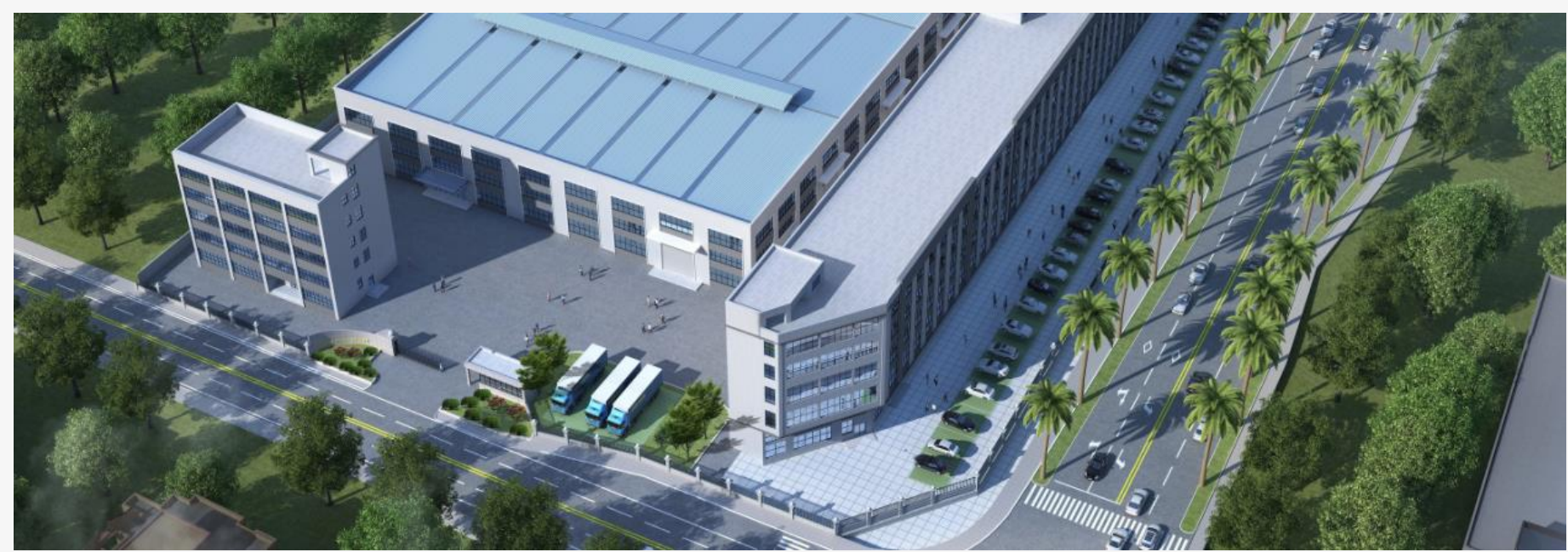




## Non-metal 5 Axis CNC Machine



Intelligent Equipment for Thermoformed plastic,  
Composite materials Industry



**COMPANY PROFILE:** Fujian RBT Intelligent Equipment Co., Ltd. is an integrated solution provider of intelligent equipment integrating R&D, manufacturing, sales and technical services, and is committed to the R&D and manufacturing of multi-axis machining centers. The company adheres to the core values of integrity, quality, gratitude and innovation; firmly believes in taking customer needs as its own responsibility and winning the future with product quality; insists on promoting the universal application of five-axis machining centers in various industries with innovation!

**The company 's main products:**

**Five-axis CNC machine; Five-axis Twin table CNC machine; Truss type Five-axis CNC machine; Truss type twin table Five-axis CNC machine; Rotary table Five-axis cnc machine.**



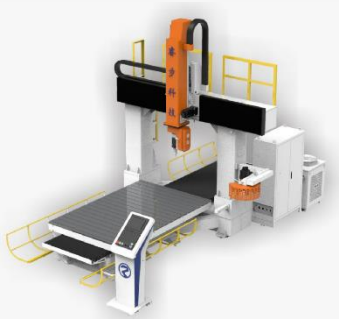
**FUJIAN FACTORY**

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**DONGGUAN COMPANY**

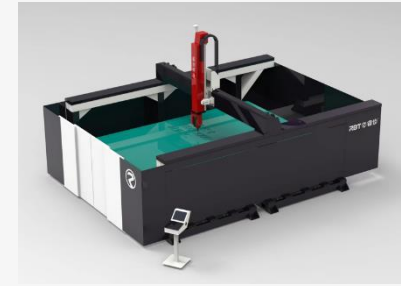
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Non-metal 5 Axis CNC Machine



Non-metal 5 Axis CNC Machine with twin table



Truss-type 5 Axis CNC Machine



Truss-type 5 Axis CNC Machine



Truss-type 5 Axis CNC Machine with twin table



Truss-type 5 Axis CNC Machine with rotary table

### Machine Function:

1. Non-metal five-axis machining center, when working, **five coordinate axes** drive the tool to move around the workpiece, and can realize five-axis linkage three-dimensional movement, which can meet the processing of pentahedron and arbitrary curved surface.
2. The system adopts **SYNTEC five-axis linkage CNC system**. The machine combines power, speed and precision and can be equipped with multiple functions such as **dust collection, automatic tool change spindle, tool library and RTCP**. It can cut difficult-to-process materials in the shortest time to obtain very high-precision contours and profiles. The multi-face processing of the entire product can be completed in one clamping.

### Machine Applicable to:

**Composite materials:** carbon fiber (PCM/RTM/SMC/LFT, etc.), glass fiber, carbon/carbon, etc.;

**Plastics:** ABS, PVC, PC, PP, PS, PE, PET, HDPE, PETG, Acrylic etc.;

**Other non-metal material:** high-density sponge, Styrofoam foam, wood, substitute wood, stone, plaster etc



### Machine Widely used in:

Mold manufacturing, composite material processing, and thick sheet thermoforming processing in industries such as aerospace, rail transit, automotive interior and exterior, sporting goods, medical beauty, white goods, handicrafts, and sanitary ware.



# FIVE-AXIS CNC MACHINE CENTER

1. **Gantry structure**, which ensures good machining dynamic characteristics of machine.
2. Solid **welded steel bed**, and the key parts are added with ribbed plates, providing a rigid and stable foundation.
3. The Z axis adopts **Taiwan HIWIN roller slider linear guide**.
4. X/Y/Z axis adopts **Taiwan TBI** precision screw rod.
5. The C/B axis adopts the Japanese **Sumitomo** high-torque zero-backlash hollow **reducer**.
6. **Suitable max workpiece** : 1400\*2500\*550mm
7. Optional: auto tool changer spindle and tool library



No.	items	parameter	No.	items	parameter
1	product name	NONMETAL FIVE-AXIS CNC MACHINE CENTER	9	Z axis maximum speed	20m/min
2	model	RB-F5-1930-Z08	10	Repeat accuracy (within 300mm)	±0.05mm
3	X axis effective stroke	1900mm	11	voltage	380V
4	Y axis effective stroke	3000mm	12	total power	14.5KW
5	Z axis effective stroke	800mm	13	spindle power	5.5KW(customizable)
6	B-axis rotation angle	±130°	14	Frequency	50HZ
7	C-axis rotation angle	±540°	15	weight	3.5T
8	X/Y axis maximum speed	35m/min	16	size	L5100*W2610*H3982mm

# FIVE-AXIS CNC MACHINE CENTER WITH TWIN TABLE

- Twin table:** Two tables working independently, one workbench is processing, the other workbench is loading and unloading;  
And two workbench also can simultaneously as a big single table.
- Suitable max workpiece:**  
1000\*1500\*550mm when two table work independently,  
2000\*1500\*550mm when two table work simultaneously as a single table.
- Optional: auto tool changer spindle and tool library



No.	items	parameter	No.	items	parameter
1	product name	NONMETAL SIX-AXIS CNC MACHINE CENTER	9	Z axis maximum speed	20m/min
2	model	RB-F6-2520-Z08	10	Repeat accuracy (within 300mm)	±0.05mm
3	X axis effective stroke	2500mm	11	voltage	380V
4	Y axis effective stroke	2000mm	12	total power	14.5KW
5	Z axis effective stroke	820mm	13	spindle power	5.5KW(customizable)
6	B-axis rotation angle	±130°	14	Frequency	50HZ
7	C-axis rotation angle	±540°	15	weight	4.1T
8	X/Y axis maximum speed	35m/min	16	size	L3482*W3350*H3768mm

# FIVE-AXIS CNC MACHINE CENTER

1. **Mini size** suitable for the processing of small parts.
2. **The closed protection design** meets the safety protection and debris prevention during equipment production and processing.
3. **Suitable max workpiece** : 600\*600\*300mm
4. Optional: auto tool changer spindle and tool library



No.	items	parameter	No.	items	parameter
1	product name	NONMETAL FIVE-AXIS CNC MACHINE CENTER	9	Z axis maximum speed	15m/min
2	model	RB-F5-1212-Z06	10	Repeat accuracy (within 300mm)	±0.05mm
3	X axis effective stroke	1200mm	11	voltage	380V
4	Y axis effective stroke	1200mm	12	total power	14.5KW
5	Z axis effective stroke	600mm	13	spindle power	5.5KW(customizable)
6	B-axis rotation angle	±120°	14	Frequency	50HZ
7	C-axis rotation angle	±540°	15	weight	2.5T
8	X/Y axis maximum speed	30m/min	16	size	L1800*W2300*H3200mm



# FIVE-AXIS CNC MACHINE CENTER WITH ROTARY TABLE

1. **The truss-type and protective room structure** meet the safety protection and debris prevention during production.
2. The **floor drain dust collection device** cooperates with the dust collector to collect external processing debris.
3. **Rotary twin worktable** making loading and unloading safer and more convenient, realizing automatic interaction between the processing area and the loading and unloading area.
4. **8 station auto tool library** , automatic replacement of 8 different tools, quick replacement of tools and improved production efficiency.
5. **Suitable max workpiece** : 2700\*1700\*750mm



No.	items	parameter	No.	items	parameter
1	product name	FIVE-AXIS CNC MACHINE CENTER WITH RORARY TABLE	9	Z axis maximum speed	20m/min
2	model	RB-F5-3323-Z10	10	Repeat accuracy (within 300mm)	±0.05mm
3	X axis effective stroke	3250mm	11	voltage	380V
4	Y axis effective stroke	2250mm	12	total power	25.35KW
5	Z axis effective stroke	1000mm	13	spindle power	17KW(customizable)
6	B-axis rotation angle	±120°	14	Frequency	50HZ
7	C-axis rotation angle	±540°	15	weight	12T
8	X/Y axis maximum speed	40m/min	16	size	

# TRUSS TYPE FIVE-AXIS CNC MACHINE CENTER WITH TWIN TABLE

1. **The truss-type and protective room structure** meet the safety protection and debris prevention during production.
2. Four groups of **dust collection boxes** are installed at the bottom to connect with external dust collection device.
3. **Twin worktable**: two tables working independently, one workbench is processing, the other workbench is loading and unloading; And two workbench also can simultaneously as a big single table.
4. **8 station auto tool library**, automatic replacement of 8 different tools, quick replacement of tools and improved production efficiency.
5. **Suitable max workpiece** : 1500\*2000\*800mm when two table work independently, 3300\*2000\*800mm when two table work simultaneously as a single table



No.	items	parameter	No.	items	parameter
1	product name	TRUSS TYPE FIVE-AXIS CNC MACHINE CENTER WITH TWIN TABLE	9	Z axis maximum speed	20m/min
2	model	RB-H6-3926-Z12	10	Repeat accuracy (within 300mm)	±0.05mm
3	X axis effective stroke	3900mm	11	voltage	380V
4	Y axis effective stroke	2650mm	12	total power	33.8KW
5	Z axis effective stroke	1200mm	13	spindle power	20KW(customizable)
6	B-axis rotation angle	±120°	14	Frequency	50HZ
7	C-axis rotation angle	±540°	15	weight	13.5T
8	X/Y axis maximum speed	35m/min	16	size	8770*7720*4930mm

# TRUSS TYPE FIVE-AXIS CNC MACHINE CENTER

1. **Truss-type structure** with a guard room to ensure the best processing dynamic characteristics for machine.
2. **The semi-enclosed protection design** meets the safety protection and debris prevention during production.
3. **Integral floor drain dust collection device** cooperates with dust collector to collect processing debris.
4. Row type **8 station auto tool library**, automatic replacement of 8 different tools, quick replacement of tools and improved production efficiency.
5. **Suitable max workpiece** : 1300\*900\*800mm



No.	items	parameter	No.	items	parameter
1	product name	TRUSS TYPE FIVE-AXIS CNC MACHINE CENTER	9	Z axis maximum speed	15m/min
2	model	RB-H5-1915-Z11	10	Repeat accuracy (within 300mm)	±0.05mm
3	X axis effective stroke	1900mm	11	voltage	380V
4	Y axis effective stroke	1500mm	12	total power	27KW
5	Z axis effective stroke	1100mm	13	spindle power	17KW(customizable)
6	B-axis rotation angle	±120°	14	Frequency	50HZ
7	C-axis rotation angle	±540°	15	weight	8T
8	X/Y axis maximum speed	25m/min	16	size	L3200*W3390*H4200mm

# TRUSS TYPE FIVE-AXIS CNC MACHINE CENTER

1. **Truss-type structure** with a guard room to ensure the best processing dynamic characteristics for machine.
2. Flushable processing and 17 kw strong spindle, **which can process the aluminum mold.**
3. **The semi-closed flushable processing protection design** meets the safety protection and debris prevention during production .
4. Row type **6 station auto tool library**, automatic replacement of 6 different tools, quick replacement of tools and improved production efficiency.
5. **Suitable max workpiece:** 2000\*3500\*800mm



No.	items	parameter	No.	items	parameter
1	product name	TRUSS TYPE FIVE-AXIS CNC MACHINE CENTER	9	Z axis maximum speed	15m/min
2	model	RB-H5-2540-Z11	10	Repeat accuracy (within 300mm)	±0.05mm
3	X axis effective stroke	2550mm	11	voltage	380V
4	Y axis effective stroke	4050mm	12	total power	27KW
5	Z axis effective stroke	1100mm	13	spindle power	17KW(customizable)
6	B-axis rotation angle	±110°	14	Frequency	50HZ
7	C-axis rotation angle	±540°	15	weight	14T
8	X/Y axis maximum speed	30m/min	16	size	4300*5500*4900mm

# What material can be processed?

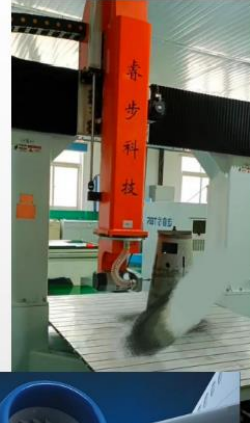
**Composite materials:** carbon fiber (PCM/RTM/SMC/LFT, etc.), glass fiber, carbon/carbon, etc.;

**Plastics:** ABS, PVC, PC, PP, PS, PE, PET, HDPE, PETG, Acrylic etc.;

**Other non-metal material:** high-density sponge, Styrofoam foam, wood, substitute wood, stone, plaster etc

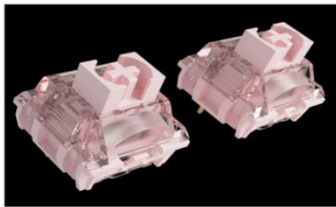


Workpiece 加工对象示例



# What industry need the machine?

Mold manufacturing, composite material processing, and thick sheet thermoforming processing in industries such as aerospace, rail transit, automotive interior and exterior, sporting goods, medical beauty, white goods, handicrafts, and sanitary ware.

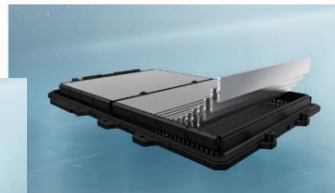




# Successful Cases



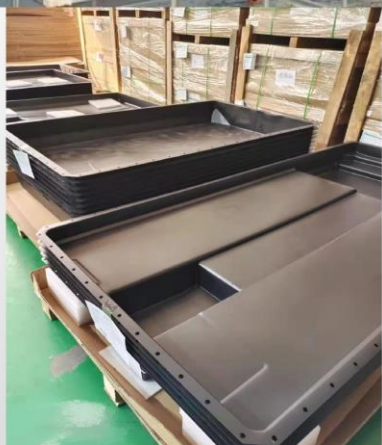
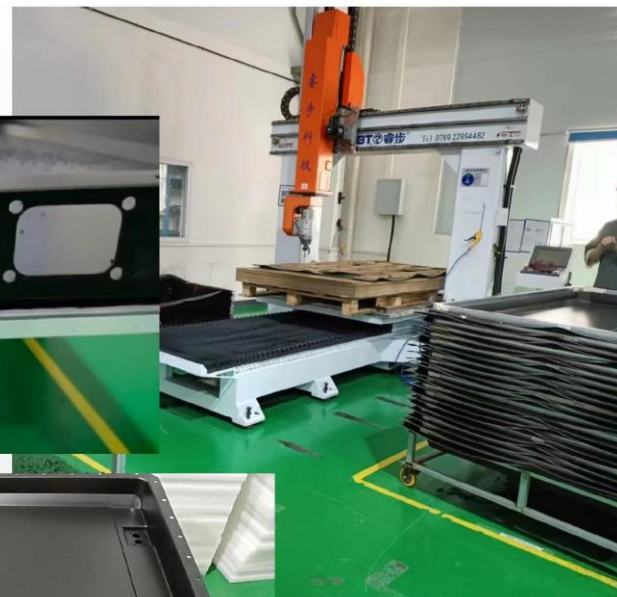
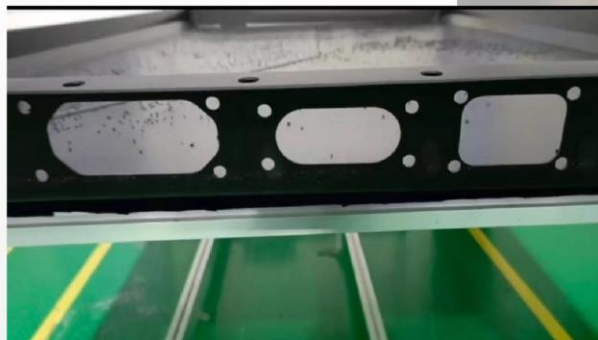
BYD  
比亚迪汽车



恩高ANKO



## Machine used in customer factory







江西长江化工有限责任公司  
Jiangxi Changjiang Chemical Co., Ltd



中航沈飞股份有限公司  
AVIC SHENYANG AIRCRAFT COMPANY LIMITED



三维五轴  
激光切割机

中国电子科技集团公司第54研究所



湖北航宇嘉泰飞机设备有限公司  
HUBEI ALI-JIATAI AIRCRAFT EQUIPMENT CO., LTD.

# Qualification



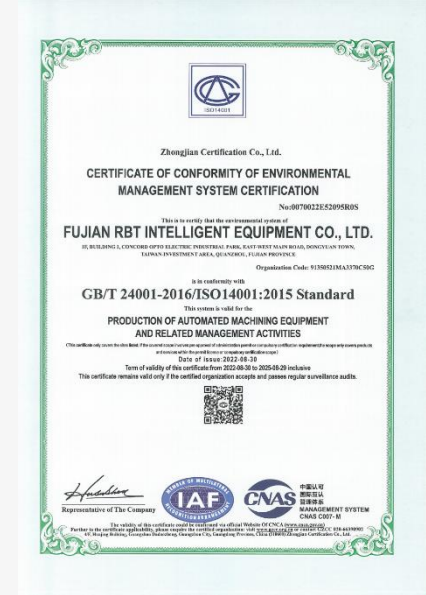
**Military Industry  
Equipment Quality  
Management System  
Certification**



**ISO9001: 2015  
Quality Management  
System Certification**

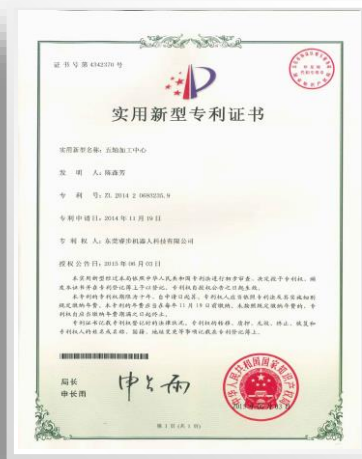


**ISO45001: 2018  
Occupational Health and  
Safety Management  
System**



**ISO14001: 2015  
Environmental  
Management System**

# Technology Patent



The company has 7 invention patents, 27 utility model patents, 2 appearance patents, and 2 software copyrights. There are currently 10 patents pending.

# Our Customer





## Fujian RBT Intelligent Equipment Co.,Ltd.

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