

Possibilities of supplying machining centers(milling and turning machines) with CNC for enterprises from PRC, Taiwan

About the company



Year of foundation 2012

Type of activity: supply of equipment, machine tools, heat exchangers, special machinery and raw materials for industrial enterprises

Resources:

- Partner factories in the PRC, possessing modern world technologies for production of raw materials and equipment for metallurgical, chemical, oil and gas and machine-building industries
- Well-adjusted logistics by all means of transportation: sea, rail, air, motor transportMany years of experience in working with customs authoritiesExtensive experience in international payments under sanctions restrictions in rubles, yuan, US dollars, UAE dirhams.

Brief reference list of the company

- Supply of raw materials and refractory products for metallurgical enterprises
- Supply of heat-exchange equipment
- Supply of machine tools, equipment for enrichment plants
- Supplies of underground special equipment (drilling rigs, loading and delivery machines, dump trucks)
- Supply of large-unit spare parts for machinery and industrial equipment



CNC machining centers (machine tools)



Our partners

Modern innovative enterprises specializing in intelligent CNC equipment. The manufacturing sites are located in China and Taiwan.

The companies have formed a complete chain from design, production, sales to after-sales service and can provide customized technology solutions for customers worldwide.



Machine structure

The machine bed, work table and other components are made by integral casting technology, a one-piece structure cast using high-strength high-grade cast iron and polymer sand, and have the characteristics of high strength and rigidity after several heat treatment processes. The static performance of the machine and basic technical parameters such as protection against deformation, vibration, etc. meet the requirements of long-term use

Technology

All products are subjected to finite element analysis According to the mechanical principle, the arrangement and number of high load bearing sliders are selected so that the machine can ensure high rigidity and stable accuracy for a long time. Together with the centralized lubrication unit, each slider is lubricated regularly and quantitatively, which

can fully guarantee the rigidity and long service life of the system.

Main products

- Key features
- Vertical machining centers with long stroke
- Multifunctional horizontal machining centers
- Cnc portal machining centers
- Additional options

Key Features

Single machine for multitasking

Long workpiece machining High efficiency and high quality

Top-level cnc System

Vertical machining centers with long strokes

PA Machining center with 3-axis moving column with long stroke

The high base design effectively prevents residual water from splashing outside the equipment. The auger drive meets the requirements of more precise machining. The lower part of the table has a large bevel for chip removal, which accelerates the residue into the chip tank, thus improving the chip removal efficiency.

| X-axis travel (mm) | 2500-6900 |
|---------------------|-----------------|
| Y-axis travel (mm) | 400 |
| Z-axis travel (mm) | 400 |
| Spindle power (kW) | 7.5/16.2 5.5/11 |
| Maximum speed (rpm) | 12000 |
| Cone | BT/SK/CAT30 |
| system | Siemens/Fanuc |

Toughness work

table

Spindle BT30

High-precision screw drive

Machining center with 3-axis moving column with long stroke

High bed design and high organ cover effectively prevent water splash and protect parts such as guides and screws. Optimized the design of moving parts, reduce the inertia of movement, increase the acceleration to 0.7G and achieve a passing speed of 50m/min. Increase the Y-axis movement, making the machine more suitable for various industries. It can be equipped with front and rear two-position fixtures, especially suitable for processing a large number of workpieces. The bottom is designed with a large sloping surface for chip removal, optimizing the chip removal process and coolant backflow structure.

| | PB65 | PB85 |
|---------------------|---------------|-----------|
| X-axis travel (mm) | 1800-6500 | 1800-2500 |
| Y-axis travel (mm) | 650 | 850 |
| Z-axis travel (mm) | 700 | 700 |
| Spindle power (kW) | 11/18.5 | 11/23.2 |
| Maximum speed (rpm) | 12000 | |
| Cone | BT/SK/CAT40 | |
| system | Siemens/Fanuc | |

inclined casting layer

** The above parameters are for reference only

PB

PB85-SD5

Machining center with 5-axis moving column with long stroke

| X-axis travel (mm) | 1800-6500 |
|------------------------|---------------|
| Y-axis travel (mm) | 850 |
| Ход по оси Z (мм) | 700 |
| Turntable (A-axis) | ±360° |
| B-axis travel (mm) | ±90° |
| Power spindle (kW) | 20/22.3 |
| Maximum speed (rpm) | 12000 |
| Cone | HSK A63 |
| system | Siemens/Fanuc |

The PB series design with high bed, which can effectively prevent the splashing of water crumb outside the equipment, at the same time protect important parts such as guides and screws, increases the service life and reliability of the machine. The three axes of 1800 and 2500 models are driven by the screw, which ensures higher processing precision. High travel speed can reach 50m/min, superior dynamic performance and higher acceleration. The lower part of the work table is designed with a large inclined chip removal surface, which is more convenient for cleaning and chip removal. Mainly used for processing in automobile, railway, power industry, etc.

PYC Machining center with 3-axis moving column with long stroke

The reinforced design of the movable column enables it to meet universal machining requirements. Features high rigidity, high efficiency and high precision.For machining various materials such as steel, aluminum, copper and non-metals, widely used in aerospace, automotive, etc.

| X-axis travel (mm) | $2500\text{-}8500 \ (\text{* can be customized})$ |
|------------------------|---|
| Y-axis travel (mm) | 580 |
| Z-axis travel (mm) | 450/700 |
| Spindle power (kW) | 11/23.2 11/18.5 |
| Maximum speed (rpm) | 10000/12000 |
| Cone | BT/ SK/CAT40 |
| system | Siemens/Fanuc |

24 location of the disk-type tool magazine

Cast iron bed

PYE Machining center with 3-axis moving column with long stroke

Demonstrates outstanding capabilities when machining workpieces of various sizes due to a wider machining range. For machining various metal parts such as steel, aluminum, copper, etc.Widely used in machine building industry, automobile industry, railroad industry, etc.

| X-axis travel (mm) | 2500-6500 |
|------------------------|--|
| Y-axis travel (mm) | 650 |
| Z-axis travel (mm) | 700 |
| Spindle power (kW) | BT40: 11/18.5 11/23.2 BT50: 15/18.5 17/42.4 |
| Maximum speed (rpm) | 10000 |
| Cone | BT/ SK/CAT40 BT/SK/CAT50 |
| system | Siemens/Fanuc |

Cast iron bed

Large work area

24-position disktype tool magazine

PCD5D Machining center with 5-axis moving column with long stroke

With a top-level configuration optimally designed for the various needs of modern flexible machining.High-precision 2-axis head and world-renowned 5-axis controller enable multi-angle and multi-directional machining of special-shaped parts. Widely used in aerospace, automotive, etc.

| X-axis travel (mm) | 4000-6000 |
|---|----------------------------|
| Y-axis travel (mm) | 1200 (3-axis)/700 (4-axis) |
| Z-axis travel (mm) | 500 |
| Stroke in the air conditioner axis (mm) | ±185°/±320° |
| Spindle power (kW) | 22/22.3 |
| Maximum speed (rpm) | 24000 |
| Cone | HSK A63 |
| system | Siemens |

Double-lever

column

a bamboo hat type tool store with 20 seats

PCD Machining center with 3-axis moving column with long stroke

The perfect combination of rigidity and dynamics, the two-arm moving column design provides excellent processing capabilities. Meets the stringent requirements of modern manufacturing processes.Widely used in the industries of electronic instrumentation, aerospace, railroads, machine parts, etc.

| | BT40 | BT50 |
|---------------------|-----------------|-----------------|
| X-axis travel (mm) | 4000/6000 | 4000/6000 |
| Y-axis travel (mm) | 800/1200 | 800/1200 |
| Z-axis travel (mm) | 600 | 600 |
| Spindle power (kW) | 11/23.2 11/18.5 | 17/42.4 15/18.5 |
| Maximum speed (rpm) | 10000/12000 | 8000 |
| Cone | BT/ SK/CAT40 | BT / SK/CAT50 |
| system | Siemens/Fanuc | |

Cast iron bed

Umbrella tool store

PDE4D 4-axis CNC profile machining center

With B-axis rotation within ±90 degrees based on the traditional 3 axes. Meets the requirements of high-precision multi-angle machining of specialshaped materials and curved surfaces Widely used in the automotive industry for machining bumpers, sunroof rails, struts, etc.

| X-axis travel (mm) | 2500-6500 (* can be customized) |
|------------------------------|---------------------------------|
| Stroke in the Y /Z axis (mm) | 500/700 |
| B-axis travel (mm) | ±90° |
| Spindle power (kW) | 16/18.5 |
| Maximum speed (rpm) | 16000 |
| Cone | BBT/SK/CAT40 |
| system | Siemens/Fanuc |

Swivel head

magazine

24-position disktype tool

Machine bed and chip conveyor

Multifunctional horizontal machining centers

Series PW

| PWA |
|-----|
| |
| PWB |
| |
| PWM |

PWA Multifunctional horizontal machining center

| | PWA8050/1160/1514H |
|------------------------|--------------------|
| X-axis travel (mm) | 900/1200/1500 |
| Y-axis travel (mm) | 800/1100/1400 |
| Z-axis travel (mm) | 500/600/600 |
| Spindle power (kW) | 14/27 9/21.2 |
| Maximum speed (rpm) | 10000/12000 |
| Cone | BT/ SK/CAT40 |
| system | Siemens/Fanuc |

The perfect combination of technological innovation and economic considerations. Thanks to the double working position and suspended structured spindle box, rigid machining with 6 faces is achieved after single clamping in two working positions, perfectly replacing a conventional production line. Capable of milling, boring, drilling, reaming and tappingWidely used for injection molding processing in lightweight automobiles, electric vehicles, LED displays, 5G communication industries.

Loading and unloading the robotic arm

Suspended structured spindle box

flexible machining of 3+2 faces

** The above parameters are for reference only

PWM Multifunctional horizontal machining center

Features high efficiency, high rigidity and high precision. The interchangeable worktable enables simultaneous workpiece feeding and machining, and meets the requirements of continuous machining.Capable of milling, boring, drilling, reaming and tapping Widely used in automotive, shipbuilding, machine tool, mold making and other industries.

| | PWM-50 II /63 II /80 II |
|---------------------|-------------------------|
| X-axis travel (mm) | 800/1000/1300 |
| Y-axis travel (mm) | 900/900/1100 |
| Z-axis travel (mm) | 800/1000/1200 |
| Spindle power (kW) | 17/20.4 |
| Maximum speed (rpm) | 6000 |
| Cone | BT / SK/CAT50 |
| system | Siemens/Fanuc |

Internal structure

Exchangeable trays

Heavy-duty cutting machining centers

PHE5D 5-axis CNC portal machining center

| Known for its versatile and flexible machining capabilities, it is characterized |
|--|
| by a wide range of workpieces and high precision. The multi-directional ${\rm A/C}$ |
| axis machining allows you to meet a variety of machining requirements.It is |
| widely used for machining special shaped parts in the aerospace, automotive |
| and mechanical engineering industries. |

| X-axis travel (mm) | 3000 |
|---|---------------------------|
| Y-axis travel (mm) | 1850 (3 оси)/1400 (4 оси) |
| Z-axis travel | 530 |
| Stroke in the air conditioner axis (mm) | ±185°/±320° |
| Spindle power (kW) 20 | |
| Maximum speed (rpm) | 24000 |
| Cone | HSK A63 |
| system | Siemens |

Foundry construction

umbrella tool store with 12 seats

** The above parameters are for reference only

PHE 3-axis CNC portal machining center

PHE-CNC2518S (welded bed)

Known for its versatile machining capabilities, the machine's low base design keeps it sturdy for high precision machining. Wide range of machining to meet a variety of customer needs. Widely used for machining profiles and plates in industries such as electric vehicle battery manufacturing, rail transportation and machine parts.

| | PHE-CNC2518S | PHE-CNC3020 | |
|------------------------|---------------|-------------|--|
| X-axis travel (mm) | 2500 | 3000 | |
| Y-axis travel (mm) | 1800 | 2000 | |
| Z-axis travel (mm) | 550 | 800 | |
| Spindle power (kW) | 9/21.2 | 7.5/15 | |
| Maximum speed (rpm) | 12000 | 10000/12000 | |
| Cone | BT/ SK/CAT40 | | |
| system | Siemens/Fanuc | | |

** The above parameters are for reference only

PHE-CNC3020(casting bed)

PGMA Gantry machining center with fixed beam for heavy duty applications

| Highly accurate, fast, flexible and environmentally friendly. With integrated |
|---|
| powerful functions of drilling, milling, boring, reaming, reaming, hard |
| tapping, linear interpolation, arc interpolation, spiral interpolation, |
| augmentation, three-axis joining. Widely used for heavy duty machining in |
| industries such as shipbuilding, power generation, heavy machinery, mold |
| making, etc. |

| | PGMA-3040/60/80 |
|------------------------|-----------------|
| X-axis travel (mm) | 4200/6200/8500 |
| Y-axis travel (mm) | 4500 |
| Z-axis travel (mm) | 1600 |
| Spindle power (kW) | 37/55.5 |
| Maximum speed (rpm) | 2500 |
| Spindle torque | 1873/2810 |
| Cone | BT50 |

Double Z axis servo drive

PGMB | Heavy-duty portal machining center with walking beam

Highly accurate, fast, flexible and environmentally friendly. With integrated powerful functions of drilling, milling, boring, reaming, reaming, hard tapping, linear interpolation, arc interpolation, spiral interpolation, augmentation, three-axis joining.Widely used for heavy duty machining in industries such as shipbuilding, power generation, heavy machinery, mold making, etc.

| | PGMB-3040/60/80 |
|---------------------|-----------------|
| X-axis travel (mm) | 4200/6200/8500 |
| Y-axis travel (mm) | 4500 |
| Z-axis travel (mm) | 1200 |
| W-axis travel (mm) | 1300 |
| Spindle power (kW) | 22/30 |
| Maximum speed (rpm) | 4500 |
| Spindle torque | 1076/1614 |
| Cone | BT50 |

Lifting part of the moving beam

Symmetrical structured RAM

PGME | Bridge type milling machine

The lightweight spindle unit module paired with a two-speed gearbox meets the requirements of high speed with high torque transmission. The X-axis is equipped with two heavy-duty roller guides that provide workbench loading while increasing travel speeds. The Z-axis pair utilizes a roller linear guide with up to 1000 mm of travel and can be machined in larger sizes.One-piece PGME beam and column castings.

| | PGME-1525/30 | PGME-2030/40 |
|---------------------|--------------|--------------|
| X-axis travel (mm) | 2700/320 | 3200/4200 |
| Y-axis travel (mm) | 1800 | 2300 |
| Z-axis travel (mm) | 1000 | |
| Spindle power (kW) | 15/18.5 | 15/18.5 |
| Maximum speed (rpm) | 6000 | |
| Spindle torque | 189/253 | 189/253 |
| Cone | BT50 | |

PGMG Heavy-duty portal machining center with walking beam

| Equipped with a two-speed transmission that provides high speeds |
|--|
| while transmitting high torque. The Z-axis dual servo dual screw |
| transmission provides high dynamic characteristics of the Z-axis |
| transmission, ensuring high dynamic characteristics under acceleration |
| and deceleration, thus achieving stable machining accuracy. The X-axis |
| is equipped with two heavy-duty roller guides to ensure workbench |
| loading while improving feed rate and machining efficiency. |

| | ПГМГ-2540/60/80 |
|---------------------|-----------------|
| X-axis travel (mm) | 4200/6200/8500 |
| Ход по оси Ү (мм) | 3900 |
| Y-axis travel (mm) | 800 |
| W-axis travel (mm) | 1300 |
| Spindle power (kW) | 17/25.5 |
| Maximum speed (rpm) | 6000 |
| Spindle torque | 723/1087 |
| Cone | BT50 |

2 guide rails with ball screws

Symmetrical structured RAM

PGMH | Bridge type milling machine

The bed, base, beam, sliding seat and other large parts have excellent rigid structure, the three-axis drive and spindle are equipped with highprecision mechanisms with a wide range of applications and powerful processing capabilities. The z-axis has a rectangular stossel design limited to four sides and has excellent machining rigidity. The z-axis is fed by twin motors and twin screws for better inertia matching and dynamism. Widely used in aerospace, shipbuilding, energy, military, mold making, machinery and other industries.

| | PGMH-2540/60/80 |
|---------------------|-----------------|
| X-axis travel (mm) | 4200/6200/8500 |
| Y-axis travel (mm) | 3700 |
| Z-axis travel (mm) | 1000 |
| Spindle power (kW) | 17/25.5 |
| Maximum speed (rpm) | 6000 |
| Spindle torque | 723/1087 |
| Cone | BT50 |

Vertical machining centers

| | PL |
|-----------|------|
| Series PL | |
| | PVLB |
| | |
| | [] |
| Series PG | PG |

PL Vertical Machining Center

The PL series machine is characterized by high precision and durability. The frame is made of high density casting to ensure high strength. All axes are driven by high precision ball screws and linear guides imported from Japan or Taiwan. This machine is a workhorse for all manufacturing enterprises, large and small. It can handle medium to small jobs that require high precision. It is one of our stylish series of machines with compact size.

| X-axis travel (mm) | 550 | 1100 | 1300 |
|---------------------|---------------|---------------|---------------|
| Y-axis travel (mm) | 550 | 650 | 750 |
| Z-axis travel (mm) | 550 | | |
| Spindle power (kW) | 7.5/15 | 11/18.5 | 11/18.5 |
| Maximum speed (rpm) | 12000 | 12000 | 12000 |
| Cone | BT40 | BT40 | BT40 |
| system | Siemens/Fanuc | Siemens/Fanuc | Siemens/Fanuc |

Imported high-speed direct drive spindle

PG Machining center with fixed beam

PG-CNC1614 PG-CNC2016 PG-CNC2518 PG-CNC3220 X-axis travel (mm) 1600 2000 2500 3200 Y-axis travel (mm) 1500 1650 1800 2000 Z-axis travel (mm) 800 800 1000 1000 Spacing between columns 1500 1660 1800 2000 (mm) Maximum speed 6000 (rpm) Spindle torque 143/236 Spindle power 15/18.5 (kW) Cone MAS 403 BT50 MAS 403 BT50 MAS 403 BT50 MAS 403

Gantry construction with movable work table. The large column and the beam are a single structure. The X-axis has two linear guides, and the two linear rolling guides on the beam have a mutually perpendicular layout structure. The cross section of the beam and the span of the guide rail are large, so it has large stiffness values. It is mainly used in milling, drilling, tapping and boring of medium and large parts in the fields of aerospace, auto parts, machining and mold making.

Additional options

Angle head

Linear encoder

Light curtain

Tool setting system

Plane Body Structure

Aircraft Seat Guide Rail

Wing Accessories


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Ramp # spacer
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Bulkheads

Spacer structural parts

Nacelle bulkheads

Bulkheads

Quality control

Imported test instruments and multi-stage tests are carried out by professionally trained inspectors to ensure customers receive the highest quality equipment.

High precision gantry machines of our own production are used for machining machine beds and some other parts with strict quality control standard.

Thank you for your attention

If you have any questions about the proposals, please contact us by tel/fax: +7 (928) 333-77-11 e-mail: <u>lirr.office@mail.ru</u>

Beijing office address: CHINA BEIJING, HAIDIANDISTRICT CHANGCHUNQIAD ROAD NO.11 WANLIUYICHENG BUDING C - 1-1806

lirrmaterials.com lirrhe.ru gag-machinery.com lirr-group.ru