

PERFECT LASER

CNC Carving and Engraving Machine

(Model:PEM-1212/1218/1325)



**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

6.

High power frequency changing water cooled spindle

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



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.

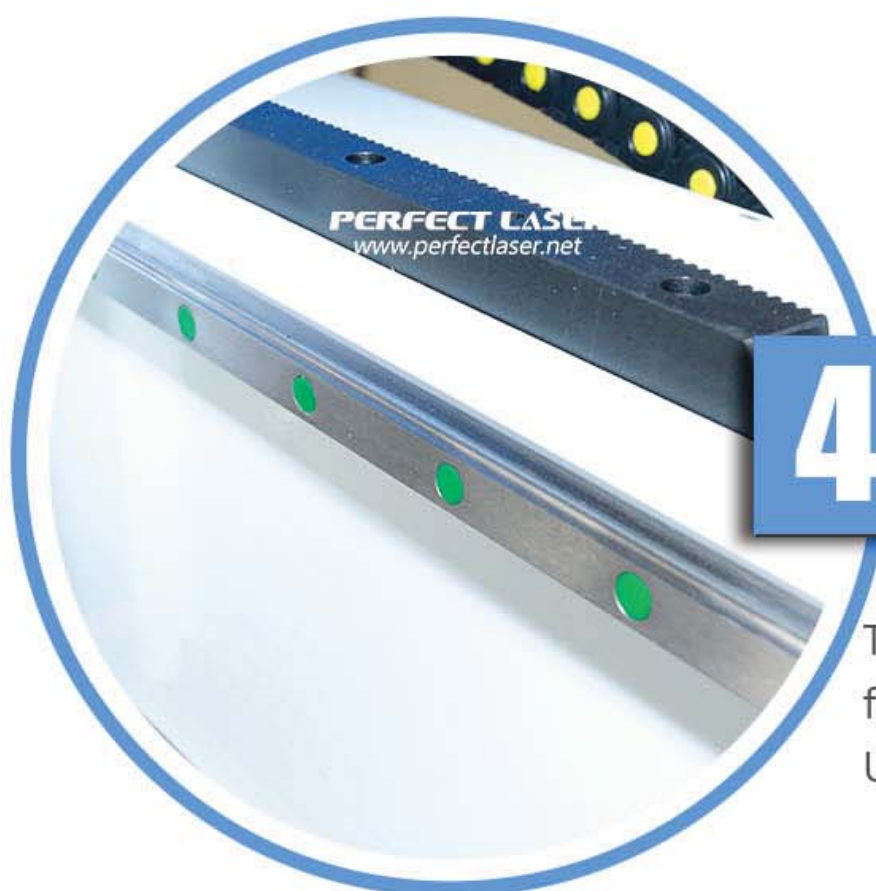


A circular inset image showing a close-up of a ball screw assembly. The screw is vertical and surrounded by a housing. The text 'PERFECT LASER' and 'www.perfectlaser.net' is overlaid on the image.

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4.

Taiwan Linear Guide Rail



A circular inset image showing a linear guide rail. The rail is silver and has four green rollers. 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

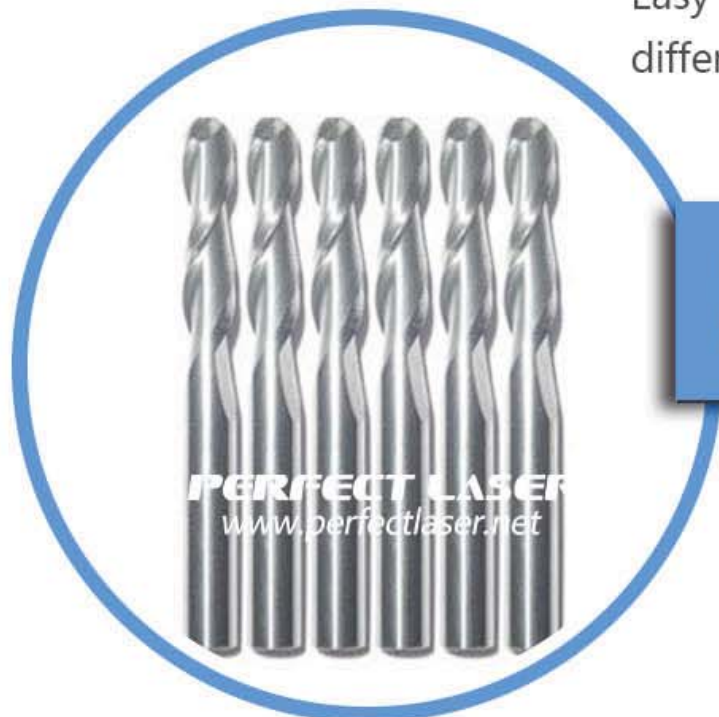
Protect all the electrical wires, ensure safety and long life using. Easy to find the errors by pointing different color of wires inside of the chains.



8.

Engraving Knife

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

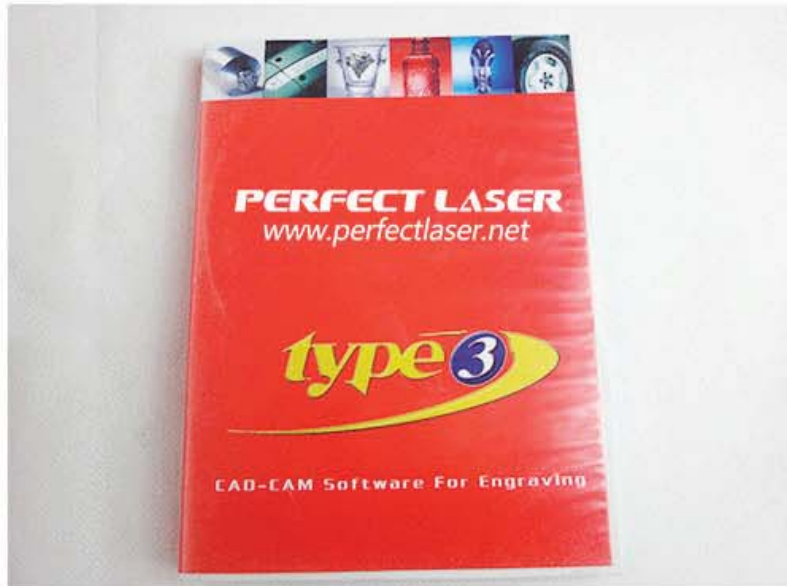




9.

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.



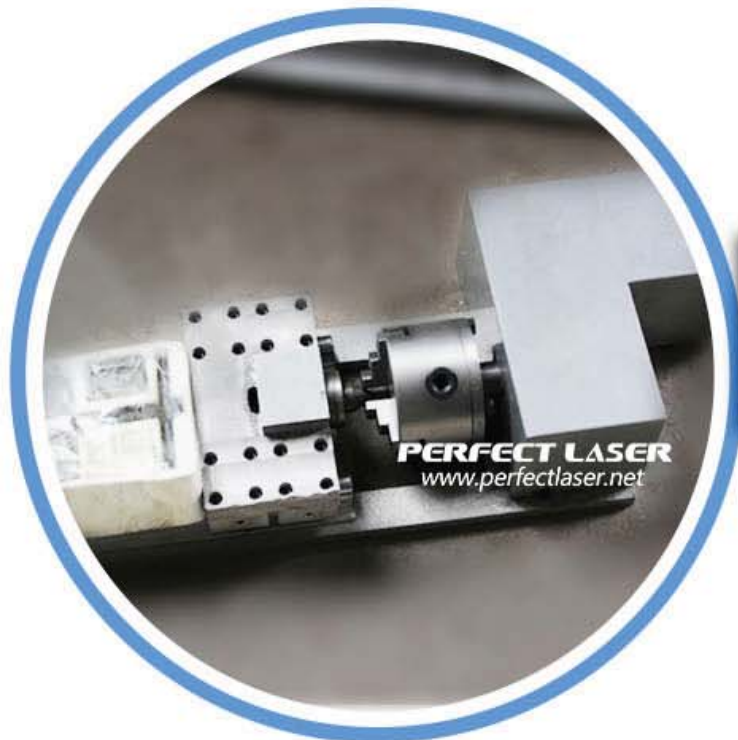
10.

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-1212 | PEM-1218 | PEM-1325 |
|---------------------------|---|---------------------|---------------------|
| | 1200*1200*200 mm | 1200*1800*200 mm | 1300*2500*200 mm |
| Working Area(X,Y,Z) | 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.