

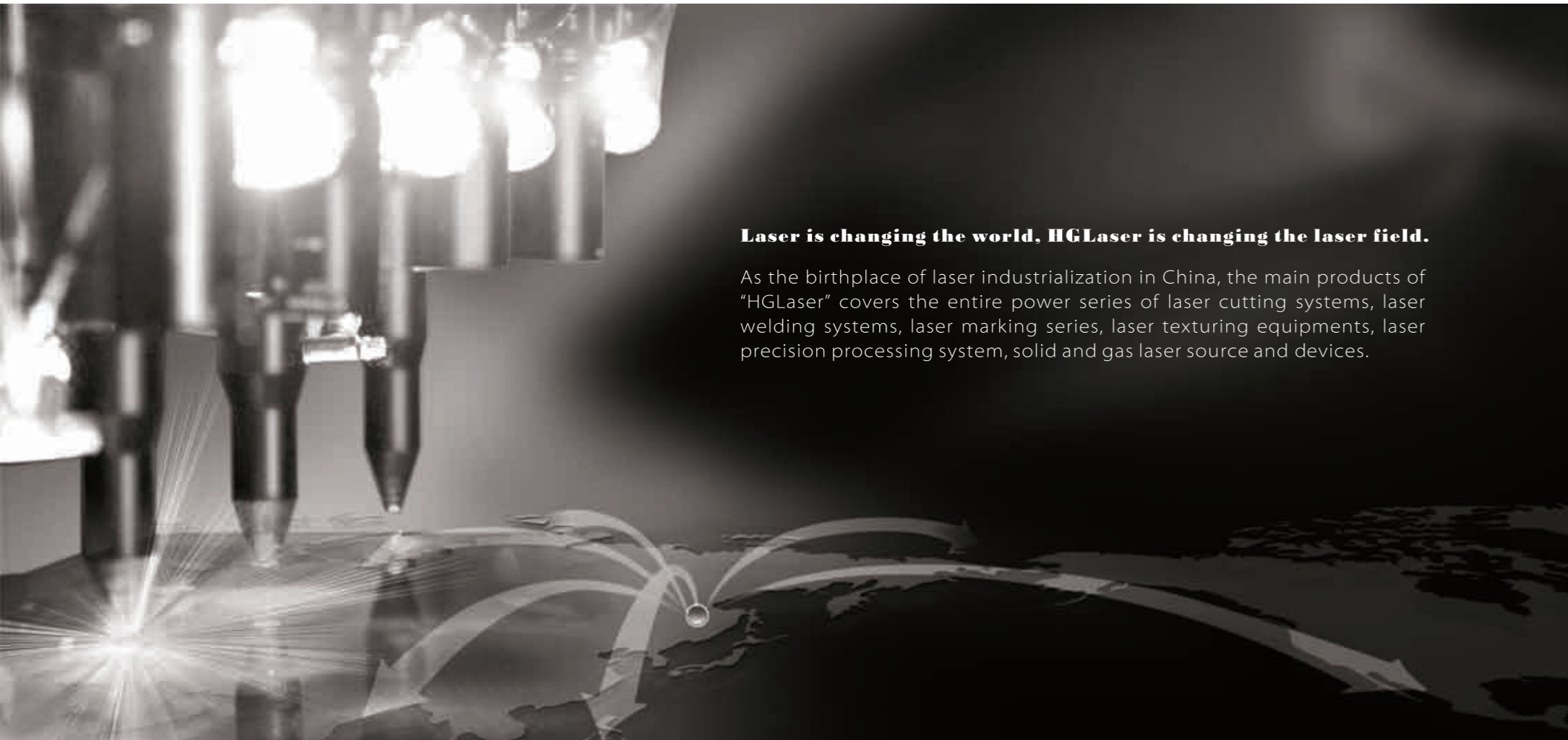


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***AUTHORITATIVE SUPPLIER OF
INDUSTRIAL LASER SOLUTIONS***

 Product



Laser is changing the world, HGLaser is changing the laser field.

As the birthplace of laser industrialization in China, the main products of "HGLaser" covers the entire power series of laser cutting systems, laser welding systems, laser marking series, laser texturing equipments, laser precision processing system, solid and gas laser source and devices.

CONTENTS

I

BRIEF

- INTRODUCTION 01

II

LASER MARKING MACHINE

- Fiber Laser Marking Machine 03
- YVO₄ Diode Laser Marking Machine 05
- Online Laser Marking Machine 07
- CO₂ Laser Marking Series 09
- Auto Parts Laser Marking Machine 11

VI

SERVICE & CUSTOMERS

- Laser Surface Treatment And Remanufacturing 23
- SERVICE 24

III

LASER WELDING MACHINE

- Fiber Transmitting Laser Welding Series 13
- YAG Laser Welding Series 15

IV

INDUSTRIAL PRECISION LASER MACHINE

- Bobbins Laser Tipping Paper Perforator Series 17

V

LASER CUTTING MACHINE

- Multi-functional YAG Solid Laser Cutting Machine 19
- Continuous Fiber Laser Cutting Machine 21



Introduction

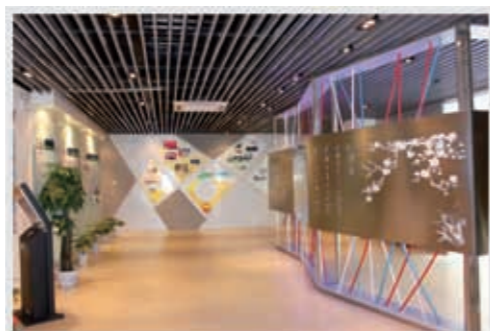
HGLaser is one of the largest laser equipment manufacturers in China. Committing to providing comprehensive laser manufacturing process solutions in industrial manufacturing field, HGLaser has always been on manufacturing and researching various laser processing complete sets of equipments.

As one of HGLaser's brands, **FARLEY • LASERLAB** is **The World Brand of Cutting & Welding Technology**.

HGLaser and **FARLEY • LASERLAB** are specialized in laser precision processing system, laser surface treating and texturing system, high power and plasma cutting & welding system. HGLaser provide a wide range of solution for industrial processing including laser marking solution; laser welding solution; laser cutting solution; laser solution for metal texturing, quenching, normalizing, tempering, alloying, clad welding; Solution for solar PV industry; Solution for LED industry; Solution for electronic circuitry industry, etc.



workshop



showroom

Authoritative Supplier Of Industrial Laser Solutions



Fiber Laser Marking Machine

LASER MARKING MACHINE

Fiber Laser Marking Machine



Fiber Laser Marking Machine with CE Standard



Features

The fiber laser marker has a lot of advantages comparing with the traditional solid-state laser marker which uses crystalrod as laser marker medium. It is adopted very long Ytterbium doped double clad optical fiber as laser medium, which is pumped by high power multi-

mode diode laser. So it has very good laser beam quality TEM₀₀. It is widely used in electronic component, IT industry, automobile accessory, cell key-press, hardware, precision instrument, gift ornaments, medical equipment, etc.

	Fiber Laser Marking Machine		Fiber Laser Marking Machine with CE Standard		
Model	LSF10	LSF20	LSF30	LSF50	LSF100
Average output power	10W	20W	30W	50W	100W
Max.linear speed	≤7000mm/s		≤7000mm/s		
Marking area	110 x 110mm (Standard) 70 x 70 mm/ 145 x 145mm / 175 x 175mm / 220x220mm(Optional)				
Min.focus laser diameter	0.2mm		0.2mm		
Marking depth	0.4mm		0.4mm		
Min. linear width	0.01mm		0.01mm		
Power supply	AC220V 50Hz/60Hz (optional)				
Application	Electronic component, IT industry, automobile accessory, cell key-press, hardware, precision instrument, gift ornaments, medical equipment, etc.		European market standard, which can satisfy high protection demand.		



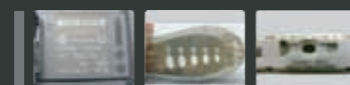
YVO₄ Diode Laser Marking Machine

LASER MARKING MACHINE

■ Nd:YVO₄ Diode Laser Marking Machine

■ Nd:YVO₄ Green Laser Marking Machine

■ Nd:YVO₄ UV Laser Marking Machine



■ Features

HG-laser LSD Diode end-pumped laser marking machine uses unique laser cavity design which included IR. Green lights. UV. DUV, etc. Its installation and commission is processed in class 1000 working room. Output laser beam has a base film, a short pulse width, peak power,

high repetition rate characteristics, integrating the industry's highest standard with stable performance, fine carving, high-quality laser precision microfabrication of choice.

	Nd:YVO ₄ Diode Laser Marking Machine		Nd:YVO ₄ Green Laser Marking Machine	Nd:YVO ₄ UV Laser Marking Machine
Model	LSD10EI	LSD15EI	LSG7EI/LSG10I/LSG20I	LSU3EI/LSU5EI
Average output power	10W	15W	7W/10W/20W	3W/5W
Wave length	1064nm		532nm	355nm
Marking area	110 x 110mm (Standard) 70 x 70 mm/ 145 x 145mm / 175 x 175mm(Optional)			
Frequency	1-100kHz		1-100kHz	1-100kHz
Cooling	water cooling		water cooling	water cooling
Min. linear width	0.01mm		0.01mm	≤0.01mm
Max. linear speed	≤7000mm/s		≤7000mm/s	≤7000mm/s
Power supply	AC220V 50Hz/60Hz (optional)		AC220V 50Hz/60Hz (optional)	AC220V 50Hz/60Hz (optional)
Application	Widely used in electronic components, integrated circuit, communication, etc.		Applied in marking precisely of special materials, precisely cutting and marking and surface processing of glass, LCD screen, textile, semiconductor silicon wafer, sapphire, etc.	



Online Laser Marking Series

LASER MARKING MACHINE

Online Fiber Laser Marking Machine



Online CO₂ Laser Marking Machine



Features

With the development of people's living standard, people pay more attention to the anti-fake in the commodity products. HGLaser detrusion Flying online laser marking series focus on commodity

industries. This series use the most advanced software and hardware, to make sure of the stable marking in a fast speed. With an adjustable bracket on the laser sources, very easy to match with the industry line.

	Online Fiber Laser Marking Series		Online CO ₂ Laser Marking Machine
Model	Flying 10F	Flying20F	Flying 10C / Flying 20C / Flying 30C / Flying 50C
Average output power	10W	20W	10W/20W/30W/50W
Wave length	1064nm		1064nm
Marking area	110 x 110mm (Standard) 70 x 70 mm/ 145 x 145mm / 175 x 175mm(Optional)		
Marking depth	0.01-0.2mm		0.01-0.2mm (Depend on Materials)
Max. online speed	120m/min (Depend on materials and marking contents)		
Min.linear width	0.01mm		0.1mm
Min. character height	0.2mm		0.4mm
Power supply	AC220V 50Hz/60Hz(optional)		
Applications	Applying to Auto Electron, molectron, crystal oscillator, PE bottle package, Electronic Component, Metallic bottle package, tube, can package, and etc industries. Suitable for nylon, ABS, PVC, PES, PE, Steel, Ti, Cu, Al and etc materials.		Applying to medicament, cosmetics, tobacco, food and drink package, closing, leather, electronic component, and etc series number and expire date laser marking. Suitable for most of the non-metalic material online marking, such as paper package, leather, perspex, resin plastic, wooden & bamboo products, metal with the coating, PCB and etc.



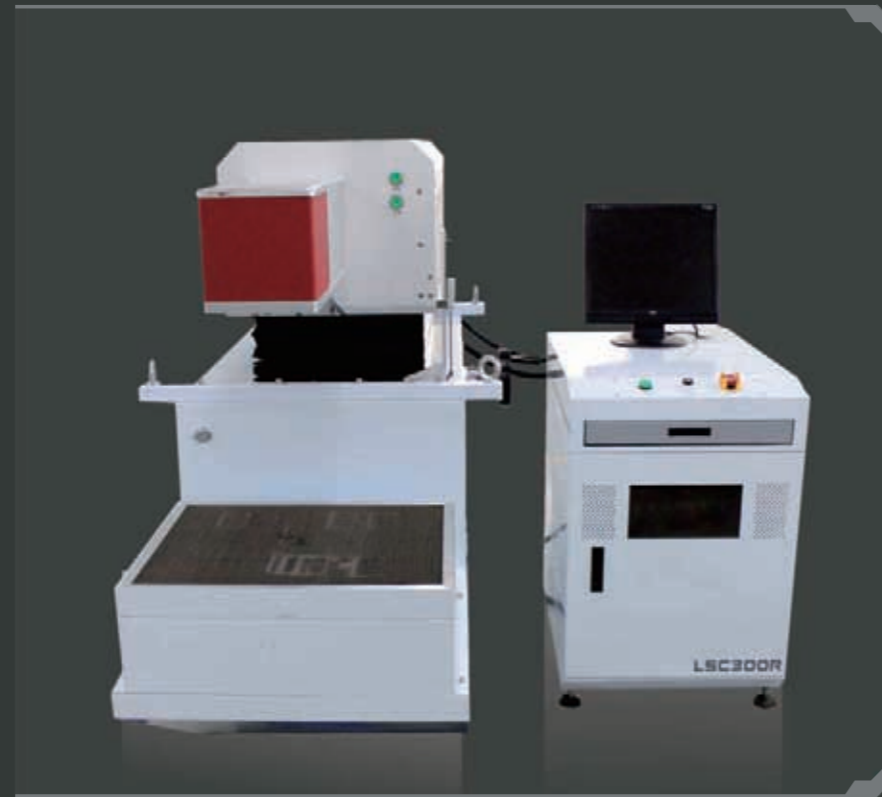
CO₂ Laser Marking Series

LASER MARKING MACHINE

CO₂ Laser Marking Machine



Dynamic Focusing Laser Marking Machine



Features

HGLaser's CO₂ laser marking machine is using the Galvo Scanner marking tech with the imported CO₂ laser sources to reach a high performance marking effect on non-metal materials.

CO₂ Laser Marking Series

	CO ₂ Laser Marking Machine		Dynamic Focusing Laser Marking Machine	
Model	LSC10	LSC30	LSC50	LSC100 / LSC200
Average output power	10W	30W	50W	100W / 200W
Laser source	US Imported CO ₂ Laser Source			
Wave length	10.64 μ m			
Marking area	110 x 110 mm(Standard) 70x70mm/145x145mm/175x175mm/300x300mm/800x800mm			
Min. character height	0.2mm		0.4mm	
Min. linear width	0.1mm		0.2mm	
Power supply	AC220V 50Hz/60Hz (optional)		AC220V 50Hz/60Hz (optional)	
Applications	Applying to medicament, cosmetics, tobacco, food and drink package, closing, leather, electronic component, and etc series number and expire date laser marking. Suitable for most of the non-metallic material online marking, such as paper package, leather, perspex, resin plastic, wooden & bamboo products, metal with the coating, PCB and etc.			



Auto Parts Laser Marking Machine

LASER MARKING MACHINE

Flexible Label Laser Marking Machine



2D Code Laser Marking Machine



Features

According to the typical requirements of automobile and hardware industries, HGLaser provides specific flexible label, metallic label laser marking machines.

	Flexible Label Laser Marking Machine		2D Code Laser Marking Machine
Model	LSF10L	LSF20L	LSF20L
Laser beam quality			M ² :1.4-1.8
Average output power	10W	20W	20W
Power consumption			≤2500W
Wave length	1064nm		1064nm
Marking area	110mm×110mm		145mm×145mm
Frequency	20KHz-80KHz		20KHz-80KHz
Min. online width	0.01mm		0.01mm
Marking depth	0.01-0.2mm		0.01-0.2mm
Min. character height	0.2mm		---
Power supply	AC220V 50Hz/60Hz (optional)		AC220V 50Hz/60Hz (optional)
Main body size	1600mm×800mm×1660mm		1600mm×800mm×1610mm
Air pressure	0.4-0.6MPa		0.4-0.6MPa
Cooling system	Air cooling		Air cooling
Applications	Label on the vehicle body, doors, engine, key, fuel tank, air bag label, air conditioner label, start label, and etc.		Suitable for all kinds of Al label, SS label, and other metallic labels.



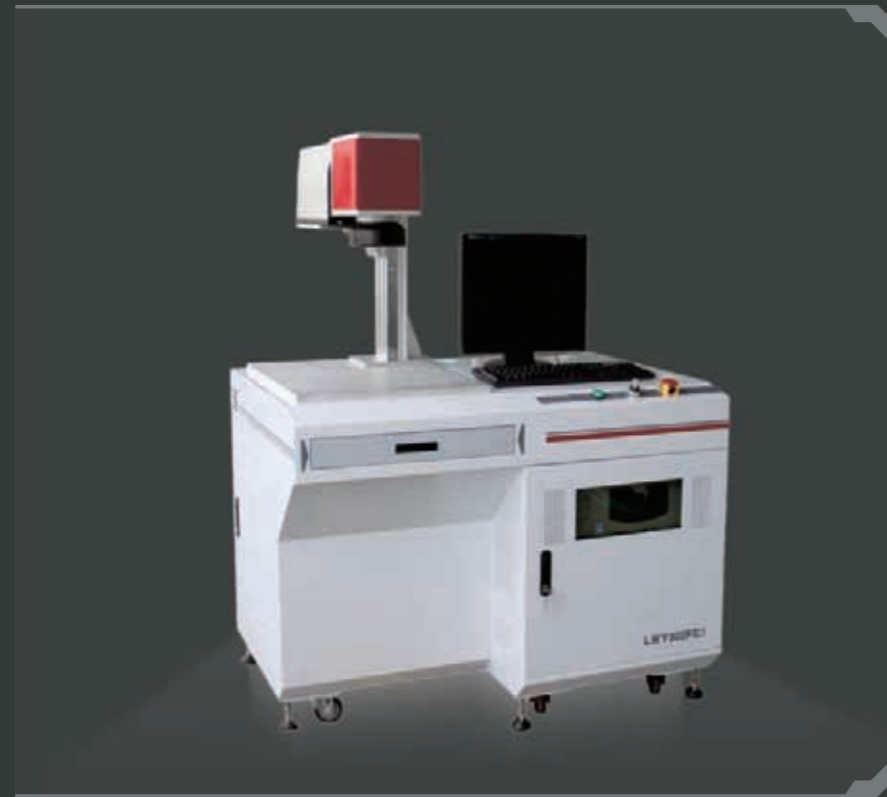
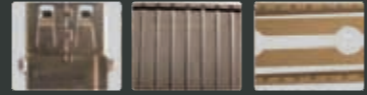
Fiber Transmitting Laser Welding Series

LASER WELDING MACHINE

Fiber Transmitting Laser Welding Machine



Fiber Transmitting Galvo Laser Welding Machine

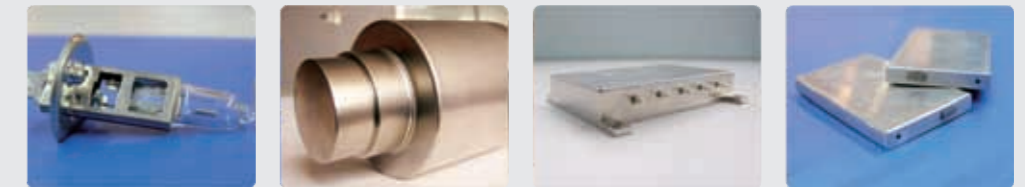


Features

Fiber transmitting laser welding machine is coupling the high performance beam of the light into the fiber. Through remote transmission, the fiber, which was collimated into parallel light by collimator, focus on the workpiece to weld. By flexible non-contact transmitting welding, this machine can flexibly weld the parts which is difficult to access. The laser beam can achieve spectra separation on the term of time and is able to process multi-beam at the same

time, which is beneficial for more precisely welding. With good-quality of fiber beam, fine spot and flexible installation, Fiber Transmitting Laser Welding Machine is suitable for optical communication devices, IT, medical, electron, battery, opto-coupler, kinescope electron gun, metal parts, cellphone vibrating motors, clocks and watches devices, car steel anchor, etc.

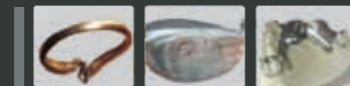
	Fiber Transmitting Laser Welding Machine			Fiber Transmitting Galvo Laser Welding Machine Double-heads(optional)
Model	LWY50C	LWY150C	LWY300C	LWY300FC1
Average output power	50W	150W	300W	300W
Wave length	1064nm			1064nm
Max. single pulse energy	50J	50J	80J	80J
Pulse width	0.1ms-20ms			0.2-15ms
Pulse frequency	1Hz-100Hz			1Hz-100Hz
Penetration	0.05-1 mm (Depends on material)			0.05-1 mm (Depends on material)
Welding area	70mm×70mm(Standard) 110mm×110mm(Optional)			
Power supply	AC220V 50Hz/60Hz (optional)			AC220V 50Hz/60Hz (optional)
Applications	Suitable for fiber optic coupler, fiber connector, kinescope parts, mobile vibration motor, and etc.			Suitable for electron, telecommunication, metals industries which with the mass production companies to online or offline laser welding. Applying to mobile parts, hardware, sensor and etc.



■ Laser Welding Machine



■ Spot Laser Welding Machine



■ Mould Laser Welding Machine



■ Features

The core component of the solid state welding machine: the laser cavity: the import ceramic cavity or metal cavity. double or single pumping lamps, switch power, system that controlled by PLC or computer, X and Y axis work table or rotary work table (option). CCD monitor system (option). Laser chiller system. All above supply the

machine high welding speed, high efficiency, high depth welding, small distortion, high rate between depth and width, normal is 5:1, the highest is 10:1. Can welding the infusible material. The machine can also welding the small size precise parts and all kinds of spot welding and mould welding.

	Laser Welding Machine			Spot Laser Welding Machine	Mould Laser Welding Machine	
Model	LWY200	LWY300	LWY400	LWY60	LWY100M	LWY200M
Average output power	200W	300W	400W	150W	100W	200W
Wave length	1064nm			1064nm	1064nm	
Max. single pulse energy	50J	70J	80J	60J	50J	60J
Pulse width	0.2-20ms			0.1-10ms	0.1-20ms	
Pulse frequency	1-100Hz			1-20Hz	0.1-50Hz	
Stability of continual output power	±3%			≤±3%	≤±3%	
Continue running time per day	24hrs			24hrs	24hrs	
Penetration	0.05-4mm			0.05-2mm	≥0.8mm	
Laser spot diameter	0.03mm			0.2-1.5mm	0.2-1.5mm	0.2-2.0mm
Power supply	AC220V 50Hz/60Hz (optional)			AC220V 50Hz/60Hz (optional)	AC220V 50Hz/60Hz (optional)	

Application

Widely used in welding of Gold, Silver, Platinum, Stainless steel, Titanium and alloy material and widely used in the fields of Aviation, Airspace, Weapon, Naval vessel, GEM products, Jewelry, Precise mould, Dental mold, Hardware and so on. Especially suitable for Jewelry welding, Mould repairing, Golf ball repairing, Spot welding for component, Battery welding, etc.

Suitable for welding metal materials, Such as steel, carbon steel, stainless steel, steel alloy, aluminium, titanium, copper, nickel, etc. It is widely used in fields of aviation, airspace, weapons, warship, petrochemical, medical treatment, measuring instruments, micro electron, automobiles, etc.

Widely used in precisely repaired welding. It has already been used in rubber mould, glass mould, machine mould, stamping mould in auto industry, machinery, mobile phone, glass, plastic, rubber and such industry. The special work table for mould manufacture, 3-D working table, assembled foot switch are optional.



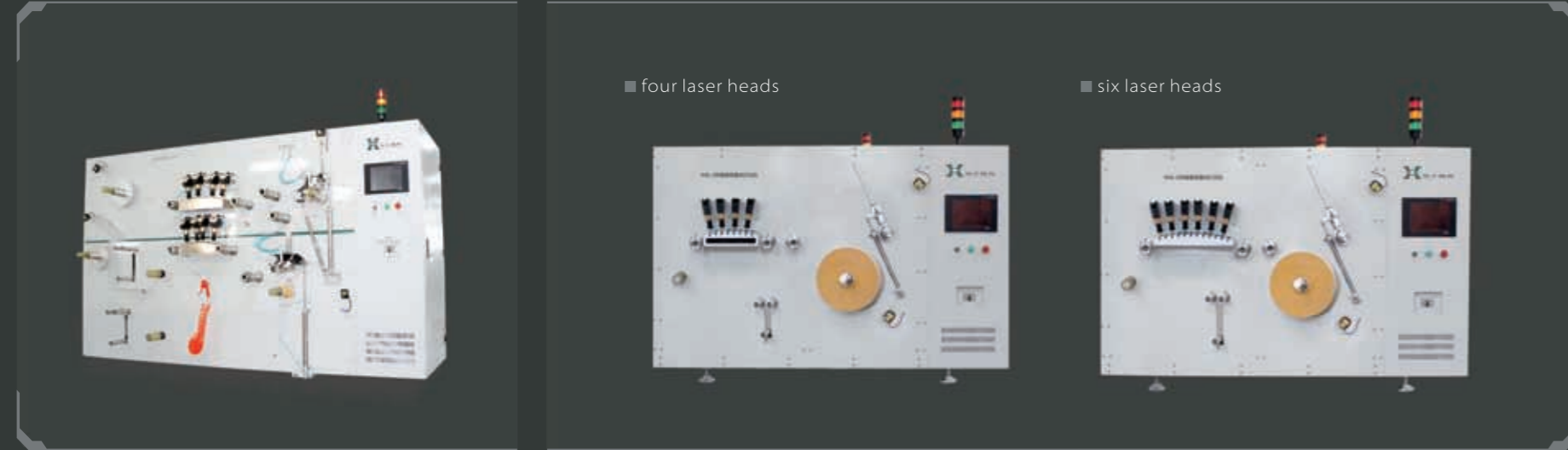
Bobbins Laser Tipping Paper Perforator Series

**INDUSTRIAL PRECISION
LASER MACHINE**

17/18

■ Double-bobbin Laser Tipping Paper Perforator

■ Single-bobbin Laser Tipping Paper Perforator



■ Features

According to thin-film material micro-processing applications, HGLaser developed series of laser perforation system, especially for tipping paper which used in tobacco field. Our double bobbins laser system with different power, different rolling methods which break the monopoly of high price situation in the China market. From 2000 years till now, HGLaser already developed 8 laser heads with 1

bobbin/16 laser heads with 2 bobbins/16 laser heads with 4 bobbins to satisfy the market demand. For 10 years market practice, HGLaser gain a good reputation from domestic and overseas market, and continuous R&D new technology to improve the configuration, our purpose is to design the humanistic laser system.

Double-bobbin Laser Tipping Paper Perforator

Single-bobbin Laser Tipping Paper Perforator

Model	LHS200D	LHR300D	LHS400D	LHR600S	LHG200S
Laser power(optional)	200W	300W	400W	600W	200W
Prism max speed(optional)	30000	30000	30000	30000	30000
The number of pores(1 row)	72000	72000	72000	72000	72
Pore spacing	Screen Setting	Screen Setting	Screen Setting	Screen Setting	Screen Setting
Pore size(mm)	0.06-0.15	0.06-0.20	0.06-0.40	0.06-0.40	0.06-0.30
Coefficient of variation	≤5%	≤5%	≤5%	≤5%	≤5%
*Capacity(KG/Day)	1500	2500	2500	3000	750
Porosity(CU)	50-1000	80-2000	80-2000	80-2000	100-1000
Maximum speed(m/Min)	400	400	400	800	400
Maximum Diameter (mm)	420	420	420	420	420
Maximum rows of perforating	8	8	8	8	4
Bobbin width (mm)	38-80	38-80	38-80	38-80	38-80
Bobbin flatness (mm)	±0.02	±0.02	±0.02	±0.02	±0.02

* two rows 160CU 20 hours per day



■ Features

Fast cutting speed, high efficiency, small straight cut, smooth cut surface, bigger ratio of pit-depth to pit-diameter and depth-to-width ratio;

Small thermal deformation, can work on hard, brittle, soft and other materials, wide range of materials;

No tool wear and replacement, no mechanical deformation, easy to maintain;

With effective protection and stop device, when the laser cooling system fails, it will cut off power supply automatically;

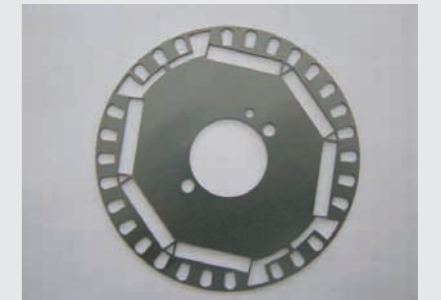
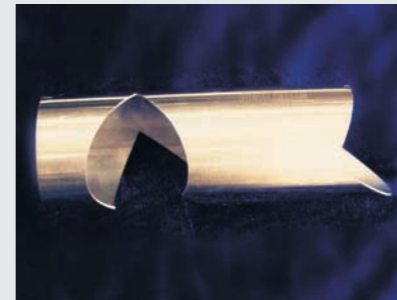
Customize special machines according to customer requirements. It is widely used in aviation, aerospace, weapons, vessels, petrification, medical treatments, instruments, micro-electronics and automobile industry.

■ Application

It can perfectly cut carbon steels, stainless steels, alloy steels, aluminium and its alloys, copper and its alloys, titanium and its alloys, Ni-Mo alloys and so on. It can also be used in laser drilling processing and scribing of integrated circuit ceramic substrates.

Laser Cutting Machine

Model	LCY200	LCY300	LCY400
Average Output Power	200W	300W	400W
Laser Wavelength	1064nm	1064nm	1064nm
Pulse Width	0.2-20ms	0.2-20ms	0.2-20ms
Pulse Frequency	1-200HZ	1-200HZ	1-200HZ
Spot Diameter	≤0.15mm	≤0.15mm	≤0.15mm
X-Y Axis Electric Precision Worktable	200mm×200mm	200mm×200mm	200mm×200mm





Adopted with superior fiber laser light source and the top configuration, HGLASER LCF series fiber laser cutting machine has beautiful and stable cut, high stability and small size. It is widely used in aviation, shipping manufacturing, instrument equipment, mechanical and electrical products and automobile industry.

■ **Features**

Good beam quality, can work on tiny workpiece, smooth and beautiful cut, fast cutting speed, provide high-efficient and economic cutting experience for customers;

High stability, long life, can meet the demands of long time continuous processing industrial production;

High electro-optic conversion efficiency, low consumption, save costs;

Powerful functions, easy operation;

Customize special machines according to customer requirements.

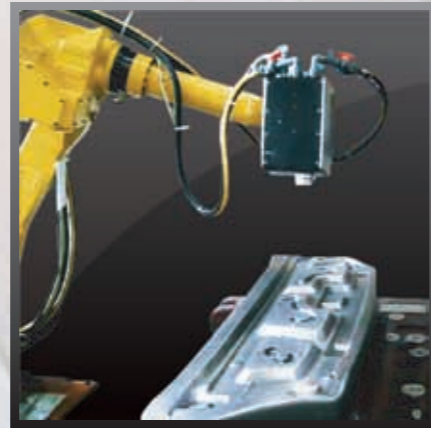
■ **Application**

It is suit for all kinds of sheet metals cutting, micro holes processing, metal parts precision cutting. It has been widely used in aviation, shipping manufacturing, instrument equipment, mechanical and electrical products and automobile industry.

Model	LCF100C	LCF200C	LCF300C	LCF400C
Average Output Power (W)	100	200	300	400
Laser Type	Continuous fiber laser			
Laser Wavelength (nm)	1080±10			
Working Mode	Continuous			
Power Adjusting Range	10-100%			
Power Instability	≤±1.5%typical (≤±3%special)			
Min Spot Diameter (mm)	0.02			
Cooling Method	Air cooling	Air cooling	Water cooling	Water cooling
Working Area (mm)	300×300	300×300	300×300	300×300
Positioning Accuracy (mm)	±0.02			
Repeat Positioning Accuracy (mm)	±0.01			
Speed (mm/s)	500			
Size (mm)	1660×1400×920			

Laser Surface Treatment and Remanufacturing

Wuhan HGLaser provides comprehensive solution for laser surface treatment and remanufacturing, including: diode pump laser robotic flexible processing system, multifunctional laser processing equipment, laser texturing equipment, R&D and application of advanced technology in laser surface treatment (such as laser quenching/normalizing/tempering, alloying, cladding and remanufacturing), and service of consultation and demonstration. It has been widely used in many fields, such as Aerospace, metallurgy, automobile, tooling, machinery, petrochemical, electric power, railway, shipping, scientific research, and etc.



■ Diode Pump Laser Robotic Flexible Processing System



■ Multifunctional Laser Processing Equipment

Service (365days+24hours)



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- HGLaser has set up perfect service system. Over 40% staff are sales and service personnel, and we acquired Farley Laserlab Australia as our branch office. Now we've got more than 10 offices and agents (such as India, Chile, Indonesia, Thailand, Malaysia, Singapore, Vietnam and Taiwan, etc.) all over the world for worldwide sales and service network to ensure the prompt response for all customers' requirement.

Due to ongoing product development HGLaser reserves the right to change specifications without notice. All representations about performance are subject to operating conditions.