



CNC KNIFE CUTTING MACHINE

PRODUCT CATALOGUE





PARAMETERS

Technical parameters models	1625	1825
Effective working area	1600*2500mm	1800*2500mm
Multi-function cutting head	The combination of Multi-function cutting head and holders, be with full cut, half cut, indentation, v-cut and cursor positioning functions, CCD positioning cut, Camera extract large contour to cut	
Tools	oscillating knife, milling tool, pneumatic knife, V-cut, crease wheel, kiss cut, drag knife, vacuum pump sucker	
Overall size	3560*2350*1221mm, 3560*2550*1221mm L*W*H	
Moving speed	800-1500mm/s	
Repeat precision	±0.05mm	
Interface	Ethernet port	
Control panel	LCD touch screen	
Drive system	Imported servo motor, linear guid ,synchronous belt, screw	
Cutting material	Paperboard, grey board, KT board, pvc foam board, honeycomb board, car sticker, lamp piece, PP Adhesive printing cloth, banner cloth, corrugated board, EPE, foam, EVA, PVC board, acrylic board, thick foam and so on.	
Dnstruction system	HP-GL Compatible format	
Rated power	2.2KW / 7.5KW / 9KW	
Rated voltage	380V±10%	
Cutting thickness	≤100mm (According to different materials and different cutting tools)	
Material fixed way	Vacuum adsorption	

Product Advantages



Rapid Exchange Tooling

The universal tool holder can be combined with the tool arbitrarily to realize the quick and convenient tool replacement with different materials



Complete Tool Categories

AOL cutting systems have a complete set of cutting tools for the materials in flexible material industry, with through-cutting, half-cutting, V-cutting, creasing and marking, ect. For whatever materials and whatever shapes we are able to provide you the most suitable cutting tools



Control System

Independent research and development of human-machine interface operating system, humanized design, intelligent recognition of knife cutting, fast capture of cutting targets

Tabletop Height Compensation Function

The flatness of the tabletop is detected by a high-precision distance detector, and the tabletop is corrected in real time by software to avoid the inconsistent cutting depth caused by the inconsistency between the tabletop and the tool drop, ensuring perfect cutting result



Safety Device

Equipped with infrared automatic sensor device and Four-corner emergency stop switc. The safety device provides a safe working environment, ensures the maximum protection of the operator's safety during the high-speed movement of the machine



Integrated Feeding Body

Ingenuously feeding and cutting integrated body, single feeding up to 1800mm and cutting size synchronization, reducing the efficiency loss of frequent feeding, so that the production capacity is greater



Certificate

AOLCNC cutting machine have obtained CE and ISO certificates. Choose Aol please rest assured





Oscillating Knife Tool

The electrical oscillating tool is super suitable for cutting the material of medium density. Coordinated with various kinds of blades, applied for cutting different materials

Application Foam board, Honeycomb board, Carpet, Corrugated, Cardboard, KT board, Gray board, Composite materials, Leather



Circular Knife Tool

Circular knife puts the materials by the high-speed rotating blades driven by the servo motor. The tool can be installed with circular blades and decagonal blades, etc. Which are especially suitable for cutting woven materials

Application Textiles, Canvas, Leather, Fabric, UV fabric, Carbon Fabric, Glass Fabric, Carpet, Blanket, Fur, Woven Fabric, Composite Double, Multi-layer Material, Flexible Plastic



Kiss-Cut Knife Tool

The kiss cut tool is mainly used for cutting vinyl materials (labels). AOL cut makes it possible that the tool cuts through the top part of the material without any damage to the bottom part. It allows high cutting speed for material processing

Application Sticker, Reflective Materials, Self-adhesive Vinyl, Label, Vinyl, Engineering Reflective Film, Double-layer Adhesives



Drag Knife Tool

AOL drag knife tool can perfectly cut materials with the thickness up to 5mm. Compared to other cutting tools, it is the most cost-effective one that allows for the fastest cutting speed and lowest maintenance cost

Application Backlit Film, Sticker, PP Paper, Folding Card, Flexible Material less than 3mm thickness, Advertising Materials KT Board, Flexible Plastics, Mobile Phone Film



V-Cut Knife Tool

Specialized for V-cut processing on corrugated materials, AOL V-Cut Tool can cut 0°, 15°, 22.5°, 30° and 45°

Application Soft Board, KT Board, Corrugated Board, Packing Box, Medium-density Material V-cuts, Carton Packaging, Hard Cardboard



Milling Knife Tool

With imported spindle, it has a rotating speed of 60000 rpm. Applied for cutting hard materials with the maximum thickness of 20 mm. The customized cleaning device cleans up the production dust and debris. The air cooling system extends blade life

Application Acrylic, MDF Board, PVC Board, Display Stand



Creasing Wheel Tool

A selection of creasing tools allows for perfect creasing. Coordinated with the cutting software, the tool can cut the corrugated material along its structure or the reverse direction to have a finest creasing result, without any damage to the corrugated material's surface

Application Packing Box, Folding Card, Corrugated Board, Carton



Pneumatic Knife Tool

Driven by compressed air, is especially for cutting hard and compact materials. Equipped with different kinds of blades, it can make different process effect. The tool can cut the material up to 100mm by using specialized blades

Application Asbestos Board, Asbestos Free Board, PTFE, Rubber Board, Fluorine Rubber Board, Silica Gel Board, Graphite Board, Graphite Composite Board



Marking Pen

The cylinder is controlled by the solenoid valve to realize the function of marking. Suitable for leather, fabric and other materials to record, order, count, proofing

Application Leather, Fabric, Cardboard and other materials



CCD Positioning Cutting

Identify the pattern contour through identifying the mark points or QR code, finally realize the position cutting along edge

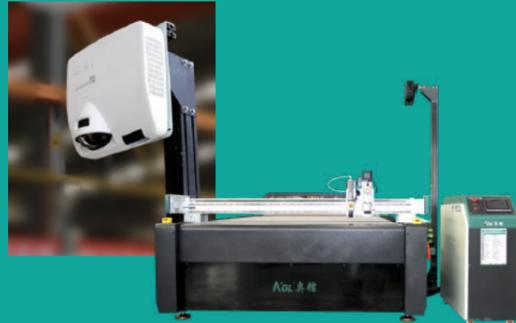
Application Printing Clothing, PVC Elevator Mat, KT Board, Foam Board, Poster Board



More Advanced Configuration

Big Size Camera

Since the flexible material may be deformed by the factors such as temperature, humidity, ink, pressure, stretching, wrinkles, etc, the original document outline cannot be used to accurately cut the actual pattern, we use the function of the high-precision camera's real-time shooting and contour extraction, thus to accurately identify and extract real-time work piece image contours for precise nesting. It is especially used in advertising printing and garments industries

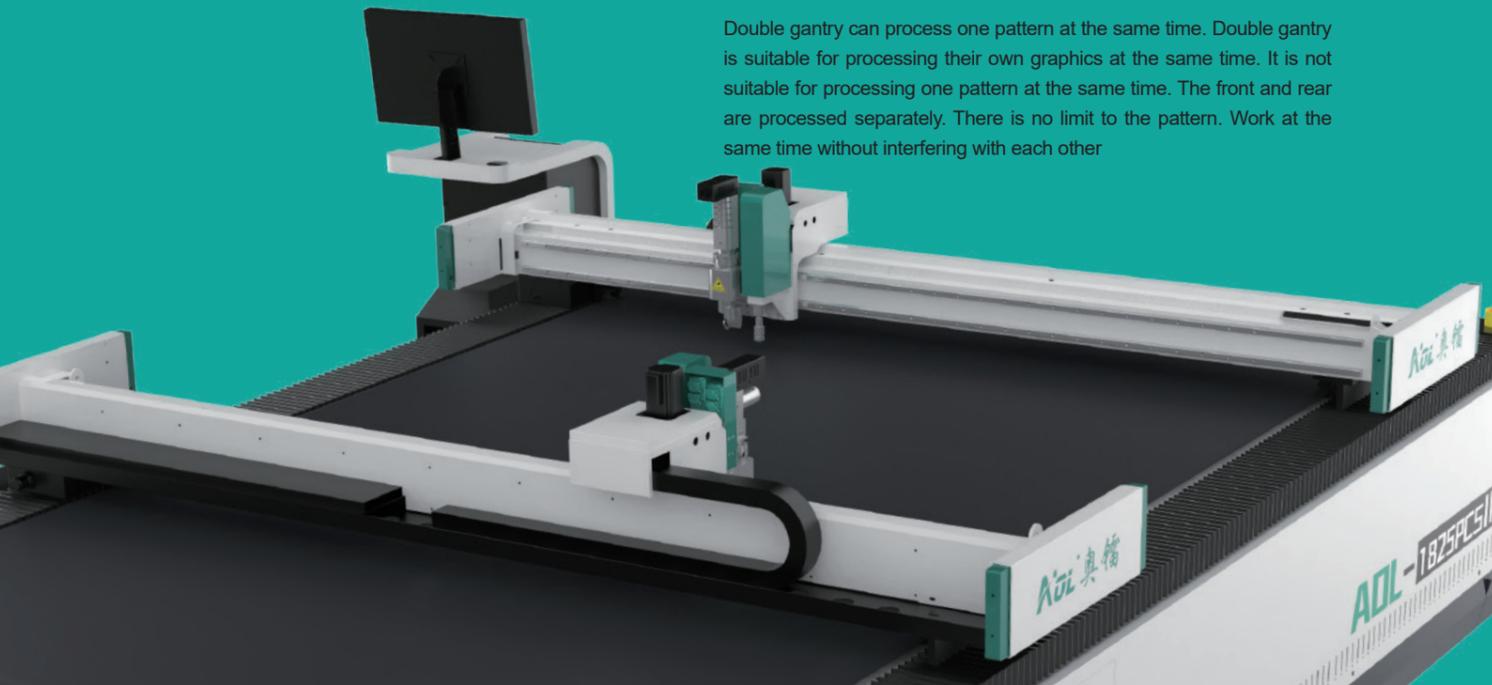


Projection Positioning System

This system can project the cutting pattern on the processing table with 1: 1, which is convenient for users to feed the alignment. The user can also place the irregular material into the projection area for the alignment cutting, which greatly improves the utilization of the material

High Efficiency Double Gantry Machining

Double gantry can process one pattern at the same time. Double gantry is suitable for processing their own graphics at the same time. It is not suitable for processing one pattern at the same time. The front and rear are processed separately. There is no limit to the pattern. Work at the same time without interfering with each other

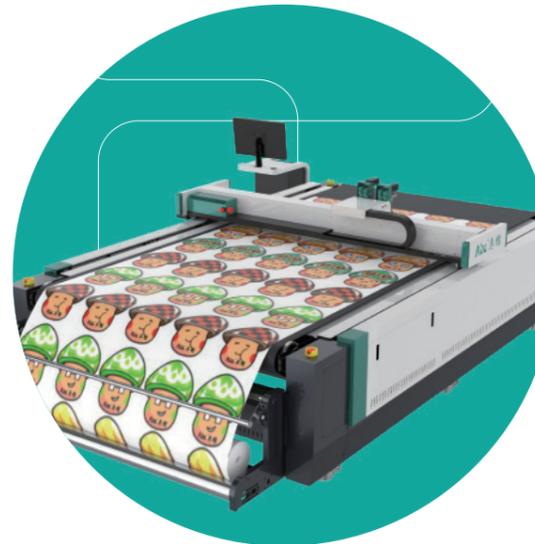


Automatic Knife Initialization

The Automatic Knife Initialization sets the tip of the tool precisely to the level of the cutting surface or underlay. The process takes only a few seconds and is accurate and reliable. Save the trouble of manual tool setting, and improve the efficiency of material cutting

Automatic Tool Changer

Automatic tool changer – or ATC – is one of the most beneficial forms of automation you can implement within your CNC operation, helping you seamlessly change tools in seconds without having to pause operation



Roller Device:

Providing roller device can ensure smoothness of the materials in the process of conveying and cutting. Different rollers height can be set according to different characteristics and specifications of coil, so as to improve the output and quality of cutting

Large Version Scanning System

It can perform high-frequency scanning, and can also use various high-speed and rotating objects as the object of detection. Its scanning manufacturing process has higher accuracy and higher resolution



CCD Software Introduction

1. Software Function

(1) Mark point identification, positioning and cutting

Working principle: The one-to-one vector graphics of the printed graphics on the material is sent to the machine, and the camera performs positioning and cutting by identifying the mark points printed on the material.

(2) Identify the QR code

Print the QR code on the material, move the camera to the position of the QR code, the camera will first recognize the QR code and read the vector diagram corresponding to the current material, and then identify the mark point for positioning and cutting, this function will omit sending Graphics to machine steps to improve work efficiency.

2. Applicable Industries

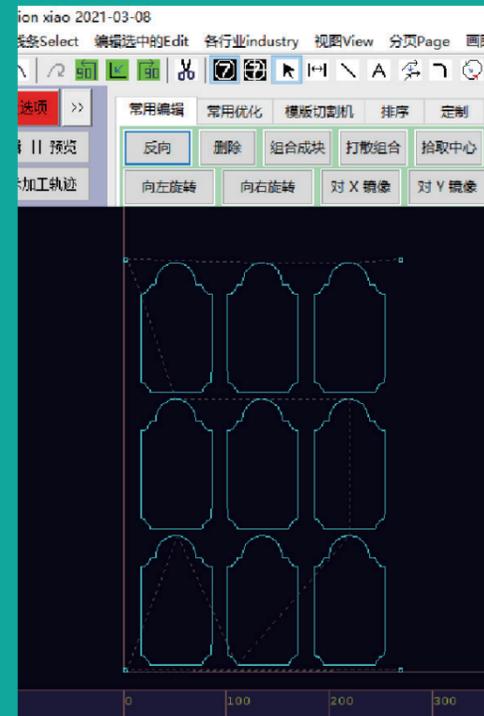
Advertising, packaging, cartons, etc.

3. Software Advantages

Recognition speed: The new software takes 7 seconds to recognize the QR code plus four mark points.

Simple operation: It is easier to calibrate the camera. There is no need to make a template for the mark points of the solid circle. Just enter the actual size of the printed mark points and the software will automatically match. You can directly control the machine to move, start cutting and stop from the software.

There are many types of identifiable mark points: the types of identifiable mark points include solid circle, cross line, right-angled line, and broken right-angled line. mark point to create an add template.



Why Choose AOL Software System

Save labor cost, solve the error of manual cutting increase yied. Solve the difficult of shape cutting, improve efficiency and solve the problem of difficult recruitment

1. Easy editing function:

The AOL software system integrates the layer functions of commonly used in the advertising industry, the original graphiC file can be modified and edited easily

2. Convenient operation:

The AOL software system is powerful and easy to operate, which is one of the important features of aol , Just have a video tutorial or manual you can quickly master the operation of AOL

3. Automatic extraction of cutting paths:

No need complicated cutting path design, the cutting path can be automatically generated directly

4. Graphic design software integration:

It can be docked with ArtiOSCAD, AutoCAD, Coreldraw and other software to simplify the work flow of structure and graphic designer

INTELLIGENT CUTTING PROCESS



Auto CAD design

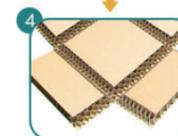


Super automatic nesting system

Corrugated Board:



Carton V-cut



Cutting

Honeycomb panel:



Carton creasing



Cutting

Card paper:



Cutting



AOL

Service Support

Pre

Base on your requirements you will be able to find the right machine or solution under our professional recommendation and we are looking forward to helping you!

Sale

Orders can be soon fulfilled as required, the merchandiser will contact you before deliver for further issues. Any questions during running a machine, please do not hesitate to contact us, AOL and its partners will help you in more professional way.

After

With a sales network of 42 countries and regions, you can easily find a professional help. The service is assisted by professional technicians, who promise to solve problems or give solutions within 24 hours. During the warranty period, there is no charge for accessories. AOL is committed to lifelong responsibility for the products it sells.

Three years warranty for all serial products

Free software upgrades for life

Free technical and maintenance services for life

Other

Any questions or suggestions please contact us!



Company Profile

Jinan AOL CNC Equipment Co., Ltd., as a high-quality manufacturer of CNC cutting equipment in China, has been leading the innovation and upgrading of intelligent cutting equipment, to provide the automated cutting equipment for users around the world. Since its establishment in 2010, it has always adhered to the business philosophy of "Technology-based Enterprise, Quality First", customer-centric, and takes every detail of R&D and production seriously to ensure the performance and quality of each equipment, operating steadily in more than 100 countries and regions around the world. AOL cutting machine production base covers an area of 11,000 square meters, has 58 national patents, a national high-tech enterprise, and has an annual sales volume of 2,000 units. The main products are intelligent knife cutting machine, automation equipment and robots. In the Industry 4.0 era, AOL CNC is committed to providing the production solutions for non-metal cutting. In addition, we have obtained CE and ISO certificates. We also welcome OEM orders. Whether selecting a current product from our catalog or seeking engineering assistance for your application, you can talk to our customer service center about your sourcing requirements. We warmly welcome domestic and foreign customers to cooperate with us , to create brilliant!

AOL

