All images in this brochure are for reference only, and the actual delivered products shall prevail. Our company continuously improves its products; in case of any changes to the above information, we reserve the right to make such changes without prior notice.

Scan to Explore More About Taikan Machine

TAIKAN INTELLIGENT EQUIPMENT (SHENZHEN) CO., LTD.
HONG KONG TAIQUN MACHINERY EQUIPMENT CO., LIMITED

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V20260228

Taikan
Stock Code: 300083

HIGH PRECISION VERTICAL MACHINING CENTER

High speed | High precision | High efficiency



HIGH-END INTELLIGENT EQUIPMENT INTEGRATED SOLUTION SERVICE PROVIDER

WE ARE A DREAM BUILDER FOR THE INNOVATION

Create Century is not only a high-end intelligent equipment manufacturer but also a creator of industrial machine tools and productivity tools

MACHINERY TAKES SHAPE BUT INNOVATION KNOWS NO BOUNDS

Create Century transcends with innovation of thinking, intelligence, products and services unveiling the realm of intelligent manufacturing and fostering a shared vision of a better future



Taikan

About Us
Company Profile

Guangdong Create Century Intelligent Equipment Group Co., Ltd.(Create Century, Stock Code: 300083) . The company is a national high-tech enterprise of intelligent equipment, integrating R&D, production, sales and service. With over 20 years of industry experience, it can provide customers with high-quality equipment and intelligent solution service. It is recognized as one of the most technologically advanced companies in the industry, offering one of the broadest and most comprehensive product portfolios among its domestic peers.

NO.183
Shenzhen Top 500 Enterprises

NO.175
Top 500
Manufacturing Companies in
Guangdong Province

Top 100
Shenzhen Bao'an District
- Top 100 Taxpayers
- Top 100 Value Added
- Top 100 Output Value
- Top 100 Innovation Enterprises



About Us
Advantages

5
Manufacturing Bases

785,000m^2
Factory area

3000+
Employees



Shenzhen Headquarters
Group Headquarters | Global Marketing Center | Technology R&D Center



Huzhou Manufacturing Headquarters
Group Manufacturing Headquarters | East China High-End CNC Machine Manufacturing Industrialization Production Base



Dongguan Manufacturing Base



Suzhou East China Headquarters



Yibin Manufacturing Base



Vietnam Manufacturing Base

Main Products

Vertical Machining Center	Tapping Machining Center	Profile Machining Center
Horizontal Machining Center	Five-axis Machining Center	Gantry Machining Center
Boring Machining Center	High-speed Machining Center	CNC Lathe
Vertical Lathe	Swiss-type Lathe	Turn-Mill

Technological Advantages

3 Technology Research Institute
- South China Research Institute —— Shenzhen
- East China Research Institute —— Suzhou
- Northwest Research Institute —— Xi'an

4 Strategic Cooperation Organization
- Shenzhen academician (expert) workstation
- Intelligent precision machining key technology engineering laboratory
- Guangdong engineering technology research center
- Shenzhen enterprise technology center

792+ Core Patents
- Invention Patents——109
- Utility Model Patents——529
- Design Patents——106
- Total Trademarks Obtained——154

Taikan

S Standard Edition with Three Linear Guide Rails

High-speed and high-efficiency—A classic masterpiece

- The tool magazine is controlled by encoders and frequency converters, allowing for quicker and more precise tool changes. The tool magazine can enter the tool changing state in advance, thereby saving time during tool changes.
- Customers have the fexibility to choose from a range of operating systems, transmission modes, as well as various speeds, powers, and core component brands, allowing for a comprehensive satisfaction of their specific needs.
- The machine tool's five major components are manufactured using premium resin sand molding and high-strength cast iron materials, resulting in vibration-free and distortion-free high-speed cutting operations, while maintaining a stable level of precision.

High-speed and High-efficiency Vertical Machining Center

HT-V856S HT-V857S HT-V1055S HT-V1165S HT-V1270S

HT-V856S
5th Generation Upgraded Version

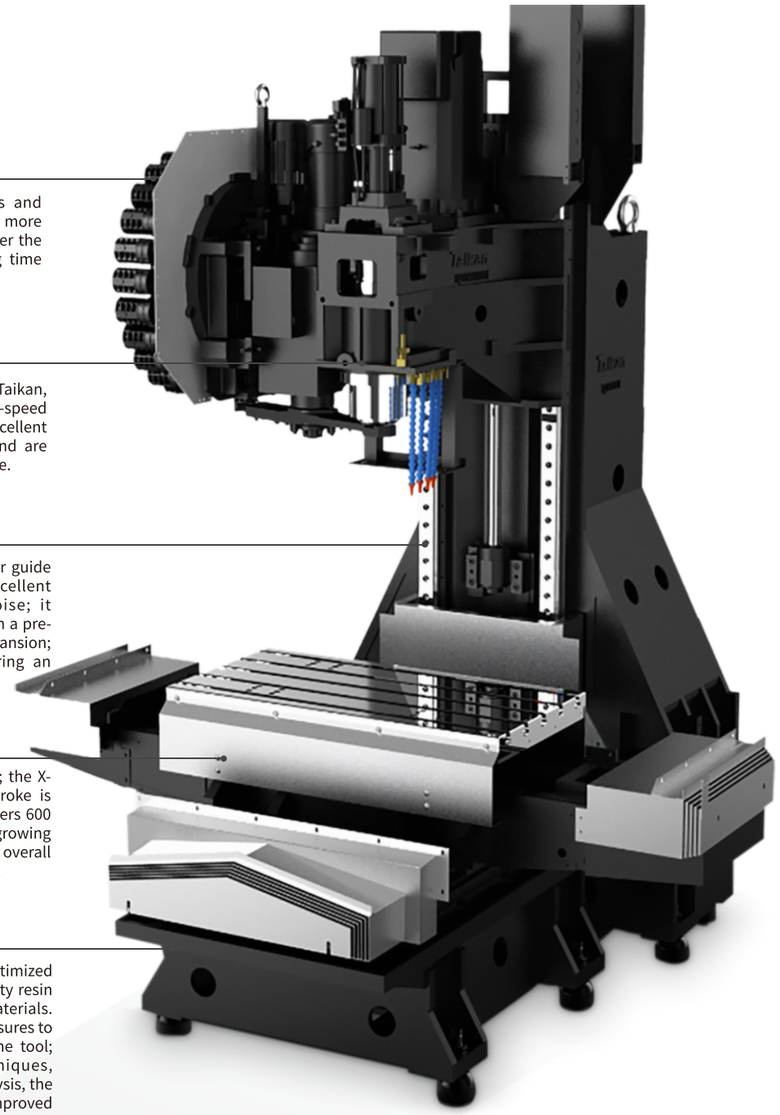
- 2.3s Ultra-Fast Variable Frequency Tool Change
- Standard Equipped with Grease Lubrication for Higher Cost Efficiency and Eco-Friendliness



Taikan

Superior static and dynamic rigidity, resistance to vibration, and thermal stability

PRODUCT STRUCTURE



■ Tool magazine

The tool magazine is controlled by encoders and frequency converters, allowing for quicker and more precise tool changes. The tool magazine can enter the tool changing state in advance, thereby saving time during tool changes.

■ Spindle

The spindle is a high-speed spindle unit from Taikan, featuring a direct-drive BT40-12000 r/min high-speed long-nose spindle. The spindle bearings offer excellent heat dissipation, minimal thermal distortion, and are complemented by an air curtain protection feature.

■ Guide rail

The three-axis guide rail is designed with a roller guide rail for load-bearing purposes, providing excellent rigidity, minimal friction, and reduced noise; it incorporates a C3-level large-diameter screw with a pre-tensioning structure to counteract thermal expansion; the screw bearings are self-lubricating, ensuring an extended lifespan.

■ Worktable

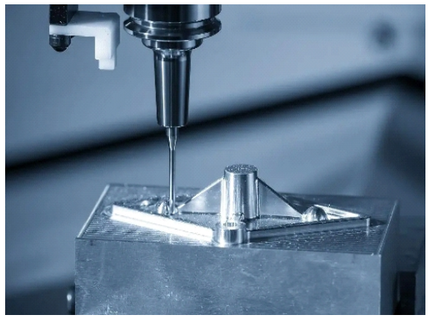
Enlarged worktable: 1000 mm x 500 mm in size; the X-axis stroke spans 800 mm, while the Y-axis stroke is extended to 550 mm, while the Z-axis stroke covers 600 mm; this expanded working range caters to the growing need for larger machining spaces and enhances overall versatility to accommodate various requirements.

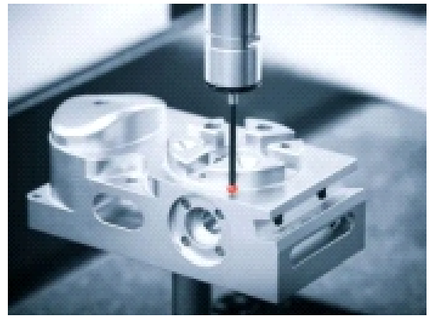
■ Foundation castings

The five basic castings for machine tool are re-optimized in their structural design and made of high-quality resin sand molding and high-strength cast iron materials. They are also combined with heat treatment measures to ensure high rigidity and stability of the machine tool; through the use of advanced design techniques, including finite element analysis and modal analysis, the overall performance of the machine has been improved by at least 20%.

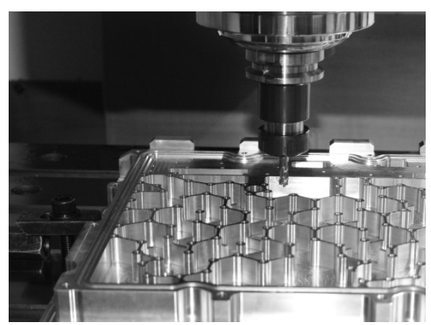
WORKPIECES DISPLAY

The machine tool is designed for medium and small batch processing of complex parts such as boxes, plates, disks, valves, casings, and molds. It's extensively used in industries such as precision parts, 3C products, hardware, auto parts, and medical devices.











S Standard Edition with Three Linear Guide Rails

High-speed and high-efficiency—A classic masterpiece

- High-rigidity belt spindle for high precision and efficiency.
- A well-designed machine structure ensures rigid machining performance.
- Three-axis ball screw and roller linear guide rail guarantee high-precision and stable operation of the machine tool.

High-speed and High-efficiency Vertical Machining Center

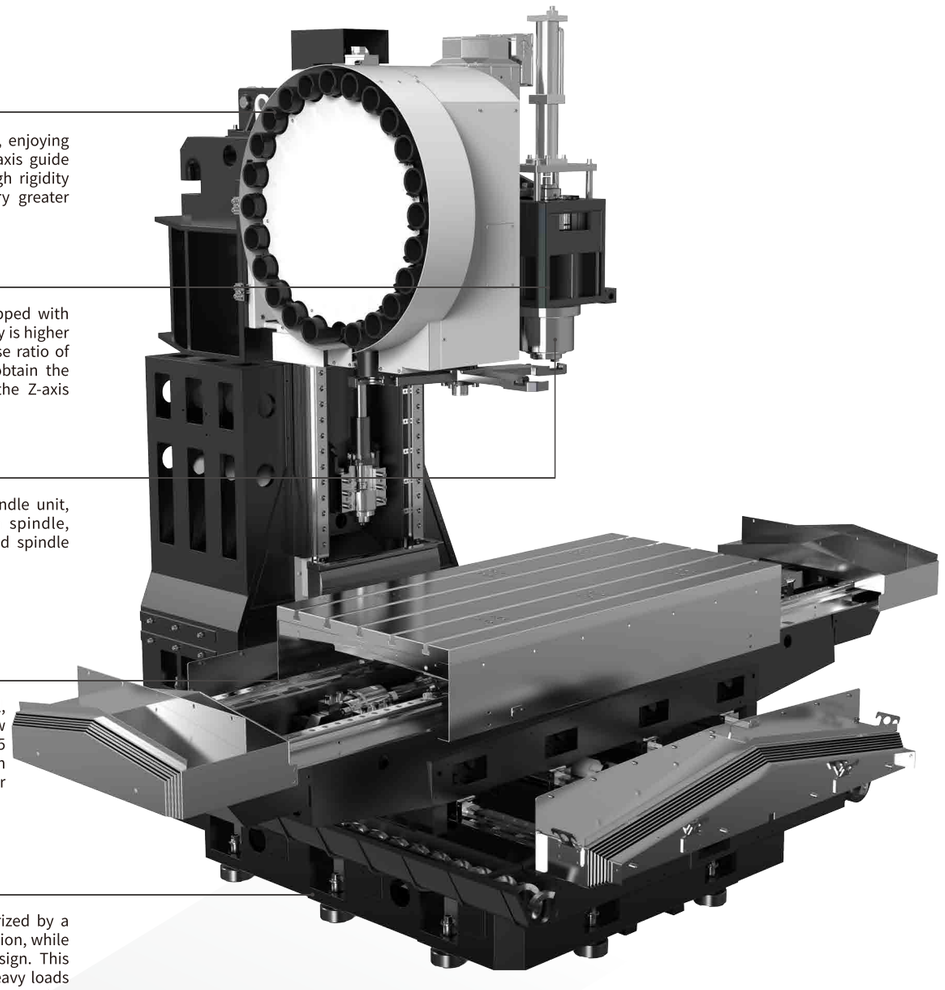
HT-V1370S HT-V1375S HT-V1475S HT-V1585S HT-V1685S



Taikan

The well-designed machine tool structure guarantees stable precision in high-speed heavy-duty cutting operations

PRODUCT STRUCTURE



■ Tool magazine

X/Y-axis guide rail is carried by #45 line rail, enjoying high rigidity, low friction and low noise; Z-axis guide rails are carried by #55 rollers, enjoying high rigidity and high vibration resistance, able to carry greater cutting force.

■ Spindle box

The spindle box movement (Z-axis) is equipped with nitrogen balancing device, so that the stability is higher even when moving at high speed; the precise ratio of counterweight to spindle box weight can obtain the best machining characteristics and make the Z-axis drive motor have good load characteristics.

■ Spindle

The spindle adopts Taikan's high-speed spindle unit, equipped with belt-driven BT50-6000rpm spindle, enjoying high cutting efficiency and reduced spindle thermal deformation.

■ Guide rail

X/Y-axis guide rail is carried by #45 line rail, enjoying high rigidity, low friction and low noise; Z-axis guide rails are carried by #55 rollers, enjoying high rigidity and high vibration resistance, able to carry greater cutting force.

■ Structure

The machine's overall structure is characterized by a stationary design and a cross-slide configuration, while the Y-axis incorporates a four-guide rail design. This ensures the machine's capacity to handle heavy loads during processing, while maintaining precise machining accuracy. The overall machine is equipped with a fully enclosed protective structure. The machine tool boasts a visually appealing appearance and is easy to operate and repair.

WORKPIECES DISPLAY

With each clamping cycle, it is capable of performing various machining operations such as milling, drilling, boring, broaching, reaming, countersinking, and tapping of workpiece. The machine tool is designed for medium and large batch processing of complex parts such as boxes, plates, disks, valves, casings, and molds. It's extensively used in industries such as precision parts, 5G products, hardware, auto parts, and medical devices.





PARAMETER TABLE

Items	Units	HT-V855S	HT-V856S	HT-V857S	HT-V1055S	HT-V1165S	HT-V1270S	HT-V1370S	HT-V1375S	HT-V1475S	HT-V1585S	HT-V1685S
Worktable size	mm	1000×500	1000×500	1000×500	1100×500	1200×600	1300×650	1400×700	1500×750	1500×750	1700×850	1700×850
strokes of the three axis (X/Y/Z)	mm	800/550/550	800/550/600	800/550/700	1000/550/600	1100/650/600	1200/700/700	1300/700/650	1350/750/750	1400/750/750	1550/850/850	1650/850/850
Distance from spindle nose to table	mm	125～675	125～725	150～850	100～700	125～725	100～800	150～800	120～870	120～870	120～970	120～970
T-slot of worktable (number of slots - slot width×spacing)	mm	5-18×100	5-18×100	5-18×100	5-18×100	5-18×100	5-18×125	5-18×125	5-18×150	5-18×150	5-18×125+2-18×100	5-18×125+2-18×100
Spindle speed	r/min	12000 (Direct coupling)	12000 (Direct coupling)	12000 (Direct coupling)	12000 (Direct coupling)	12000 (Direct coupling)	12000 (Direct coupling)	6000(Belt)	6000(Belt)	6000(Belt)	6000(Belt)	6000(Belt)
Spindle taper	/	BT40	BT40	BT40	BT40	BT40	BT40	BT50	BT50	BT50	BT50	BT50
Rapid feedrate	m/min	48/48/48	48/48/48	48/48/48	48/48/48	36/36/36	36/36/30	36/36/24	24/24/20	24/24/20	24/24/20	24/24/20
Tool magazine capacity	PCS	24	24	24	24	24	24	24	24	24	24	24
Tool weight	kg	7	7	7	7	7	7	15	15	15	15	15
Tool length	mm	250	250	250	250	250	250	350	350	350	350	350

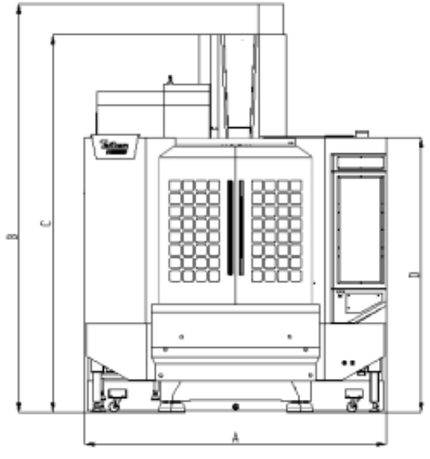
CONFIGURATION

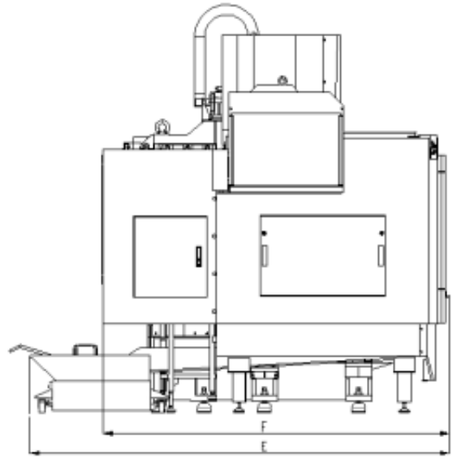
(●Standard configuration ○Optional configuration △Not supported)

Items	HT-V855S	HT-V856S	HT-V857S	HT-V1055S	HT-V1165S	HT-V1270S	Items	HT-V1370S	HT-V1375S	HT-V1475S	HT-V1585S	HT-V1685S
BT40 belt type 8000 rpm	○	○	○	○	○	○	Bt50 belt type 6000 rpm	●	●	●	●	●
BT40 belt type 10000 rpm	○	○	○	○	○	○	Bt40 belt type 10000 rpm	△	○	○	△	△
BT40 direct type 12000 rpm	●	●	●	●	●	●	Bt40 belt type 12000 rpm	△	○	○	○	○
CTS (2MPa/3MPa/5MPa/7MPa)	○	○	○	○	○	○	CTS (2MPa/3MPa/5MPa/7MPa)	○	○	○	○	○
Mitsubishi M80VB	●	●	●	●	●	●	Mitsubishi M80VB	○	○	○	○	○
FANUC-0i-MF(3B)	○	○	○	○	○	○	FANUC-0i-MF(3B)	●	●	●	●	●
Siemens 828D	○	○	○	○	○	○	Siemens 828D	○	○	○	○	○
Huazhong Numerical Control System	○	○	○	○	○	○	Huazhong Numerical Control System	○	○	○	○	○
Four-axis	○	○	○	○	○	○	Four-axis	○	○	○	○	○
Roller linear guide rail	●	●	●	●	●	●	Roller linear guide rail	●	●	●	●	●
24T disc-type tool magazine	●	●	●	●	●	●	24T disc-type tool magazine	●	●	●	●	●
30T disc-type tool magazine	○	○	○	○	○	○						
Rear chain chip conveyor	○	○	○	○	○	○	Front double-helix chip removal	○	●	●	●	●
Tool setter	○	○	○	○	○	○	Front chain chip conveyor	○	●	●	●	●
Oil-water separator	○	○	○	○	○	○	Oil-water separator	○	○	○	○	○
Spindle cooling	●	●	●	●	●	●	Spindle cooling	●	●	●	●	●

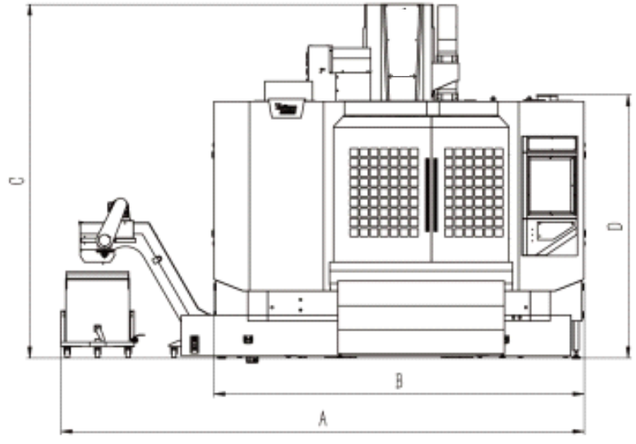
Taikan

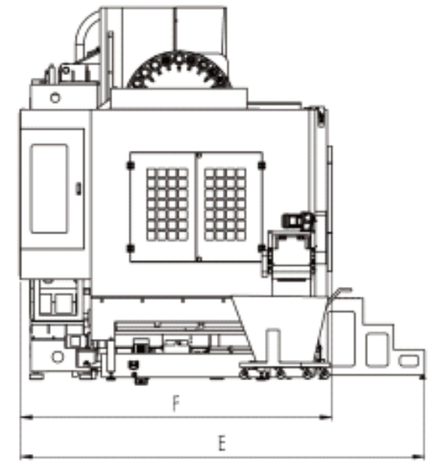
OVERALL LAYOUT DIAGRAM





Overall size						
Model \ Size	A	B	C	D	E	F
HT-V855S	2210		2946	1936	3082	2512
HT-V856S	2240	3026	2805	2038	3121	2576
HT-V857S	2500	3077	3023	2038	3137	2591
HT-V1055S	2500	3026	2745	2038	3141	2591
HT-V1165S	2700	2955	2508	2158	2806	3470
HT-V1270S	3000	3057	2604	2195	2836	3497
HT-V1370S	3160	3200	3155	2140	3580	2950





Overall size						
Model \ Size	A	B	C	D	E	F
HT-V1375S	4976	3560	3440	2630	3680	2845
HT-V1475S	4976	3560	3440	2630	3680	2845
HT-V1585S	5240	3920	3517	2585	4014	3185
HT-V1685S	5240	3920	3517	2585	4014	3185

Taikan

H Advanced Edition with Three Linear Guide Rails

High speed and high precision——A testament to exquisite craftsmanship

- Faster and more precise tool change saves time.
- Suitable for the machining of workpieces with high precision requirements and moderate chip volume.
- With its ability to perform high-speed cutting without any vibrations or deformations, the machine tool maintains consistent precision throughout the process.

High-speed and High-precision Vertical Machining Center

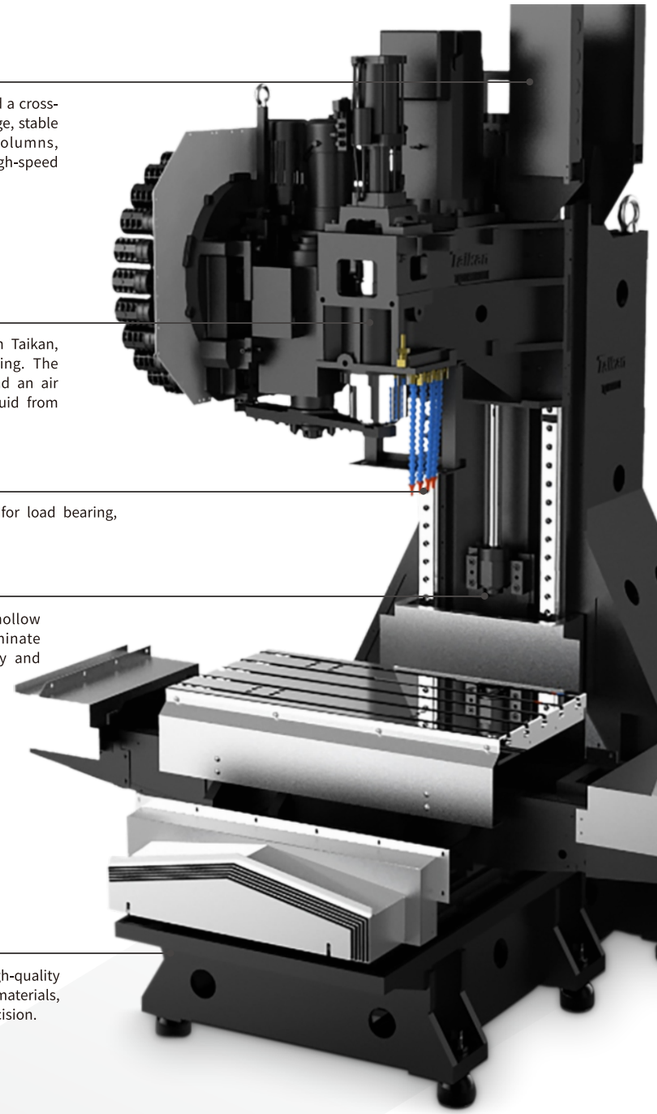
HT-V856H HT-V1165H



Taikan

This machine exhibits high levels of static and dynamic stiffness, along with excellent vibration resistance and excellent thermal stability

PRODUCT STRUCTURE



■ Column

The machine features a fixed column structure and a cross-slide table. The machine body utilizes an extra-large, stable base and high-rigidity, wide-span A-frame columns, ensuring vibration-free and deformation-free high-speed cutting.

■ Spindle

The spindle uses a high-speed spindle unit from Taikan, equipped with a BT40-12000r/min direct coupling. The spindle front end features a labyrinth design and an air curtain protection function to prevent cutting fluid from entering the spindle bearings.

■ Guide rail

The three-axis guide rail uses 45# roller guides for load bearing, offering high rigidity, low friction, and low noise.

■ Screw

Large-diameter precision ball screws employ hollow cooling and a pre-tensioning structure to eliminate thermal expansion, improve machining accuracy and stability, and extend screw life.

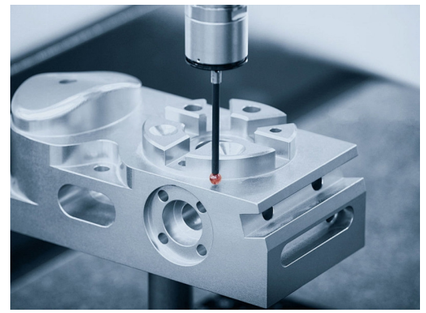
■ Castings

The major basic components are all cast using high-quality resin sand molding and high-strength cast iron materials, giving the machine tool high rigidity and stable precision.

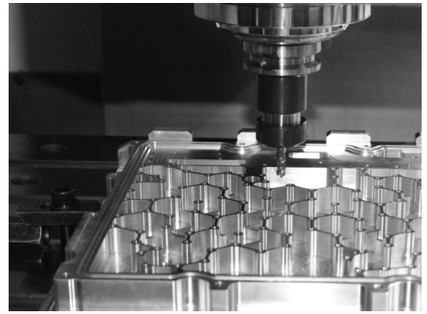
WORKPIECES DISPLAY

With each clamping cycle, it is capable of performing various machining operations such as milling, drilling, boring, broaching, reaming, and tapping of workpiece. The machine tool is designed for medium and small batch processing of complex parts such as boxes, plates, disks, valves, casings, and molds. It's extensively used in industries such as precision parts, 5G products, hardware, auto parts, and medical devices.











PARAMETER TABLE

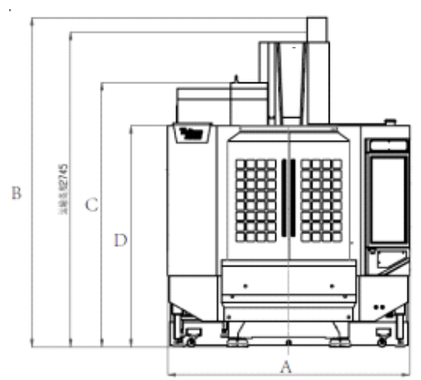
Items		Units	HT-V856H	HT-V1165H
Stroke	Strokes of the three axis (X/Y/Z)	mm	800/550/600	1100/650/600
	Distance from spindle nose to table	mm	125～725	125～725
Worktable	Worktable size	mm	1000*500	1200*600
	Max. load bearing capability of worktable	kg	450	800
	T-slot of worktable (number of slots - slot width×spacing)	mm	5-18*100	5-18*100
Spindle	Max. rotational speed of spindle	rpm	50~12000(Direct coupling)	50~12000(Direct coupling)
	Spindle taper	#	BT40	BT40
	Motor power (rated/short-time)	Kw	11/15	11/15
	Motor torque (rated/short-time)	N.m	52.5/118	52.5/118
Tools	Tool magazine capacity	PCS	24	24
	Max. diameter (full magazine/vacant adjacent slot)	mm	Φ75/Φ150	Φ75/Φ150
	Tool length	mm	250	250
	Tool weight	kg	7	7
Feed	Rapid feedrate	m/min	30/30/30	30/30/30

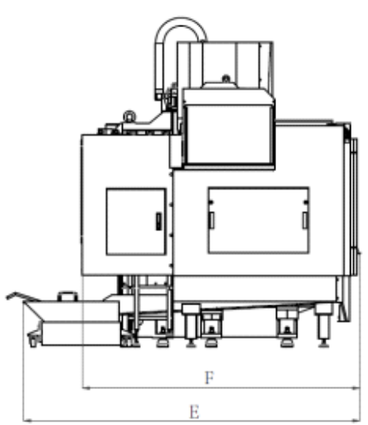
CONFIGURATION

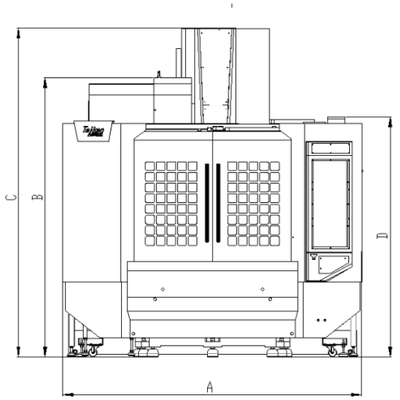
(●Standard configuration ○Optional configuration △Not supported)

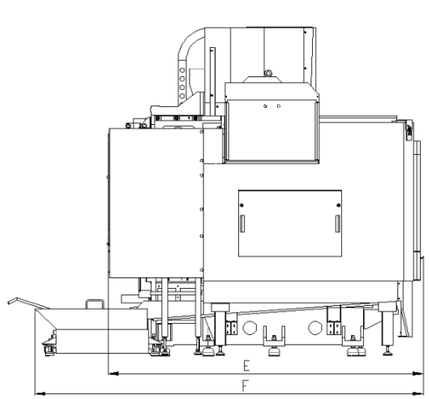
Items	HT-V856H	HT-V1165H
BT40 direct type 12000 rpm	●	●
BT40 direct type15000 rpm	○	○
BT40 motorized spindle 15000 rpm	○	○
HSK-A63 motorizde spindle 20000 rpm	○	○
CTS (2MPa/3MPa/5MPa/7MPa)	○	○
Mitsubishi M80VB	●	●
FANUC-0i-MF(3B/1B)	○	○
Siemens 828D	○	○
Four-axis	○	○
Roller linear guide rail	●	●
24T disc-type tool magazine BT40	●	●
30T disc-type tool magazine BT40	○	○
Tool setter	○	○
Oil-water separator	○	○
Spindle cooling	●	●
Screw hollw cooling	●	●

OVERALL LAYOUT DIAGRAM









Overall size						
Model \ Size	A	B	C	D	E	F
HT-V856H	2240	3026	2435	2038	3121	2576
HT-V1165H	2691	2508	2953	2156	2840	3500

Taikan

L Two Linear and One Box Way Design

High precision and high efficiency - An outstanding masterpiece

- High-rigidity belt spindle for high precision and efficiency.
- The structural design of the machine tool guarantees outstanding performance in heavy-duty machining.
- Three-axis ball screw and "two linear and one box way design" guarantee high-precision and stable operation of the machine tool.

High-speed and High-precision Vertical Machining Center

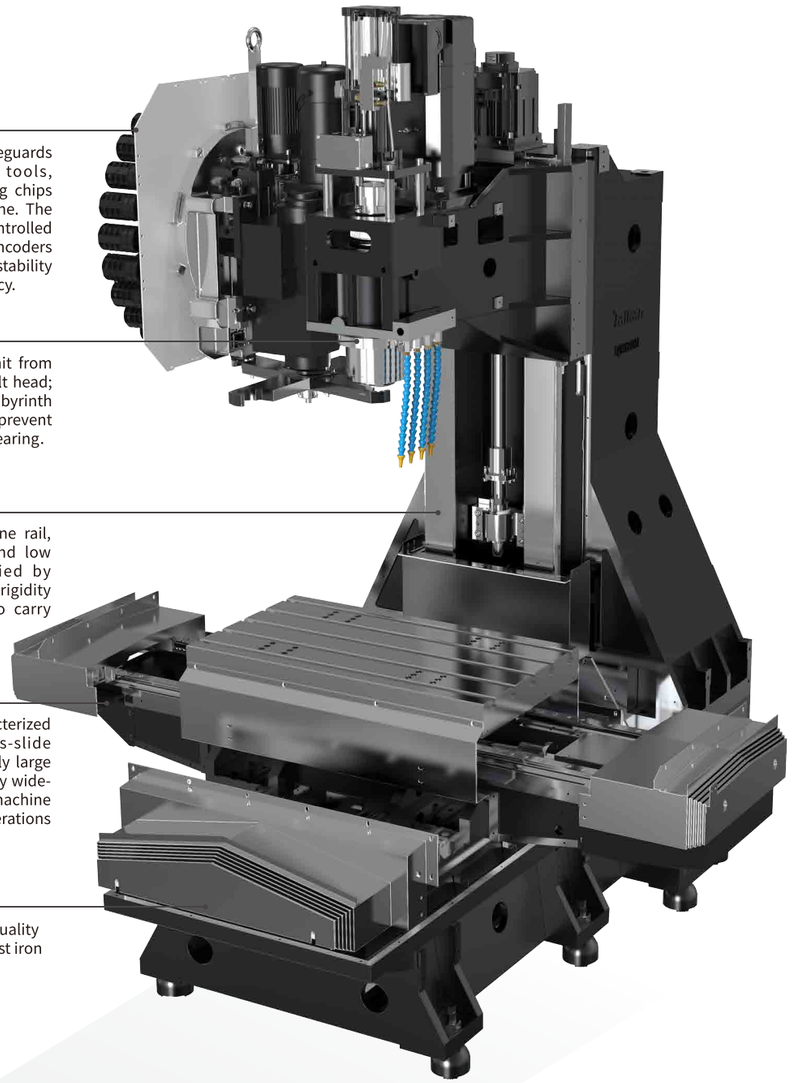
HT-856L HT-1060L HT-1260L



Taikan

The machine tool structure guarantees stable precision in high-speed heavy-duty cutting operations

PRODUCT STRUCTURE



■ Tool magazine

The fully enclosed tool magazine safeguards and preserves the cleanliness of tools, minimizing the possibility of machining chips contaminating the tools in the magazine. The ATC tool change speed and angle are controlled with frequency converters and angle encoders to improve the tool change speed and stability and boost the overall machining efficiency.

■ Spindle

The spindle is a high-speed spindle unit from Taikan, featuring a BT40-8,000 r/min belt head; the front end of the spindle adopts labyrinth design with air curtain protection to prevent cutting fluid from entering the spindle bearing.

■ Guide rail

X/Y-axis guide rail is carried by #45 line rail, enjoying high rigidity, low friction and low noise; Z-axis guide rails are carried by rectangular hard rails, enjoying high rigidity and high vibration resistance, able to carry greater cutting force.

■ Structure

The machine's overall structure is characterized by a stationary design and a cross-slide configuration. Featuring an exceptionally large and stable base, as well as a high-rigidity wide-span inverted "T" shaped column, the machine frame enables high-speed cutting operations without any vibrations or deformations.

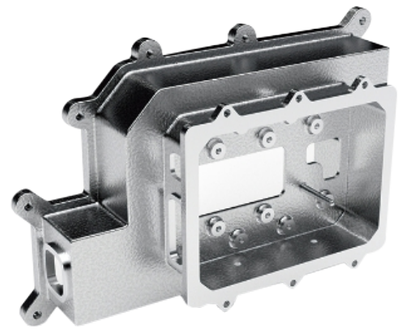
■ Castings

The foundation parts are made of high-quality resin sand molding and high-strength cast iron material, which makes the lathe get high rigidity and stable precision.

WORKPIECES DISPLAY

This machine is capable of achieving high precision and handling substantial cutting volumes in workpiece machining, making it well-suited for the processing of small to medium-sized precision parts and molds; it finds extensive applications across industries including precision parts, auto parts, medical devices, precision molds, etc.

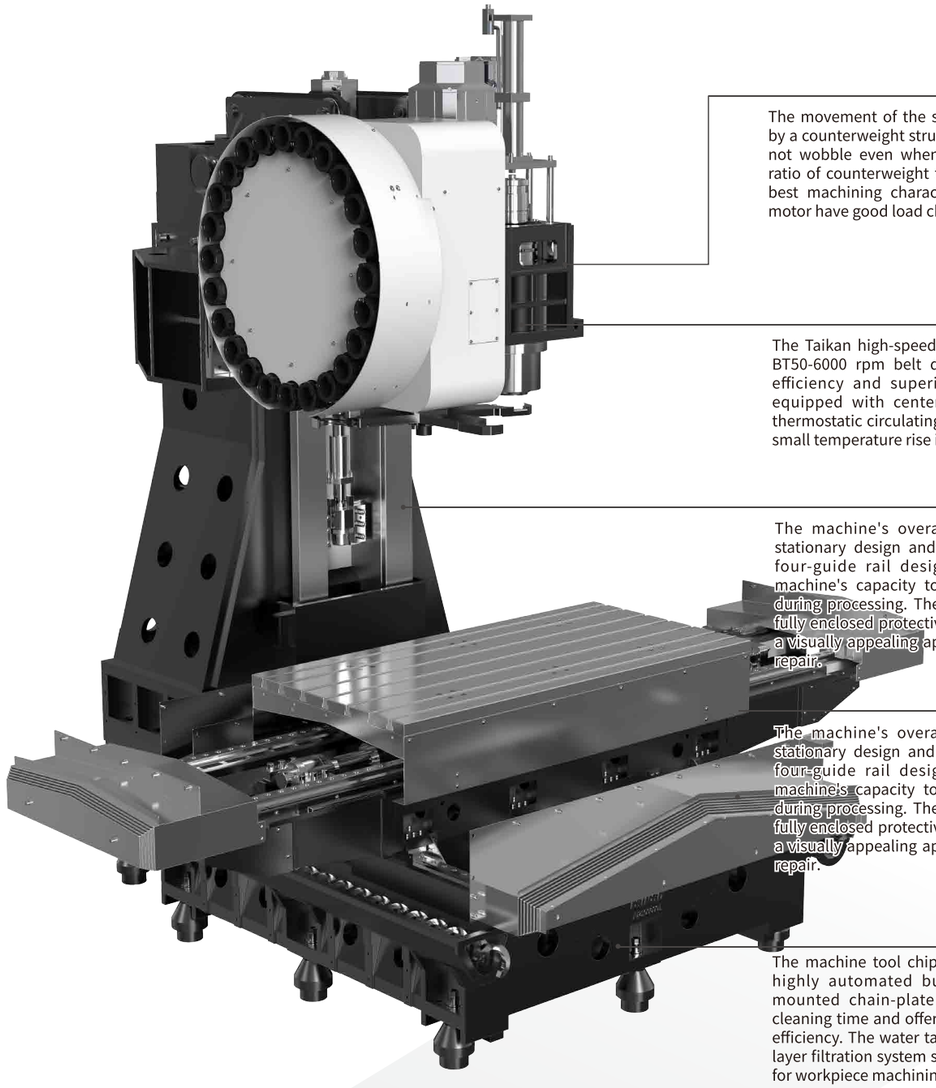






This machine is capable of achieving high precision, handling substantial cutting volumes, and offering high rigidity for workpiece machining

PRODUCT STRUCTURE



Spindle box ■

The movement of the spindle box (Z-axis) is complemented by a counterweight structure, so that the counterweight does not wobble even when moving at high speed; the precise ratio of counterweight to spindle box weight can obtain the best machining characteristics and make the Z-axis drive motor have good load characteristics.

Spindle ■

The Taikan high-speed spindle unit comes with a standard BT50-6000 rpm belt drive to provide exceptional cutting efficiency and superior cutting rigidity The spindle is equipped with center blowing function and automatic thermostatic circulating water cooling device, which ensures small temperature rise in spindle and high precision stability.

Guide rail ■

The machine's overall structure is characterized by a stationary design and a cross-slide configuration, while a four-guide rail design is incorporated to ensure the machine's capacity to handle heavy loads and precision during processing. The overall machine is equipped with a fully enclosed protective structure. The machine tool boasts a visually appealing appearance and is easy to operate and repair.

Structure ■

The machine's overall structure is characterized by a stationary design and a cross-slide configuration, while a four-guide rail design is incorporated to ensure the machine's capacity to handle heavy loads and precision during processing. The overall machine is equipped with a fully enclosed protective structure. The machine tool boasts a visually appealing appearance and is easy to operate and repair.

Chip removal ■

The machine tool chip removal system is equipped with a highly automated built-in dual-screw row-type front-mounted chain-plate chip conveyor to reduce manual cleaning time and offer favorable user-friendliness, and high efficiency. The water tank of the machine tool adopts multi-layer filtration system structure to provide good cutting fluid for workpiece machining.

High-speed and High-precision Vertical Machining Center

HT-1370G HT-1370L HT-1375L HT-1475L HT-1585L HT-1685L



Taikan

PARAMETER TABLE

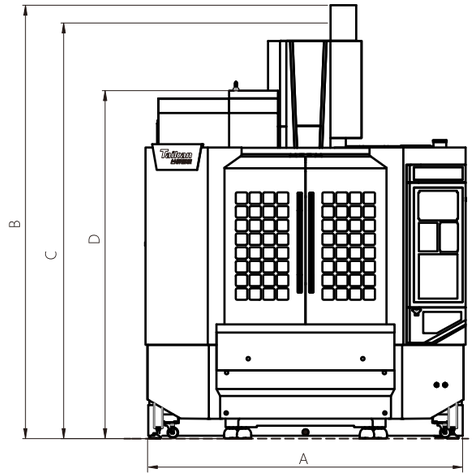
Items		Units	HT-856L	HT-1060L	HT-1260L	HT-1370G	HT-1370L	HT-1375L	HT-1475L	HT-1585L	HT-1685L
Stroke	Strokes of the three axis (X/Y/Z)	mm	800/500/600	1050/600/570	1200/600/570	1300/700/650	1300/700/650	1350/750/750	1400/750/750	1550/850/850	1650/850/850
	Distance from spindle nose to table	mm	125～725	140～710	140~710	150~800	150~800	120~870	120~870	120~970	120~970
Worktable	Worktable size	mm	1000*500	1200*600	1300*600	1400*700	1400*700	1500*750	1500*750	1700*850	1700*850
	Max. load bearing capability of worktable	kg	500	800	1000	1100	1100	1300	1400	1500	1600
	T-slot of worktable (number of slots - slot width×spacing)	mm	5-18*100	5-18*100	5-18×100	5-18×125	5-18×125	5-18×150	5-18×150	5-18×125+2-18×100	5-18×125+2-18×100
Spindle	Max. rotational speed of spindle	rpm	Belt 8000	Belt 8000	Belt 8000	50-6000 (Gear head type)	50-6000 (Belt type)	Belt 6000	Belt 6000	Belt 6000	Belt 6000
	Spindle taper	#	BT40	BT40	BT40	BT50	BT50	BT50	BT50	BT50	BT50
	Motor power (rated/short-time)	Kw	7.5/11	7.5/11	7.5/11	11/15	11/15	15/18.5	15/18.5	15/18.5	15/18.5
	Motor torque (rated/short-time)	N.m	35.8/95.5	35.8/95.5	35.8/95.5	52.5/118	52.5/118	143/191	143/191	143/191	143/191
Tools	Tool magazine capacity	PCS	24	24	24	24	24	24	24	24	24
	Max. diameter (full magazine/vacant adjacent slot)	mm	Φ75/Φ150	Φ75/Φ150	Φ75/Φ150	Φ105/Φ210	Φ105/Φ210	Φ105/Φ210	Φ105/Φ210	Φ105/Φ210	Φ105/Φ210
	Tool length	mm	250	250	250	300	300	350	350	350	350
	Tool weight	kg	7	7	7	15	15	15	15	15	15
Feed	Rapid feedrate	m/min	36/36/24	36/36/20	36/36/20	24/24/16	24/24/16	24/24/15	24/24/15	24/24/15	24/24/15

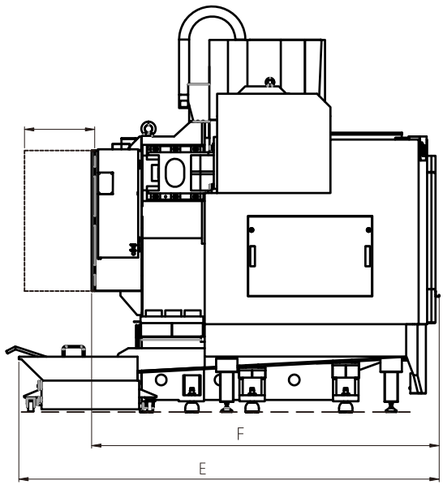
CONFIGURATION

(●Standard configuration ○Optional configuration △Not supported)

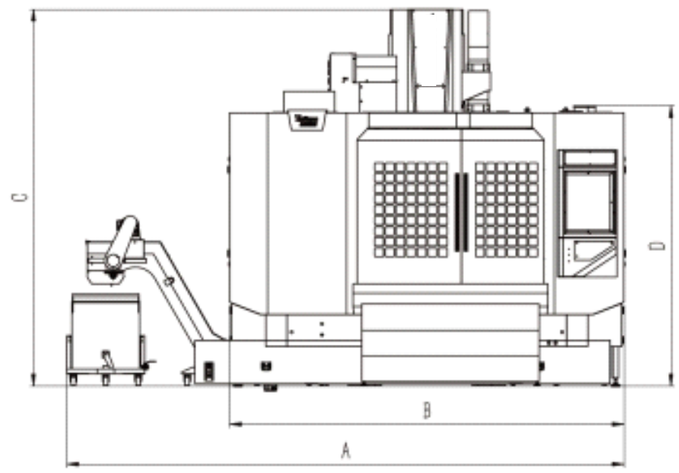
Items	HT-856L	HT-1060L	HT-1260L	Items	HT-1370G	HT-1370L	HT-1375L	HT-1475L	HT-1585L	HT-1685L
BT40 belt type 8000 rpm	●	●	●	BT50 belt type 6000 rpm	○	●	●	●	●	●
BT40 belt type 10000 rpm	○	○	○	BT50 gear head type 6000 rpm	●	○	○	○	○	○
FANUC-0I-MF(3B)	○	○	○	FANUC-0I-MF(3B)	●	●	●	●	●	●
Mitsubishi M80VB	●	●	●	Mitsubishi M80VB	○	○	○	○	○	○
Siemens 828D	○	○	○	Siemens 828D	○	○	○	○	○	○
Water-cooled spindle	●	●	●	Water-cooled spindle	○	●	●	●	●	●
Oil-cooled spindle	○	○	○	Oil-cooled spindle	●	○	○	○	○	○
Four-axis	○	○	○	Four-axis	○	○	○	○	○	○
Five-axis turntable（4.5axis）	○	○	○	Five-axis turntable (4.5axis)	○	○	○	○	○	○
24T disc-type tool magazine	●	●	●	24T disc-type tool magazine	●	●	●	●	●	●
30T disc-type tool magazine	○	○	○	30T disc-type tool magazine	○	○	○	○	○	○
Dual-screw chip conveyor	○	○	○	Dual-screw chip conveyor	○	○	●	●	●	●
Rear chain chip conveyor	○	○	○	Rear chain chip conveyor	○	○	●	●	●	●
Oil-water separator	○	○	○	Oil-water separator	○	○	○	○	○	○
CTS (2MPa/3MPa/5MPa/7MPa)	○	○	○	CTS (2MPa/3MPa/5MPa/7MPa)	○	○	○	○	○	○
Safety lock	○	○	○	Safety lock	○	○	○	○	○	○
Automatic door	○	○	○	Automatic door	○	○	○	○	○	○
Water gun	○	○	○	Water gun	○	○	○	○	○	○
Electric cabinet air conditioner/heat exchanger	○	○	○	Electric cabinet air conditioner/heat exchanger	○	○	○	○	○	○

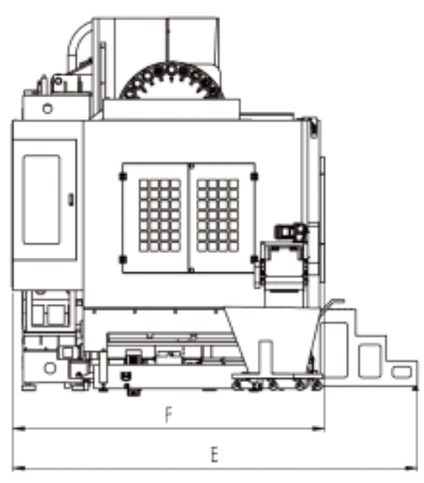
OVERALL LAYOUT DIAGRAM





Overall size						
Model \ Size	A	B	C	D	E	F
HT-856L	2240	3033	2755	2436	3144	2599
HT-1060L	2700	3169	2926	2090	3468	2777
HT-1260L	3000	3156	2821	2075	3492	2811
HT-1370L	3160	3154	2985	2985	3653	3005
HT-1370G	3160	3315	2985	2985	3668	3005





Overall size						
Model \ Size	A	B	C	D	E	F
HT-1375L	4976	3560	3440	2630	3680	2845
HT-1475L	4976	3560	3440	2630	3680	2845
HT-1585L	5240	3920	3517	2585	4014	3185
HT-1685L	5240	3920	3517	2585	4014	3185

M Series with Excellent Rigidity

High speed and high rigidity - A masterpiece for heavy-duty cutting operations

- A design featuring an exceptionally massive and robust base structure; concealed anchor support structure; a low center of gravity for enhanced stability; exceptional vibration reduction capabilities, and impeccable rigidity and stability.
- Large-span high-rigidity H-shaped column; double-layered wall panel design at the bottom, along with the reinforced spindle box with three-layered wall panel structure, and the use of 6-slider roller guide rail design for the Z-axis, to provide strong resistance to deformation during heavy-duty cutting operations and ensure precision preservation.
- Belt-driven 8000 RPM spindle offering high cutting rigidity.

High-speed and high-rigidity vertical machining center

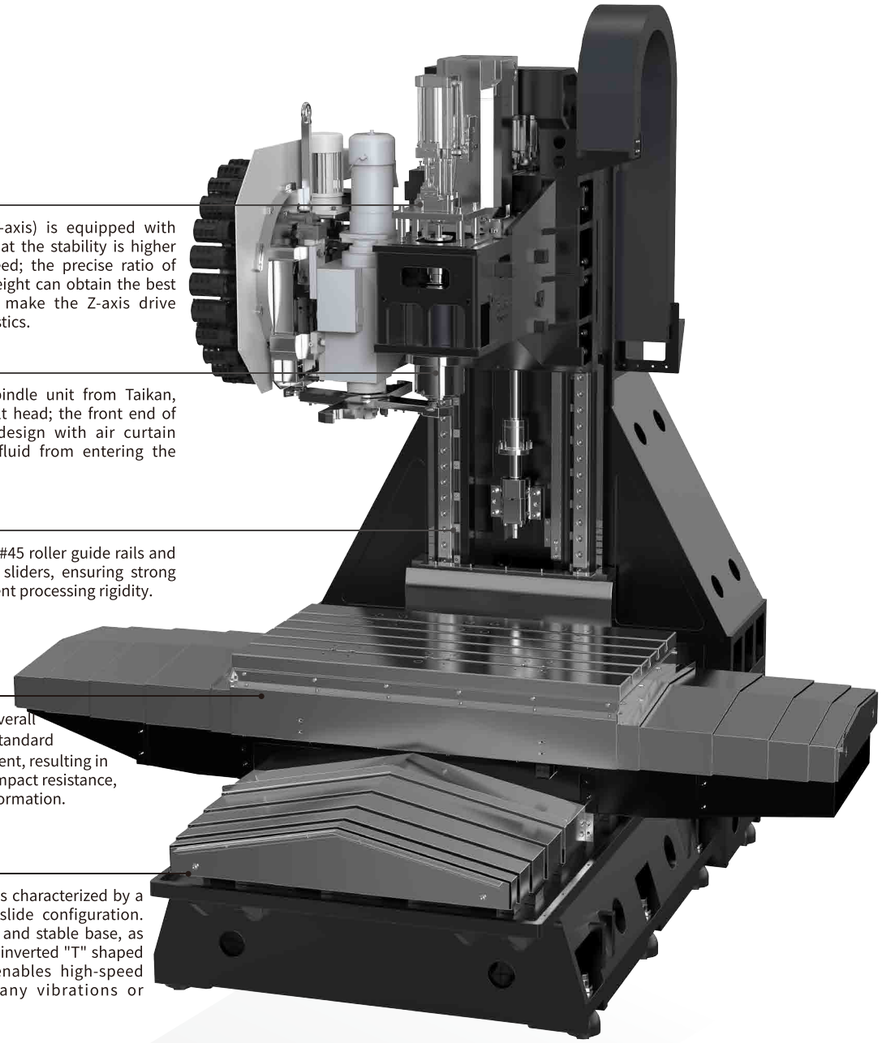
HT-V850M HT-V1055M HT-V1165M HT-V1370M



Taikan

High speed, high precision and high rigidity - A masterpiece for heavy-duty cutting operations

PRODUCT STRUCTURE



■ Spindle box

The spindle box movement (Z-axis) is equipped with nitrogen balancing device, so that the stability is higher even when moving at high speed; the precise ratio of counterweight to spindle box weight can obtain the best machining characteristics and make the Z-axis drive motor have good load characteristics.

■ Spindle

The spindle is a high-speed spindle unit from Taikan, featuring a BT40-8,000 r/min belt head; the front end of the spindle adopts labyrinth design with air curtain protection to prevent cutting fluid from entering the spindle bearing.

■ Guide rail

All three axes are furnished with #45 roller guide rails and the X/Z-axis is designed with 6 sliders, ensuring strong load bearing capacity and sufficient processing rigidity.

■ Worktable

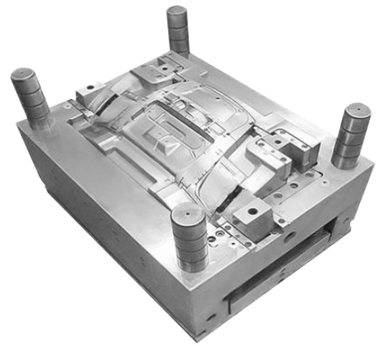
Thickened worktable enhances overall strength The surface undergoes standard quenching and hardening treatment, resulting in high surface hardness, superior impact resistance, and exceptional resistance to deformation.

■ Structure

The machine's overall structure is characterized by a stationary design and a cross-slide configuration. Featuring an exceptionally large and stable base, as well as a high-rigidity wide-span inverted "T" shaped column, the machine frame enables high-speed cutting operations without any vibrations or deformations.

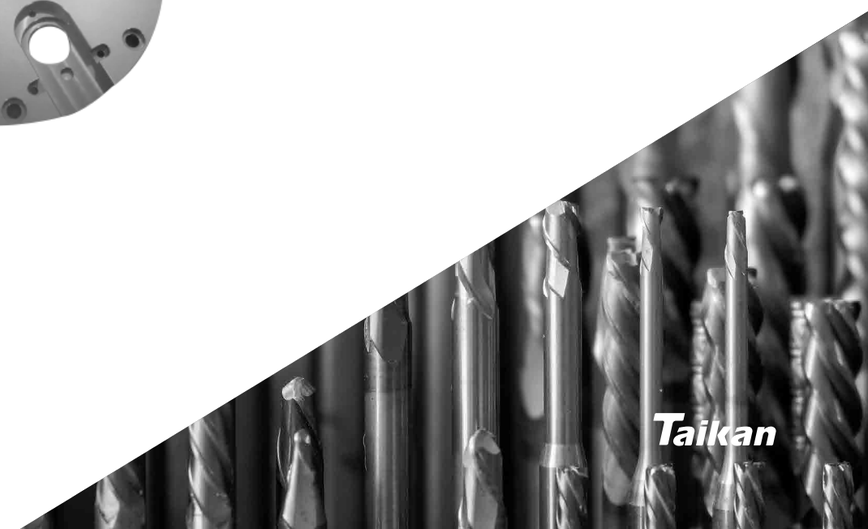
WORKPIECES DISPLAY

The M series high-rigidity vertical machining center features enhanced dynamic responsiveness for high-speed, high-rigidity cutting operations. It’ s capable of cutting various types of metal or non-metal materials, delivering high machining precision and excellent surface finishing quality. High-speed machining and batch processing capabilities are suitable for applications in 5G communication, toy manufacturing, hardware, and valve body manufacturing; also suitable for high-speed machining of aluminum and heavy-duty cutting operations of cast iron, steel and other materials.



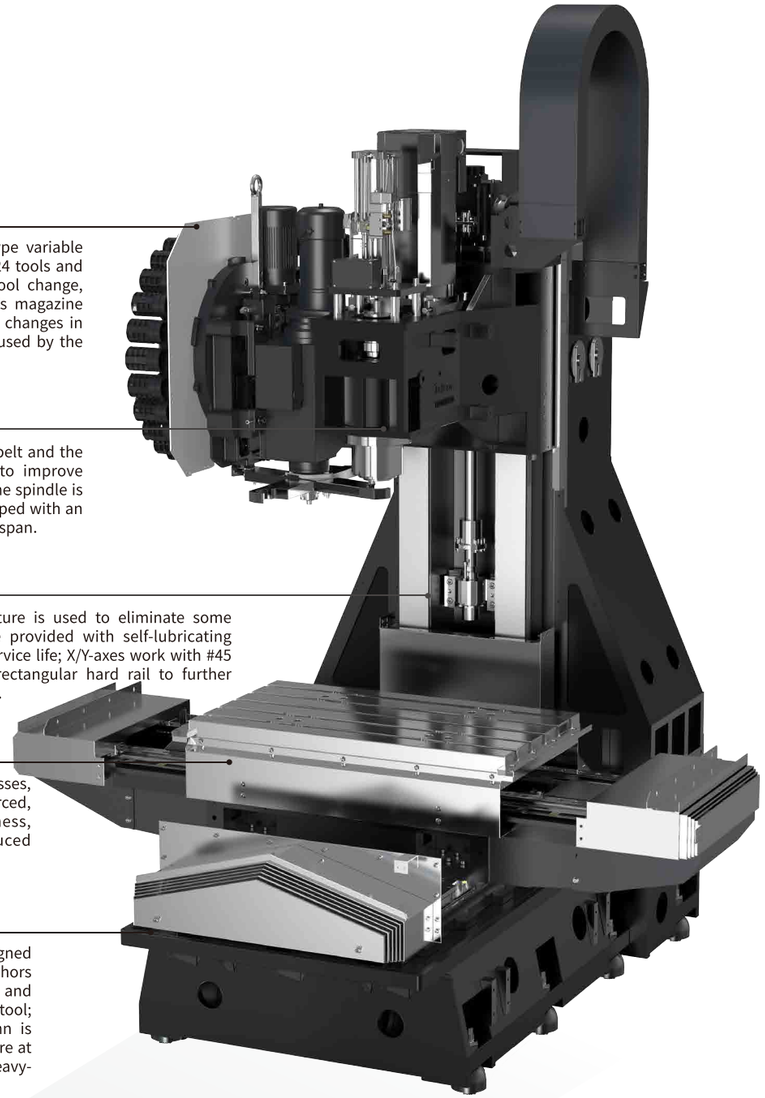






The machine tool structure can withstand high-intensity heavy-duty cutting, ensuring overall stability and precision

PRODUCT STRUCTURE



■ Tool magazine

The tool magazine employs Taikan's arm type variable frequency magazine that can accommodate 24 tools and change tools automatically. Featuring fast tool change, reliable quality, and stable performance, this magazine can make up for the drawbacks of slow tool changes in ordinary magazines and accelerated wear caused by the use of mechanical brakes.

■ Spindle

The spindle comes standard with 8,000 RPM belt and the bearings are arranged in a "3+2" fashion to improve cutting rigidity; in addition, the front end of the spindle is designed with a labyrinth structure and equipped with an air curtain protection function to extend its lifespan.

■ Screw/guide rail

C3-grade screw with a pre-tensioning structure is used to eliminate some thermal expansion; the screw bearings are provided with self-lubricating capabilities to ensure a prolonged bearing service life; X/Y-axes work with #45 roller guide wails while Z-axis employs a rectangular hard rail to further improve the load-bearing capacity and rigidity.

■ Worktable

Through quenching and strengthening processes, the worktable surface is remarkably reinforced, which brings about higher surface hardness, increased resistance to impact, and reduced susceptibility to deformation.

■ Foundation structure

The massive and robust base structure designed for the machine is furnished with 8 built-in anchors to reduce the height of the center of gravity and improve the overall stability of the machine tool; the large-span high-rigidity H-shaped column is furnished with a double-layered panel structure at the bottom to avoid deformation during heavy-duty cutting operations.

High-speed and high-rigidity vertical machining center

HT-850LM HT-1165LM

High rigidity and high stability
A masterpiece for heavy-duty cutting operations



Taikan

PARAMETER TABLE

	Items	Units	HT-V850M	HT-V1055M	HT-V1165M	HT-V1370M
Stroke	Strokes of the three axis (X/Y/Z)	mm	850/550/550	1020/550/550	1100/650/600	1300/700/700
	Distance from spindle nose to table	mm	150～700	150～700	150～750	150～850
Worktable	Worktable size	mm	1000*550	1100*550	1200*650	1400*700
	Max. load bearing capability of the worktable	kg	600	650	1000	1100
	T-slot of worktable (number of slots - slot width×spacing)	mm	5-18*100	5-18*100	5-18*100	5-18*125
Spindle	Max. rotational speed of spindle	rpm	50~8000 (Belt)	50~8000 (Belt)	50~8000 (Belt)	50~8000 (Belt)
	Spindle taper	#	BT40	BT40	BT40	BT40
	Motor power (rated/short-time)	Kw	11/15	11/15	11/15	11/15
	Motor torque (rated/short-time)	N.m	52.5/118	52.5/118	52.5/118	52.5/118
Tools	Tool magazine capacity	PCS	24	24	24	24
	Max. diameter (full magazine/vacant adjacent slot)	mm	Φ75/Φ150	Φ75/Φ150	Φ75/Φ150	Φ75/Φ150
	Tool length	mm	250	250	250	250
	Tool weight	kg	7	7	7	7
Feed	Rapid feedrate	m/min	36/36/30	36/36/30	36/36/30	36/36/30

CONFIGURATION

(●Standard configuration ○Optional configuration △Not supported)

Items	HT-V850M	HT-V1055M	HT-V1165M	HT-V1370M
Bt40 belt type 8000 rpm	●	●	●	●
Bt40 belt type 10000 rpm	○	○	○	○
BT40 direct type 12000 rpm	○	○	○	○
BT40 direct type 15000 rpm	○	○	○	○
HSK-A63 motorizde spindle 20000 rpm	○	○	○	○
CTS (2MPa/3MPa/5MPa/7MPa)	○	○	○	○
Mitsubishi M80VA	○	○	○	○
Mitsubishi M80VB	●	●	●	●
FANUC 0I-MF (3B)	○	○	○	○
Siemens 828D	○	○	○	○
Four-axis	○	○	○	○
Five-axis turntable (4.5 axis)	○	○	○	○
Roller linear guide rail	●	●	●	●
Screw hollow cooling	○	○	○	○
24T disc-type tool magazine BT40	●	●	●	●
30T disc-type tool magazine BT40	○	○	○	○
Water-cooled spindle	●	●	●	●
Oil-cooled spindle	○	○	○	○
Tool setter	○	○	○	○
Oil-water separator	○	○	○	○
Rear chain chip conveyor	○	○	○	○
Safety lock	○	○	○	○
Automatic door	○	○	○	○
Water gun	○	○	○	○
Grating scale	○	○	○	○
Electric cabinet air conditioner/heat exchanger	○	○	○	○

PARAMETER TABLE

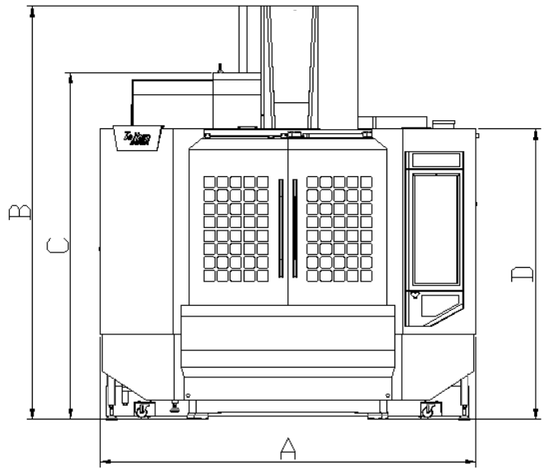
	Items	Units	HT-850LM	HT-1165LM
Stroke	Strokes of the three axis (X/Y/Z)	mm	850/520/550	1100/650/600
	Distance from spindle nose to table	mm	150～700	150～750
Worktable	Worktable size	mm	1000*550	1200*650
	Max. load bearing capability of the worktable size	kg	600	1000
	T-slot of worktable (number of slots - slot width×spacing)	mm	5-18*100	5-18*100
Spindle	Max. rotational speed of spindle	rpm	50~8000 (Belt)	50~8000 (Belt)
	Spindle taper	#	BT40	BT40
	Motor power (rated/short-time)	Kw	11/15	11/15
	Motor torque (rated/short-time)	N.m	52.5/118	52.5/118
Tools	Tool magazine capacity	PCS	24	24
	Max. diameter (full magazine/vacant adjacent slot)	mm	Φ75/Φ150	Φ75/Φ150
	Tool length	mm	250	250
	Tool weight	kg	7	7
Feed	Rapid feedrate	m/min	30/30/20	30/30/20

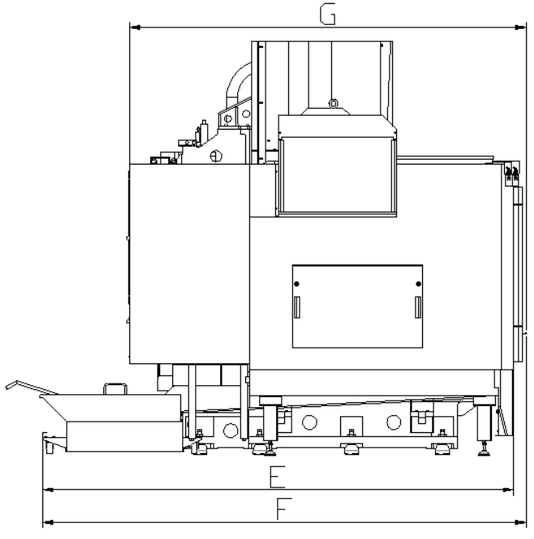
CONFIGURATION

(●Standard configuration ○Optional configuration △Not supported)

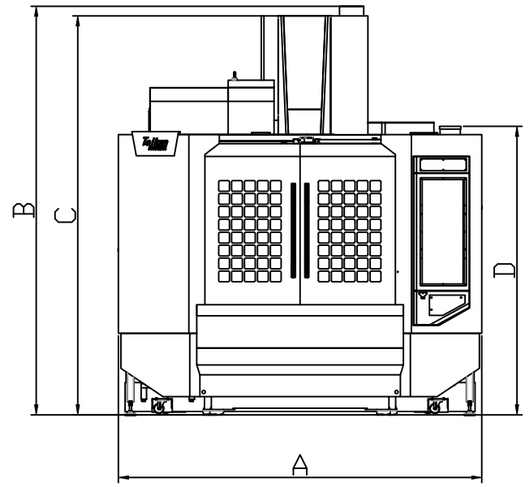
Items	HT-850LM	HT-1165LM
Bt40 belt type 8000 rpm	●	●
Bt40 belt type 10000 rpm	○	○
BT40 direct type 12000 rpm	○	○
BT40 direct type 15000 rpm	△	△
HSK-A63 motorizde spindle 20000 rpm	△	△
CTS (2MPa/3MPa/5MPa/7MPa)	○	○
Mitsubishi M80VA	○	○
Mitsubishi M80VB	●	●
FANUC 0I-MF (3B)	○	○
Siemens 828D	○	○
Four-axis	○	○
Five-axis turntable (4.5 axis)	○	○
Screw hollow cooling	○	○
24T disc-type tool magazine BT40	●	●
30T disc-type tool magazine BT40	○	○
Water-cooled spindle	●	●
Oil-cooled spindle	○	○
Tool setter	○	○
Oil-water separator	○	○
Rear chain chip conveyor	○	○
Safety lock	○	○
Automatic door	○	○
Water gun	○	○
Grating scale	○	○
Electric cabinet air conditioner/heat exchanger	○	○

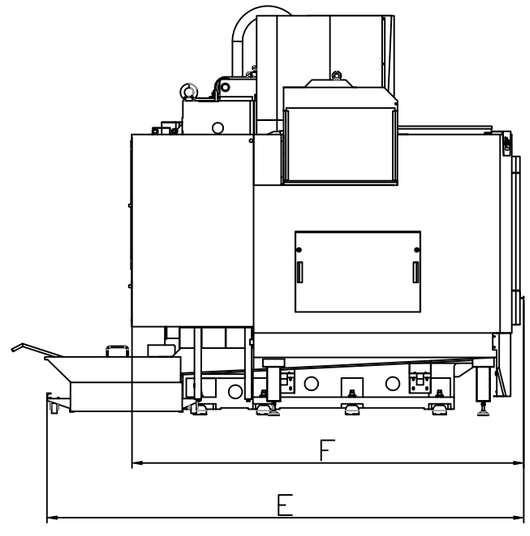
OVERALL LAYOUT DIAGRAM





Overall size						
Model \ Size	A	B	C	D	E	F
HT-V850M	2245	3223	2935	2451	3987	2896
HT-V1055M	2650	2900	2860	2100	2610	3110
HT-V1165M	2700	2963	2488	2082	3378	2844
HT-V1370M	3160	3150	3110	2145	2950	3570





Overall size						
Model \ Size	A	B	C	D	E	F
HT-850LM	2250	2977	2858	2042	3170	2638
HT-1165LM	2700	3036	2963	2144	3543	2911

Taikan

W Wheel hub machining series

High-speed, high-efficiency and specialized——A specialized masterpiece

- In comparison to conventional machining methods, the wheel hub machine boasts enhanced efÞciency and broader adaptability. It delivers the required machining precision for wheel hubs and other high-precision components.
- Customers have the ßexibility to choose from a range of operating systems, transmission modes, as well as various speeds, powers, and core component brands, allowing for a comprehensive satisfaction of their speciÞc needs.
- The wheel hub machine offers a wide range of functionalities, including machining, chip removal, positioning, and material handling. Its versatility allows for the processing of wheel hubs across different sizes.

High-precision and high-efficiency wheel hub machining center

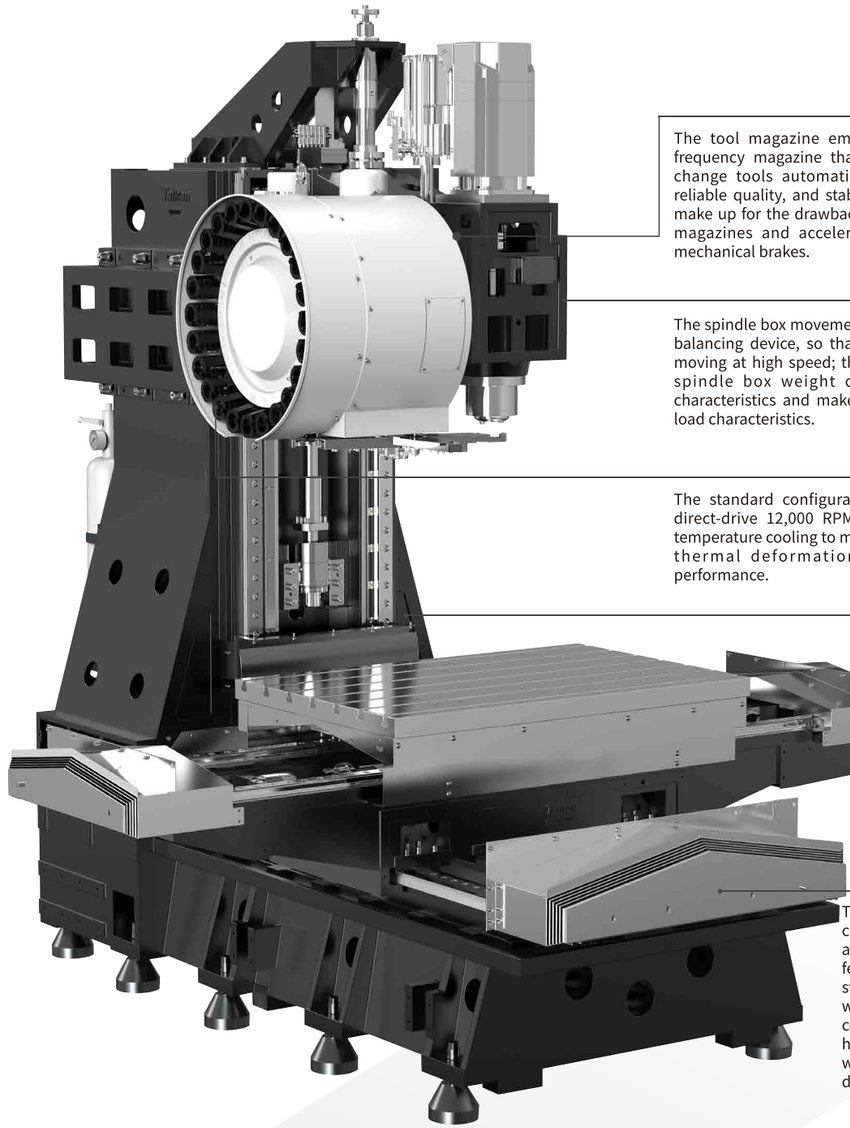
HT-V870W HT-V1285W



Taikan

Designed with careful consideration for processing automotive wheel hubs measuring 26 inches and below, this machine offers a broad processing range, high machining speed, exceptional rigidity, and superior machining precision

PRODUCT STRUCTURE



Tool magazine ■

The tool magazine employs Taikan's arm type variable frequency magazine that can accommodate 24 tools and change tools automatically. Featuring fast tool change, reliable quality, and stable performance, this magazine can make up for the drawbacks of slow tool changes in ordinary magazines and accelerated wear caused by the use of mechanical brakes.

Spindle box ■

The spindle box movement (Z-axis) is equipped with nitrogen balancing device, so that the stability is higher even when moving at high speed; the precise ratio of counterweight to spindle box weight can obtain the best machining characteristics and make the Z-axis drive motor have good load characteristics.

Spindle ■

The standard configuration includes a high-rigidity BT40 direct-drive 12,000 RPM spindle designed with constant-temperature cooling to minimize temperature rise and reduce thermal deformation, ensuring stable machining performance.

Guide rail ■

The three axes of the machine work with #45 roller guide rails (#55 rail for T-V1285W), and the Z-axis is designed with 6 sliders to ensure exceptional rigidity and superior vibration damping, and to fulfill the requirements for precision mold surface machining with fine finishing tools.

Structure ■

The machine's overall structure is characterized by a stationary design and a cross-slide configuration; featuring an exceptionally large and stable base, as well as a high-rigidity wide-span inverted "T" shaped column, the machine frame enables high-speed cutting operations without any vibrations or deformations.

WORKPIECES DISPLAY

With each clamping cycle, it is capable of performing various machining operations such as milling, drilling, boring, broaching, reaming, countersinking, and tapping of workpiece. The Y-axis with large travel range is suitable for processing square or circular workpieces, thus being extensively applicable to the machining of NEV wheel hubs of less than 26 inches in diameter in the casting-forging process and the semi-solid die forging process.





PARAMETER TABLE

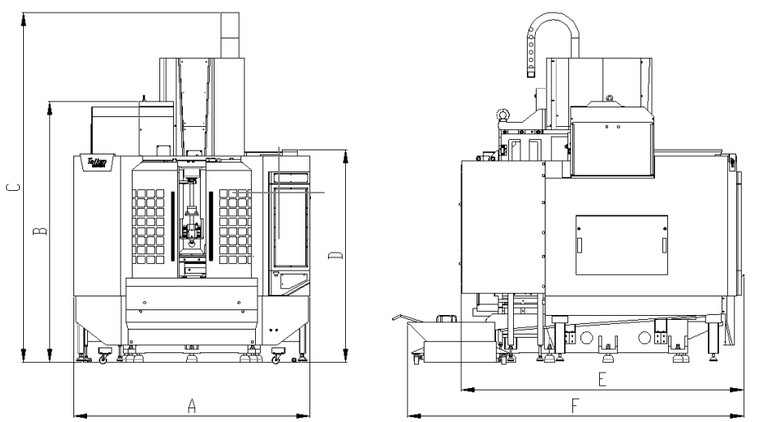
Items		Units	HT-V870W	HT-V1285W
Stroke	Strokes of the three axis (X/Y/Z)	mm	850/720/650	1200/850/700
	Distance from spindle nose to table	mm	200～850	80~780
Worktable	Worktable size	mm	1000*650	1300*850
	T-slot of worktable (number of slots - slot width×spacing)	mm	5-18*125	7-18×125
	Max. load bearing capability of the worktable size	kg	500	1000
Spindle	Max. rotational speed of spindle	rpm	50~12000	12000 (direct type)
	Spindle taper	#	BT40	BT40
	Motor power (rated/short-time)	Kw	7.5/11	11/15
	Motor torque (rated/short-time)	N.m	35.8/95.5	52.5/118
Tools	Tool magazine capacity	PCS	24	24
	Max. diameter (full magazine/vacant adjacent slot)	mm	Φ75/Φ150	Φ75/Φ150
	Tool length	mm	250	250
	Tool weight	kg	7	7
Feed	Rapid feedrate	m/min	36/36/30	24/24/16

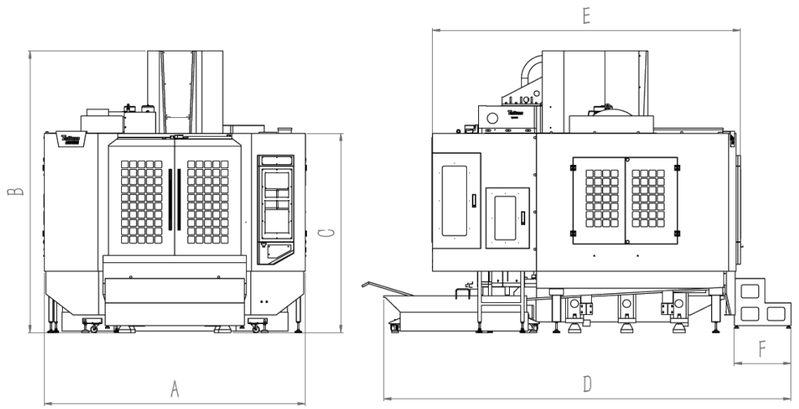
CONFIGURATION

(●Standard configuration ○Optional configuration △Not supported)

Items	HT-V870W	Items	HT-V1285W
BT40 belt type 8000 rpm	○	Bt40 motorized spindle 15000rpm	○
BT40 direct type 12000 rpm	●	Bt40 direct type 12000 rpm	●
CTS (2MPa/3MPa/5MPa/7MPa)	○	FANUC-0I-MF(3B)	●
Mitsubishi M80VB	●	Mitsubishi M80VB	○
Mitsubishi M80VA	○	Siemens 828D	○
FANUC 0I-MF (3B/1B)	○	Worktable quenching	○
Four-axis	○	Water-cooled spindle	●
Five-axis turntable (4.5 axis)	○	Oil-cooled spindle	○
Roller linear guide rail	●	Four-axis	○
24T disc-type tool magazine BT40	●	Five axis (4.5 axis)	○
Water-cooled spindle	●	24T disc-type tool magazine BT40	●
Oil-cooled spindle	○	30T disc-type tool magazine BT40	○
Tool setter	○	Dual-screw row-type front chip removal	○
Oil-water separator	○	Front chain chip conveyor	○
Rear chain chip conveyor	○	Oil-water separator	○
Automatic door	○	Oil-mist collector	○
Water gun	○	CTS (2MPa/3MPa/5MPa/7MPa)	○
Grating scale	○		
Electric cabinet air conditioner/heat exchanger	○		
Built-in dual screw row	○		

OVERALL LAYOUT DIAGRAM





Overall size						
Model \ Size	A	B	C	D	E	F
HT-V870W	2400	2649	3550	2156	2874	3418
HT-V1285W	3000	3240	2292	4680	3540	650

Taikan

T-V Light Cutting Series

High speed and light & fast cutting - A masterpiece of high efficiency

- The directly coupled drive and high output allow for substantial improvements in high-speed and high-efficiency machining operations.
- The specif ication of X-axis ranges from 600 mm to 2000 mm, ensuring versatility across multiple machine models to cater to a wide range of requirements.
- The 24T tool arm magazine improves tool handling capabilities and facilitates process consolidation.

Vertical machining center for light and fast cutting

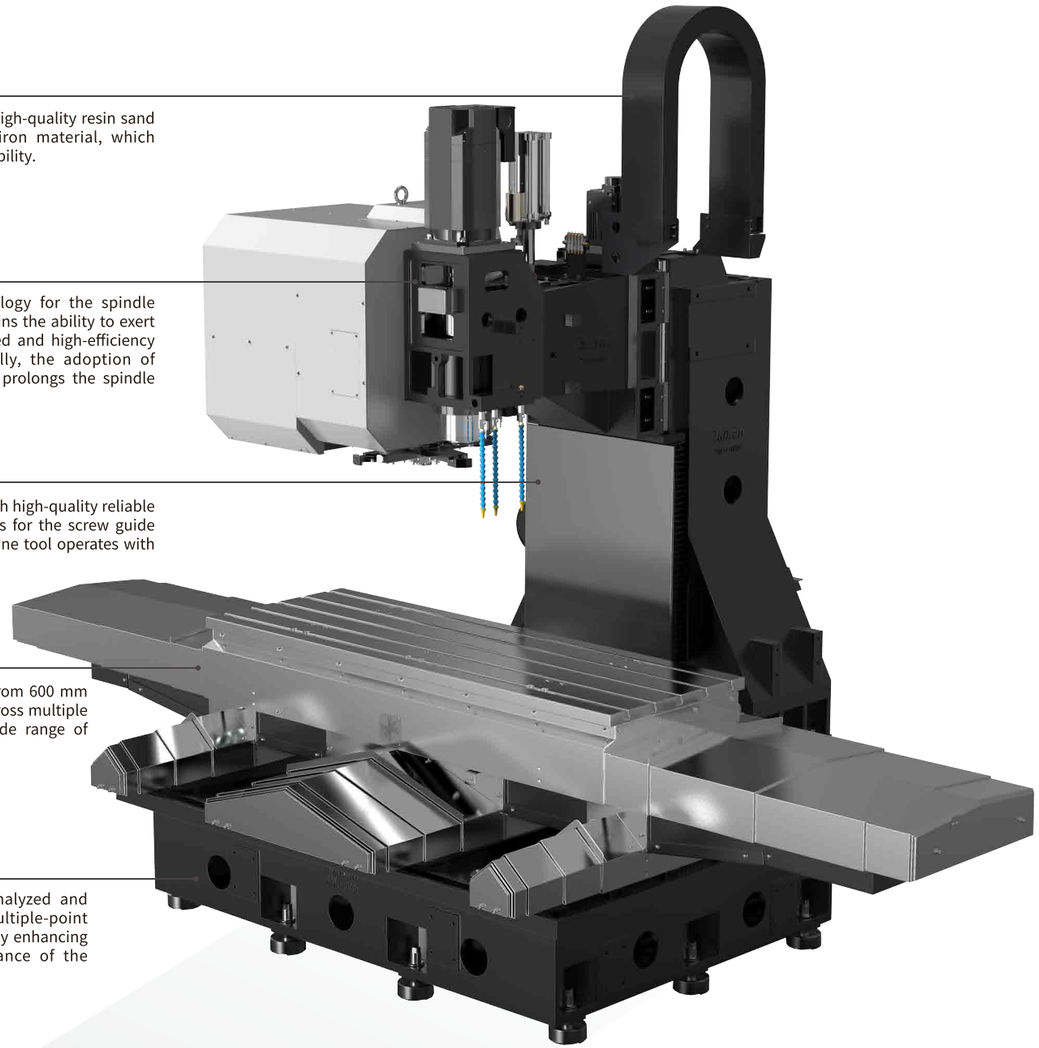
HT-V6 HT-V16 HT-V18 HT-V20



Taikan

Superior static and dynamic rigidity, resistance to vibration, and thermal stability

PRODUCT STRUCTURE



■ Foundation parts

The foundation parts are made of high-quality resin sand molding and high-strength cast iron material, which ensures the excellent processing stability.

■ Spindle

By employing direct-drive technology for the spindle motor and spindle, the machine gains the ability to exert high output force during high-speed and high-efficiency machining operations. Additionally, the adoption of ceramic ball bearings significantly prolongs the spindle lifespan.

■ Screw/guide rail

The X, Y, and Z axes are outfitted with high-quality reliable components from renowned brands for the screw guide rails to effectively ensure the machine tool operates with high precision and high speed.

■ X-axis stroke

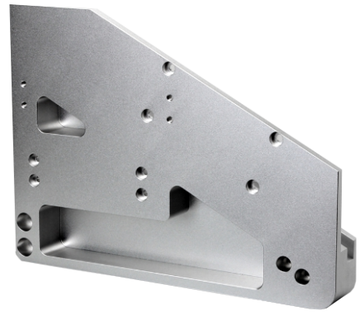
The specification of X-axis ranges from 600 mm to 2000 mm, ensuring versatility across multiple machine models to cater to a wide range of customer requirements.

■ Base

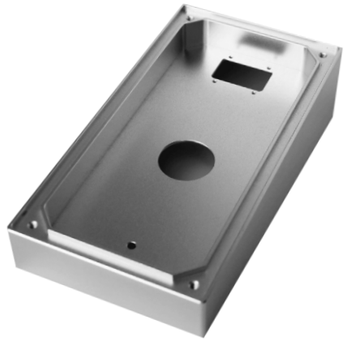
The base structure is digitally analyzed and specially designed to provide multiple-point support for extra-large span, thereby enhancing the rigidity and vibration resistance of the machine.

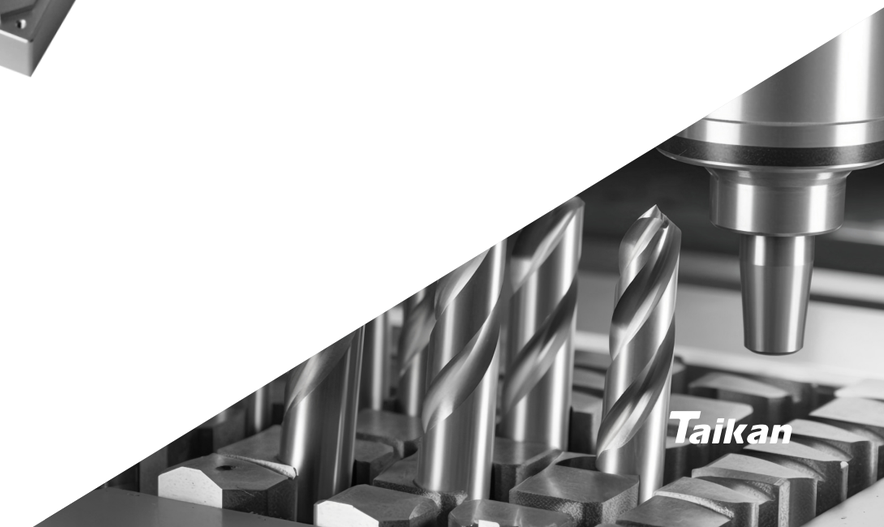
WORKPIECES DISPLAY

Incorporating drilling, tapping, and milling features, this machine is characterized by high precision, high rigidity and high stability. It principally finds applications in light-duty machining of boxes (cabinets), frames, plates (panels, boards), disk-shaped parts, profiles, and casings (housings) for general industries like new energy and 5G, etc.









PARAMETER TABLE

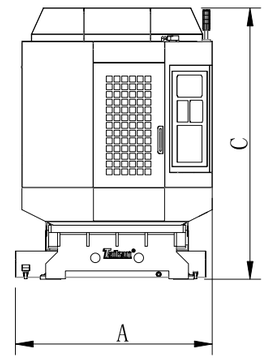
Items		Units	HT-V6	HT-V16	HT-V18	HT-V20
Stroke	Strokes of the three axis (X/Y/Z)	mm	600/390/450	1600/650/590	1800/650/590	2000/650/590
	Distance from spindle nose to table	mm	140~590	100~690	100~690	100~690
Worktable	Worktable size	mm	700*400	1700*650	1900*650	2000*650
	Max. load bearing capability of the worktable	kg	/	/	/	/
	T-slot of worktable (number of slots - slot width × spacing)	mm	3-18*125	5-18*125	5-18*125	5-18*125
Spindle	Max. rotational speed of spindle	rpm	20~12000	20~12000	20~12000	20~12000
	Spindle taper	#	BT40	BT40	BT40	BT40
	Motor power (rated/short-time)	Kw	/	/	/	/
	Motor torque (rated/short-time)	N.m	/	/	/	/
Tools	Tool magazine capacity	PCS	24	24	24	24
	Max. diameter (full magazine/vacant adjacent slot)	mm	/	/	/	/
	Tool length	mm	250	250	250	250
	Tool weight	kg	7	7	7	7
Feed	Rapid feedrate	m/min	48/48/48	30/36/36	30/36/36	30/36/36

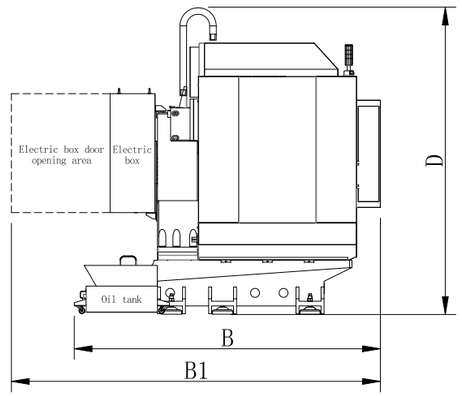
CONFIGURATION

(●Standard configuration ○Optional configuration △Not supported)

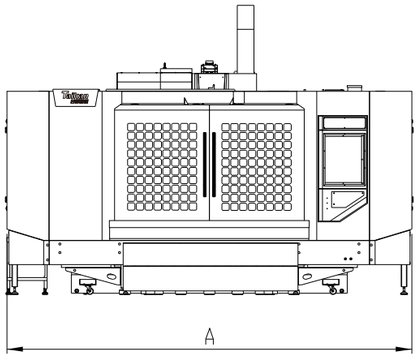
Items	HT-V6	HT-V16	HT-V18	HT-V20
BT40 direct type12000 rpm/120 mm in diameter	●	△	△	△
BT40 direct type12000 rpm/150mm in diameter	○	●	●	●
BT40belt type8000 rpm	△	○	○	○
CTS (2MPa/3MPa/5MPa/7MPa)	○	○	○	○
Mitsubishi M80A	○	○	○	○
Mitsubishi M80B	●	●	●	●
FANUC-0i-MF(3B/1B)	○	○	○	○
Siemens 828D	○	○	○	○
Four-axis	○	○	○	○
Huazhong Numerical Control	○	○	○	○
24T disc-type tool magazine BT40	●	●	●	●
Rear chain chip conveyor	○	○	○	○
Tool setter	○	○	○	○
Oil-water separator	○	○	○	○
Water-cooled spindle	●	●	●	●
Oil-cooled spindle	○	○	○	○

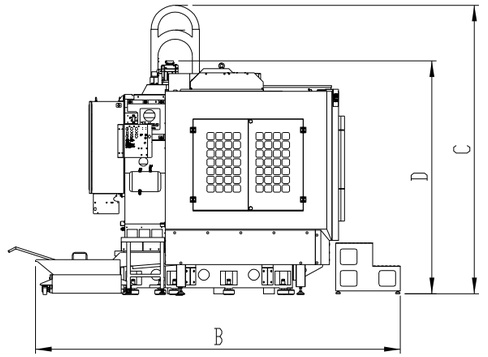
OVERALL LAYOUT DIAGRAM





Overall size					
Model \ Size	A	B	B1	C	D
HT-V6	2100	2580	2700	2670	2520





Overall size				
Model \ Size	A	B	C	D
HT-V16	4150	3900	3150	2550
HT-V18	4400	3900	3150	2550
HT-V20	4800	3900	3150	2550

Taikan



CORE COMPONENT



Spindle: Superior cooling efficacy complemented by a built-in air curtain protection

The constant-temperature cooling system that comes standard with a water cooler fully exploits the high specific heat capacity of the water cooling medium (dedicated water-based mixture) to dissipate more heat for better cooling performance. In this way, the spindle temperature rise during machining is minimized, leading to excellent control of thermal deformation in spindle, improvements in machining precision, and extension of bearing lifespan.



Bearings: Self-lubrication prolongs the lifespan

The bearings are imported from Japan-based NSK/Germany-based FAG The bearings are self-lubricating, featuring long lifespan, high maximum speed, high load resistance, low noise to the operating environment, and easy maintenance.



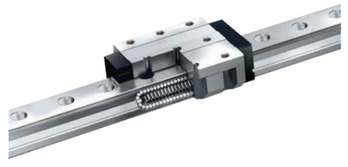
Screws: Imported high-precision and high-rigidity screws of renowned foreign brands

The large-diameter 40C3-grade screws from Taiwan Hiwin/PMI is used to improve machining accuracy and stability of machine tools.



24-slot arm-type tool magazine: Reliable quality and stable performance

The use of a frequency converter to control the automatic tool changer (ATC) enables faster tool changes compared to conventional tool magazines, reducing the tool-to-tool time to just 1.2 seconds; with a fully enclosed design, the tool magazine shroud enhances processing stability and improves processing efficiency.



Linear guide rails: High-rigidity, low-friction and low-noise roller linear guide rail

The three-axis linear guide rail is roller linear guide rail, featuring high rigidity, reduced friction and low noise. It ensures no crawling during low-speed feed and exhibits exceptional precision stability.



OPTIONAL CONFIGURATION



Concealed Motorized Spindle

The concealed spindle is either BBT40-15000rpm or HSKA63-18000rpm dual-face fitting spindle. The spindle offers superior cutting rigidity and outstanding stability, effectively reducing vibrations during high-speed rotation; It demonstrates outstanding performance when manufacturing high precision products such as molds.



Quenched Worktable

The worktable surface undergoes quenching treatment, thereby enhancing overall strength, increasing surface hardness, improving wear resistance, increasing impact resistance, and reducing the likelihood of deformation.



CTS

1. Avoid chip entanglement on workpieces and cutting tools for smoother cutting performance.
2. Increase feed rate and cutting speed, raise the depth of cut, and maximize production efficiency.
3. Reduce tool wear, with the risk of tool breakage significantly mitigated.
4. Lower the local temperature generated by high heat during machining to extend tool service life.
5. Decrease tool change frequency and tool consumption, thus reducing production costs.
6. Improve the surface finish of workpieces, enhance part quality, and boost market competitiveness.



Grease lubrication

1. Grease features a higher load-carrying capacity and superior damping and shock absorption performance.
2. Grease can form a sealing grease ring that prevents the intrusion of solid or fluid contaminants, making it ideal for use in humid and dusty working environments.