Digital Cutting Machine *T3*

TPS cutting software supports the following file formats:

AI EPS PDF DXF PLT JPG TIF TPS

T3 digital cutting machine adopts independent developed professional cutting CAM software, with functions of tabletop compensation, automatic edge-finding and positioning, over cutting optimization, multi-task and multi-station cycle cutting, small vision positioning, large vision positioning, projection positioning, laser mapping positioning, cost estimation, file management, etc.

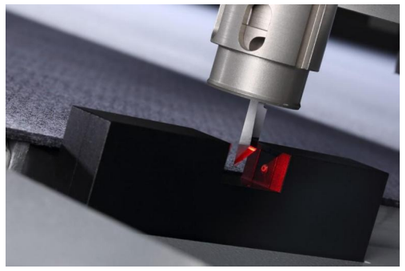
Vac-Sorb Almag alloy platform

T3 digital cutting machine is designed with an advanced conveyor system to achieve continuous automatic material feeding, and the theoretical cutting length is unlimited. It adopts high- strength honeycomb aluminum adsorption tabletop with six- zone independent adsorption structure with good flatness and no deformation. It is equiped with cut- resistant 4mm thick imported felt of good permeability, good wear resistance and long service life. The machine works with a strong power vacuum pump to ensure superior adsorption during processing products.

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.

The detection of table flatness done by a high-precision height detector and the function of automatic height compensation of dropping tool protect the tabletop and felt from damage.



Fiber laser tools calibrating device

Quick and easy automatic tool calibration system: Adopt fiber laser sensor to accurately detect the tool which greatly improves the efficiency of calibration.

Safety anti-collision mechanism

TPS digital cutting machine is equipped with a safety light curtain sensor and a mechanical anti- collision mechanism to prevent the device from damaging personnel during high- speed operation.

Automatic edge-finding and positioning function

The CCD camera captures the image in real time, and the pattern deformation law is obtained by identifying registration marks, and the original contour pattern is optimized according to the deformation amount to get high accurate cutting result.

A. Support many formats such as AI, EPS, DXF, PLT, PDF, JPG, TIF, TPS etc.

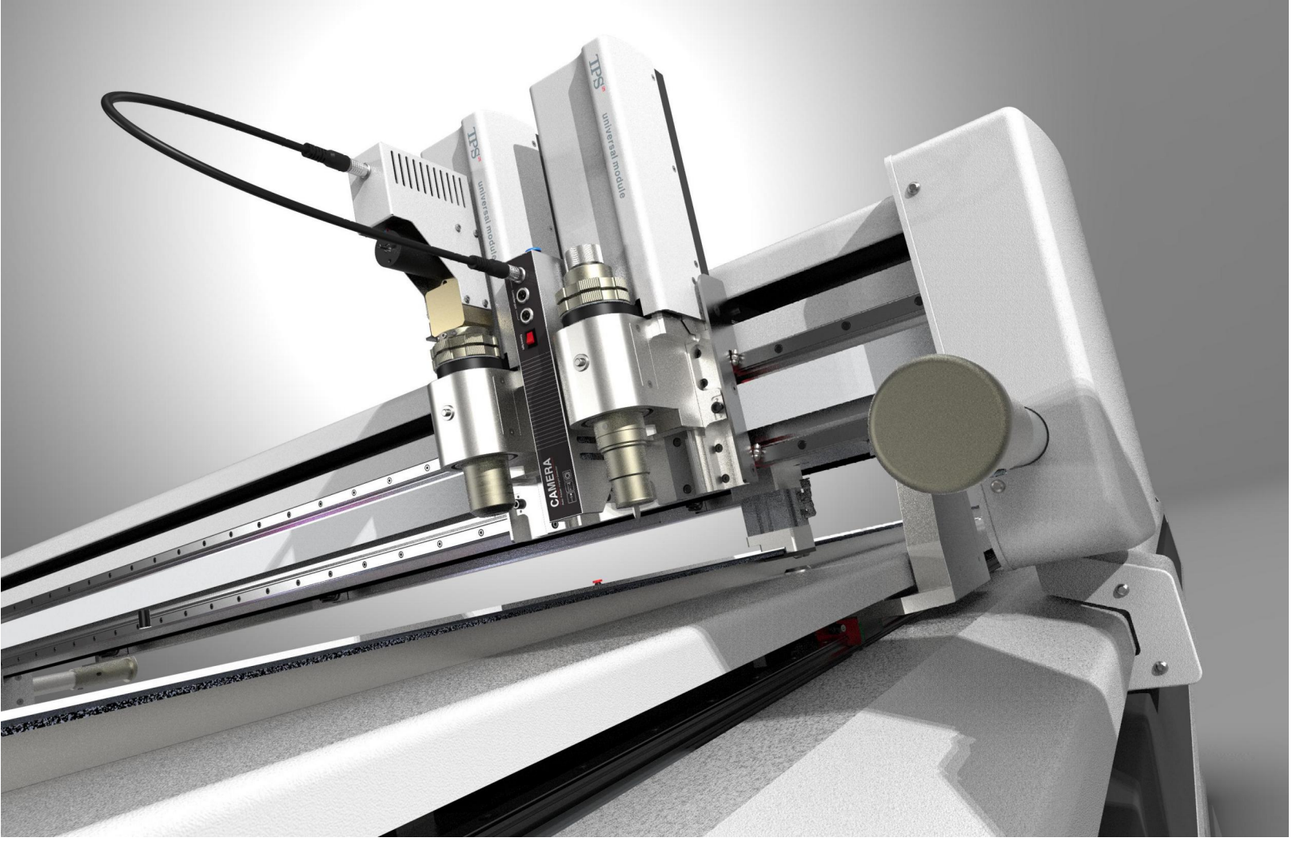
B. Bitmap vectorization function, smoothing algorithm and mutation point modification.

C. Recognize registration marks intelligently and distinguish the layer automatically according to the shape and the color of the graphic during importing the graphic.

D. Shapes of registration marks such as circle, square or cross for users' choice.

E. Precise positioning, accuracy of repeated positioning is within 0.1mm.

F. The requirement of environment is not high, positioning can also be implemented in the case of insufficient light.



Universal tool module

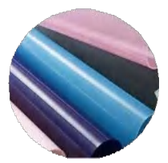
Universal tool module
and tool unit

Independent milling system (including imported spindle and vacuum cleaning system)

Suitable for cutting acrylic, aluminum, composite panel and MDF, etc. under 20mm thickness.

Drag knife

Suitable for cutting a wide variety of flexible material less than 3mm thickness.



Electric oscillating tool

Suitable for cutting all kinds of corrugated, cardboard, KT board, gray board, composite materials，etc.

Pneumatic oscillating tool

Suitable for cutting seal parts and gaskets material such as asbestos board, asbestos free board, PTFE, rubber board, fluorine rubber board, silica gel board, graphite board, graphite composite board, etc

Driven rotary tool

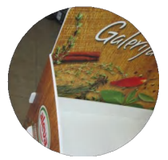
Suitable for cutting a wide variety of flexible material such as UV fabric, carbon fabric, glass Fabric and textiles, etc.

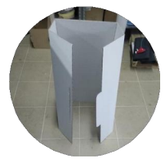
Multi-angle V-Cut tool

It can make V-cut angles of 15° , 22.5° , 30° and 45° for cardboard less than 20mm thickness

Creasing tool

Creasing tools are used in packaing industry for making cartons and boxes of corrugated board, cardboard and pp hollow board, etc.





Kiss-cut Tool

Suitable for cutting all kinds of stickers, Vinyl, engineering reflective film, etc.

Configurations and function selection

○ Standard configuration ● Optional configuration

Configurations	○ Mainframe
	○ Laser tool calibration system
	○ Double sides safety anti-collision device
	○ Safety light sensor system
	○ Automatic feeding device
	○ Air pump
	● Head Single head Double heads
	● Independent milling system (including imported spindle and vacuum cleaning system)
	● Overhead camera
	● Projector
	● Tools
Features	○ Standard control software
	○ Tabletop height compensation function
	○ Automatic edge-finding and positioning function
	○ Prevent over-cutting function
	○ Multi-task and multi-station cycle cutting function
	○ File management system
	● Small vision positioning system
	● Large vision positioning system
	● Projection positioning system
	● Laser mapping positioning function
	● Parametric drawing modules (seals and gaskets industry)
	● National standard database (seals and gaskets industry)
	● Cost estimation template (seals and gaskets industry)

Main technical parameters

Item	Parameter
Equipment power	2.5kw
Vacuum pump power	7.5 / 8.6kw
Capacity	380V 3phase
Overall dimension	4040x3273x2630mm
Working area	1600x2500mm
Max material size	1700x3000mm
Max material cutting thickness	45mm
Beam height	60mm
Max processing speed	72m/min.
Servo motor qty.	6pcs
Weight	1500Kg

Hangzhou TPS Automation Co., Ltd.

Address: No.3276, Nanhuan Road, Puyan Street, Binjiang District, Hangzhou City, Zhejiang Province, China
Email: info@tpscutter.com
Website: www.tpscutter.com