

Technical Proposal



C2516T — Digital Cutting Machine



● About us

Hangzhou Joyhigh Intelligent Equipment Co., Ltd.

Founded in 2010 and headquartered in Hangzhou, China, we specialize in designing and manufacturing premium CNC equipment for global markets. Our comprehensive product range includes:

- High-Speed Vision-Guided Router Series
- High-Precision Machining Centers
- Multi-Functional Intelligent Cutting Systems
- Fiber Laser Cutting Machines
- CO₂ Laser Cutting Solutions

Manufacturing Excellence

Operating from an **5,000 m²** facility in Yuhang Liangzhu, our vertically integrated production features:

- Sheet Metal Fabrication Workshop
- Precision Assembly Center
- Dedicated R&D Departments for:
 - ◆ Software Development
 - ◆ Mechanical Engineering
 - ◆ Machine Tool Processing

Supported by **35+ skilled professionals**, we maintain an annual production capacity valued at **¥40 million** with streamlined manufacturing processes refined over a decade.

		
Factory	Showroom	Future factory
		
Precision testing instruments	Production room	Warehouse



● Technical Parameters

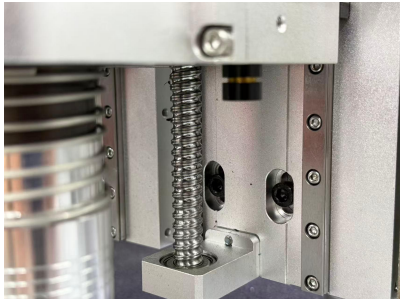
No.	Content	Specification
1	Air Pump Power	7.5kw
2	Total Capacity	9.5kw
3	Cutting Area	2500mm×1600mm
4	Machine Size	3900mm×2585mm×1350mm
5	Cutting Speed	300-1800mm (depends on the material)
6	Cutting Thickness	≤50mm (depends on the material)
7	Working Environment	Temperature:-10-45°C Humidity:0%-90%
8	Transmission System	servo drive+linear guide+belt + rack
9	Operating Voltage	AC 380V/220V±10% 50Hz/60Hz
10	File	HPGL/PLT/DXF,etc.
11	Operating Characteristics	Can be connected to any CAD software, computer aided design and cutting simultaneously
12	Cutter Buffer Capacity	Rapid transfer for single-pass sheet changing cuts
13	Transmission Port	Standard ethernet port
14	Mounting Method	Vacuum adsorption for material fixing
15	Spindle power	800w, 1.8kw, 4kw
16	Feeding Method	High-performance belt auto-feeding (enables continuous cutting)
17	Standard Tools	OET, Drag tool, Router
18	Optional Tools	POT, rotary tool, V-cut tool, kiss-cut tool, creasing tool, wheel tool etc.
19	Cutting Materials	Composite materials, all kinds of corrugated cardboard, PVC cardboard, honeycomb board, PVC foam board, acrylic, KT board, aluminum-plastic board, fiber reinforced baseboard, rubber sheet, rigid foam board, adhesive-backed vinyl, reflective film, photographic gloss paper, rigid PVC photo panel, etc.
20	Container loading dimensions	3900mm×2280mm×1350mm



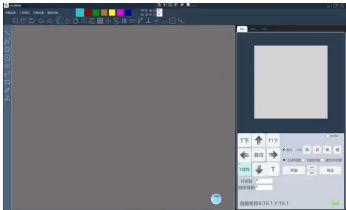
● Configurations

	Items	√/O(option)	Notes
Machine	Servo motor & drive	√	Inovance
	Guide rail	√	LAPPING
	Belt transmission	√	/
	Ball screw	√	/
	Electrical circuitry	√	/
	Machine frame	√	inline steel-structure bed, aluminum gantry
	Felt platform	√	/
	Collection device	√	/
	Auto-feeding	√	/
	Camera	√	/
	Two universal modules	√	EOT & UCT
	Spindle	√	800w/1.5kw/4kw
	Aluminum honeycomb table	√	Vacuum adsorption
	Safety device (anti-collision)	√	/
	Emergency bottom	√	/
	Frequency converter	√	/
	Conveyor table	√	/
	Infrared tool alignment	O	For EOT
	ATC	O	
Operation	Software	√	MNT
	Auto-typesetting software	O	MNT
	Computer	O	/
Parts	Air pump	√	7.5kw
	Power transformer	O	/
	Dust collection	O	Collector + holder + Pipe
	chiller	√	S&A
Tools	Electrical oscillating tool	√	/
	Universal cutting tool	√	/
	Pneumatic oscillating tool	O	/
	Creasing tool	O	/
	V-cut tool	O	/
	kiss-cut tool	O	/
	Rotary tool	O	/
Others	Warranty	√	1 year for machine, software update for lifetime
	Training	√	online & on site
	After-sales service	√	online & on site

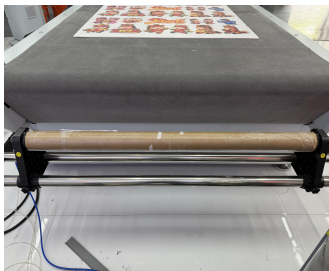
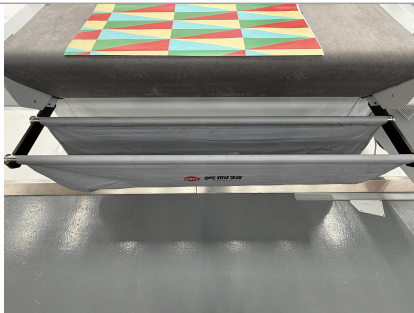
● Details

ITEM	PICTURE	CHARACTERISTIC
Servo Motor + Drive		Motor & driver: High-speed, high-precision Configuration Performance: High accuracy with low inertia ensures operational precision and prevents step loss during operation.
Air Pump		7.5kW aluminum turbo vacuum pump delivers stable negative pressure for the vacuum adsorption table of CNC engraving machines, ensuring machining accuracy, improving clamping efficiency, with wide compatibility, low energy consumption and maintenance-free operation.
Guide Rail		- High precision - Low noise - Wear-resistant design ensures long service life.
Ball Screw		- High wear resistance - Precision accuracy - Exceptional stability.



Electrical Circuitry		German-engineered exceptional stability surpassing industry standards
Software		Intelligent cutting control software features optimized path algorithm and grid line processing, supports over-cut/arc compensation, multi-format file extraction and simulation cutting, delivering high-precision, fast and high-quality cutting.
Universal tool modules		Universal tool modules allow replacement of different tools, adapt to various cutting processes, and greatly improve processing flexibility and adaptability.
Camera		The CNC edge-following camera locates workpieces by identifying mark points, corrects deviations automatically and ensures precise contour cutting.



Anti-collision Device		Anti-collision device and emergency stop button provide dual safety protection, automatically stop on collision and enable one-click braking in emergencies, comprehensively protecting personnel and equipment safety.
Emergency bottom		
Auto-feeding		Automatic feeding and collecting rack realizes automatic loading and unloading of plates, eliminates manual handling, supports continuous processing of long materials, and greatly improves production efficiency.
Collection Device		
Dust Collection		1.European standard professional dust collector It instantly removes dust and debris from engraving work. 2.Adopting strong suction, multi-layer filtration, low noise and energy-saving design, it meets European environmental protection standards. 3.It purifies workshop air, protects operators' health, reduces dust buildup on equipment, keeps the processing area clean, and improves finished product quality.

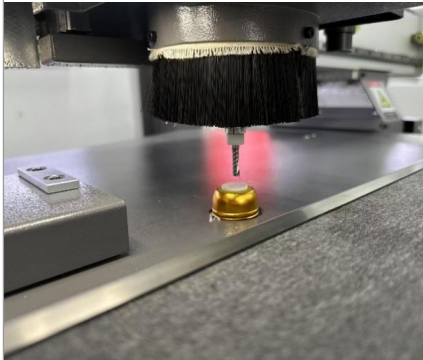


ATC System



6-station ATC automatic tool magazine enables fast automatic replacement of milling cutters, no manual tool changing required. It adapts to multi-process continuous machining and greatly improves processing efficiency.

Tools Calibrating Device



Automatic tool setter enables fast and precise tool setting, avoids manual setting errors, improves accuracy and efficiency, and suits automated continuous production.



● Optional Tools and Applications

Tools	Applications
Ultra-frequency electric oscillating tool (standard)	All kinds of corrugated, cardboard, KT board, gray board, composite materials, etc 
Non-oscillating tool (standard)	Flexible materials less than 3mm thickness. 
Milling tool (standard)	Acrylic, aluminum composite panel and MDF, etc within 20mm thickness. 
Ultra-frequency pneumatic oscillating tool (optional)	Seal parts and gaskets materials such as asbestos board, asbestos free board, PTFE, rubber board, fluorine rubber board, silica gel board, graphite board, graphite composite board, etc. 



Wheel cut tool (optional)	Flexible materials such as UV fabric, carbon fabric, glass fabric and textiles, etc. 
Multi-angle V-Cut tool (optional)	Can make V-cut angles of 15°,22.5°,30° and 45° for cardboard less than 20mm thickness. 
Creasing tool (optional)	Used in packaging industry for making cartons and boxes of corrugated board, cardboard and pp hollow board, etc. 
Kiss-cut tool (optional)	All kinds of stickers, vinyl, engineering reflective film, etc. 