



CNC Horizontal Machining Center

Overview

GC-CNC-II is a high-tech machining center, which can complete complex machining processes in a short time and meet high quality requirements.

The machining center adopts a digital control system to achieve dynamic management of each axis and precise speed control, so as to achieve the most accurate external dimensions and the best product quality. The flexibility of the control system meets the needs of different products, and the entire processing process is completed automatically without human intervention. GC-CNC-II combines the characteristics of various CNC glass processing machine tools in the world today, and the perfect combination of digital control and PC systems realizes the machine is highly automated and managed, suitable for mass production of high-precision glass deep-processing products. It enables customers to achieve the optimal production configuration with the smallest investment.

The equipment is especially suitable for processing automotive glass, lighting glass, appliance glass, furniture glass and architectural glass, and its functions include:

drilling

edge milling

Internal and external edging, polishing

Mechanical structure

GC-CNC-II is an open-top structure, which is convenient for glass loading and unloading operations, the movable bridge is welded structural steel, and the X-axis transmission mechanism is installed on the movable bridge.

The three linear axes X, Y and Z are driven by high-precision ball screws and slide on linear square guides.

The Y axis and the Y1 axis are synchronous axes, and servo motors, ball screws and linear guide rails are installed on both sides.

The structure advantages:

Good structural rigidity

Achieving high acceleration, moving at speeds up to 25 m/min

Achieve high processing speed and high quality

Low mechanical wear. Even use for many years, it can still maintain the original equipment quality.

Worktops and Air Stations

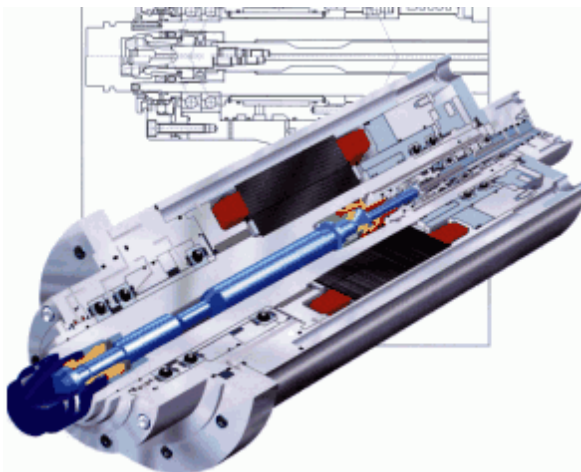
The material of the worktop is hard aluminum alloy.

GLASS's engineers designed two sets of air source workstations at the front end of the workbench. Each set of workstations is equipped with relevant compressed air pipelines and vacuum pipelines, which can facilitate workers to load and unload glass sheet, and position before processing glass.



Spindle

Spindle is one of the most important parts of CNC machining center. GLASS machining center has the following characteristics:



□ The spindle motor has the maximum constant torque output, its output power is 13KW, even at 15000RPM, its torque output can reach 25 Nm! High torque output means increased machining speed and the use large diameter grinding wheels.

□ Adopt the latest design glass machinery special structure high-precision motorized spindle, use the motorized spindle to reduce the inertia of the grinding head in high-speed motion, greatly improve the moving speed of

each axis of the machining center, and the motorized spindle is positioned accurately and the operation is stable and reliable.

□The inner water cooling of the cutter tool is realized through the center of the spindle, and the cooling effect will be greatly improved by passing water through the middle of the spindle. The internal water cooling must use clean special grinding coolant, and special tools with internal cooling drainage holes must be used for drilling, milling and guiding.

CNC machining center



The CNC machining center is a combination of professional CNC system and PC WINDOWS operation platform, which makes the man-machine operation interface more simple and convenient.

Key features of the system include:

When the machine is working, the operator can simultaneously edit the program through the PC on the machine

Simple picture interface

Equipped with keyboard and mouse

PC can be connected to the network

Connect to MODEM can achieve remote online assistance

CAM software

GLASS's team of engineers designed and developed the Easy CAM software. Directly read the DXF file or library placement, select different processing elements to generate multiple processing techniques, and output the program. It can handle complex tasks while keeping the operation simple.

Electrical system

Electrical system

The electrical components are installed according to the CE standard, the power cabinet is separated from the machine, and the electrical connections are waterproof. There is fan cooling in the electric control cabinet, and the spindle and each axis servo motor are no



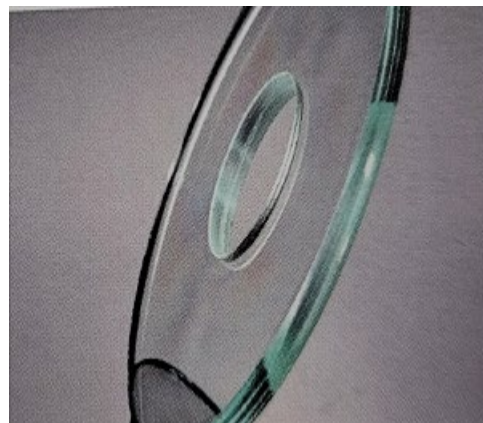
carbon brush servo motors.

The standard voltage is 380V/50HZ, but it can be customized according to different requirements.

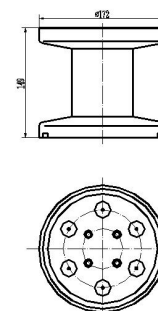
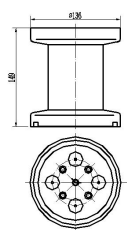
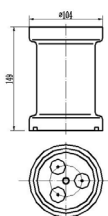
Drive system and servo motor adopt internationally renowned brands



Samples



Sucker





GC-CNC-II		
Technical Parameter		
Maximum size: 1200*2400mm 1500*3000mm 1900*3000mm Minimum size: 250*250mm Glass thickness: 4-30mm	Spindle power: 13KW Spindle speed: 0-12000r.p.m Movement speed: X.Y-axis 25m/min Z-axis 10m/min Cutter tool magazine: 8*1 Total power: 22KW	
Function		Applicable cutter tools
Drilling, grinding and polishing, milling, engraving		Milling cutter, drill bit, cylindrical wheel, seal carving pen
Standard Configuration		
Host	Structural welded steel, Co2 shielded welding, heat treated	1 set
Control System	Mitsubishi (Japan)	1 set
Servo Motor	Mitsubishi (Japan)	4 sets
Spindle Frequency Converter	Delta (Taiwan, China)	1 set
Low Voltage Electrical Components	Schneider (France)	1 set
Pneumatic Components	AirTAC (Taiwan, China)	1 set
Spindle	GLASS OEM manufactures exclusively for glass grinding. Speed: 0-12000 rpm, Power: 13KW	1 set
Software	Glass-EasyCAD/CAM	1 set
Water Pump	Stell (Taiwan, China)	1 set
Water Ring Vacuum Pump	China	1 set
Linear Guides	HIWIN (Taiwan, China)	1 set
Ball screw	HIWIN (Taiwan, China)	1 set
Automatic Lubrication System	China	1 set
Cutter Tool Magazine	8-bit automatic cutter tool changer	1 set
Working Desk	Aluminum alloy	1 set
Water Tank	Stainless steel + plastic case	2 sets + 1 set
Cutter Handle	BT40 [with positioning cutter holder]	8 pieces
Sucker	Φ135mm	4 pieces
Sucker	Φ165mm	4 pieces
Positioning Post	Φ20mm	6 pieces