

Tianjin Meifurui Technology Co.,Ltd

Technical Parameters



I. Machine description

1.1 Equipment function (principle) introduction

This product adopts the four axis CNC cutting technology which represents the development direction of flexible machining.

The imported linear guide rail combined with full digital servo motor is used as the motion control structure in the direction X.Y. In the direction D, the imported ball screw combined with full digital servo motor is used to control the cutting head fast up and down

depth positioning. In the direction C, the high precision full digital servo motor is used to control the cutting knife to automatically identify the track of line attributes.

Blade vibration transmission parts using the Swiss import high speed digital servo motor, vibration cutter CNC cutting machine work four axis X, Y, D, C must start work at the same time, and run the physical interpolation, associativity, adaptability, expansibility, ease of use, the advantages of the high performance, high precision and strong openness, interface simple to operate,

Stability and operation to reach the leading technical level at home and abroad.

1.2 Technical parameters and models of intelligent cutting machine

Technical parameters / model	HG-2516 Intelligent cutting CNC CNC cutting machine
Single function head	Different cutting blades can be changed freely, with functions of engraving and milling, vibration full cutting, half cutting and cursor positioning
Tool configuration	A variety of cutting tools
Safety equipment	Adopt infrared ray induction, sensitive reaction, safe and reliable
Moving speed	800-1500mm/s
Cutting speed	10-1200mm/s(The cutting speed depends on the hardness and thickness of the material)
Cutting thick	≤30mm(Cut according to different materials)
Cutting material	Sponge composite skin, XPE material, wire ring foot pads, silicone, rubber, leather, soft glass material, etc. Various kinds of leather, artificial leather, paper, cardboard, composite materials, a variety of pictorial cloth, flags, PP synthetic paper, corrugated cardboard, Huang Hou cardboard, red cardboard, (PC) foam honeycomb panel, PC board, knitting, fiber board and thick foam.
Material fixation mode	Aluminum platform vacuum adsorption function

The cutting tool	High frequency high power vibration knife, imported motor
Supported software formats	AI software, AutoCAD, Coreldraw, PLI, DXF, etc
The transmission system	Japan Panasonic servo motor, silver linear guide rail, synchronous belt, lead screw
Transport port	Network port, USB transmission
Cutting precision	±0.1mm
Command system	HP-GL Compatible format
Repeat accuracy	≤0.03mm
Rated power	13KW
The rated voltage	AC 380V 50HZ
Effective working range	2500×1600mm
The whole machine size	3300×2200×1300mm

II. Equipment structure composition

2.1 Functional and structural composition of the equipment

Number	Name	Quantity	Country of origin and name of manufacturer
(A)	Cutting head		
1	Cutting head	1set	
2	The cutting blade	20 pcs	35°
(B)	Machine		
1	Machine	1 set	Tianjin Meifurui Technology Co., Ltd Aluminum profile splicing bed
2	Adsorption platform	1 tensor	Foushan Yinmei
3	guide	1 set	Taiwan Shangyin
4	X、Y、D、C servo motor	5 set	Japan Panasonic Motor Servo Motor
5	Transmission model	1set	Rack drive
6	Machine tool accessories	1Set	Tianjin Meifurui Technology Co., Ltd
7	Transmission crawler	1Set	Tianjin Meifurui Technology Co., Ltd
8	Vibration cutting head	1Set	Tianjin Meifurui Technology Co., Ltd
(C)	CNC and software systems		

1	CNC system	1Set	Shenzhen Qiancheng
2	Software	1Set	Form a complete set of
(D)	Standard accessories		
1	The vacuum fan	1Set	9KW vacuum fan / set
(E)	Random accessories		
1	Tool Box	1Set	Tianjin Meifurui Technology Co., Ltd

2.2 Main characteristics of intelligent cutting machine

1. With independent intellectual property rights 1. Using advanced four axis high speed motion control system, convenient application software of the operating system, make the automatic identification of cutting knife in the process of cutting line trajectory when cutting flexible material properties, graphic design can be complicated and ordinary cutting blunt knife cannot achieve and cutting die can't manufacture high precision cutting operation,

By controlling the high speed up and down movement of the cutting knife (18000 times per minute seamless up and down movement), the finished product is smooth and beautiful, and it is convenient to customize special programs for the personalized needs of users and carry out remote upgrade;

2. The design concept of replaceable head is adopted, and the tool head is integrated by non-fixed welding. It can be conveniently replaced and added with tool heads of different functions according to actual work needs and the expansion of business scope;

3. Adopt servo motor to drive screw control mode, and computer linkage can be preset storage dao deep pressure according to different demand, compared with the old pneumatic head, thorough farewell manual adjustment deep knife pressure with experience of history, easy to digital fine-tuning, also completely solve pneumatic pressure increases with the increasing temperature, time constant ups and downs without problems;

4. High performance integrated circuit controller, can be directly connected with the computer (including notebook), do not need to specially equipped with another high computer, such as computer failure can be convenient to replace the ordinary computer to operate the equipment, completely eliminate the problem of cutting equipment failure caused by computer link failure;

5. In consideration of the actual environment of the customer, the special configuration of anti-interference operation screen, not affected by the surrounding electronic environment, will not spend the screen;

6. Adopt explosion-proof treatment design (can prevent short circuit caused by conductive powder), and carry out special treatment on the line and interface to make the cutting of conductive material safer;

7. Equipped with special stability device, effectively reduce the vibration range of equipment, to maintain the long-term stability of the machine performance, accurate;

8. The data transmission is network interface and USB interface, which can realize

remote upgrade and maintenance. The transmission speed is fast and the distance is long, and it can be transferred to multiple computers at the same time.

9. Equipped with vibrating knife, drag knife, circular knife (optional with driving wheel knife, pneumatic circular knife) and other tools and drawing pen, according to the different requirements of different materials, such as writing line, dotted line cutting, half cutting, full cutting and other functions.

Can be cut such as sponge composite leather, XPE material, silk mat, leather, soft glass, silicone, rubber materials and other flexible materials.

10. Vibrating cutter head adopts high-frequency high-power imported motor, cutting edge is more smooth, cutting speed is fast, precision is guaranteed, higher efficiency.

2.3 Incoming materials or product specifications suitable for the equipment

Clothing proofing, large panel cutting, leather industry, footwear industry, advertising industry, packaging and printing industry, model industry, craft and gift industry, car seat cover mat.

All kinds of leather, artificial leather, paper, cardboard, composite materials, rubber board, sponge, all kinds of photo cloth, grid cloth, flag cloth, PP synthetic paper, corrugated board, yellow cardboard, red cardboard, (PC board) honeycomb board, PC foaming board, fiber bottom plate and rubber board, thick foam, shuttle and other width within 1600mm.