

YAG Metal Laser Cutting Machine



PE-M500-2513 / PE-M700-2513

PE-M500-3015 / PE-M700-3015

YAG Cutting Machine Advantages

01
ONE

Low Cost in Use:
Power Consumption is only 20-30% Compare to Co2 Laser

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High Speed: 2-3 Times than CO2 Laser

02
TWO

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03
THREE

High Accuracy: Fine Laser Beam Quantity, Slim Kerf

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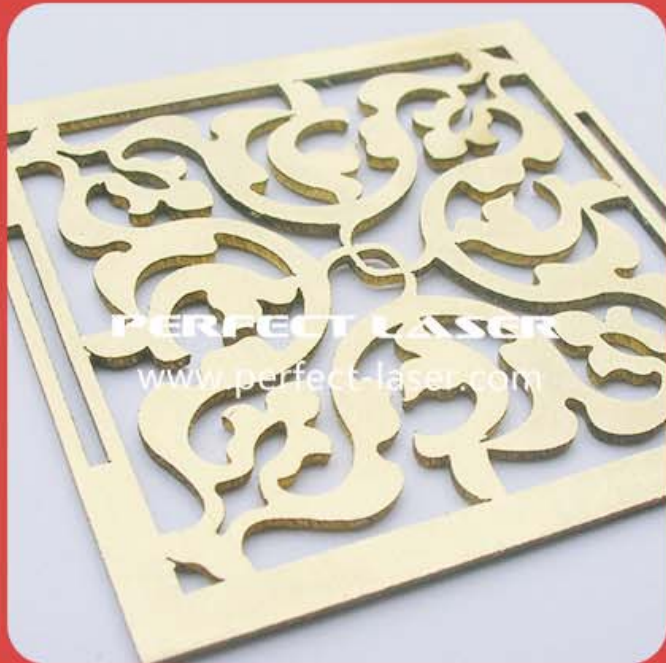
Low Maintenance: Almost Zero Maintenance Cost

04
FOUR

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Consumables

Items List	Life time (Hour)	Suggest QTY for One Year (Pc)
Laser Xenon Lamp	700	6-12
Focus Lens	1200	2
Beam Expander Lens	500	5-10
Full Reflection Lens	800	5
Half Reflection Lens	500	5-10
45 Degree Lens	1500	2
Copper Gas Nozzle	1500	2
Adjusting Sheet	1500	2

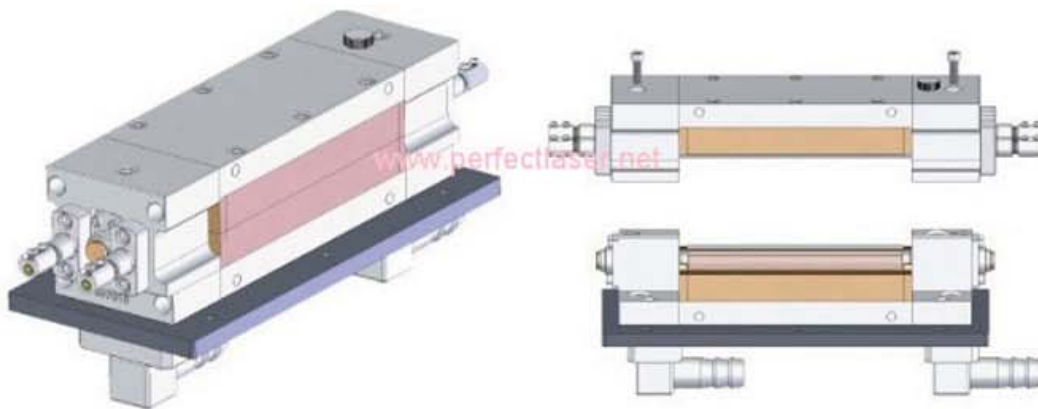






1. Adopt Advanced Germany Technology

Ensure most high tech in the world



2. Advanced Laser Optical System

Ensure excellent laser beam quality
Double-Xenon-lamp technology
Can strongly improve the laser power and laser beam quality.



3. Laser Path Pre-View & Pre-Position Function

Laser beam is in-visible
by adopting "Red Light Pointer"
Realize the laser path pre-view and Pre-position function.
Simulate the laser cutting path
Pre-run the cutting path in advance
Ensure finding the accurate cutting position

4. Unique Mirrors and Lens Cooling Technology

All mirrors and lens is cooled by water
Takes the mirror heat during working
Prolong its' lifetime
Save future operation cost



5. Heavy Machine Body

Adopt 100mm*100mm*6mm thick
square metal tube
Stable, Heavy Loading
Won' t distortion after long-time using
Worktable Max. Load can reach 500 kgs



6. Adopt A Funnel-Type Machine Bed Design

Work with conveyor belt
Easy for user to get the cutting pieces
from the machine front



7. Dynamic Auto-Focus System

Keep the same distance between
the metal sheet and laser head
Realize the accuracy of cutting effect.



8. Auto-Feeding Design

Adopt feeding wheel design
Make the material feeding easier
Labor energy saving

9. Auto Oil-Filling System

Press for once, can lubricate the machine
transmission rod for 2-3 months.

10. No Need User to Take It by Hand.

Make the work-pieces neat and beautiful.



1. 7P Powerful Water Chiller

Increase the stability of cutting power
Support water flow testing
Makes the cutting power more stable.
Avoid material cut un-completely.
Enhance the working efficiency



Industry Computer
CPU is Intel Core i3, DDR3 is 4G
SSD is 250G

PERFECT LASER
www.perfect-laser.com

2. Professional Laser Cutting Software

Adopt CNC 2012 latest version,
with powerful editing function
Friendly interface, Easy to Use.
Supports DXF, PLT, G-Code and many graphs.



3. USA Dynamic Auto Focus System

When metal sheet is not so plain
Adjust the focusing distance automatically



4. Saw-tooth Type Working Table

Stable, Heavy Holding



5. Laser Source

Adopt USA imported Laser Xenon lamp
Double lamp Technology
Strongly improve the power and laser beam quality



6. Taiwan Made Ball Screw Rod

Diameter 50mm ball screw rod
High accuracy linear running guide rail
Improve the precision and accuracy of the machine



7. USA Dynamic Auto Focus System

When metal sheet is not so plain
Adjust the focusing distance automatically



8. Taiwan Linear Guide Rail

High speed with
Lower noise volume
High accuracy and long life span



9. Japanese Panasonic Servo Motor and Driver

Extreme precise positioning
Make moving positioning mechanism operate smoothly
Reliably and free of maintenance



10. 45 Degree Lens

3 Screws in the 45 degree lens
Easy to adjust laser path




11. Driving Chain



12. Foot Switch

Press it for cutting easily

Cutting Material	PE-M500-3015		PE-M700-3015	
	Max. Cutting Thickness	Best Cutting Thickness	Max. Cutting Thickness	Best Cutting Thickness
Mild Steel	6-7 mm	3-5mm	7-8 mm	4-6mm
Stainless Steel	5-6 mm	3-4 mm	6-7 mm	3-5mm


www.perfect-laser.com



Metal	Cutting Thickness (mm)	Cutting Speed (mm/s)	Min Line Width (mm)	Auxiliary Gas
Stainless Steel	0.5	4000	0.12	Air
	1	2000	0.15	Air
	2	1000	0.2	Air
	3	500	0.25	Air
	4	300	0.3	Air
	5	200	0.4	Air
	6	150	0.45	Air
Carbon Steel	0.5	4000	0.12	Air
	1	2400	0.12	Air
	2	1000	0.15	Air
	3	500	0.2	Air
	4	350	0.3	Air
	5	240	0.35	Air
	6	200	0.4	Air
Aluminum Alloy	0.5	3600	0.12	Air
	1	2000	0.15	Air
	2	1200	0.2	Air
	3	500	0.25	Air
Brass	0.5	2400	0.12	Air
	1	1500	0.15	Air
	2	900	0.2	Air

Cutting Thickness

Special Note:

- 1) If auxiliary gas is Oxygen, the cutting speed can increase by 30%-50%.
- 2) Aluminum Alloy and Brass should be not pure one (have alloy in it).

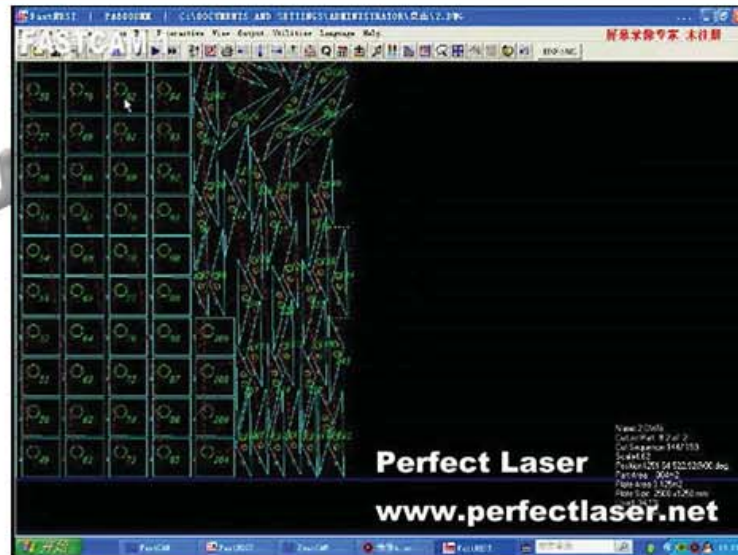
Air Compressor + Air Drying Machine:
This equipment is needed when using compressed air which is the most economic way compared with N2 and O2.



1. Air Compressor
Economic and long life using.



2. Air Drying Machine
Drying the water from the air compressor



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Model	Part	LWH (m)	Volume(m3)	Weight(kg)
PE-M500-2513	Host computer	4.5*2.1*1.58	14.93	2000
	Control cabinet	1.05*0.9*1.42	1.34	
	Chiller	1.25*0.75*1.85	1.73	