

US WHEELER

HANGZHOU WHEELER GENERAL MACHINERY INCORPORATED CO.,LTD

Add:

NO.288 Shunfeng Road,Liping District

Tel:

+86 571 8369 5216

Fax:

+86 571 8369 5836

E mail:

info@wheeler-us.com



For more information
please follow
Official WeChat account

400 780 1898

24/7 Service Hotline.

Machine Tool Lifetime Service

We provide on-call service 24/7. If you encounter any equipment maintenance and repair problems, please contact us. If you have any suggestions, please log in to the company's official website to leave a message.
www.wheeler-us.com



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HL-HM02309-02-1000



COMPREHENSIVE PRODUCT CATALOG



US WHEELER

US WHEELER

INDUSTRIAL ROBOT/
CNC MACHITOOLS/
SMART FACTORY

ABOUT US

HANGZHOU WHEELER GENERAL MACHINERY INCORPORATED CO., LTD. is a national high-tech enterprise specialized in the design and manufacturing of CNC machining equipment, machine tool loading and unloading automation lines, digital factory, and non-standard fixtures. The company was established in January 2015, with its operation center Located in Linping Economic Development region, Hangzhou City. The company currently has over 300 employees and an efficient professional technical research and development team, including more than 60 professional technical personnel with various intermediate and senior technical titles (engineers). The company has an R&D center of 5000 square meters and a production and commissioning base of 43000 square meters, with more than 50 patented technologies. It has offices and after-sales service outlets in Shanghai, Jiangsu, Anhui, Shandong, Henan, Jilin, Chongqing, Ningbo, Taizhou, Wuhan, Xi'an, Zhengzhou and other places. Our products have been exported to Turkey, Egypt, South Africa, Brazil, Australia, Singapore, Malaysia, Thailand and other countries.

The certification system we have passed



The certification system we have passed

The company's main products include machining equipment, machine tool loading and unloading robots, machine tool fixtures, peripheral automated logistics equipment, and robot integration systems. It is a strategic partner of robot companies such as KUKA from Germany and ABB from Switzerland. Provide customers with mechanical processing automation technology solutions, a complete set of automation equipment, technical consulting, and comprehensive after-sales and technical services. The product is widely used in mass production industries such as automotive parts processing and construction machinery.

EM series

Vertical machining center

The EM series vertical machining center is a new generation of CNC machine tool produced by US WHEELER introducing advanced technologies. Its rational structural design, high rigidity, high stability, high accuracy, and high-quality parts effectively save the machining time. Its special shield design also greatly improves the service life of the machine tool.



EM series

The tool changer is driven by a cam motor. During machining, the tool magazine can be rotated to the next tool to be used and wait for the tool change command, which can minimize non-cutting time, and at the same time, 24 tools {optional 30 tools} can be equipped, diversifying the machining

The supported maximum tool diameter is up to 150 mm. The maximum length is up to 300 mm. The high-performance tool magazine and automatic tool change system enable fast tool changes and shorten non-production time. The high-reliability tool magazine and automatic tool change system support a wide range of tools, ensuring reliable and flexible tool changes in production.

- + Tool magazine capacity: 24 tools (30 tools)
- + Maximum tool diameter (without/with adjacent tool): $\Phi 150$ mm/ $\Phi 80$ mm
- + Maximum tool weight: 8 kg



+ Core components



+ Spindle

The spindle adopts a precision sleeve type design, with main body assembled with high-grade precision P4 bearing, and thick and stable tapered hole walls in the spindle hole ensures that the cutting will not vibrate at various speeds.



+ Roller guide way

The roller guide rail has small elastic deformation due to force and achieves high rigidity by incorporating rollers into the sliding device.



+ Ball screw

The imported C3 grinding grade ball screw is used, which has the characteristics of good rigidity, wear resistance, torsion resistance, long service life, etc.: the addition of pre-tensioned nut eliminates the backlash and ensures high machining accuracy of the machine.

+ User-friendly design



Centralized layout

The auxiliary equipment is centralized in the back of the machine for easy inspection.



Rotatable operation panel

The 0°~60° rotatable operation panel improves the convenience and visibility of operation.



Rear flush water tank

The water tank realizes a full range of multi-layer filtration of sediment ensuring the cleanliness and efficiency of the return water.

EM series

+ Bare machine

The optimized mechanical design through advanced simulation and analysis provides a solid foundation for the entire machining center. The large cast iron structure improves the overall shock absorption performance and high stable rigidity, ensuring high accuracy in continuous cutting operation under full load.



Specifications

Item	Vertical machining center	EM600A	EM855A	EM855Z	EM1100A
Travel	Horizontal X-axis	600mm	800mm	800mm	1100mm
	Longitudinal Y-axis	400mm	550mm	550mm	600mm
	Vertical Z-axis	450mm	550mm	550mm	600mm
	Distance from spindle end face to worktable	150-600mm	120-670mm	105-655mm	120-720mm
	Distance from spindle center to column rail surface	447mm	590mm	600mm	650mm
	Worktable size	700*420mm	1000*550mm	1000*550mm	1200*600mm
Worktable	T-slot quantity/size/spacing	4*14*84	5*18*90	5*18*90	5*18*100
	Maximum loading capacity	350kg	600kg	500kg	800kg
Spindle	Spindle speed	50-10000rpm	50-8000rpm	50-8000rpm	50-8000rpm
	Drive mode	Synchronous belt drive	Synchronous belt drive	Synchronous belt drive	Synchronous belt drive
	Spindle motor torque (rated/maximum)	35.8/95.5Nm	52.5/118Nm	52.5/118Nm	52.5/118Nm
	Main motor power	7.5/11kW	11/15kW	11/15kW	11/15kW
Servo axis	X/Y/Z rapid traverse speed	42/42/48m/min	42/42/42m/min	42/42/42m/min	36/36/36m/min
	Cutting feed rate	1-10000mm/min	1-10000mm/min	1-10000mm/min	1-10000mm/min
Tool magazine	Tool magazine type	ATC tool magazine with 24 tools			
	Shank specification	BT-40	BT-40	BT-40	BT-40
Main accuracy (full travel)	Positioning accuracy	0.008mm	0.008mm	0.008mm	0.008mm
	Repeatability	0.004mm	0.004mm	0.004mm	0.004mm
Others	Machine footprint and height	2050*2280*2850mm	2600*2310*3000mm	2600*2310*3000mm	2900*2400*3000mm
	Machine weight (apx.)	3700kg	5400kg	5000kg	6500kg
	Power capacity	25kVA	25kVA	30kVA	30kVA
	CNC system	FANUC 0iMF PLUS[MITSUBISHI]			

EM series application

This series of machine has strong overall rigidity, easy and flexible operation, and adopts fully enclosed protection. It is suitable for machining box parts and various complex two or three dimensional and molds. After the clamping of parts, multiple processes such as milling, drilling, boring, reaming, and tapping can be implemented.

It is widely used in multi-process, high-precision and high-efficiency parts/mold machining in automobile, mold, aviation, military and other industries. Rotary coordinate axes can also be added according to customer needs to machine the multi-angle parts, cylindrical gears, cams and other types of parts.



Specifications

Item II	Five-axis machining center	EU5-700
Travel	Horizontal X-axis	750mm
	Longitudinal Y-axis	600mm
	Vertical Z-axis	600mm
	C-axis	360°
	A-axis	-120° ~ +120°
	Distance from spindle end face to worktable	120-720mm
	Distance from spindle center to column guide way	650mm
	Table size	Φ410mm
	Maximum workpiece rotation diameter	720mm
	Center hole diameter	70H7mm
Rotary table	Table height (to linear guide way slider surface)	469mm
	Maximum load-bearing capacity	200kg
	T-slot dimensions	14H7mm
	Spindle speed	10000rpm
	Drive mode	Direct drive
Spindle	Spindle motor torque	70/140Nm
	Main motor power	11kW
	X/Y/Z rapid traverse speed	36/36/36m/min
Servo axis	Cutting feed rate	1-10000mm/min
	Tool magazine type	ATC tool magazine (24 tools)
Tool magazine	Shank specification	BT-40
	Positioning accuracy	0.005mm
Main accuracy	Repeatability	0.003mm
	Machine footprint and height	2900*2400*3000mm
Others	Machine tool weight	8000kg
	Power capacity	30kVA
	CNC system	SIEMENS

Specifications

	EM1100Z	EM1300A	EM1570	EM1500Z
1100mm	1300mm	1500mm	1500mm	
600mm	700mm	700mm	800mm	
600mm	700mm	700mm	700mm	
80-680mm	120-820mm	130-830mm	150-850mm	
635mm	750mm	750mm	870mm	
1200*600mm	1400*700mm	1600*700mm	1700*800mm	
5*18*100	5*18*125	5*18*125	5*18*140	
800kg	1000kg	1000kg	1200kg	
50-6000rpm	50-8000rpm	50-8000rpm	50-6000rpm	
Synchronous belt drive	Synchronous belt drive	Synchronous belt drive	Synchronous belt drive	
143/236Nm	52.5/118Nm	52.5/118Nm	143/236Nm	
15/18.5kW	11/15kW	11/15kW	15/18.5kW	
36/36/20m/min	36/36/24m/min	24/24/20m/min	20/20/20m/min	
1-10000mm/min	1-8000mm/min	1-8000mm/min	1-10000mm/min	
ATC tool magazine with 24 tools	ATC tool magazine with 24 tools	ATC tool magazine with 24 tools (30 tools)	ATC tool magazine with 24 tools (30 tools)	
BT-50	BT-40 (50)	BT-40	BT-50	
0.008mm	0.01mm	0.01mm	0.01mm	
0.004mm	0.005mm	0.005mm	0.005mm	
2900*2400*3000mm	3400*2600*3200mm	3700*2800*3300mm	4000*3250*3610mm	
6500kg	7800kg	9000kg	10400kg	
30kVA	30kVA	30kVA	30kVA	
	FANUC 0iMF PLUS[MITSUBISHI]	FANUC 0iMF PLUS[MITSUBISHI]		

DT series

Vertical drilling and tapping center

The design and development of DT series drilling and tapping center meet the requirements of users for high-speed/high-productivity vertical drilling and tapping center. The overall layout of the DT series drilling and tapping center adopts an overall compact and vertical frame structure. The column is a Y-shape structure with high rigidity, solid saddle and wide base. It can withstand heavy loads during machining and maintain no vibration or deformation during high-speed displacement. It is suitable for machining automobile and motorcycle accessories, small generator accessories, etc.



+ ATC 1.4 s without pause

1.4秒

Tool-to-tool change time

1.9秒

Cutting-to-cutting
tool change time

BT30 spindle and high-efficiency servo tool magazine are adopted to realize high-speed action and optimal change.

+ High output spindle motor

Standard specification

28.7Nm

Maximum torque
(Instantaneous)

9kW

Maximum output
power

High torque specification

82.8Nm

Maximum torque
(Instantaneous)

13kW

Maximum output
power



Application

DT series high-speed and high-productivity vertical drilling and tapping center is suitable for machining automobile and motorcycle accessories and small generator accessories. DT series high-speed and high-productivity vertical drilling and tapping center is suitable for machining automobile and motorcycle accessories and small generator accessories.



Specifications

Item	High-speed drilling and tapping center	DT600	DT800	DT1000
Travel	Horizontal X-axis	600mm	800mm	1000mm
	Longitudinal Y-axis	400mm	500mm	500mm
	Vertical Z-axis	330mm	330mm	330mm
	Distance from spindle end face to worktable	150-480mm	160-490mm	155-485mm
	Distance from spindle center to column rail surface	464mm	546mm	546mm
Worktable	Worktable size	700*420mm	1000*500mm	1100*500mm
	T-slot quantity/size/spacing	3*14*125mm	5*18*100mm	5*18*100mm
	Maximum loading capacity	250kg	300kg	350kg
Spindle	Spindle speed	50-20000rpm	50-20000rpm	50-20000rpm
	Drive mode	Direct drive	Direct drive	Direct drive
	Spindle motor torque (constant/maximum)	11.8/28.7 Nm	11.8/28.7 Nm	11.8/28.7 Nm
Servo axis	Main motor power	3.7/5.5 kW	3.7/5.5 kW	3.7/5.5 kW
	X/Y/Z rapid traverse speed	48/48/48m/min	48/48/48m/min	48/48/48m/min
	Cutting feed rate	1-1000mm/min	1-1000mm/min	1-1000mm/min
Main accuracy (full travel)	Tool magazine type	Reversible servo tool magazine with 21 tools	Reversible servo tool magazine with 21 tools (26 tools)	Reversible servo tool magazine with 21 tools
	Shank specification	BT-30	BT-30	BT-30
	Positioning accuracy	0.008mm	0.008mm	0.008mm
Others	Repeatability	0.004mm	0.004mm	0.004mm
	Machine footprint and height	1760*2320*2240mm	2480*2540*2440mm	2750*2540*2440mm
	Machine weight (apx.)	2900kg	4300kg	4700kg
	Power capacity	15KVA	15KVA	15KVA
CNC system				
FANUC/MITSUBISHI				

LT series

CNC lathe/turning-milling composite

LT series CNC lathe is a high-precision and high-efficiency automatic lathe. It is equipped with multi-station turret, with a wide range of machining performance. It also has linear interpolation, circular interpolation and various compensation functions, which has played a good economic effect in the mass production of complex components.



+ Core components



+ Turret

Imported standard 12-station servo turret and hydraulic locking. Powered turret and hydraulic turret are optional.

+ Chuck

All series are equipped with hollow hydraulic chuck.

+ Tailstock

The heavy-duty tailstock body is connected to the bed through rectangular guide way (box way), ensuring the rigidity of the tailstock, the stability during machining and the excellent quality of machined parts.

+ Bed

The overall inclined bed structure is adopted, which has good rigidity and reasonable structure, and makes use of the chip removal and cooling during machining.

Specifications

	Item	LT-210	LT-210M	LT-300A	LT-300M	LT-400	LT-400L
Machining capacity	Maximum swing over bed	510mm	510mm	560mm	560mm	790mm	790mm
	Maximum turning diameter	320mm	235mm	460mm	400mm	600mm	600mm
	Recommended turning diameter	210mm	210mm	260mm	260mm	400mm	400mm
	Maximum turning length	500mm	450mm	640mm	550mm	1500mm	2000mm
	Bar workpiece diameter	51mm	51mm	74mm	74mm	115mm	115mm
	Distance from spindle center to ground	1050mm	1050mm	1050mm	1050mm	1245mm	1245mm
Stroke	X travel	175mm	175mm	260mm	220mm	340mm	340mm
	Z travel	510mm	480mm	680mm	600mm	1600mm	2100mm
Travel	Spindle speed	4500rpm	4500rpm	3000rpm	3000rpm	2000rpm	2000rpm
	Spindle interface specification	A2-6	A2-6	A2-8	A2-8	A2-11	A2-11
	Main motor power (rated/maximum)	11/15kW	11/15kW	15/18.5kW	15/18.5kW	15/18.5kW	15/18.5kW
	Spindle through hole diameter	66mm	66mm	87	87	127	127
Servo axis	X/Z rapid traverse speed	30/24m/min	30/24m/min	30/24m/min	30/24m/min	12/12m/min	12/12m/min
	Cutting feed rate	1-10000mm/min	1-10000mm/min	1-10000mm/min	1-10000mm/min	1-10000mm/min	1-10000mm/min
Turret	Turret capacity	12 Station Bot	12 Station Bot	12 Station Bot	12 Station Bot	12 Station Bot	12 Station Bot
	Boring bar diameter	40mm	32mm	50mm	32mm	60mm	60mm
Tailstock	Turret type	Servo turret + hydraulic locking	Powered turret + hydraulic locking	Servo turret + hydraulic locking	Powered turret + hydraulic locking	Hydraulic turret + hydraulic locking	Hydraulic turret + hydraulic locking
	Tailstock type	Manual/servo	Manual/servo	Servo	Servo	Programmable hydraulic tailstock	Programmable hydraulic tailstock
Main accuracy	Positioning accuracy (X/Z full travel)	0.008mm	0.008mm	0.008mm	0.008mm	0.01/0.015mm	0.01/0.015mm
	Repeatability (X/Z full stroke)	0.004mm	0.004mm	0.004mm	0.004mm	0.006/0.01mm	0.006/0.01mm
Others	Machine tool footprint	2570*2300*1750mm	2570*2300*1750mm	3010*2500*1900mm	3010*2500*1900mm	6050*2300*2520mm	6550*2300*2520mm
	Machine tool weight	3200kg	3500kg	3900kg	4000kg	11000kg	12000kg
CNC system							
FANUC 0iTF(SIEMENS 828D)							

* () indicates optional

LM series

Gantry machining center

LM series gantry machining center is a high-end technology-intensive product of high quality, high precision and high performance carefully designed and manufactured by US WHEELER. The machine tool is novel in design, beautiful in overall structure, stable in precision, reliable in performance, and flexible and convenient in operation.

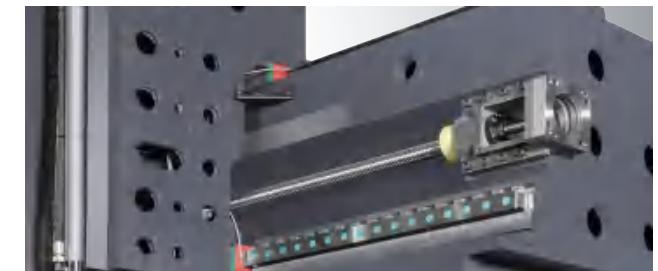


+ Mechanical structure



+ Double column mechanism

The overweight-bearing machine tool body structure is supported by oversized columns, beams and box structures (bottom rail support is reinforced). The head ribs are completely arranged. The whole machine has good rigidity and can realize heavy cutting of large workpieces and molds.



+ X/Y/Z-axis

The Z-axis uses nitrogen hydraulic counterweight to ensure stable and reliable balance quality. The X/Y-axis uses roller linear rail, and the Z-axis uses roller linear rail or hard rail. The Y-axis adopts linear rail, which prevents crawling at low speeds. At the same time, it adopts the rail step structure design, which not only ensures the rigidity of the gantry frame, but also reduces the overturning moment of the saddle and ram.

+ Application

This series of machine tools has strong overall rigidity and flexible and convenient operation, and is suitable for machining large sheet metal parts, box parts, molds, etc. After the clamping of parts, multiple processes such as milling, boring (drilling, chambering and reaming), tapping and countersinking can be implemented. This machine tool is widely used in automobile industry, construction machinery, aerospace, household appliance mold, mold base machining, construction manufacturing and other industries.



Specifications

	Item	LM-1613L	LM-2015	LM-2518	LM-3023	LM-4027	LM-8032
Travel	X-axis travel	1600mm	2000mm	2500mm	3000mm	4000mm	8000mm
	Y-axis travel	1300mm	1500mm	1800mm	2200mm	2700mm	3200mm
	Z-axis travel	600mm	800mm	1000mm	1000mm	1000mm	1250mm
	Distance from spindle end face to worktable	200-800mm	170-970mm	150-1150mm	280-1280mm	280-1280mm	300-1550mm
	Gantry width	1400mm	1500mm	1800mm	2300mm	2700mm	3200mm
Worktable	Worktable size	1700*1200mm	2100*1200mm	2500*1600mm	3000*2000mm	4000*2300mm	8000*2500mm
	T-slot quantity/size-spacing	7*22*150	7*22*150	9*22*180	9*28*200	11*28*200	11*28*200(1-28-180)
	Maximum loading capacity	3000kg	3500kg	7000kg	10000kg	12000kg	30000kg
Spindle	Spindle speed	50-12000rpm	50-6000rpm	50-6000rpm	50-6000rpm	50-6000rpm	50-6000rpm
	Drive mode	Direct drive	Synchronous belt drive	Synchronous belt drive	Synchronous belt drive	Synchronous belt drive	Synchronous belt drive
	Spindle motor torque (rated/maximum)	52.5/118Nm	143/236Nm	143/236Nm	220/272Nm	220/272Nm	220/272Nm
Servo axis	Main motor power	11/15kW	15/18.5kW	15/18.5kW	15/18.5kW	15/18.5kW	15/18.5kW
	X/Y/Z rapid traverse speed	15/18/18m/min	15/15/15m/min	15/15/15m/min	12/12/12m/min	10/10/10m/min	10/10/10m/min
Tool magazine	Cutting feed rate	1-10000m/min	1-10000m/min	1-10000m/min	1-10000m/min	1-10000m/min	1-10000m/min
	Tool magazine type	ATC tool magazine (optional)					
Main accuracy (full travel)	Shank specification	BT-40	BT-50	BT-50	BT-50	BT-50	BT-50
	Positioning accuracy	0.006mm	0.0075mm	0.009mm	0.009mm	0.0125mm	0.0135mm
Others	Repeatability	0.004mm	0.006mm	0.006mm	0.006mm	0.009mm	0.01mm
	Machine footprint (including pedal)	4450*4024mm	5800*4290mm	7120*4450mm	7830*5200mm	10280*5760mm	19740*7260mm
	Height	3200mm	3890mm	4510mm	5370mm	5370mm	6470mm
Machine weight (approx.)				26000kg	37000kg	46000kg	100000kg
CNC system				FANUC 0iMF PLUS			

HM Series

Horizontal machining center

HM series horizontal machining centers incorporate internationally advanced design concepts: inverted T-shaped bed, front hanging box layout, moving column structure, large span design, high rigidity and high strength; three-axis high-rigidity roller guides achieve the perfect combination of high precision and high efficiency processing. Widely used in automobiles, aerospace, rail transit, petroleum valves, plastic machinery, mining machinery, general machinery and other mechanical processing fields.

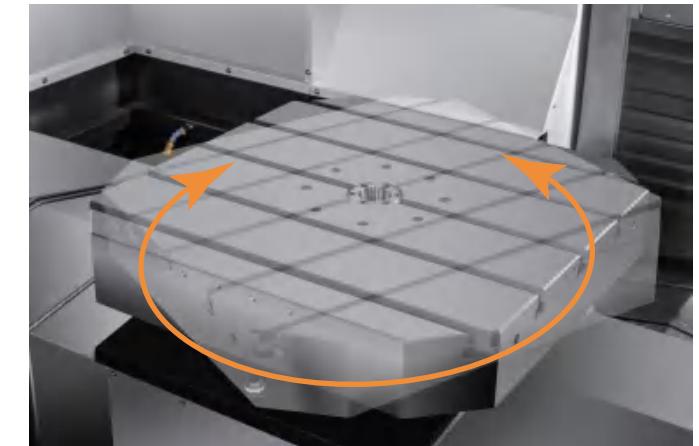


+Mechanical structure



+Rotatable operation panel

The rotatable operation panel can adjust the operating angle according to needs, making better observe the processing workpiece easier.



+360° rotating turntable

The standard configuration of the worktable is an indexing worktable with rat tooth plate ($1^\circ \times 360$) positioning, which has high positioning accuracy: CNC workbench with continuous indexing (0.001°) positioning is optional.

+High-speed, efficient processing characteristics

It is suitable for rapid roughing and finishing of various boxes and valve body parts.

The positioning time is shortened through high acceleration/deceleration axis feed, and the machining cycle is greatly shortened through high-speed spindle, high-speed ATC and high-speed drilling to rank among the world's mainstream machine tools.

Aluminum casting processing time is 34% shorter than traditional machine tools.

Specifications

	Item	HS 5000	HM 6300	HM 8000
Travel	X-axis travel	1100mm	1050mm	1100mm
	Y-axis travel	600mm	750mm	850mm
	Z-axis travel	600mm	900mm	900mm
	Distance from spindle end face to worktable	-20~580mm	120~870mm	100~950mm
Worktable	Distance from spindle end face to worktable	180~780mm	130~1030mm	180~1080mm
	Worktable size	500*500mm	630*630mm	800*800mm
	T-slot quantity/size/spacing	5*18*100	5*18*100	5*22*160
Spindle	Maximum loading capacity	350kg	800kg	1500kg
	Spindle speed	50-10000rpm	50-6000rpm	50-6000rpm
	Drive mode	Direct drive	Synchronous belt drive	Synchronous belt drive
Servo axis	Spindle motor torque	52.2/118Nm	143/236Nm	143/236Nm
	Main motor power	11/15kW	15/18.5kW	15/18.5kW
	X/Y/Z rapid traverse speed	36/36/36m/min	24/24/24m/min	24/24/24m/min
Tool magazine	Cutting feed rate	1-10000mm/min	1-10000mm/min	1-10000mm/min
	Tool magazine type	ATC tool magazine with 24 tools	ATC tool magazine with 30 tools	ATC tool magazine with 30 tools
Main accuracy (full travel)	Shank specification	BT-40	BT-50	BT-50
	Positioning accuracy	0.005mm	0.006mm	0.006mm
Other	Repeatability	0.003mm	0.004mm	0.004mm
	Machine footprint and height	2680*2950*2850mm	5005*4000*2850mm	5215*4000*3100mm
	Machine weight (apx.)	7500kg	12000kg	18000kg
	CNC systemt		FANUC 0i	

LV500 vertical lathe

The vertical lathe targets large and medium-sized workpieces to achieve powerful, high-precision and high-efficiency machining, especially for machining large parts such as brake drums, brake discs, wheels, driving wheels, hubs, transmission gears, snap rings, pulleys and others in the automobile, power generation, shipbuilding, metallurgy, mining and other industries. It has high accuracy and efficiency, and is suitable for machining large batches of parts.



+Mechanical structure



+Chuck



+Turret

High-quality casting: The whole machine adopts HT300 high-grade resin sand castings, which has been tempered and subjected to vibration and natural aging treatment to eliminate internal stress;

Square base structure: It is easier to ensure accuracy by machine the main spindle box surface, bed mounting surface and main motor surface in one-time: realizing space-saving, good vibration resistance, good overall rigidity and good machining stability;

Spindle: The spindle box and the base are integrated structures, which is more rigid. The spindle uses four front and two rear original bearings imported from Japan, which has better accuracy and service life;

Dual-axis guide way: The two axes use roller-type linear guide ways to withstand greater cutting forces;

Bed worktable: the bed is widened, the Z-axis guide rail span is larger, and the vibration resistance is better;

Application

The vertical lathe has an overall box-shaped structure and a rectangular cross-section column. It has good rigidity, pro heavy cutting, and has strong accuracy retention. The spindle diameter is large, and the bearing structure has good rigidity for high-precision and powerful cutting. The longitudinal and horizontal movements are on the cross ram structure, realizing full protection design, beautiful appearance, and convenient operation and maintenance.



Specifications

	Item	LV500
Machining capacity	Maximum swing over bed	650mm
	Maximum turning diameter	550mm
	Maximum turning length	465mm
Spindle	Main motor power	15/18.5 kW
	Spindle motor torque	590 N·m
	Maximum spindle speed	2000rpm
	Standard chuck size	12 inch
Servo axis	X/Z rapid traverse speed	24/24 m/min
	X/Z servo motor torque	12/22 N·m
	Cutting feed rate	1-10000 mm/min
Travel	X-axis travel	310mm
	Z-axis travel	500mm
Turret	Turret capacity	8
	Turret type	Hydraulic turret
	Maximum boring bar diameter	40mm
Main accuracy	Positioning accuracy	0.008mm
	Repeatability	0.004mm
Others	Machine footprint and height	1700*3060*2900mm
	Machine weight (apx.)	6100Kg
	CNC system	FANUC-0iTF PLUS



Robot automation production line 1

Product: Automobile rim hub

The automated unit covers an area of about 270 square meters and has an annual output of about 800,000 pieces (single production line and three shifts). Only one worker is required for regular loading and unloading and daily inspection. The system adopts 14 sets of equipment (machining center, robot loading and unloading, automatic coding, online monitoring, automatic cleaning)



Ground rail robot automation production line 2

Product: High-end lock

The production line is a multifunctional composite production line with one set of robot ground rails to complete the workpiece loading and unloading of seven machines, and is equipped with vision, truss, sampling inspection, online inspection, AGV docking silo and other equipment.



Truss line robot automation production line

Product: Automobile transmission housing

Automated machining line configuration: vertical machining center, vertical lathe, loading & unloading line, cleaning machine, angular positioning, sample inspection machine, laser marking, online inspection, flip & protection device.



Product: Bellows valve body

Robot unit line 1

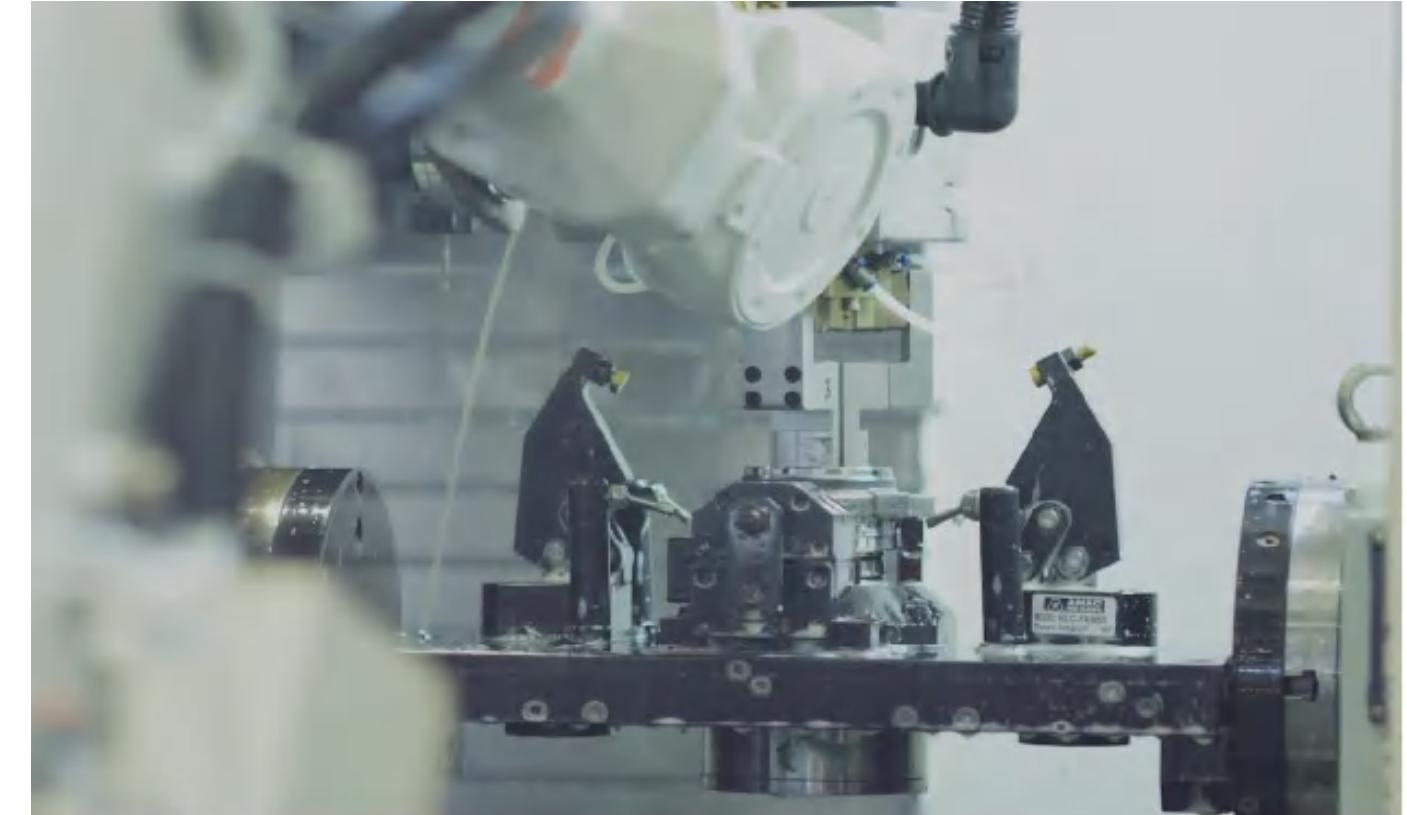
This automated production line uses one robot to complete the loading and unloading of three machine tools. The loading and unloading station use positioning trolleys, with a precise positioning table and a turning table in the middle. The efficiency of the entire line has been greatly improved compared to the original equipment.



Product: Piston

Robot unit line 2

The production line consists of three robot units, each unit is equipped with two machines, a work-piece station, and a sample inspection machine. The loading only needs to place the tray on the work-piece station, which is convenient and fast. The whole line has high production efficiency, and the cycle time of a single piece is about 22 s.



Product: Automobile hub

Robot unit line 3

One robot is used for the loading and unloading of three machines. This automated unit includes three vertical machines, one robot, a loading station, an unloading conveyor line, a set of visual positioning system, safety protection device, etc. This automated unit realizes a set of gripping, positioning and clamping system using six types of automated machining of workpieces, which realizes flexible manufacturing, and improves the economic benefits and profitability of the enterprise.



Sales and after-sales service outlets

In order to provide better customer service, US WHEELER has offices and after-sales service outlets in Shanghai, Jiangsu, Anhui, Shandong, Henan, Jilin, Chongqing, Ningbo, Taizhou, Wuhan, Xi'an, Zhengzhou and other places. In addition to domestic market, US WHEELER's products have a good influence overseas, and the products are exported to Turkey, Egypt, South Africa, Brazil, Australia, Singapore, Malaysia, Thailand, etc.

Offices and after-sales

The Company has established a complete sales service network system to provide high-quality and efficient installation and after-sales services.



About Wheelink

Wheelink was established in July 2021 as an industrial Internet platform company incubated by HANGZHOU WHEELER GENERAL MACHINERY INCORPORATED CO., LTD. It is committed to providing SaaS MES, digital factory, machine measurement system, tool monitoring, spindle failure prediction and other digital intelligent products for machine tool users, and helping customers solve problems such as difficult production management, high tool cost, and high machining defective rate. More than 90% of the employee of Wheelink have a bachelor's degree or above.

It covers 50+ countries and regions around the world: 500+ global cooperative customers: covering 80+ industries

Product structure



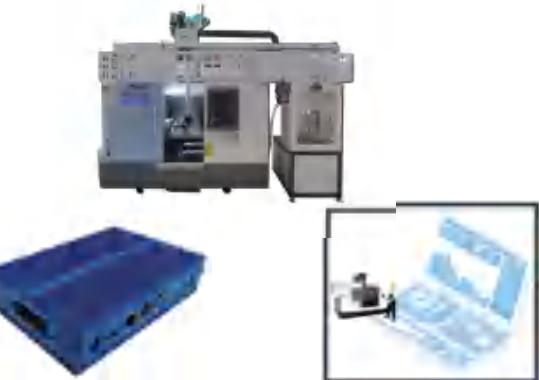
Screen out look management module

The key indicators are automatically counted and presented in real time, and key information such as equipment operating status, equipment alarm status, and utilization rate are monitored in real time, which promotes the enterprise production and operation.



Improve enterprise operation efficiency by 70%

SaaS MES



Industrial computer



Tablet

- The machine tool is connected to the Internet as soon as it leaves the factory, and functionally implements functions such as equipment monitoring, program management, output statistics and reporting, quality management, and remote operation and maintenance management.

- Support more than **99%** of mainstream CNC control systems and more than **95%** of PLC plug-and-play

- Increase data collection efficiency by **99%**

Improve efficiency and reduce costs

On-machine measurement system

For automatic setting of workpiece reference in mass production

- Reduce production auxiliary job time and improve production capacity
- Add automated operations
- Reduce labor costs and human intervention

For accuracy control of workpieces in production process

- Update tool offset of machining coordinate system according to actual allowance
- Improve workpiece accuracy
- Reduce rework, out-of-tolerance and scrap products

For measurement of geometric tolerance workpieces and surface features (special software required)

- Quickly measure geometric and positional features such as internal and external aperture, rectangle, position, parallelism, flatness, symmetry, and coaxiality of the workpiece
- Measure surface features of the workpiece



Tool monitoring system



- Tool breakage monitoring:** Real-time monitoring of tool breakage abnormalities and control of machine tool shutdown, with an accuracy of **100%** for tool breakage monitoring.

- Blade breakage monitoring:** Big data feature comparison and real-time monitoring of tool blade breakage abnormalities, with an accuracy over **100%** for blade breakage monitoring.

- Wear monitoring:** Real-time monitoring of spindle load current to reflect the wear of the tool and measuring the real service life of the tool, with prediction accuracy over **99%** for service life of the tool.

Tool monitoring terminal
real-time monitoring + service life prediction