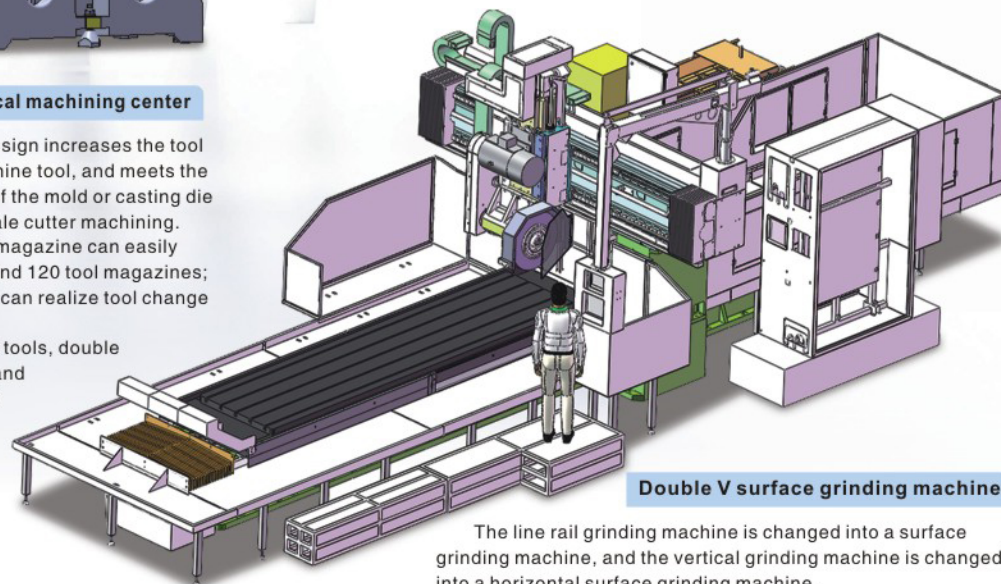
1. The design of dual tool magazine can easily realize the capacity of 48, 64 and 120 tool magazines;
2. The dual tool magazine can realize tool change and adjustment faster;
3. For the same number of tools, double tool magazine has lower cost and more convenient maintenance than single tool magazine;
4. The machine tool structure of double tool magazine is designed, and the floor area is smaller.



Five-axis horizontal machining center

The upper turntable of the inverted T-type horizontal machine tool is changed into a five-axis cradle, greatly improving the machining capacity of the machine tool.

1. Change axle 4 to axle 5 to improve processing capacity;
2. Reduce the tolerance of geometric position of clamping and lifting machined parts.

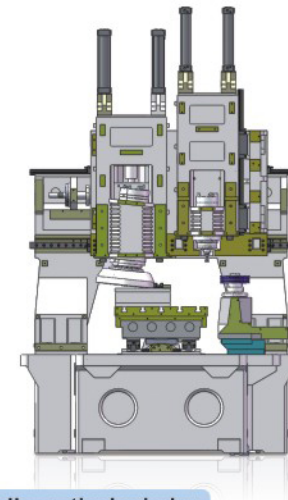


Double V surface grinding machine

The line rail grinding machine is changed into a surface grinding machine, and the vertical grinding machine is changed into a horizontal surface grinding machine.

1. Idle machine utilization, reasonable cost saving;
2. The PLC control part of the system is upgraded to adapt to the operation of the new machine tool.

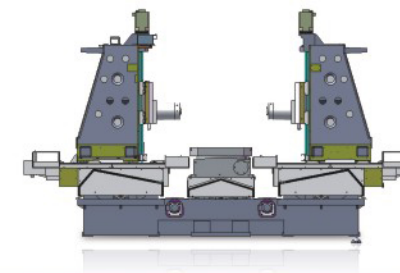
NON-STANDARD SERIES



Double spindle vertical grinder

The two main shaft heads can grind different machining surfaces respectively to meet the requirements of datum consistency.

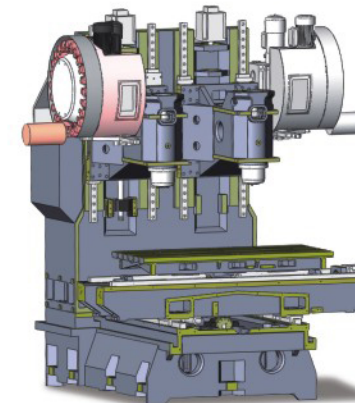
1. One-time clamping can grind two important positions respectively, the outer side and inner side of the parts, so as to improve the machining accuracy of the parts;
2. Reduce clamping times and improve processing efficiency.



Symmetric double-column horizontal 7-axis machine tool

It can be realized that the opposite faces of one part can be machined at the same time or at different times.

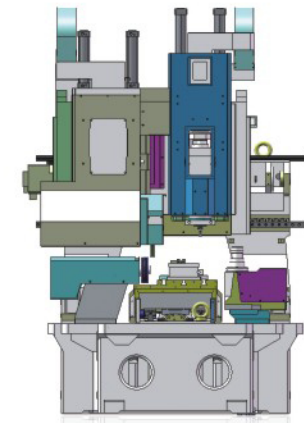
1. Coaxial precision of machined parts can be achieved through position control;
2. Processing at the same time can improve the processing efficiency.



Vertical machining center with double spindle and double tool magazine

Parts of 2, 4, 6 and 8 even multiple times can be placed on one workbench at the same time, and two parts can be processed at the same time in one program.

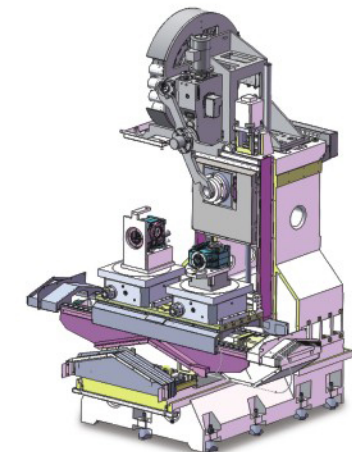
1. High processing efficiency;
2. Share one set of numerical control system, easy to use one machine as two machines, reduce the procurement cost.



Double spindle vertical and horizontal grinding machine

One equipment is equipped with vertical grinding head and horizontal grinding head, which are matched with horizontal grinding wheel finisher and vertical grinding wheel finisher respectively. Both grinding heads can grind the inner or outer side and upper surface of parts respectively.

1. One clamping can grind two important positions respectively to improve the machining accuracy of parts;
2. Reduce clamping times and improve processing efficiency.



Two-turret high-speed horizontal machining center

One horizontal machining center is equipped with two turntables, which can clamp two machined parts at the same time and can be machined in one time.

1. The tool change time is saved, and the same tool in the same work step can process 2 parts at a time;
2. Only one start is required and 2 parts are machined at the same time.

■ Type of Spindle



Gear box



Belt spindle



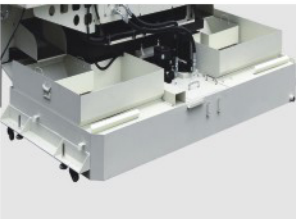
Direct coupled spindle



Electric spindle

Item	Max. rotating speed	Cutting capacity	Surface finish degree	Nature of bearing
Gear spindle	3200–6000	Super high	Medium	Gear drive
Belt spindle	6000–10000	High	Medium	Large steel ball bearing
Direct coupled spindle	8000–15000	Medium	high	Small steel ball/ceramic bearing
Electric spindle	12000–60000	Low	super high	Ceramic bearing

■ Chip removal mode



Rear flushing chip removal



Front chip removal



Double rear chain plate chip removal



Screw chip removal

■ Type of chip removal machine



Magnetic chip removal



Scraper chip removal machine



Chain plate chip removal



Chain plate compound roller bucket chip removal

Item	Material of swarf	Length of chips	Cutting condition	Chip removal efficiency
Chain plate chip removal	Iron	> 50mm (non-massive)	General	High
Magnetic chip removal	Iron	< 50mm	Dry cutting	High
Scraper chip removal	Aluminum and iron	> 50mm (non-massive)	Wet cutting	High
Chain plate compound roller bucket chip removal	Applicable to all	Universal (non-block)	Wet cutting	High
Screw chip removal	Aluminum and iron	> 50mm (non-massive)	General	Medium
Rear punch chip removal	Applicable to all	General	General	Low

■ Other options



4-axis rotary table



5-axis rotary table



Tool setting instrument



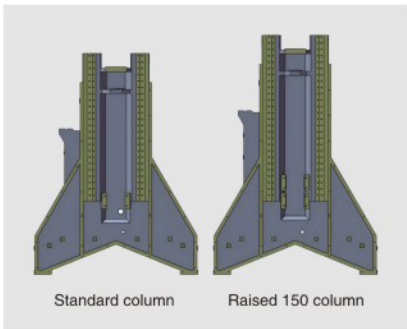
Hydraulic station



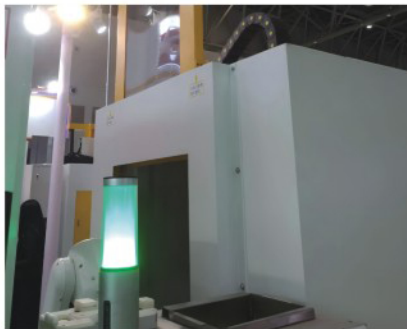
Center effluent 25, 50, 75 kg



Oil cooling of spindle



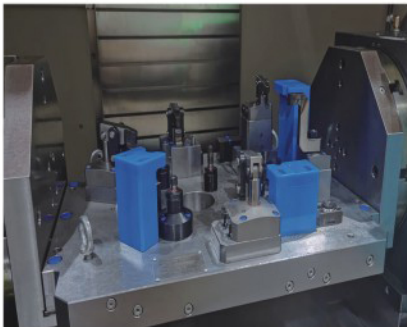
Machine tool heightening customization



Front door and side window automatic door



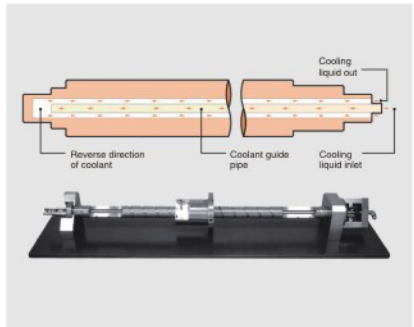
Tool magazine automatic door



Fixture



Safety door lock



leadscrew oil cooling



CORPORATE STYLE

Since entrepreneurship
We are always committed to the continuous development and innovation of product manufacturing
We adhere to our original intention and focus on developing high-quality machine tools
New products are released every year
We are committed to providing our customers with a better experience and value
Intended to help people involved in various stages of manufacturing achieve more flexible and ideal processing methods
Keeping pace with the booming development of the manufacturing industry and continuously contributing to its efforts
It is precisely this extraordinary development process
It has forged our spirit of positivity, optimism, and courage to explore
We constantly explore various possibilities in product manufacturing
Transforming grand dreams and hopes into reality together
Facing challenges, we never stop
Join hands to create a better future together



TAKAZAKI

