

PERFECT LASER

CNC Carving and Engraving Machine

(Model:PEM-1015/1212/1215/1325)



**Updated
Technology**

**Friendly
Operational
Interface**

**All in one
function**

**Apply to All
Metal and
Nonmetal
Material**

Application

Acrylic, color plates, PVC, plastic board, light board, light boxes and other advertising material laser and mechanical engraving or cutting; This machine also used for Woodworking, dimensional wave board processing, cabinet doors, craft wooden doors, and company logo laser engraving carving; furniture, decoration, wooden doors, hollow carved, musical instruments and other items mechanical cutting.





Working Table



Main Spindle



Driver System



Transmission Rod

1.

**Break Point and
Break Knife Continue
Engraving Function**

Can engrave at any place as you like.



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Large Internal Memory Capacity

Capacity of over 500M is able to store 40 processing files simultaneously and open and process any of them.

High Compatibility

Can work with CAD/CAM software such as Type 3 /Artcam / Castmate / Proe /CorelDraw / Artcut (Window98/NT/2000/XP)

Auto tool correction function when do cutting and engraving

Enable higher precision and save working piece.

5.

Auto Oiling Structure

Guarantee the long term running of the mechanical parts

A circular inset image showing a transparent oil reservoir with a yellow cap and a dipstick, connected to a mechanical system. The reservoir has a label with Chinese characters '合格证' (Certificate of Conformity) and '日期' (Date).

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6.

High power frequency changing water cooled spindle

Can process hard materials efficiently.
Enable long-term use and high power of spindle

A circular inset image showing a close-up of a spindle assembly with two orange cables and a metal fitting. The spindle is mounted on a metal base.

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1.

Aluminium Alloy and Cast Steel Structure

Adopt Cast Steel Structure body, gantry type, stable and bearable. Non-deformation configured long lifetime using.



2.

Germany High Technology Main Spindle

Water cooling, high power spindle, low noise, and big cutting force to assure the long time working



3.

Germany Double Nuts Automatic Ball Screw

Excellent XY Gear Transmission ,
Z ball screw made in Germany and
sideways made in Japan or Korea.

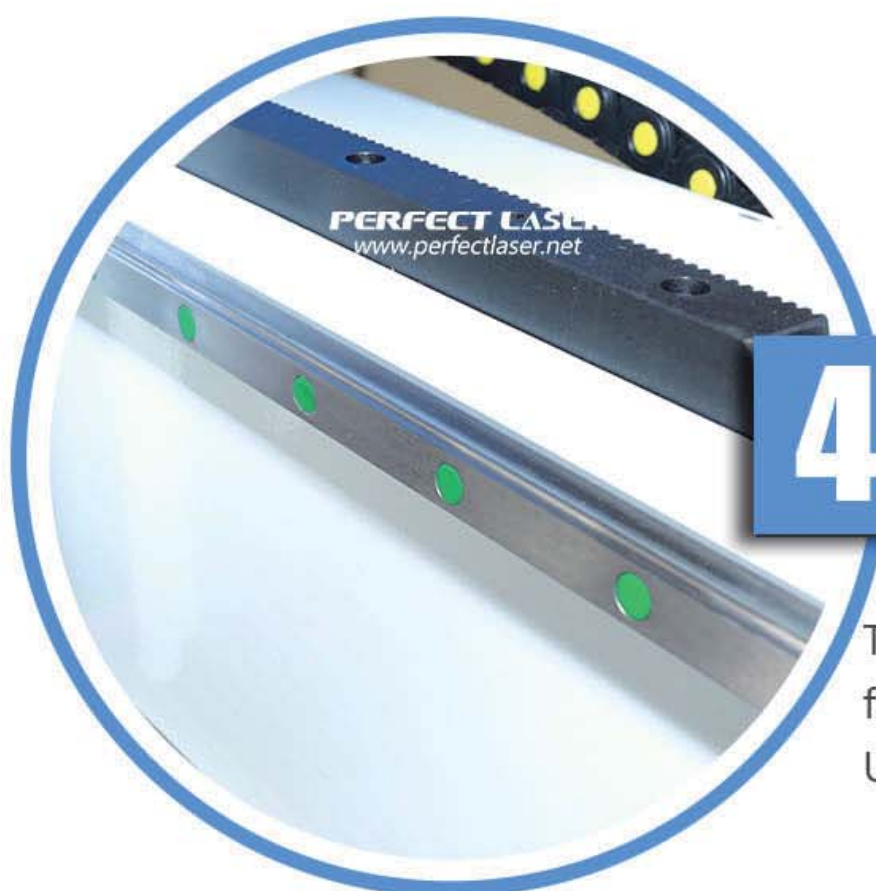


A circular inset image showing a close-up of a ball screw assembly. The screw is vertical and surrounded by a metal housing. The text 'PERFECT LASER' and 'www.perfectlaser.net' is overlaid on the image.

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4.

Taiwan Linear Guide Rail



A circular inset image showing a close-up of a linear guide rail. The rail is silver and has several green rollers visible. The text 'PERFECT LASER' and 'www.perfectlaser.net' is overlaid on the image.

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The bearing of the lead guide rail is
face to face
Using precision is high for a long time.

5.

Power Switches

With "Over-Current Protection" function design, more safe during long-term using.



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6.

Chinese Top Brand Motor and Driver System



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7.

Drive Chain

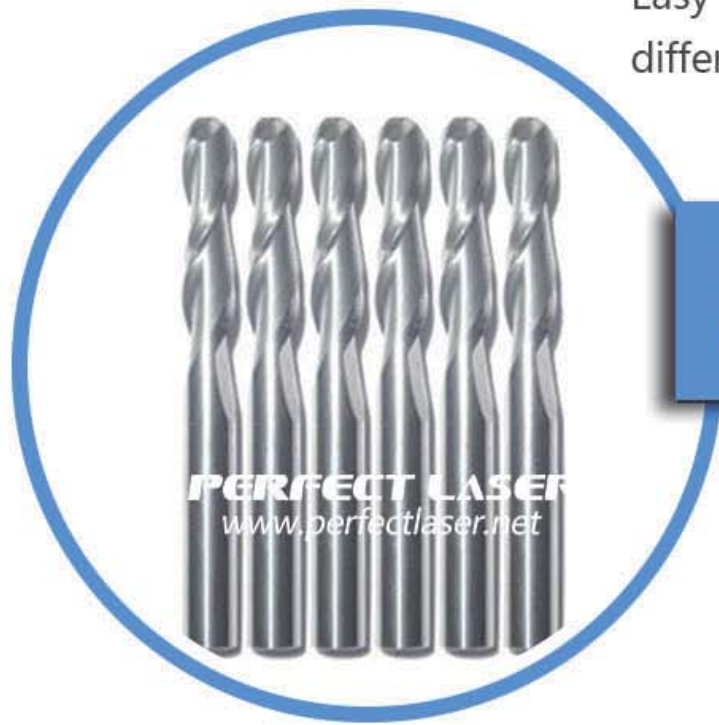
Protect all the electrical wires, ensure safety and long life using. Easy to find the errors by pointing different color of wires inside of the chains.



8.

Engraving Knife

Adopt hard alloy
Not easy to worn
Can work for long time



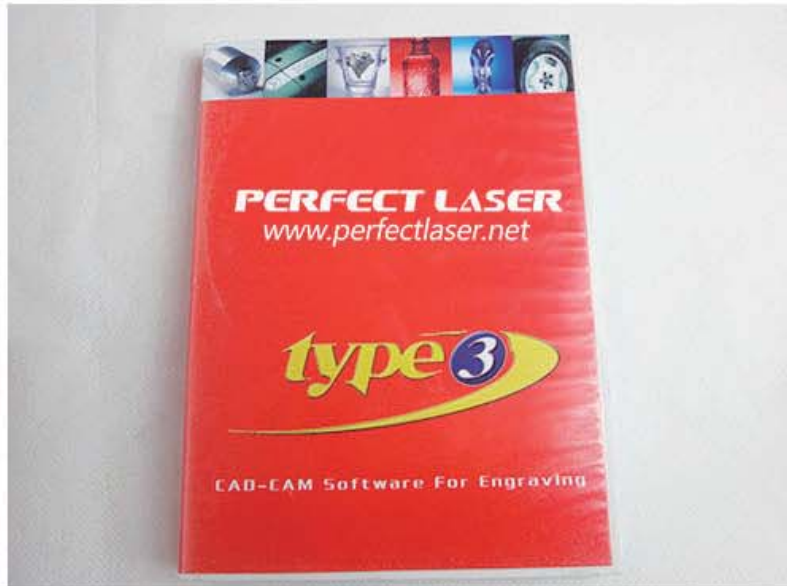


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9.

Pump

China Top brand Pump, the pressure is powerful, to help cooling spindle through inlet and outlet system efficiently, enable long-term use and high power of spindle.



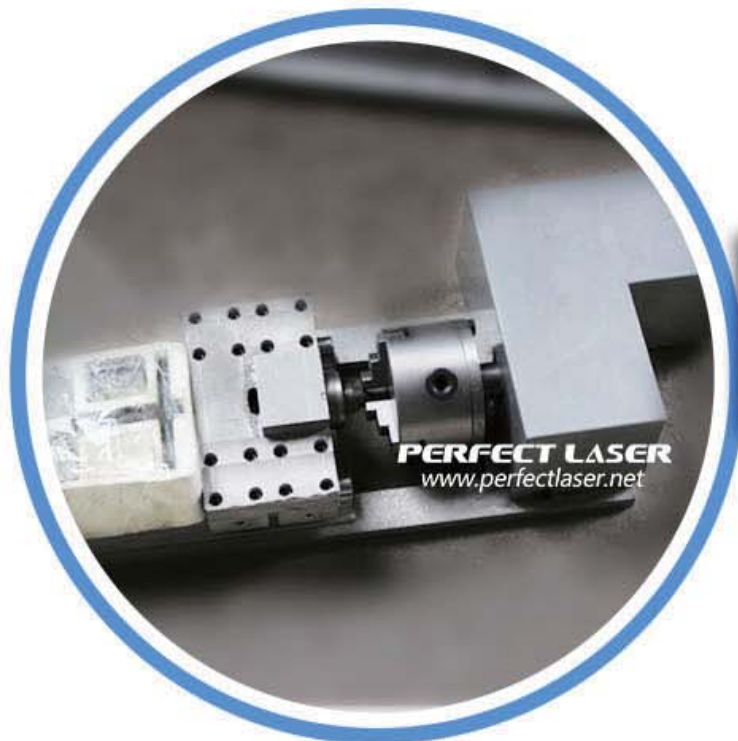
10.

Type 3 Software

Graphic clear, more powerful carving function, high precision. Easily make relief, and other three-dimensional sculpture.

1. Advanced DSP Digital-Control System

Handle operation and large liquid crystal display brings out more convenient operation, simpler maintenance and more human nature on the design of the machine



2. Rotary Fixture

Special design for engrave round and cylindrical work-pieces
Standard Diameter is 200mm
(can be customized)

3.

Water Cooling System & Stainless Steel Water Slot (special design for metal)

Water cooling system:

Cooling the heat of cutting knife when engraving metal products

Stainless steel slot:

Used in flushing the scraps, especially in cutting, engraving metal work-pieces



4.

Vacuum Table for Woodworking

- ◆ 1.Vacuum Working Table
Absorb the easy-move and irregular working pieces.
- ◆ 2.8 Zones Vacuum Table
Can absorb any shape of work-pieces
No need to use any fixture assist

5.

Dust Collecting System

Collect and clean the scraps and powder (such as wood and acrylic powder), Protect the nice working environment



6.

Acrylic Polishing Machine (Special design for Acrylic)

Specially used for polishing acrylic edge
Can modify acrylic edge to be smooth and elegant



Technical Data

Model	PEM-1015	PEM-1212	PEM-1215	PEM-1325
Working Area(X,Y,Z)	1000*1500* 200MM	1200*1200* 200MM	1200*1500* 200MM	1300*2500* 200MM
	Perfect Laser also have the ability to custom-made according to user's special demand			
Spindle Power	2.2KW			
Option Spindle Power	3KW, 4.5KW, 5KW			
Table material	Aluminum Alloy, Cast Steel Structure			
Maximum feed height	80mm-300mm			
X,Y,Z Guideway rails type	Round Guide Rail, Ball Screws Transmission			
Working Delicacy	0.025-0.05mm			
Max Engraving Speed	25,000mm/min			
Resolution ratio	0.002mm			
Repetition accuracy	±0.02mm			
Spindle Rotating Speed	18000 - 24,000rpm			
Spindle cooling	Water Cooling			
Drive motor system	Step Motor and Step Driver(Option: Servo System)			
Interface	PCI Port or USB Port			
Memory buffer (Flash)	500MB (U Disk)			
Engraving Command	G code, u00, mmg, PLT, HPG			
Command language system	English Version, Windows 98/2000/XP Operation System			
Operational Software	Original Type3 Software, MACH 3, ArtCam software or Wentai Software			
Command language system	English Version, Windows 98/2000/XP/Win7 Operation System			
Software Compatibility	Support CAD/CAM software, PLT format, Corel Draw, Auto CAD			
Working temperature	0-45℃			
Relative humidity	30% - 75%			

- * 12 Months Guarantee
- * 30 working Days Lead Time
- * VCD Training , Easy Installation
- * 12 Hours Response
- * TT/Western Union / Paypal / Ali Trade Assurance Payment
- * Sea Shipping

FAQ

Q: What's the package?

A: We have 3 layers package. For the outside, we adopt wood craft case. In the middle, the machine is covered by foam, to protect the machine from shaking. For the inside layer, the machine is covered by thickening plastic bag for waterproof.

Q: Will the package damaged during transportation?

A: Our package is considerate all the damage factors and make it to be safe, and our shipping agent have full experienced in safe transportation. We have exported to 180 countries worldwide. So please don't worry, you will receive the parcel in good condition.

Q: How to install and run the machine?

A: Our technician have installed the machine before shipping. For some small parts installation, we will send detail training video, user's manual along with the machine. 95% customers can learn by themselves.