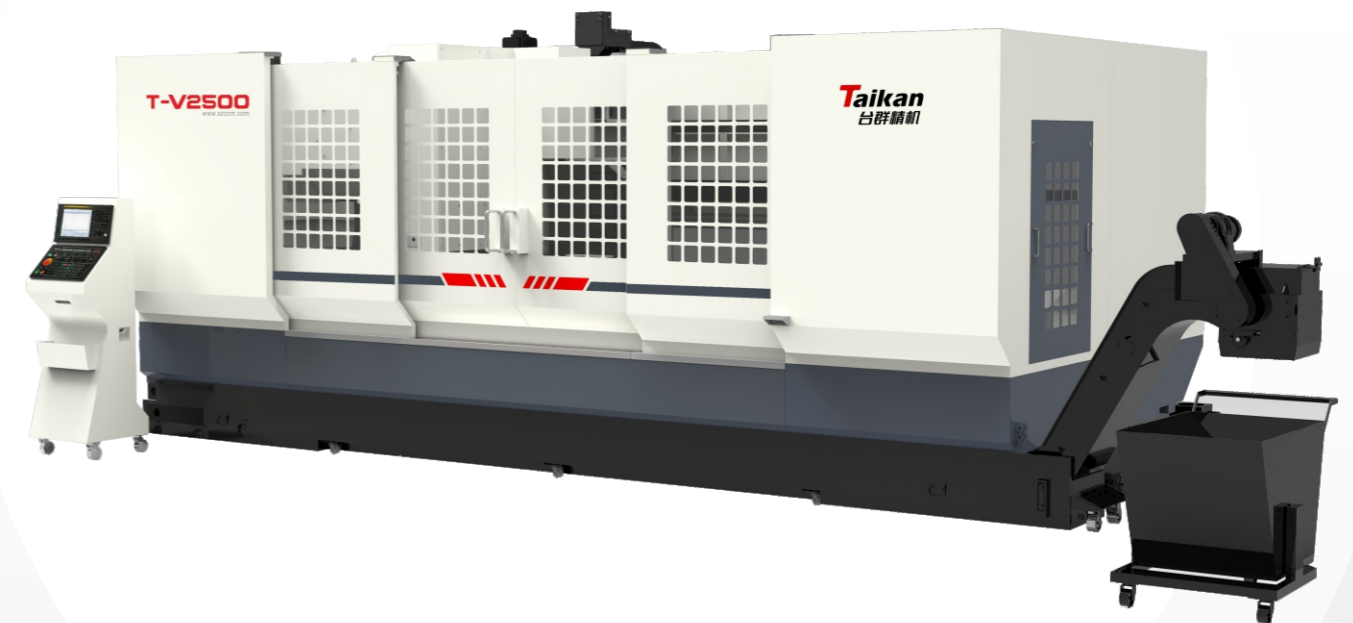


# Profile Machining Center

Long stroke | High efficiency | High cost performance



# Taikan

High-end Intelligent Equipment Integrated Solutions Service Provider

SHENZHEN CREATE CENTURY MACHINERY CO.,LTD.

📍 Address/Site: No. 154, Nanpu Road, Xinqiao Street, Bao'an District, Shenzhen

☎ Phone/Tel: 40000-81518 0755-27255633/733/833

🌐 Official Website: [www.szccm.com](http://www.szccm.com)



Follow the official Tiktok account of Taikan



Follow Create Century Group

High-end Intelligent Equipment Integrated Solutions 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 LOOKS **SCOPED** BUT INNOVATION KNOWS **ENDLESS**

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

# COMPANY PROFILE

Taikan

## Founded **18** years ago ◆

Create Century established in 2005

## Ranking **191st** ◆

Shenzhen's Top 500 Enterprises in 2022

## Top **100** businesses ◆

Bao'an District, Shenzhen  
 Top 100 enterprises by added value  
 Top 100 enterprises by output value  
 Top 100 enterprises by tax contribution  
 Top 100 enterprises by innovation

### 2R&D centers

The South China R&D Center  
 The East China R&D Center

### 500+ R&D team members

The Company boasts a technical advisory board consisting of industry-leading technical experts from Mainland China, Taiwan, South Korea, Malaysia, Germany, and other regions, along with a dedicated R&D team of over 500 professionals

### 4strategic partnership agencies

ONE STATION, ONE LAB, AND TWO CENTERS

Academician <Expert> Workstation of Shenzhen  
 Engineering Technology Research Center of Guangdong Province  
 Engineering Laboratory for Key Technologies in Smart Precision Machining  
 Enterprise Technology Center of Shenzhen

### 700+ core patents

Invention patents-----168  
 Utility model patents-----509  
 Design patents-----121  
 Software copyrights-----88

Guangdong Create Century Intelligent Equipment Group Co., Ltd. (Create Century for short; stock code: 300083) was publicly listed on the Shenzhen Stock Exchange in 2010, and underwent a transformation in 2016 to become an intelligent equipment Co., Ltd. in 2016. Create Century is a company that specializes in the research and development, production, sales, and service of high-end intelligent equipment. With nearly two decades of industry experience, it is capable of delivering top-quality equipment and comprehensive intelligent solutions to its customers. More importantly, Create Century stands out among similar domestic enterprises for its broad technological expertise and extensive product range.



Dongguan Industrial Park



Suzhou Industrial Park



Yibin Industrial Park



Huzhou Industrial Park

# T Series

## BT30 (Tilt-disc Tool Magazine)

- . Generous X-axis stroke length, high speed and a broad machining range; 2500/4500/6500 mm is optional for stroke length
- . With each clamping cycle, it is capability of performing various machining operations such as milling, drilling, boring, broaching, reaming, countersinking and tapping;
- . It features a moving-column structure with a stationary worktable, to obtain excellent rigidity and convenience of loading and unloading.

Profile Machining Center with Moving Column

T-2500 T-4500  
T-6500



▶ The stationary worktable design effectively solves the problems of "over-reaction with light loads and sluggish response with heavy loads", which occurred typically in machine tools with C-shape column and moving worktable.

## Product Structure

### Stroke

The product offers a wide X-axis stroke range of 2500/4500/6500 mm, effectively meeting the machining needs of large-sized narrow and long workpieces for customers

### Worktable

The stationary worktable prevents the deformation from heavy loads; The tool magazine is mounted in front of machine head, resulting in rapid tool changes. By easily loading, the machine enables multi-station clamping in a single operation, facilitating segmented machining.

### Rapid traverse speed

The X-axis traverses rapidly up to 50 m/min by rack and pinion transmission, thus improving its productivity and saving processing time.

### Appearance

The overall machine is surrounded with a semi-enclosed and heightened metal guard to effectively prevent chips and water splashes. It is designed with dual-sided slopes and a flushing chip removal system. The model of BT30 series incorporates a rear-mounted water tank. Its visual appealing appearance is easy to operate and repair.

### Tool magazine

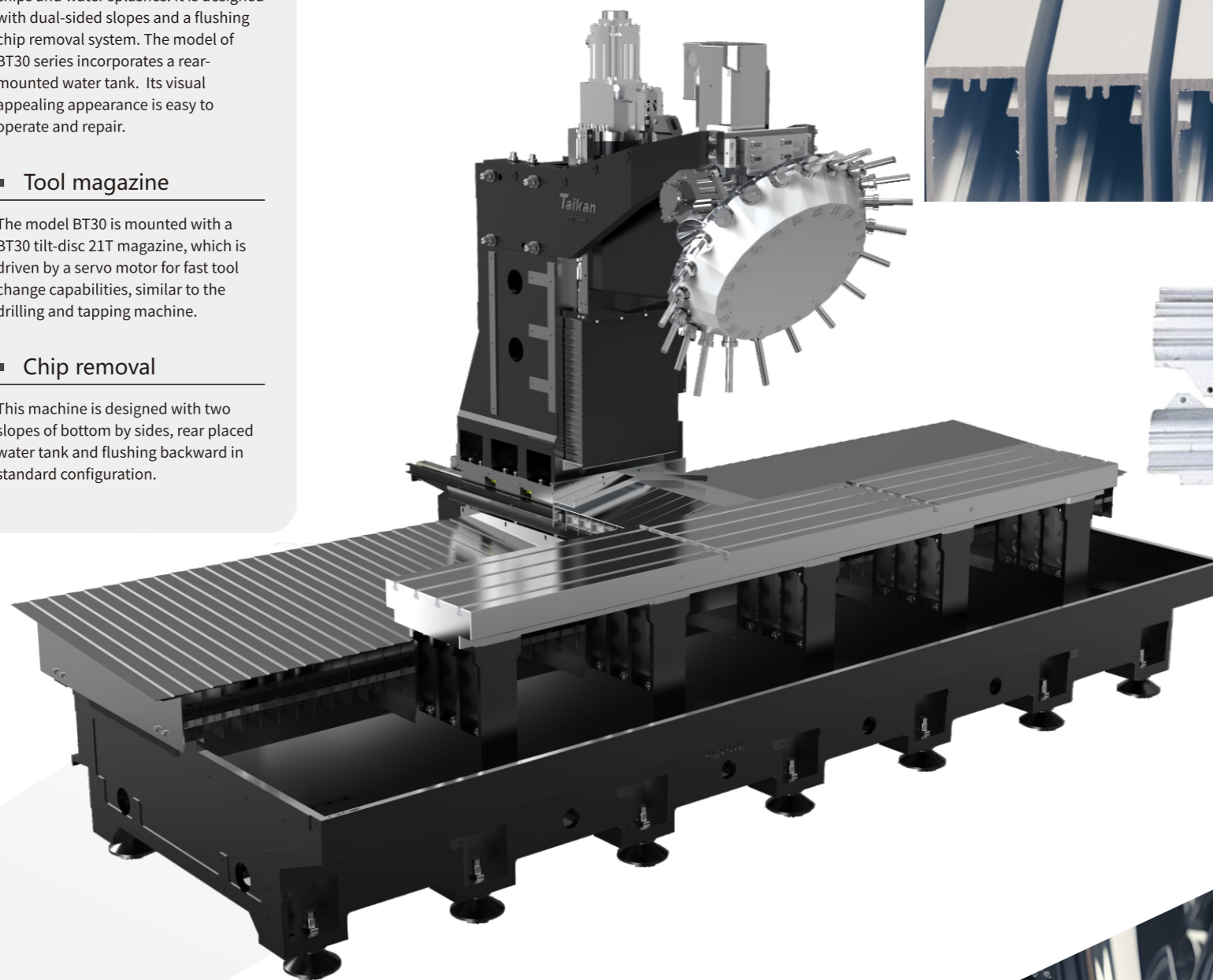
The model BT30 is mounted with a BT30 tilt-disc 21T magazine, which is driven by a servo motor for fast tool change capabilities, similar to the drilling and tapping machine.

### Chip removal

This machine is designed with two slopes of bottom by sides, rear placed water tank and flushing backward in standard configuration.

## WIDE APPLICATION

This machine is widely used in such industries as automobile, 5G, hardware, auto parts and home furnishings. Its major application dedicates to the processing of narrow and elongated aluminum profiles, making it well-suited for machining battery tray cross-bars/vertical side panel bars/sunroof guide strips/bumpers/decorative strips and other components.



▶ **PARAMETER TABLE**

Items	Units	T-2500	T-2500	T-4500	T-6500
Type of X-axis transmission	/	Rack/pinion	Screw	Rack/pinion	
Strokes of the three axes (X/Y/Z)	mm	2500/400/350		4500/400/350	6500/400/350
Distance from spindle nose to worktable	mm	200-550			
Worktable size	mm	2500*400		4500*400	6500*400
T-slot (number of slots - slot width × spacing)	mm	4-14*100			
Spindle motor power (rated/Temporary)	kW	3.7/5.5			
Spindle torque (rated/temporary)	N.m	23.6/35			
Spindle motor speed	rpm	20-12000			
Spindle taper	/	BT30			
Outer diameter of spindle	mm	Φ100			
Feed rate	mm/min	1-10000			
Rapid traverse speed X/Y/Z	m/min	50/30/36		50/30/36	
Tool magazine capacity	pc(s)	21			
Positioning accuracy	mm	0.05/0.01/0.01	0.02/0.01/0.01	0.08/0.01/0.01	0.1/0.01/0.01
Repeated positioning accuracy	mm	0.03/0.006/0.006	0.01/0.006/0.006	0.05/0.006/0.006	0.06/0.006/0.006

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Classification

Specifications and model

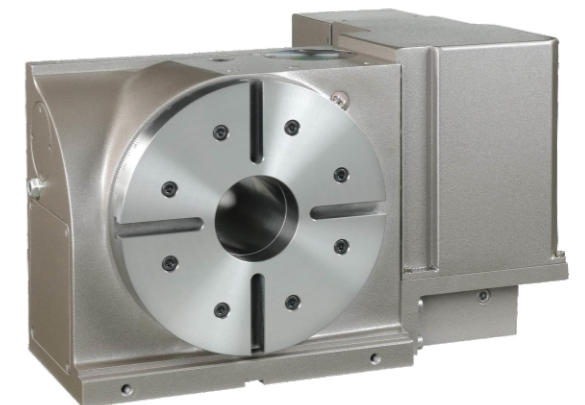
Chip removal	Rear flushing in machine	●
	Rear chain chip conveyor	○
Tool magazine	BT30-21T tilt-disc tool magazine	●
Cooling	Cooled with cutting fluid	●
	Micro-mist lubrication cooling(MQL)	○
Screw	Screw center through cooling	△
Electric cabinet cooling	Heat exchanger	○
The 4th -axis	The 4th-axis	○
Higher column	Column increased by 100mm	△
	Column increased by 200mm	△
Others	Water gun	●
	Tool setter	○
	Laser probe	○
	Shank with small angle-head	○
	Oil mist extractor device	△
	Front door secure interlock module	○
	Automatic front door control system	○

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▶ **CONFIGURATION TABLE**

(●Standard configuration ○Optional configuration △Not supported)

Classification	Specifications and model	
Spindle	BT30 direct connect - 12,000 RPM	●
	BT30 direct connect - 20,000 RPM	○
	BT30 direct connect - 24,000 RPM	○
	Water-cooled spindle	○
	Oil-cooled spindle	○
System	Mitsubishi M80B	●
	Mitsubishi M80A	○
	FANUC-0i MF(5)	○
	Siemens 828D	○
	Taikan system	○



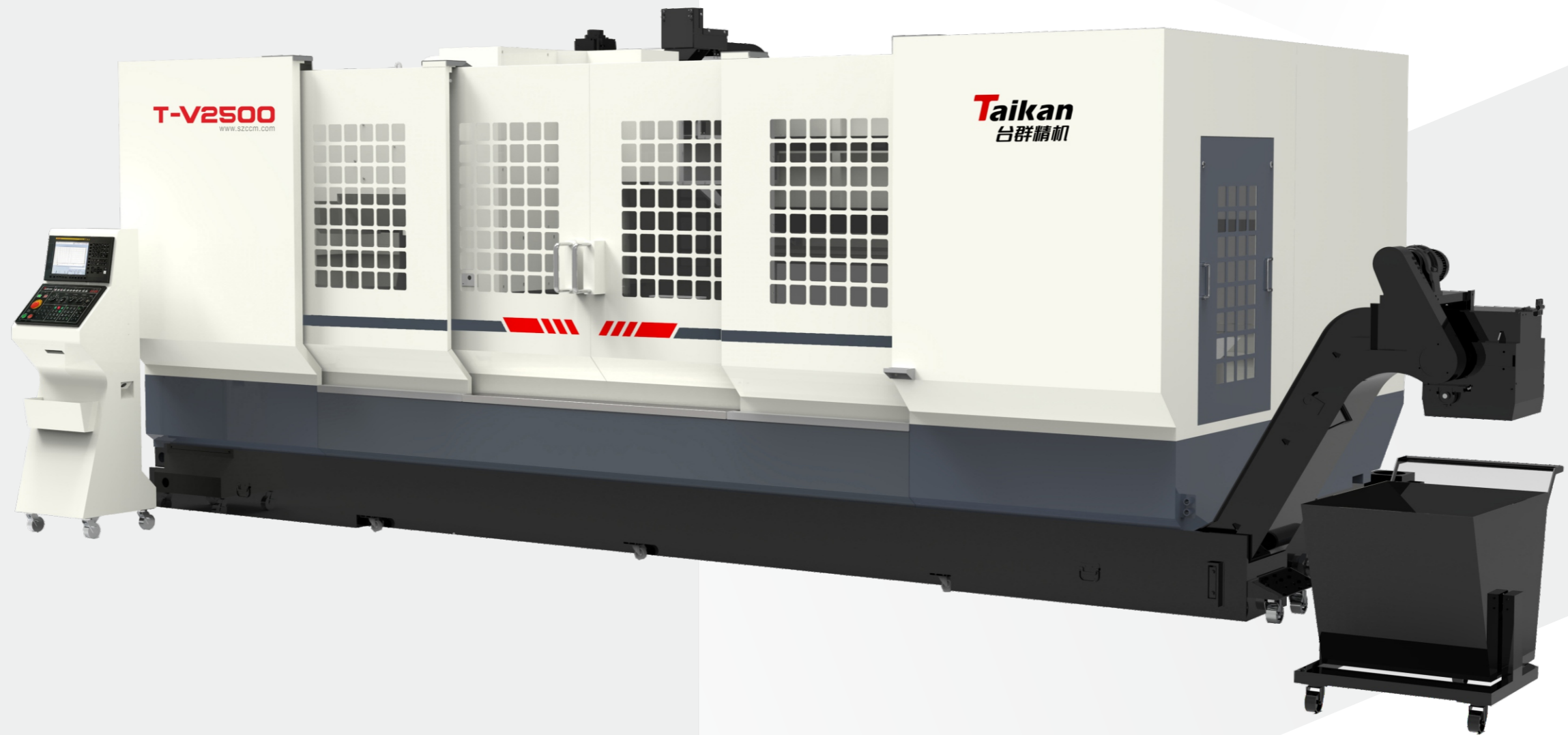
# V Series

## BT40 (Tilt-disc Tool Magazine)

- . The BT40-150 model direct connecting spindle with high rigidity runs at 12,000 rpm for high machining efficiency
- . Three axes are equipped with 45 mm thickness guide rails for 6 sliders on the each X/Y axis to ensure excellent stability
- . The X-axis features a high-angle stainless steel scaly guard, which works with our proprietary movable flushing structure to minimize chip buildup
- . Optional VB swing head can be installed to achieve B-axis directional machining or coordinated machining

Profile Machining Center with Moving Column

T-V2500 T-V4500  
T-V6500 T-VB2500



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

## Product Structure

### ■ Moving columns Structure

The use of moving columns along the stationary structure provides enough space for grand workpieces or multiple sets of workpieces. This design is particularly well-suited for the processing of large, elongated workpieces. It also facilitates the easy installation of workpieces and fixtures by workers, enhancing the flexibility and convenience of operations.

### ■ Three axes

Three-axis are equipped with #45 guide rails for load-bearing purposes, providing excellent rigidity, minimal friction and reduced noise; it incorporates a large-diameter screw with a pre-tensioning structure to counteract thermal expansion; the screw bearings are self-lubricating, ensuring an extended lifespan.

### ■ Castings

Its casting bases are optimized in their structural design and made of high-quality of resin sand molding and high-strength of cast iron materials. They are also combined with heat treatment measures to ensure high rigidity and stability of the machine tools; with advanced design techniques, including finite element analysis and modal analysis, its overall performance has been improved by 20% at least.

### ■ Chip conveyor

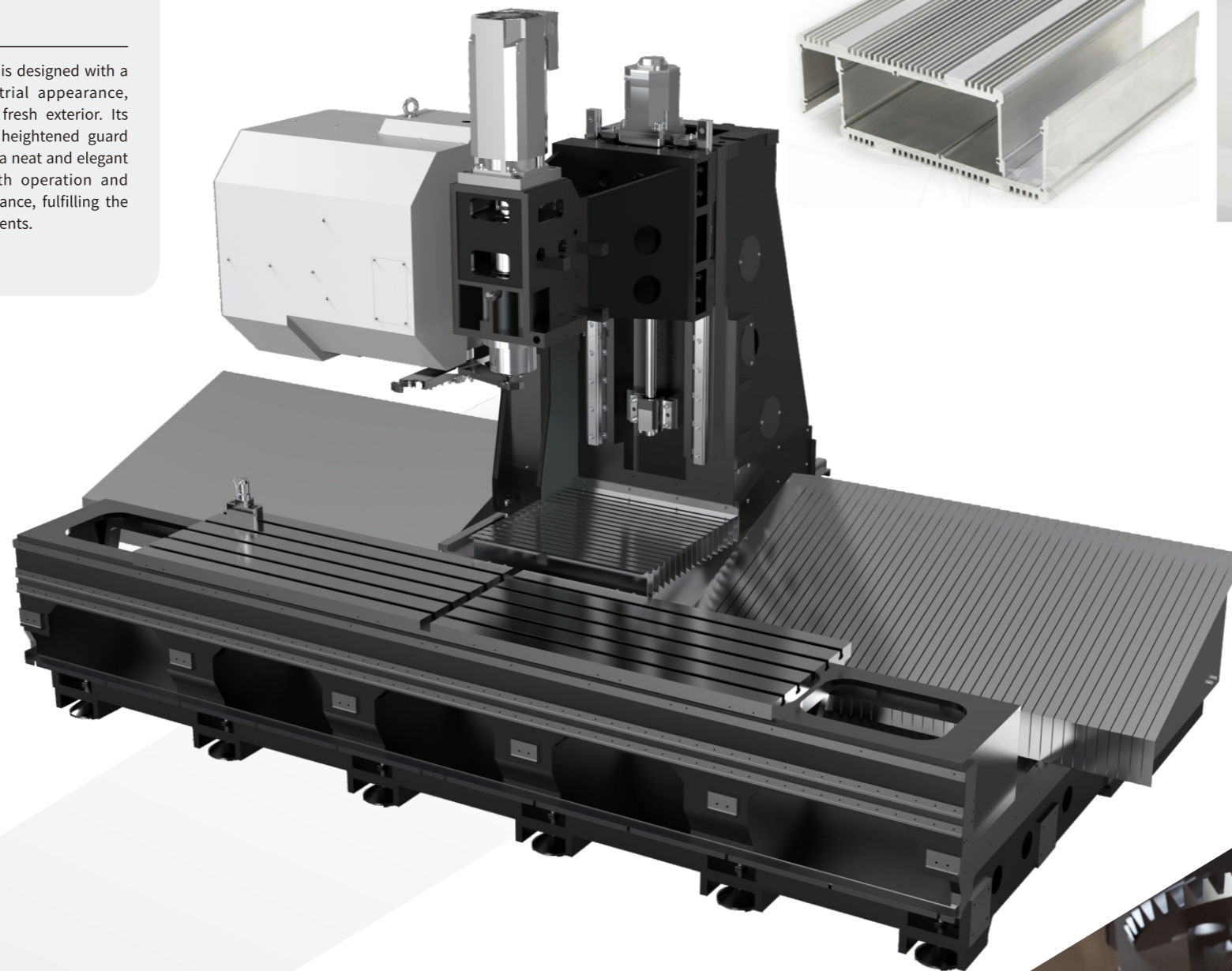
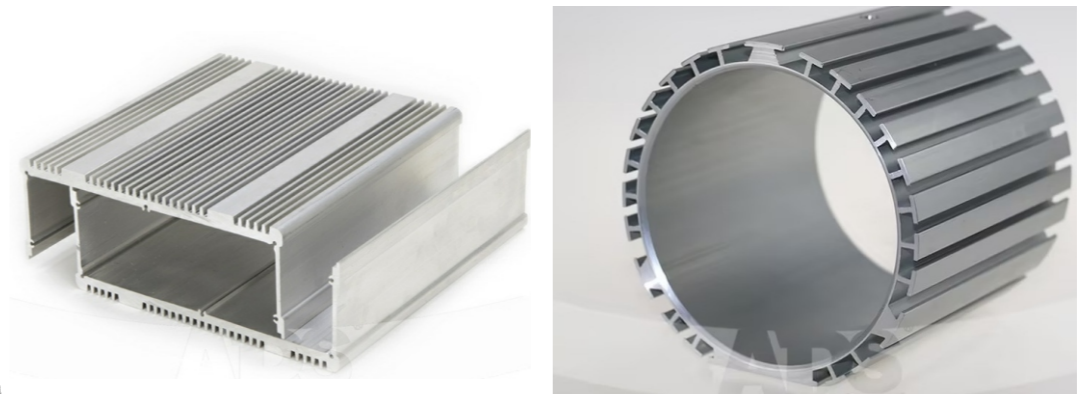
Usually the machine tool is designed with dual slopes for chip removal on both sides of bottom, a forward-placed water tank and a chain chip conveyor for convenient chip removing.

### ■ Appearance

The whole machine is designed with a professional industrial appearance, showcasing a new fresh exterior. Its fully enclosed and heightened guard on all sides ensures a neat and elegant appearance, smooth operation and convenient maintenance, fulfilling the ergonomic requirements.

## WORKPIECE DISPLAY

These series are high-speed profile machining centers with moving columns that integrate drilling, tapping and milling operations. They are extensively used in various industries such as 5G, new energy, automobile, electronics and electric, mechanical manufacturing and home furnishings. Meanwhile they are ideal for mass processing of installation holes, water flow grooves, lock holes, contour holes of narrow and long aluminum profiles.





## ▶ PARAMETER TABLE

Items	Units	T-V2500	T-V2500	T-V4500	T-V6500	T-VB2500
Type of X-axis transmission	/	Rack/pinion	Screw	Rack/pinion	Rack/pinion	Screw
Strokes of the three axes (X/Y/Z)	mm	2500/550/550	2500/550/550	4500/550/550	6500/550/550	2500/550/700
Distance from spindle nose to worktable	mm	150-700	150-700	150-700	150-700	240-940
Worktable size	mm	2500*550	2500*550	4500*550	6500*550	2500*550
T-slot (number of slots - slot width × spacing)	mm	5-18*100	5-18*100	5-18*100	5-18*100	5-18*100
Spindle motor power (rated/temporary)	kw	7.5/11	7.5/11	7.5/11	7.5/11	20/24 (motorized spindle)
Spindle torque (rated/temporary)	N.m	35.8/95.5	35.8/95.5	35.8/95.5	35.8/95.5	30.7/36.8
Spindle motor speed	rpm	20-12000	20-12000	20-12000	20-12000	20-18000
Spindle taper	/	BT40	BT40	BT40	BT40	BT40
Outer diameter of spindle	mm	Φ150	Φ150	Φ150	Φ150	Φ150
Feed rate	mm/min	1-10000	1-10000	1-10000	1-10000	1-10000
Rapid traverse speed of X/Y/Z	m/min	50/28/28	20/28/28	50/28/28	50/28/28	20/28/20
Tool magazine capacity	pc(s)	24	24	24	24	24
Positioning accuracy	mm	0.05/0.01/0.01	0.02/0.01/0.01	0.08/0.01/0.01	0.1/0.01/0.01	0.02/0.01/0.01
Repeated positioning accuracy	mm	0.03/0.006/0.006	0.01/0.006/0.006	0.05/0.006/0.006	0.06/0.006/0.006	0.01/0.006/0.006

## ▶ CONFIGURATION TABLE

(● Standard configuration ○ Optional configuration △ Not supported)

Items	Specifications and model	T-V2500/4500/6500	T-VB2500
Spindle	BT40 direct connect - 12,000 RPM	●	○
	BT40 motorized spindle - 18,000 RPM	○	●
	Water-cooled spindle	○	●
	Oil-cooled spindle	○	○
System	Mitsubishi M80B	●	●
	Mitsubishi M80A	○	○
	FANUC-0I MF(5)	○	○
	Siemens 828D	○	○
	Taikan system	○	○
Chip removal	Rear flushing in machine	○	●
	Front chain chip conveyor	●	○
Tool magazine	BT30-21T tilt-disc tool magazine	/	●
	BT40-24T ATC tool magazine	●	●
Cooling	Cooling with cutting fluid	●	●
	Micro-mist lubrication cooling (MQL)	○	○

Items	Specifications and model	T-V2500/4500/6500	T-VB2500
Screw	Screw center through cooling	△	△
Electric cabinet cooling	Heat exchanger	○	○
The 4th axis	The 4th axis	○	○
Higher column	Column increased by 100 mm	△	△
	Column increased by 200 mm	△	△
Others	Water gun	●	●
	Tool setter	○	○
	Laser probe	○	○
	Shank with small angle-head	○	○
	Oil mist extractor device	△	△
	Front door secure interlock module	○	○
	Automatic front door control system	○	○

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# X Series

## Bt40 (Tilt-Disc Tool Magazine)

.The BT40-120 direct connecting spindle with high rigidity works at 12,000 rpm for high machining efficiency

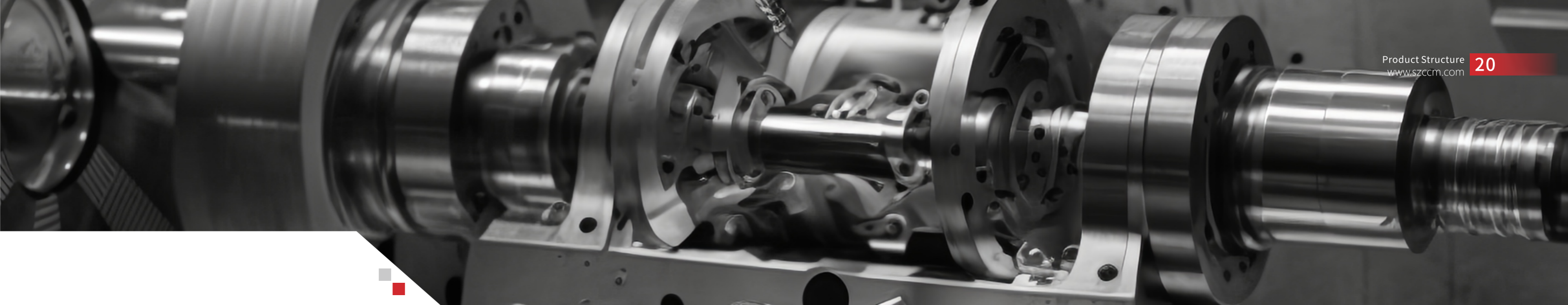
.Equipped with a BT4 tilt-disc tool magazine, it ensures rapid tool changeovers

.The X-axis features a high-angle stainless steel scaly guard, which works with our proprietary movable flushing structure to minimize chip buildup

Profile Machining Center with Moving Column

T-2500X T-4500X  
T-6500X





# PRODUCT STRUCTURE

## Three axes

Three axes are equipped with a #45 roller guide rail for load-bearing purposes, providing excellent rigidity, minimal friction and reduced noise; it incorporates a large-diameter screw with a pre-tensioning structure to counteract thermal expansion; the screw bearings are self-lubricating, ensuring an extended lifespan.

## Castings

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

## Chip removal

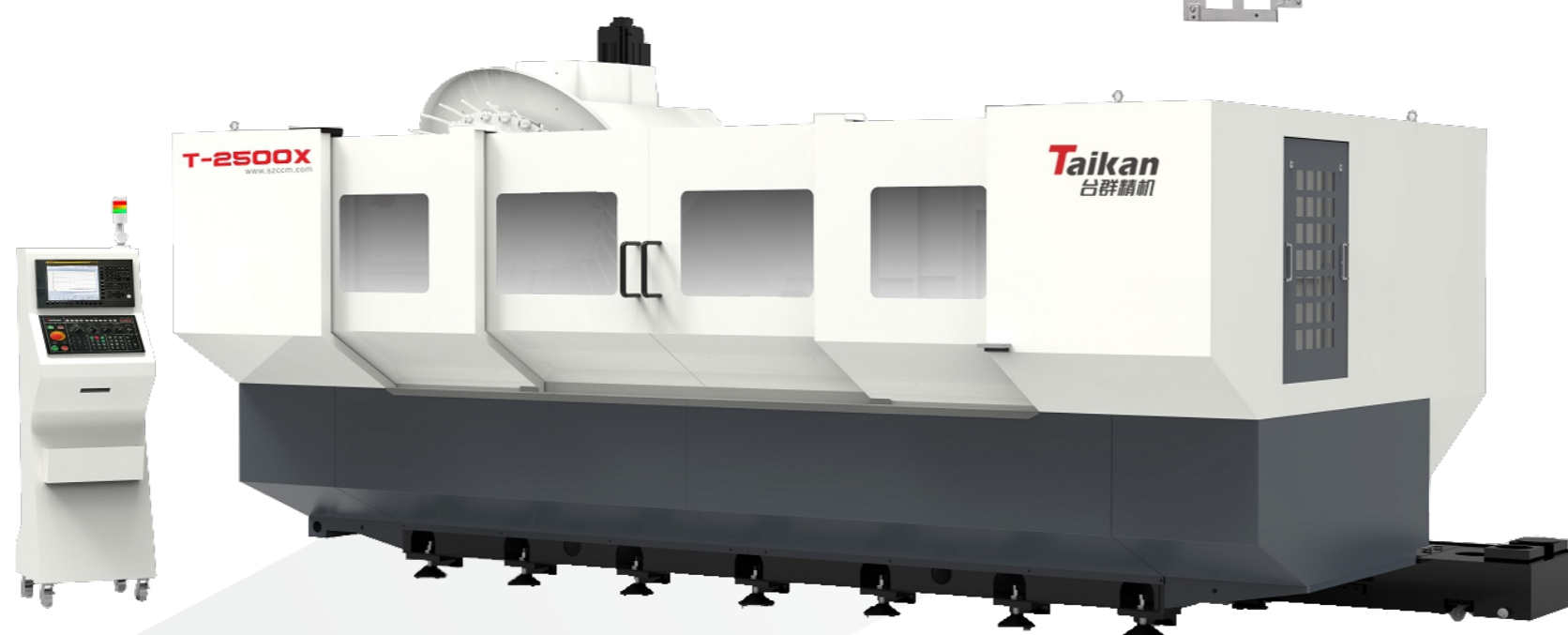
Usually the machine tool is equipped with dual slopes for rear-flushing chip removal on both sides and a backward-placed water tank, featuring high automation, user-friendliness and efficiency. The water tank adopts two-layer filtration structure to provide good cutting fluid for machining.

## Appearance

The whole machine is designed with a professional industrial appearance, showcasing a fresh new exterior. Its fully enclosed guard on all sides ensures a neat and elegant appearance, smooth operation and convenient maintenance, fulfilling the ergonomic requirements.

## WORKPIECE DISPLAY

With one clamping cycle, it is capability of performing various machining operations such as milling, drilling, boring, broaching, reaming, countersinking and tapping. It 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	T-2500X	T-2500X	T-4500X	T-6500X
Strokes of the three axes (X/Y/Z)	mm	2500/550/450		4500/550/450	6500/550/450
Distance from spindle nose to worktable	mm	150-600			
Worktable size	mm	2500*550		4500*550	6500*550
T-slot (number of slots - slot width × spacing)	mm	5-18*100			
Type of X-axis transmission	/	Rack/pinion	Screw	Rack/pinion	
Spindle motor power (rated/temporary)	kw	3.7/5.5			
Spindle torque (rated/temporary)	N.m	23.6/35			
Spindle motor speed	rpm	20-12000			
Spindle taper	/	BT40			
Outer diameter of spindle	mm	Φ120			
Feed rate	mm/min	1-10000			
Rapid traverse speed of X/Y/Z	m/min	50/30/36	20/30/36	50/30/36	
Tool magazine capacity	pc(s)	20			
Positioning accuracy	mm	0.05/0.01/0.01	0.02/0.01/0.01	0.08/0.01/0.01	0.1/0.01/0.01
Repeated positioning accuracy	mm	0.03/0.006/0.006	0.01/0.006/0.006	0.05/0.006/0.006	0.06/0.006/0.006

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Classification	Specifications and model	T-2500X
Tool magazine	BT40-20T tilt-disc tool magazine	●
Cooling	Cooling with cutting fluid	●
	Micro-mist lubrication cooling (MQL)	○
Screw	Screw center through cooling	△
Electric cabinet cooling	Heat exchanger	○
The 4th axis	The 4th axis	○
Higher column	Heighten column	○
Others	Water gun	●
	Tool setter	○
	Laser probe	○
	Shank with small angle-head	○
	Oil mist extractor device	△
	Front door secure interlock module	○
Automatic front door control system	○	

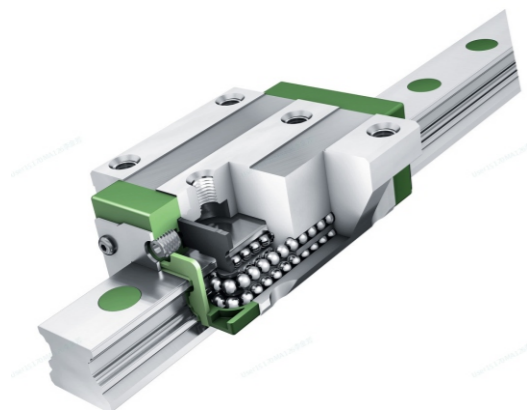
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## ▶ CONFIGURATION TABLE

(●Standard configuration ○Optional configuration △Not supported)

Classification	Specifications and model	T-2500X
Spindle	BT40 direct connecting - 12,000 RPM	●
	Water-cooled spindle	○
	Oil-cooled spindle	○
System	Mitsubishi M80B	●
	Mitsubishi M80A	○
	FANUC-0i MF(5)	○
	Siemens 828D	○
	Taikan system	○
Chip removal	Flushing in machine	●
	Front chain chip conveyor	●

## CORE COMPONENTS



### Ball Linear Guide Rail

Three axes are equipped with #PMI45 ball linear guide rails from Nanjing Technical Equipment Manufacture, featuring the elongated sliders to reduce friction and low noise. It ensures feeding without crawling and achieves exceptional precision and stability.



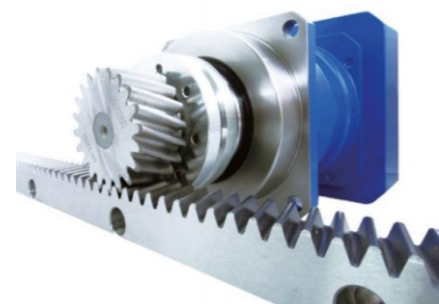
### Ball Screws

The large-diameter precision-grade screw from Nanjing Technical Equipment Manufacture/PMI is used to improve machining accuracy and stability.



### Bearings

The dedicated bearings for screws are imported from FAG (Germany)/NSK (Japan). The bearings are self-lubricating and easy maintenance, featuring long lifetime, high speed, high burden, low noise.



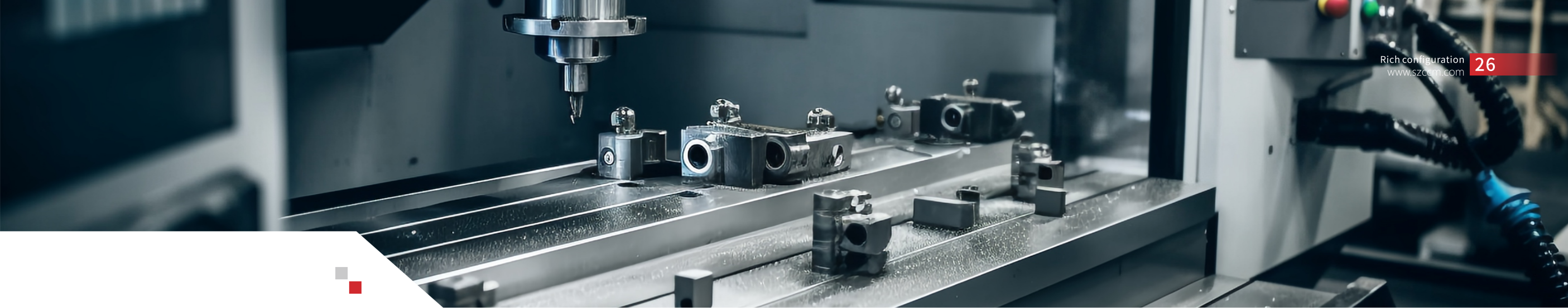
### Reducer/Rack and Pinion

The machine is equipped with a precision-grade low-backlash planetary reducer and a Taiwan precision-grade ground rack/pinion with helical teeth. While aiming for rapid displacement, it is also possible to achieve relatively high accuracy.



### Spindle

High-speed and high-rigidity bearings with strong load-carrying capacity are employed. The spindle with a standard outer diameter of 150 owns excellent heat dissipation at the elongated nose.



# RICH CONFIGURATION



Oil lubrication



Grease lubrication



BT30:12000/20000/24000 RPM Spindle /  
BT40: 12000 RPM spindle



BT30-21T  
tilt-disc tool magazine



BT40-24T ATC  
tool magazine



BT40-20T tilt-disc  
tool magazine



Water cooler



Micro-mist lubrication MQL



Oil chiller: Reduce the coolant temperature  
and improve the cooling effect



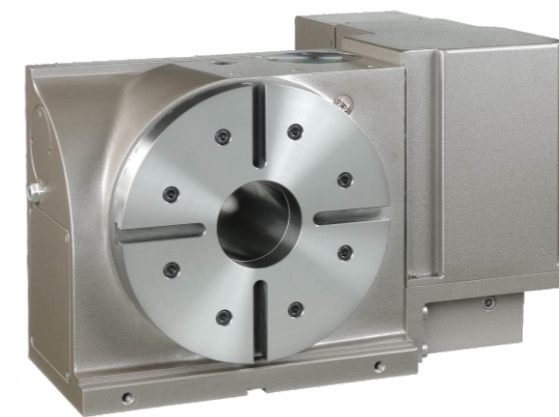
Shank for side milling



CNC system: three advanced high-speed  
CNC system options



Tool setter: Tool wear is compensated to  
ensure accurate machining



The 4th axis: the 4th axis' coordinated movement for  
machining complicate workpieces

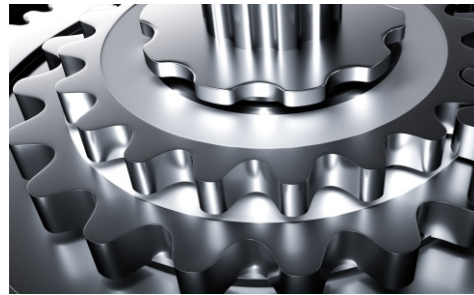
## PRODUCT CONFIGURATION

### Overview of Principal Configuration Options

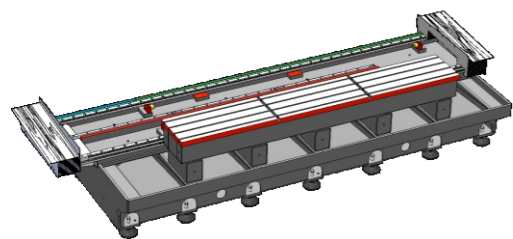
X-axis transmission options: For the model with 2500 mm stroke, the X-axis can be driven either by rack and pinion mode or by screw and nut mode. For models with a stroke greater than 2500 mm, only the rack and pinion option is available

#### RACK AND PINION TRANSMISSION

1. Benefits: This drive option offers several benefits. It features a simple structure, making it easy to install and convenient to maintain. It also offers a high load-bearing capacity. Moreover, it offers high-speed operation, making it well-suited for long strokes;
2. Disadvantages: Low accuracy, high transmission noise and substantial wear. The rapid traverse speed of the X-axis is 50 m/min



**Base: There are two options available - welded and cast bases**

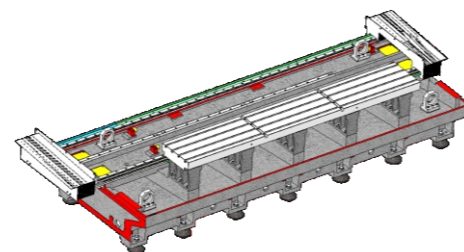


**Welded base (standard)**

1. Benefits: Light weight, fast manufacturing cycle and low cost;
2. Disadvantages: Simple design, significant deformation, low accuracy and high demand for welding proficiency.

#### SCREW AND NUT TRANSMISSION

1. Benefits: High precision, minimal noise, efficient transmission and excellent stability;
2. Disadvantages: Slow speed, susceptibility to sagging from dead weight, significant thermal expansion and long lead time. The rapid traverse speed of the X-axis is 20 m/min

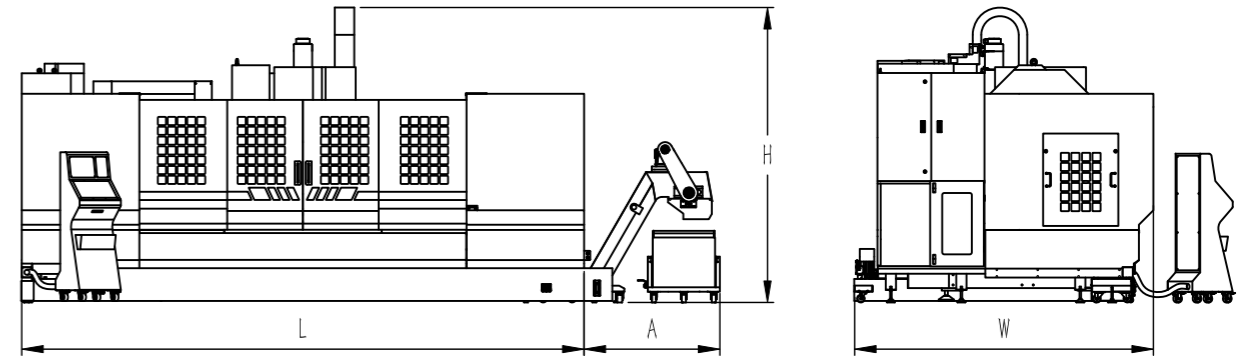


**Cast base (preferred for screw-driven X-axis)**

1. Benefits: Stable structure, diverse design possibilities, minimal deformation, high precision and excellent seismic resistance;
2. Disadvantages: Mold fabrication needed, significant weight, elevated cost, prolonged production cycle and casting defects such as blowholes, shrinkage voids and cracks.

## OVERALL LAYOUT DIAGRAM

V Series



Type	L(mm)	W(mm)	H(mm)	Chip conveyor A(mm)
T-2500/4500/6500	5270	2890	2450	0
T-V2500/V4500/V6500	5500/8000/10000	2700	2800	Approx1250
T-2500X/4500X/6500X	5500	3050	3100	Approx1145
T-VB2500	5700	2810	2900	Approx1250

# G Gantry Profile

Fast speed, high efficiency and excellent cost performance

- . X-axis offers a choice of 3000/1800/1500mm for forward and backward strokes, while Y-axis provides options of 2000/2500mm for left and right movement
- . The moving beam and dual-drive X-axis enable swift movement;
- the seamless integration of the base and worktable result in exceptional rigidity
- . Ultra-low worktable, a spacious front and rear door design for convenient loading and unloading

Gantry-type Profile Machining Center

**G-M2030L/G-M2518L**  
**G-M2518X/G-M2030X**  
**G-M2015X/G-M2030U**



# G



## Gantry-type Profile Machining Center

### Features of G-M2015X

- .Comes standard with a BT40-20T tilt-disc tool magazine, which is mounted on the machine head for rapid tool changes
- .The overall structure of features a moving beam gantry design, where the beam and columns are a unified structure.
- It operates at high speeds, with a rapid three-axis moving speed of 36/36/36 m/min
- .The machine features a high-rigidity precision BT40 spindle, which achieves a maximum speed of 12000 rpm through a direct connecting transmission structure;
- the standard configuration includes a 3.7/5.5 KW spindle motor
- .With a rear-mounted spiral chip conveyor, the worktable efficiently removes chips while occupying minimal floor space



### Features of G-M2030U

- .A new A/C five-axis configuration has been incorporated, offering 3+2 control (non-linked five-axis).
- The Z-axis has a generous travel distance of 800 mm, providing the capability to handle more intricate machining requirements for interior of flat panels, interior of cavities and side faces
- .The machine features a high-speed HSK-A63 motorized spindle with a power output of 20/23 kW and a maximum speed of 20,000 rpm; the A-axis offers a rotation range of  $\pm 110^\circ$ , while the C-axis provides a rotation range of  $\pm 180^\circ$ , so the machine is capable of handling a wide range of processing tasks
- .The spindle box is designed with a concealed structure that can retract above the saddle; the beam has a low overall height, ensuring excellent dynamic performance; the X-axis is driven by a dual-drive system consisting of precision racks and pinions for high-speed operation and can reach a speed of 40 m/min
- .The spindle comes with a built-in ring spray device and can be optionally configured with center through-fluid capabilities; the machine offers a rich selection of configurations for diverse requirements
- .The overall structure of the machine features a moving beam gantry design, where the beam and columns are a unified structure. With its high rigidity and ultra-lightweight structure design, the machine is capable of satisfying high-speed machining needs
- .The overall machine is equipped with a semi-enclosed and heightened protective structure, surrounded by a complete sheet metal frame to effectively prevent chips and water splashes. Its visual appealing appearance is easy to operate and repair



Featuring a moving-column structure and a lightweight design, the machine exhibits rapid response speed, a wide processing range, and high processing efficiency

## Product Structure

### Structure

With its lightweight design, the machine achieves high-speed movement on all three axes, effectively reducing non-machining time and enhancing processing efficiency.

### Three axes

The machine adopts a one-piece design for the base and worktable, which has undergone aging treatment to remove internal stress. The spacious and robust base and the lowered gravity center improve the stability of machine tool; moreover, this design facilitates easy loading and unloading operations.

### Castings

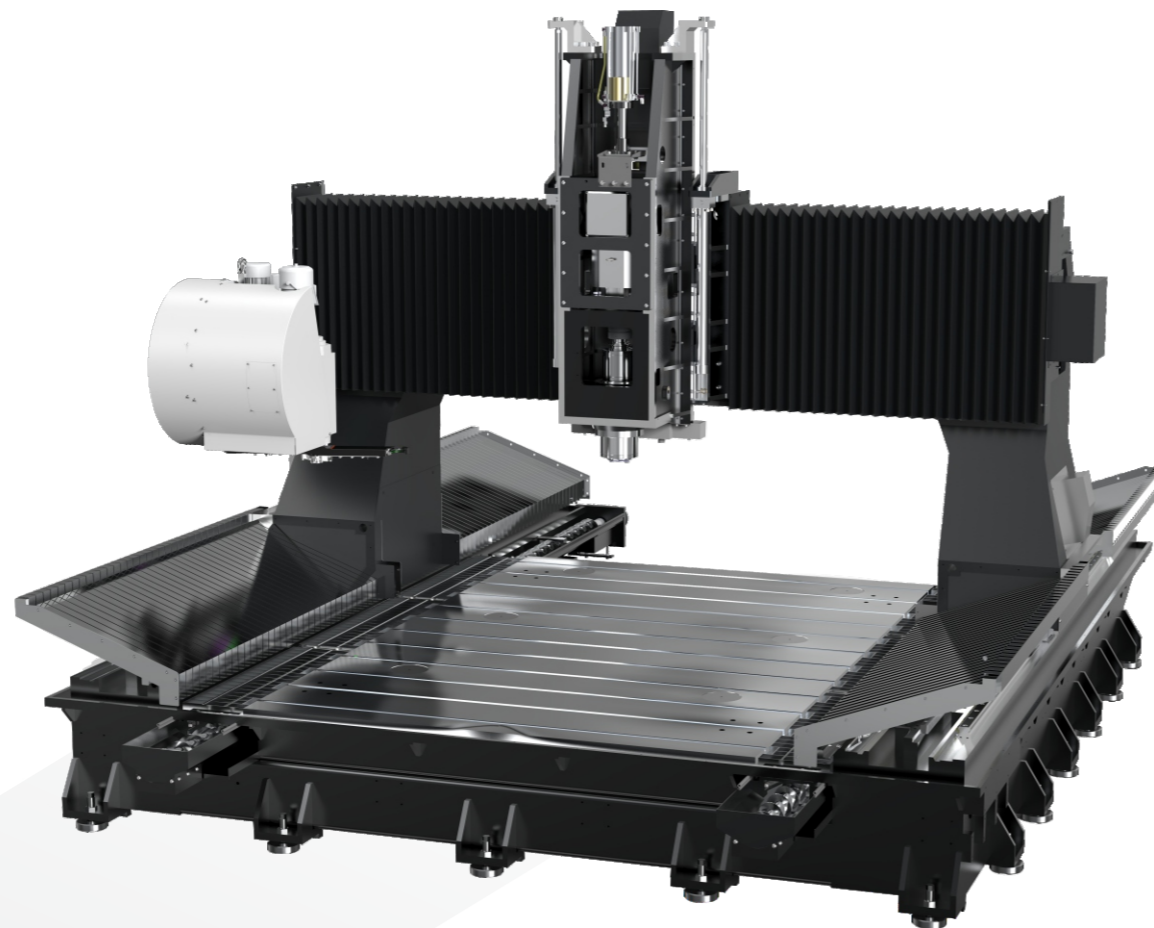
With its moving-column structure and integrated design of the beam and columns, the machine owns superior rigidity while occupying minimal space in the front and back.

### Chip removal

The overall machine is equipped with a semi-enclosed and heightened protective structure, surrounded by a complete sheet metal frame to effectively prevent chips and water splashes. Its visual appealing appearance is easy to operate and repair.

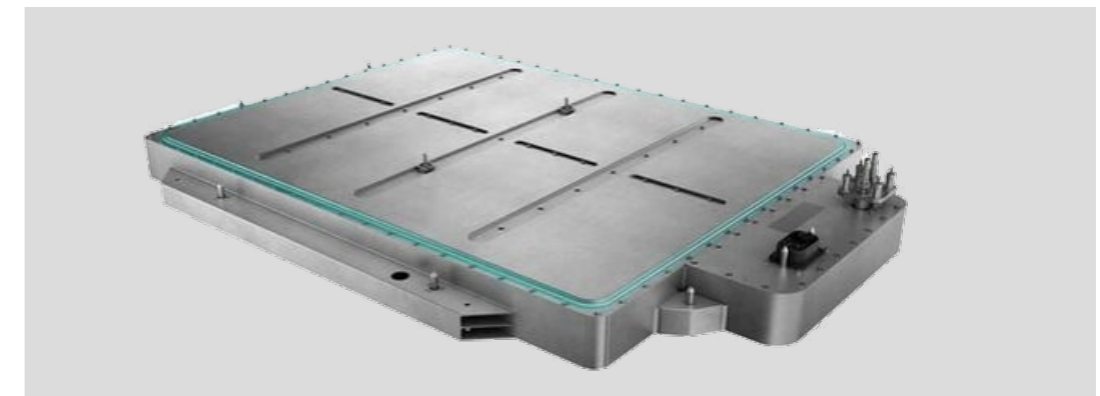
### Weight

Thanks to its small footprint and reduced weight compared to traditional gantry machines, the machine can be easily lifted and transported as a whole.



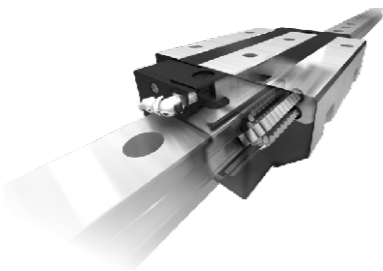
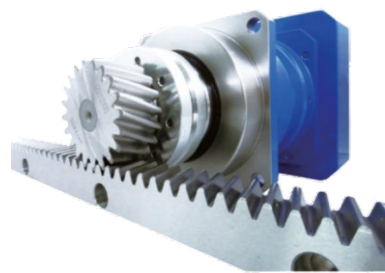
## WORKPIECE DISPLAY

This machine is designed for the machining of large flat parts, including battery tray assemblies, battery baseplates, battery cases, etc, which are commonly used in industries such as new energy vehicles and rail transport.



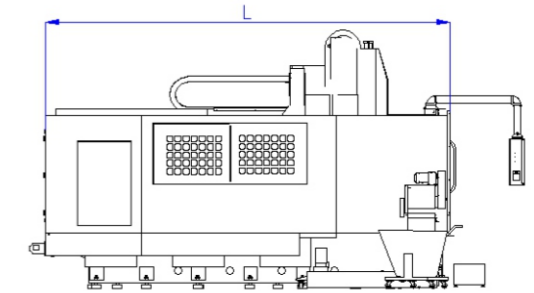
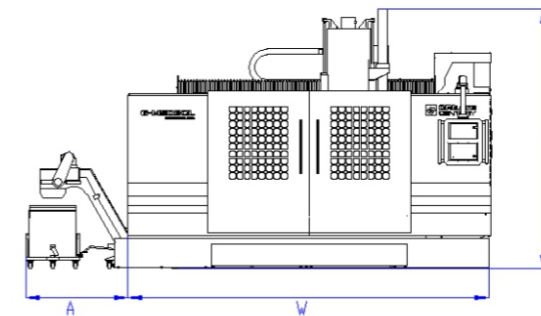
## CORE COMPONENTS

1. The machine is equipped with a precision-grade low-backlash planetary reducer and incorporates a Taiwan precision-grade ground rack/pinion with helical teeth.
2. Three axes are equipped with #45 ball linear guide rails from PMI/Nanjing Technical Equipment Manufacture, featuring elongated sliders to reduce friction and low noise. It ensures low-speed feed without crawling and exceptional precision stability.
3. The large-diameter precision-grade screw from PMI/Nanjing Technical Equipment Manufacture is used to improve machining accuracy and stability.



## OVERALL LAYOUT DIAGRAM

Gantry-type Profile Machining Centers



## PRODUCT CONFIGURATION

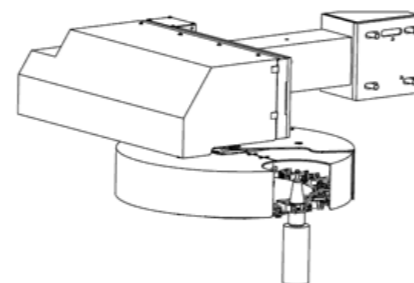
Overview of Principal Configuration Options  
Various tool magazine options



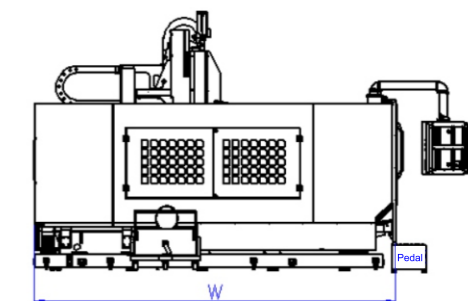
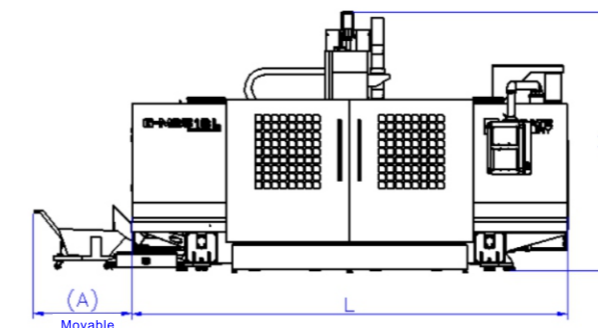
BT40-24T ATC tool magazine



BT40-20T tilt-disc tool magazine  
(Standard configuration for X series)



BT40-20T umbrella shape tool magazine  
(Standard configuration for G-M2518L)



Type	L(mm)	W(mm)	H(mm)	Chip conveyor A (mm)
G-M2030L/2030X	5200	4700	3300	1300
G-M2030U	5400	4800	3300	1200
G-M2518L/2518X	4200	5000	3000	800
G-M2015L/2015X	4000	4500	3100	800

## ▶ PARAMETER TABLE

Items	Units	G-M2030L	G-M2518L	G-M2015X	G-M2030U (Five-axis)
Strokes of the three axes (X/Y/Z)	mm	3000/2000/600	1800/2500/500	1500/2000/450	3000/2000/800
Distance from spindle nose to worktable	mm	200-800	180-680	180-630	50-850
Worktable size	mm	2000*3000	2500*1800	2000*1500	2000*3000
T-slot (number of slots - slot width*spacing)	mm	12-18*250	9-18*300	7-18*300	12-18*250
Type of X-axis transmission	/	Rack and pinion	Screw	Screw	Rack and pinion
Spindle motor power (rated/Temporary)	kw	7.5/11	7.5/11	3.7/5.5	20/23 (motorized spindle)
Spindle torque (rated/Temporary)	N.m	35.8/95.5	35.8/95.5	23.6/35	35/42
Spindle motor speed	rpm	20-12000	20-12000	20-12000	20-20000
Spindle taper	/	BT40	BT40	BT40	HSK-A63
Outer diameter of spindle	mm	Φ150	Φ150	Φ120	/
Feed rate	mm/min	1-15000	1-15000	1-15000	1-15000
Rapid traverse speed X/Y/Z	m/min	40/30/30	36/36/36	36/36/36	40/30/30
Tool magazine capacity	pc(s)	24	Umbrella shape 20T (disc 24T)	20	24
Positioning accuracy	mm	0.05/0.04/0.015	0.03/0.04/0.02	0.03/0.04/0.02	0.05/0.04/0.015
Repeated positioning accuracy	mm	0.025/0.02/0.008	0.02/0.02/0.01	0.02/0.02/0.01	0.025/0.02/0.008

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## Classification Specifications and model G-M2030L/G-M2518L

System	Mitsubishi M80B	●
	Mitsubishi M80A	○
	FANUC-0i MF(5)	○
	Siemens 828D	○
	Taikan system	○
Chip removal	Rear/front flushing in machine	△
	Chain chip conveyor/spiral chip conveyor	●
Tool magazine	BT40-20T tilt-disc type tool magazine	○
	BT40-24T ATC tool magazine	●
	BT40-20T umbrella shape tool magazine	○
Cooling	Cooling with cutting fluid	●
	Micro-mist lubrication cooling (MQL)	○
Screw	Screw center through cooling	△
Electric cabinet cooling	Heat exchanger	●
The 4th axis	The 4th axis	○
Higher column	Heighten column	△
Others	Water gun	●
	Tool setter	○
	Laser probe	○
	Shank with small angle-head	○
	Oil mist extractor device	△
	Front door secure interlock module	○
	Automatic front door control system	○

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## ▶ CONFIGURATION TABLE

(●Standard configuration ○Optional configuration △Not supported)

### Classification Specifications and model G-M2030L/G-M2518L

Spindle	BT30 direct connecting - 20,000 RPM	○
	BT40 direct connecting - 12,000 RPM	●
	Water-cooled spindle	○
	Oil-cooled spindle	○

# T Gantry-type Profile Machining Center

High speed, high efficiency and high rigidity

- . With its extensive X/Y axis stroke, this machine offers a broad processing range and can accommodate diverse manufacturing needs
- . Stationary beam and moving worktable structure with four Y-axis guide rails offer excellent rigidity
- . Standard configuration includes a servo-driven BT30-21T tilt-disc tool magazine for quick tool change

Gantry-type Profile Machining Center

## T-2515



The three-axis screw transmission guarantees excellent accuracy; the gantry structure with stationary beam offers excellent rigidity. Standard configuration includes a BT30-21T tilt-disc tool magazine for quick tool change.

## Product Structure

### ■ Castings

The foundation parts are made of high-quality of resin sand molding and high-strength of cast iron material.

### ■ Complete machine

The machine features a stationary-beam gantry structure, where the worktable can move back and forth; the beam and columns are designed as an integral structure; four guide rails for Y-axis support guarantees robust load-bearing performance.

### ■ Three axes

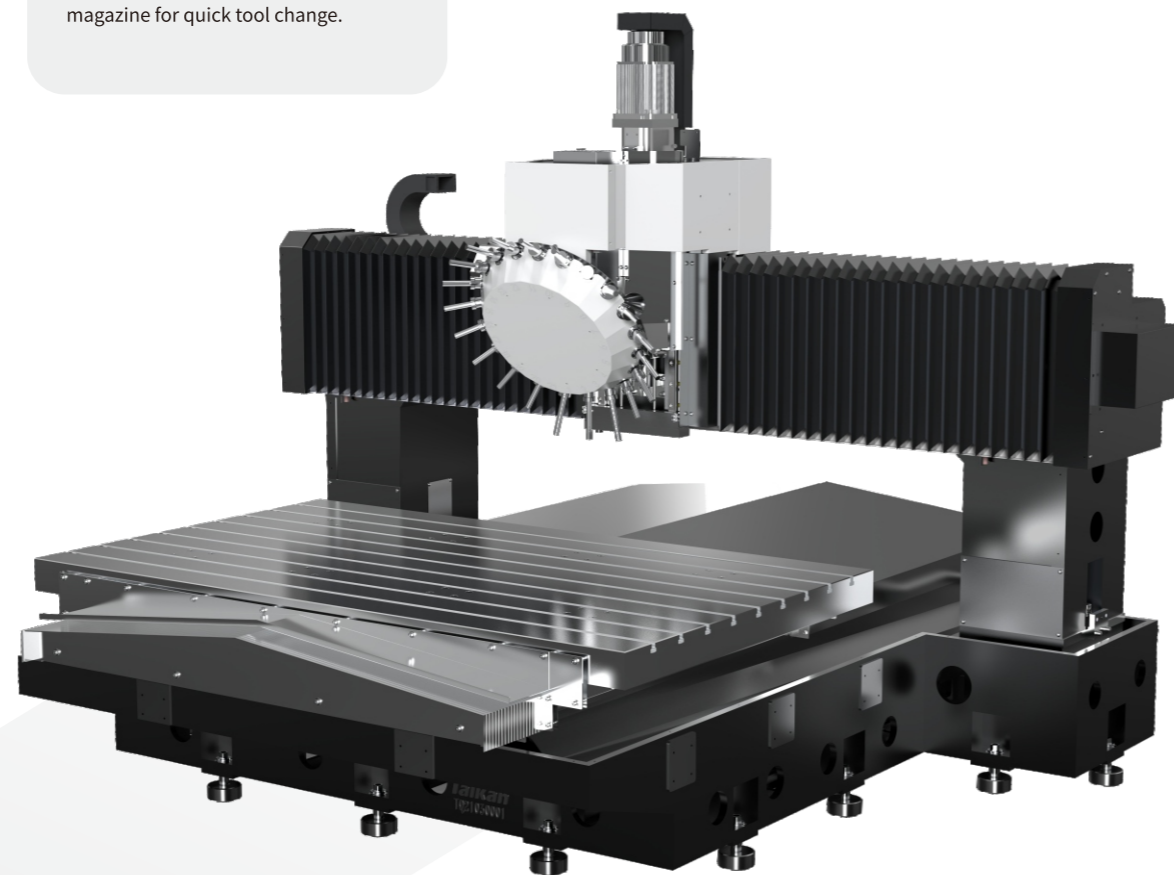
All three axes are driven by screws and nuts transmission structure, ensuring reliable performance with excellent precision. They adopt precision ball linear guide rails with extended sliders for heavy duty, high rigidity, low friction and low noise.

### ■ Appearance

The overall machine is surrounded with a semi-enclosed and heightened metal guard to effectively prevent chips and water splashes. It is designed with dual-sided slopes and a flushing chip removal system. The model of BT30 series incorporates a rear-mounted water tank. Its visual appealing appearance is easy to operate and repair.

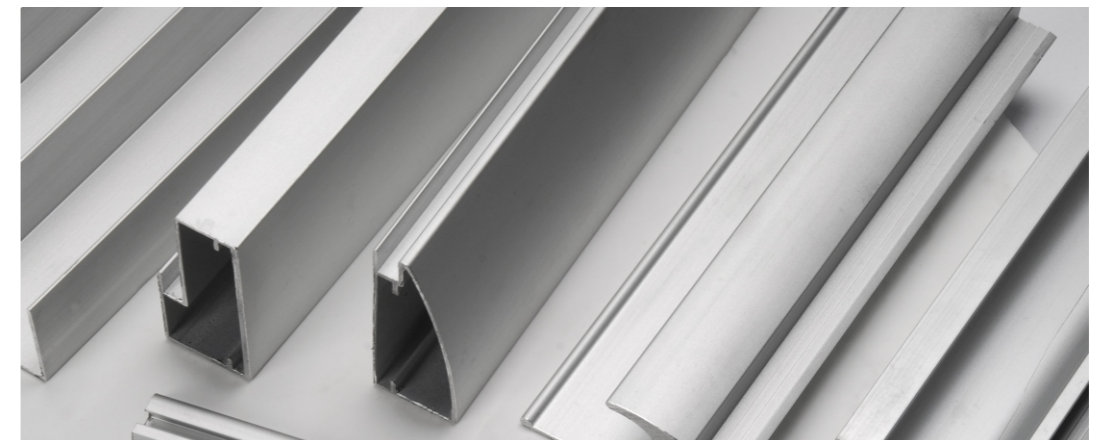
### ■ Tool magazine

Standard configuration includes a servo-driven BT30-21T tilt-disc tool magazine for quick tool change.



## WORKPIECE DISPLAY

It's used for processing large flat panels and frame components in industries such as LED, display, 5G base station casings and aluminum substrates.



## ▶ PARAMETER TABLE

Items	Name	Units	T-2515
Machining range	X-axis (left and right)	mm	2500
	Y-axis (front and back)	mm	1500
	Z-axis (up and down)	mm	350
Worktable	Worktable size	mm	2500*1500
Spindle	Spindle motor speed	rpm	50-24000
	Spindle power	kW	3.7/5.5
	Spindle taper	/	BT30
Guide rails	X/Y/Z	mm	45/45/35
Drive	Screw: X/Y/Z	/	5016/5016/3216
	Motor power: X/Y/Z	kW	3.6/3.6/4.7
Speed	Feed rate	mm/min	1-15000
	Rapid traverse speed X/Y/Z	m/min	20/30/32
Machine accuracy	Positioning accuracy (X/Y/Z)	mm	0.04/0.02/0.01
	Repeated positioning accuracy (X/Y/Z)	mm	0.02/0.01/0.006
Tool magazine	Tool magazine capacity	pc(s)	21
Others	CNC system	/	Taikan system

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## ▶ CONFIGURATION TABLE

(●Standard configuration ○Optional configuration △Not supported)

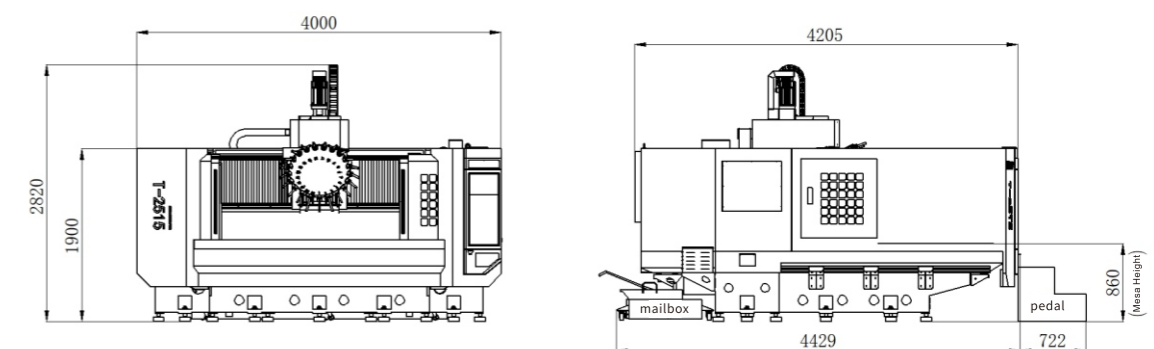
Classification	Specifications and model	T-2515
Spindle	Bt30 direct connecting - 24,000 RPM	●
	BT40 direct connecting spindle with a maximum speed of 12,000 rpm/120 mm in diameter	○
	Water-cooled spindle	○
	Oil-cooled spindle	○
System	Mitsubishi M80B	○
	Mitsubishi M80A	○
	FANUC-0i MF(5)	○
	Siemens 828D	○
	Taikan system	●

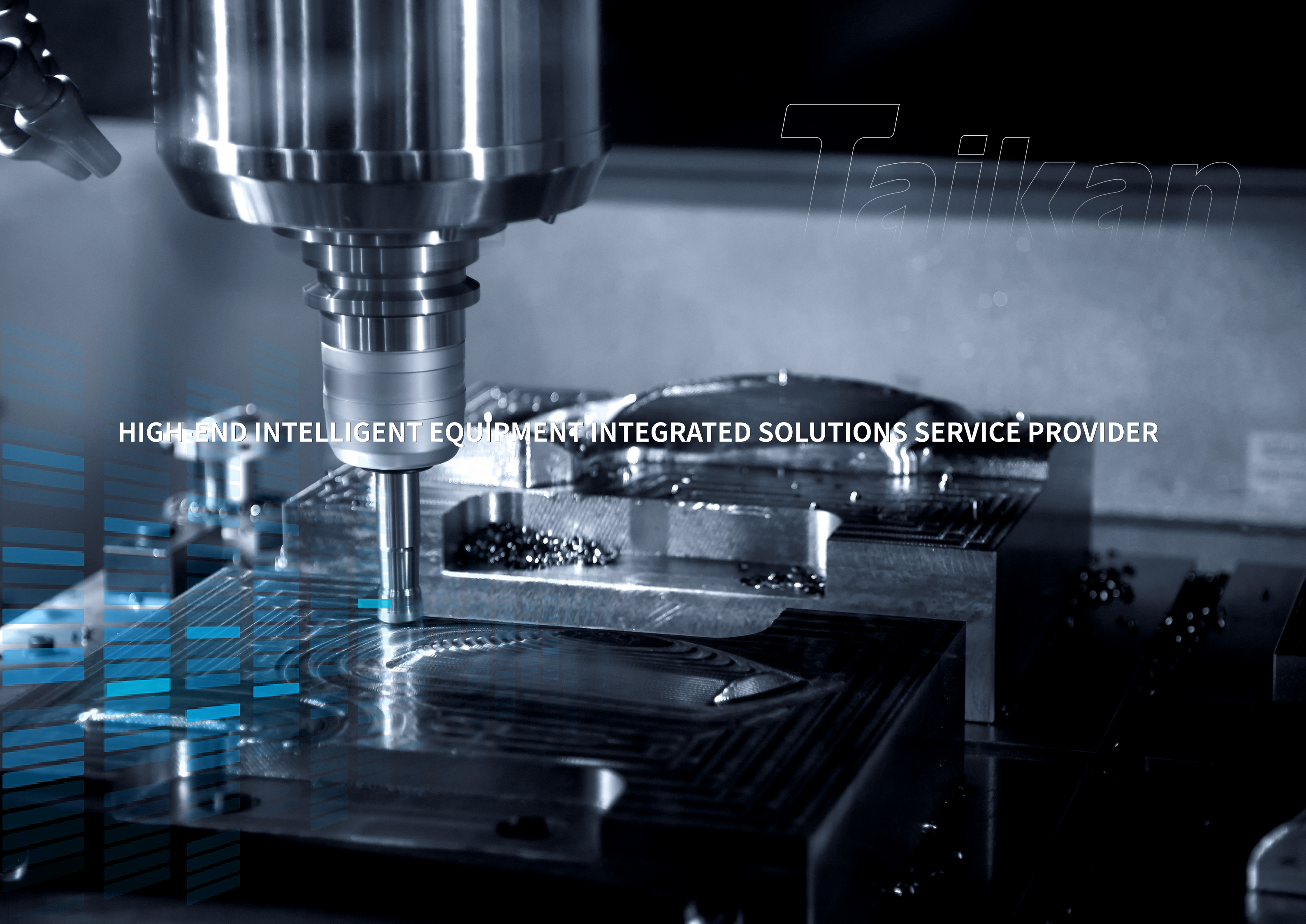
Classification	Specifications and model	T-2515
Chip removal	Rear flushing in machine	●
	Rear chain chip conveyor	○
Tool magazine	BT30-21T tilt-disc tool magazine	●
	BT40-20T ATC tool magazine	○
Cooling	Cooling with cutting fluid	●
	Micro-mist lubrication cooling (MQL)	○
Screw	Screw center through cooling	△
Electric cabinet cooling	Heat exchanger	○
The 4th axis	The 4th axis	○
Higher column	Column increased by 100 mm	○
	Column increased by 200 mm	○
Others	Water gun	●
	Tool setter	○
	Laser probe	○
	Shank with small angle-head	○
	Oil mist extractor device	△
	Front door secure interlock module	○
	Automatic front door	○

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## OVERALL LAYOUT DIAGRAM

Gantry-type Profile Machining Centers





*Taikuan*

HIGH-END INTELLIGENT EQUIPMENT INTEGRATED SOLUTIONS SERVICE PROVIDER