

Wuhan HGLaser Engineering Co.,Ltd.

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If you want to know more details about us, welcome to visit our company in Wuhan! We will wholeheartedly to serve you with a company tour, inspection of samples and machine, printing samples, processing researching and other services.
The contents of this book are published through the company's research and evaluation, the content is subject to change without notice. HGLASER/ 2018-03-12







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HGTECH

For Higher Glory In Manufacture

COMPANY INTRODUCTION







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For Higher Glory In Manufacture

COMPANY INTRODUCTION



HGLASER Laser Marking Machine's Obvious Advantages

Market rapidly changed, Crisis struck, serious competition in Internet+ Eras.When

you confused about how to achieve transformation and upgrading of enterprises; When you are trying to rouse yourself but lack the strength to break through the

bottleneck of marketing; When you are still disappointed for the quality of the prod-

uct of market chaos; When you are still worried about the after sale service......Please

H5 Program Helps You Easily Get Profit (H: High)

try to find us-HGlaser.



High Precision

High Efficiency



En.hglaser.com

High Quality 1

/

/

High Cost-efficient

High Profit

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For Higher Glory In Manufacture

HGLaser is a high-tech enterprise, the main business in the field of industrial manufacturing and laser processing. Over the years we have been a leader and technology pioneer in industrial manufacturing and laser processing industry. Our products set the standard for the industry. The strict quality requirements and reliable customer service is our fundamental competitiveness.

Convincing Diversified Products

HGLaser's laser product line is very rich, covering laser welding brazing, cutting, drilling, surface peeling and marking in all areas. Variety specifications of laser marking machines are equipped with variety of different power levels and the laser source of all available wavelengths. Therefore, whatever your laser marking tasks can find the suitable laser marking machine.

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Wuhan HGLaser Engineering Coultor I 05-06

Product Lines

Markets & Applitions

Fiber Marking Series

DPSS Marking Series

CO2 Marking Series

3D Marking Series

Solutions For Industry

Global Serives

For Higher Glory In Manufacture

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CO2 Marking Series

3D Marking Series

Solutions For Industry

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HGLASER PRODUCT LINES



Fiber Marking Series

HGLaser fiber laser marking machine has a general type, large marking area rotary double-station, portable and other serieseach series has a different power modelseach model can be equipped with safety shield, can also be customized dedicated models according to user's needs at the same time.

CO2 Marking Series

HGLaser launched the CO2 laser marking machine series, with its excellent quality, perfect marking effect and perfect service system to win the attention and trust of global users.

DPSS Marking Series

 \mathbf{O}

02

DPSS laser marking machine includes infrared, green and UV series, which is suitable for metal and various non-metallic materials marking, is the first choice for high quality laser precision micro-processing.









er

 $\mathbf{04}$

3D Marking Series

HGLaser launched the 3D laser marking machine, including fiber, UV and CO2 series, which is suitable for all kinds of metals and nonmetals laser marking on 3D surface, widel, used in mobile manufacture, cubic circuits, medical equipments, moulds 3C electronics, auto parts, electronic communication, etc.

HGLASER PRODUCT LINES



Fiber Marking Series

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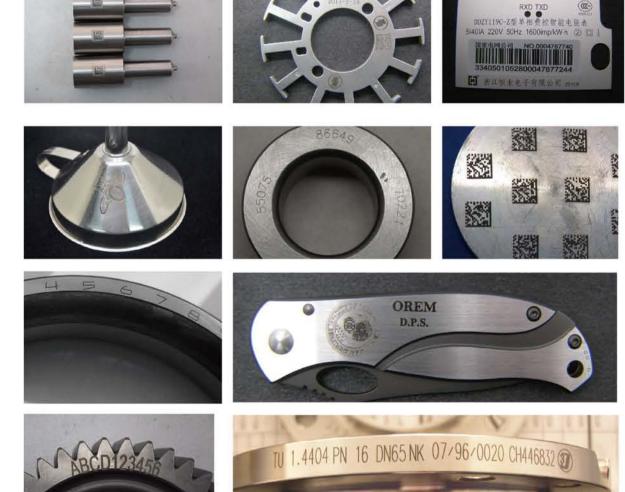
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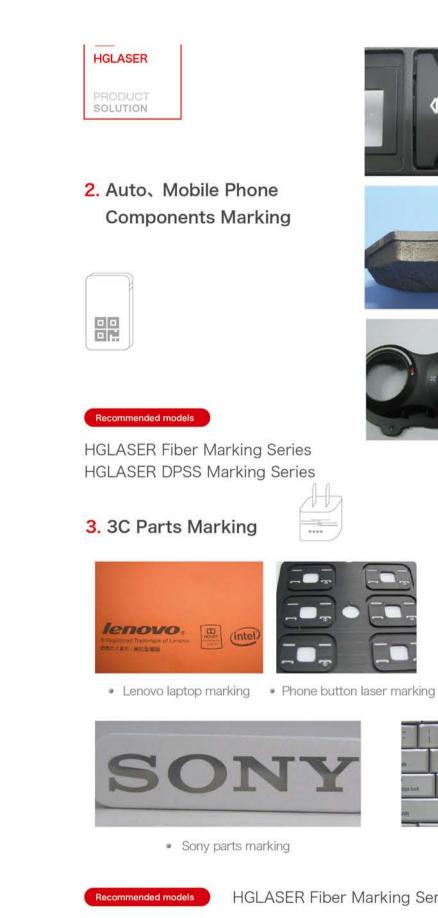
HGLASER **MARKETS & APPLICATIONS**

Laser marking is a marking method which using the high-energy density of the laser proceeds local illumination on the work piece, resulting in the surface material evaporation or chemical reaction of color variations, therefor leaving a permanent marking, with high precision marking, fast speed and clear marking characteristics etc. HGLaser has infrared, green, ultraviolet, CO2 laser light source can handle different materials and processing requirements.

1. Stainless Steel Aluminum Cast Iron Marking









HGLASER Fiber Marking Series











Charger panel laser marking



Laptop keyboard laser marking

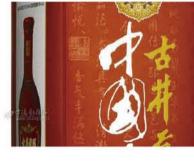
HGLASER Fiber Marking Series HGLASER DPSS Marking Series



4. Beverage, Food, Daily Packaging Marking









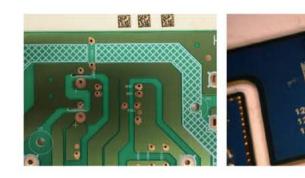


Recommended models

HGLASER CO2 Marking Series HGLASER Fiber Marking Series HGLASER DPSS Marking Series











Recommended models

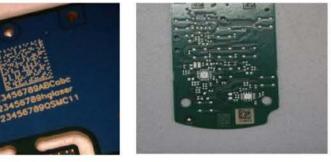
HGLASER CO2 Marking Series HGLASER DPSS UV Marking Series

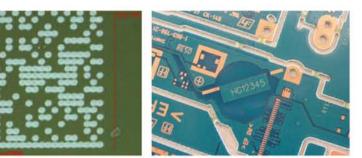














HGLASER **MARKETS & APPLICATIONS**

6. Plastic Parts Marking





Recommended models

HGLASER DPSS UV Marking Series HGLASER Fiber Marking Series HGLASER CO2 Marking Series







HGLASER

SOLUTION



Copper parts marking





Tool marking



Stainless steel copper marking
 Sanitary ware marking







Bearing marking Nameplate marking



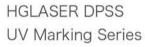
8. Glass Marking





Red wine bottle marking







Beverage bottle marking

9. Leather Marking







Recommended models

Recommended Models HGLASER DPSS Green / UV Marking Series HGLASER CO2 Marking Series



13-14





Glass bottle marking QR code, high surface damage by using co2 marking, UV marking effect is relatively smooth.

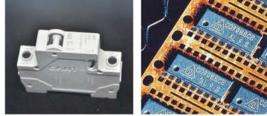


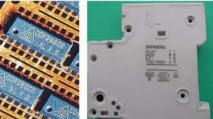
Spirit bottle marking



HGLASER **MARKETS & APPLICATIONS**

10. Electronic Components Marking





HGLASER

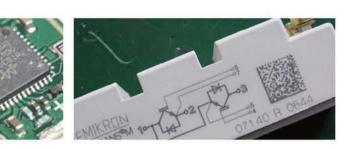
PRODUCT

SOLUTION



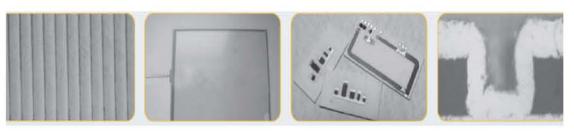
ecommended models

Recommended Models HGLASER Fiber Marking Series HGLASER DPSS UV Marking Series



12. Special Material Marking

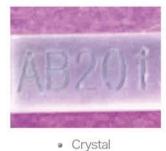




Aviation gold plating pieces



Pe pipe





11. Personal Care Products **Tobacco Marking**



Recommended models

Recommended Models HGLASER Co2 Marking Series HGLASER Fiber Marking Series











Special-shaped card



Wafer



- Ceramics
- HGLASER CO2 Marking Series HGLASER DPSS Marking Series

HGLASER **FIBER MARKING** SERIES

HGLASER ADVANTAGE

Laser marking is one of the most popular laser processing technologies. Laser marking is local irradiation in substances with high energy laser beam to make it evaporate rapidly and color change by physical or chemical reaction. These markers are permanent and hard to remove. Perfect marking effect, High marking speed and marking more clearly.

All models of the series:

LSFD series



Equipment model Nominal average output power Laser Wavelength Pulse repetition frequency Average power stability Marking range (Optional) Minimum mark line width Minimum character

height Scan speed Cooling method System power supply Total Weight Operating environment requirements

equipment dimensions

LSF series



Complete sets of Equipment model Nominal average output power Laser Wavelength Pulse repetition frequency Average power stability Marking range (Optional) Minimum mark line width Minimum character height

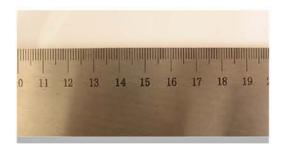
> Scan speed Cooling method

System power supply Total Weight

Operating environment requirements Complete sets of equipment dimensions

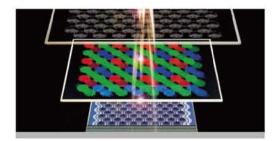
1.Perfect marking effect

Can mark various fine effects which are the users' requirement in an extremely tiny surface, has been known as "the king of marking" by client



2.Rich laser automation unit technology

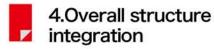
Optional visual recognition, measurement technology, motion modules, fixture and other rich automation unit technology and modules





In the same time, the processing capacity significantly increased, Speed up the pay back on user investment





Compact, small footprint, easy to transport







LSF20D	LSF30D	LSF50D	LSF100D
20W	30W	50W	100W
	10	64nm	
30~60 kHz	30~60 kHz	50~100 kHz	20~100 kHz
	<39	%rms	
F160/110×110 (Standard), F100/70	×70, F210/145×14	5, F254/175×175)
0.06mm (Depend	s on the material)		
0.2mm			
F=160mm, 7000r	nm/s		
Air cooling			
1KW/AC220V/50	Hz		
\approx 145kg (Net wei	ght), 190kg(With pa	ickaging)	
0~40°C, 30%≤R	H≤85%		
820mm×640mm	×1500mm (Length	× Width × Height)	

LSF20	LSF30	LSF50	LSF100
20W	30W	50W	100W
	106	i4nm	
20~200 kHz	30~200 kHz	50~200 kHz	50~200 kHz
	< 39	%rms	
F160/110×110 (S	Standard), F100/70	×70, F210/145×14	5, F254/175×175
0.06mm (Depends	on the material)		
0.2mm			
< 24urad (F=160	. 4.3um)		
Air cooling			
1KW/AC220V/50	Hz		
\approx 145kg (Net weig	ht), 190kg(With pa	ckaging)	
0~40°C, 30%≤Rł	H≤85%		
820mm × 640mm	×1500mm (Length	\times Width \times Height)	

HGLASER FIBER MARKING SERIES

HGL	ASER
PRC	

> Desktop Fiber Laser Marking Machine LSF - M



Equipment model	LSF - M		
Laser wavelength (nm)	1064nm		
Laser brand		Raycus	
Output power (W)	20	30	50
Galvo head marking speed	≤7000m/s		
Marking area	110mm×110mm (70mm×70mm 、145mm×145mm 、175mm×175mm, Optional)		
Pulse repetition frequency	3060kHz		
Marking standard line height	0.06mm(Depends on the material)		
Minimum character height	0.2mm		
Marking software	Customized by HGLASER, can be directly imported .ai, .plt, .dxf etc		
Communication interface	USB, RS232		
Power supply	AV220V/50HZ, Voltage fluctuation range $\pm 5\%,$ if out of the range, voltage stabilizer would be needed		
Machine power consumption	0.6KW		
Net weight	65KG		



> Suitcase Fiber Laser Marking Machin LSF - B

> Full protection fiber laser marking machine

Equipment model Laser wavelength (nm) Laser brand Output power (W) Galvo head marking speed

Marking area

Pulse repetition frequency

Marking standard line height Minimum character

height Marking software

Communication interface

Power supply

Machine power consumption

Net weight

Portable Fiber Laser Marking Machine LSF - H



Equipment model	LSF - H		
Laser wavelength (nm) Laser brand	1064nm Raycus		
Output power (W)	20	30	50
Galvo head marking speed	≤7000m/s		
Marking area	110mm×110mm (70mm×70mm 、145mm	n×145mm、175mm×17	75mm, Optional)
Pulse repetition frequency	3060kHz		
Marking standard line height	0.06mm(Depends on the material)		
Minimum character height	0.2mm		
Marking software	Customized by HGLASER, can be directly imported .ai, .plt, .dxf etc		
Communication interface	USB, RS232		
Power supply	AV220V/50HZ, Voltage fluctuation range $\pm 5\%,$ if out of the range, voltage stabilizer would be needed		
Machine power consumption	0.6KW		
Net weight	≈45KG		



Equipment model Laser wavelength (nm) Laser brand Output power (W) Galvo head marking speed

Marking area

Pulse repetition frequency

Marking standard line height

Minimum character height Marking software

Communication interface

Power supply

Machine power consumption Net weight





	LSF - H		
	1064nm		
	Raycus		
20	30		50
≤7000m/s			
110mm×110mm (70mm×70mm, 145mm	1×145mm、175mm	× 175mm, Opti	onal)
30 ~60kHz			
0.06mm(Depends on the	material)		
0.2mm			
Customized by HGLASER,	can be directly impo	orted .ai, .plt, .dx	f etc
USB, RS232			
AV220V/50HZ, Voltage flu voltage stabilizer would be		6, if out of the	range,
1KW			
85KG			

HGLASER FIBER MARKING SERIES

HGLASER PARAMETER

> HG-V series



Equipment model	HG-V20
Nominal average outputpower	20W
Laser Wavelength	1064nm
Pulse repetition frequency	20-80kHz
Average power stability	<3%rms
Marking range (Optional)	F160/110×110 (Standard), F100/70×70, F210/145×145, F254/175×175
Minimum mark line width	0.06mm(Depends on the material)
Minimum character height	0.2mm
Scan speed	F=160mm, 7000mm/s
Cooling method	Air cooling
System power supply	1KW/AC220V/50Hz
Total Weight	\approx 145kg(Net weight), 190kg(With packaging)
Operating environment requirements	0 ~ 40 °C, 30%≤RH≤85%
Complete sets of equipment dimensions	820mm×560(780)mm×1495mm (Length × Width × Height)

LSFN series



Equipment model	LSF20N	
Nominal average outputpower	20W	
Laser Wavelength	1064nm	
Pulse repetition frequency	1.6~1000kHz	
Average power stability	<3%rms	
Marking range (Optional)	F160/110×110(Standard). F100/70×70, F210/145×145, F254/175×175	
Minimum mark line width	0.06mm (Depends on the material)	
Minimum character height	0.2mm	
Scan speed	F=160mm, 7000mm/s	
Cooling method	Air cooling	
System power supply	1KW/AC220V/50Hz	
Total Weight	\approx 180kg (Net weight), 220kg(With packaging)	
Operating environment requirements	0 ~ 40 °C, 30%≤RH≤85%	
Complete sets of equipment dimensions	820mm×640mm×1450mm (Length × Width × Height)	

LSFH series



Equipment model Nominal average outputpower Laser Wavelength Pulse repetition frequency Average power stability Marking range (Optional) Minimum mark line width Minimum character height Scan speed

Cooling method System power supply Total Weight Operating environment requirements

Complete sets of equipment dimensions

> LSF Flexible car label marking machine series

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Equipment model Nominal average outputpower Laser Wavelength Pulse repetition frequency Average power stability Marking range (Optional) Minimum mark line width Minimum character height Scan speed Cooling method System power supply Total Weight Operating environment requirements Complete sets of equipment dimensions





LSF20H		
20W		
1064nm		
50~1000 kHz		
<3%rms		
F160/110×110 (Standard), F100/70×70, F210/145×145, F254/175×175		
0.06mm(Depends on the material)		
0.2mm		
F=160mm, 7000mm/s		
Air cooling		
1KW/AC220V/50Hz		
\approx 180kg (Net weight), 220kg(With packaging)		
0 ~ 40 °C, 30%≤RH≤85%		
820mm×560(780)mm×1495mm (Length × Width × Height)		

LSF20LI	
20W	
1064nm	
1.6~1000kHz	
<3%rms	
F254/175×175(Standard)	
0.06mm(Depends on the material)	
0.2mm	
≤7000mm/s	
Air cooling	
2 KW/AC220V/50Hz	
≈480kg	
10 ~ 35 °C, humidity≤90%	
1100mm×800mm×1670mm (Length × Width × Height)	

HGLASER DPSS MARKING SERIES

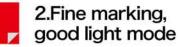


All models of the series:



1.Have independent intellectual property rights and patentedtechnology

Stable equipment performance, high reliability, to satisfy the requirement of continuous 24 hours of full load operation, suitable for large quantities needs of factory processing



Exquisite marking lines, favorable rate of customer is reaching 100%









Nominal average output power Laser Wavelength Pulse repetition frequency

Equipment model

Average power stability Marking range

(Optional) Minimum mark

line width Minimum character

height

Scan speed Cooling method

System power supply Total Weight

Operating environment requirements

Complete sets of equipment dimensions

3.Long service life, easy maintenance

The average working life is 20 times as longer as that of the traditional machine, greatly reducing the equipment maintenance amount





High electro-optical conversion efficiency, reducing the 75% energy consumption which compared with the traditional YAG marking machine







LSG10EA	LSG20EA	LSG40EA
20W	зоw	50W
	532nm	
	20~200kHz	
	<3%rms	
F160/110×110(Standa	rd), F100/60×60, F254/16	5×165
0.03mm(Depends on th	e material)	
0.06mm		
F=160mm, 7000mm/s		
Water cooling		
1.5KW/AC220V/50Hz		
≈255Kg		
10 ~ 35 °C, humidity≤9	0%	
1212mm×640mm×17	15mm (Length × Width × I	Height)



HGLASER **DPSS MARKING** SERIES

HGLASER PRODUCT PARAMETER

> LSUE UV series



quipment model	LSU3EA	LSU5EA	
lominal average output power	ЗW	5W	
aser Wavelength	355r	im	
ulse repetition requency	20~200	DkHz	
verage power tability	<3%rn	ns	
larking range Optional)	F170/105×105 (Standard), F120/140	×140, F255/170×170	
1inimum mark ne width	0.01mm(Depends on the material)		
finimum character eight	0.03mm		
epeat positioning ccuracy	<24 µrad(F170, 4.1µm)		
ong time drift	<0.6 mrad, Constant ambient tempera 8 hours of continuous work)	ture +15 °C~+35 °C,	
can speed	F=170mm, 7000mm/s		
ooling method	Water cooling		
stem power supply	1.5KW/AC220V/50Hz		
tal Weight	≈255Kg		
perating environment quirements	10 ~ 35 °C, humidity≼90%		
omplete sets of quipment dimensions	1052mm×640mm×1715mm (Length	× Width × Height)	

> LSUD UV double station



Equipment model	LSU3D	LSU5D	
Nominal average output power	ЗW	5W	
Laser Wavelength	355nm		
Pulse repetition frequency	20~20	D0kHz	
Average power stability	<3%rms		
Marking range (Optional)	F170/105×105(Standard), F120/140×140, F255/170×170		
Minimum mark line width	0.01mm(Depends on the material)		
Minimum character height	0.03mm		
Scan speed	F=170mm, 7000mm/s		
Cooling method	Water cooling		
System power supply	1.5KW/AC220V/50Hz		
Total Weight	≈400Kg		
Operating environment requirements	10 ~ 35 °C, humidity≤90%		
Complete sets of equipment dimensions	1550mm × 900mm × 1825mm (Length × Width × Height)		

> LSUE UV series



quipment model	LSU5EA	LSU12EA	
lominal average output power	5W	12W	
aser Wavelength	355	5nm	
Pulse repetition requency	20~200kHz	1~200kHz	
Average power stability	<3%	rms	
/larking range Optional)	F170/105×105(Standard), F210/140	0×140, F255/170×170	
vlinimum mark ine width	0.01mm(Depends on the material)		
Minimum character neight	0.03mm		
Repeat positioning accuracy	<24 µrad(F170, 4.1µm)		
ong time drift	<0.6 mrad, Constant ambient temperature +15 °C++35 °C, 8 hours of continuous work)		
can speed	F=170mm, 7000mm/s		
Cooling method	Water cooling		
System power supply	1.5KW/AC220V/50Hz		
otal Weight	≈350Kg		
perating environment equirements	10 ~ 35 °C, humidity ≤ 90%		
Complete sets of equipment dimensions	1240mm×700mm×1700mm (Lengt	h \times Width \times Height)	

HGLASER PRODUCT PARAMETER







HGLASER CO2 MARKING SERIES

1.Exquisite marking lines

Using imported metal sealed RF excitation CO2 laser, stable and reliable performance, high repeatability accuracy and positioning accuracy, favorable rate of customer is reaching 100%



2.Long service life

Many manufacturers used CO2 laser which service life is only 5000 hours, and HGLaser used laser which service life up to 40,000 hours or more, 24 hours full load operation, can well meet the requirements of mass production and processing of enterprise



3.Environmentally friendly

Does not produce any harmful chemical substances to the environment and the human body, which is an environmentally friendly marking method



4.Simple operation

Powerful dedicated marking software, friendly man-machine dialogue interface, generally skillful workers can quickly independent operation



HGLASER ADVANTAGE

All models of the series:

LSC10/30/55 CO₂ Laser marking machine



requirements Complete sets of equipment dimensions

> LSC100/150 CO, marking machine



Equipment model Nominal average output power Laser Wavelength Pulse repetition frequency Average power stability Marking range (Optional) Minimum mark line width Minimum character height Repeat positioning accuracy Long time drift

Scan speed Cooling method System power supply Total Weight

Operating environment requirements

Complete sets of equipment dimensions



Equipment model	LSC10	LSC30	LSC60		
Nominal average output power	10W	30W	60W		
Laser Wavelength	CO2 /10.6µm	CO2 /10.6µm	CO2 /10.6µm		
Pulse repetition frequency	≤20kHz	0-25kHz	0~25kHz		
Average power stability		±5%			
Marking range (Optional)	F150/107×107(Standard), F200/140×140, F250/175×175				
Minimum mark line width	0.1mm(Depends on the material)				
Minimum character height	0.4mm				
Scan speed	F=150mm, 7000mm/s	F=150mm, 7000mm/s			
Cooling method	Air cooling				
System power supply	1.5KW/AC220V/50Hz				
Total Weight	≈170Kg				
Operating environment requirements	Synrad 10W CO2 laser: 15 ~ 40 °C; Coherent 30W CO2 laser: 5 ~ 40 °Chumidity≤90%				
Complete sets of equipment dimensions	640mm × 930mm × 1435mm (Length × Width × Height)				

	LSC100	LSC150
	100W	150W
	CO2 /10.2~10.7 µm	CO2 /10.2~10.8µm
	0~100kHz	0~100kHz
	±10%	≤±7%
F150/1	07×107(Standard), F100/70×70), F200/140×140, F250/175×175
0.1mm(Depends on the material)	
0.4mm		
<24µr	ad(F150, 3.7μm)	
	rad, Constant ambient temperatu of continuous work	re +15 °C~+35 °C,
F=150n	nm, 7000mm/s	
Water c	ooling	
4.5KW/	AC220V/50Hz	
≈350K	g	
5 ~ 40 °	C, humidity≤90%	
	cabinet, laser profile frame, the v ted arrangement (Length $ imes$ Widt	

1、First Class 3D Marking

The laser marking can be achieved more accurately on the

surface of workpiece, and there is no defocus in processing.

Even complex surface can be handled freely. 3D dynamic

laser marking process are controlled by self developed

hardware and software, and a special three dimensional galvanometer is configured to control the laser beam mark on

3D MARKING SERIES

Technology

any 3D surface perfectly.



All models of the series:

> Fiber 3D Laser Marking Machine

No.	LSF20DS、LSF30DS、LSF50DS、LSF100DS	Remarks
Laser	20W、30W、50W、100W	Raycus/IPG Laser Source
Scanner	3D Scanner	Fine, accurate, fast and stable performance with range
		400×400mm, 600×600mm, 800×800mm
IPC	HGLaser	High stability of continuous work, and strong
		anti-interference ability, smoothly software editing and running.
Control Card	HGLaser	Stable performance.
Marking Software	HGLaser	Software is easy to operate and edit,
		also compatible with other software formats.
Lifting Mechanism	Strike 540mm	Stable and reliable performance by four guide rod lifting mechanism
Cabinet	Standard small cabinet, chiller size	High strength cabinet and load capacity, internal device with good
	1240mmX800mmX1850mm	grounding, and strong anti-interference ability.
Protecting Cover	HGLaser	For laser protection use.
Chiller	HGLaser	Air cooling.
Power Supply	1KW/AC220V/50Hz	



3、Leading 3D Graphics Processing Technology

The operation interface is friendly and suitable for various formats such as DXF, PLT, CNC, STEP, IGES and so on.





2、High Precision 3D

Positioning Technology

High speed focusing and scanning system, laser beam

base mode, short pulse, high peak power, high repeti-

tion rate, bring the perfect marking result for custom-

er.



High photoelectric conversion, long service life, simple maintenance, fast marking speed and high efficiency, independent light source, guaranteed performance and service, flexible extensible configuration, optional automatic lifting, automatic focusing and rotation functions.









3D MARKING SERIES

HGLASER PARAMETER

3D UV Laser Marking Machine

No.	LSU3DS、LSU5DS	Remarks
Laser	20W、30W、50W、100W	UV integrated laser source
Scanner	3D Scanner	Fine, accurate, fast and stable performance with range
		100×100mm, 200×200mm, 300×300mm, 400×400mm
IPC	HGLaser	High stability of continuous work, and strong anti-interference ability
		smoothly software editing and running.
Control Card	HGLaser	Stable performance.
Marking Software	HGLaser	Software is easy to operate and edit,
		also compatible with other software formats.
Lifting Mechanism	Strike 540mm	Stable and reliable performance by
		double 170 profile lifting mechanism.
Cabinet	Standard small cabinet, chiller size	High strength cabinet and load capacity, internal device with
	1240*700*1698mm	good grounding, and strong anti-interference ability.
Protecting Cover	HGLaser	For laser protection use.
Chiller	HGLaser	Integrated circulating water cooling.
Power Supply	1.5KW/AC220V/50Hz	

> LSC30DS Laser Marking Machine

No.	LSC10DS, LSC30DS, LSC100DS, LSC150DS
Laser	10W、30W、100W、150W
Scanner	3D Scanner
IPC	HGLaser
Control Card	HGLaser
Marking Software	HGLaser
Lifting Mechanism	Strike 285mm
Cabinet	Standard cabinet size
	1200*1100*1712mm
Protecting Cover	HGLaser
Chiller	HGLaser
Power Supply	1.5KW/AC220V/50Hz (10W、20W)
	4.5KW/AC220V/50Hz (100W, 150W)

3D Marking Series









Remarks

CO2 Laser Source

- Fine, accurate, fast and stable performance with range
- 400×400mm, 600×600mm, 800×800mm
- High stability of continuous work, and strong anti-interference ability,
- smoothly software editing and running.
- Stable performance.
- Software is easy to operate and edit,
- also compatible with other software formats.
- Stable and reliable performance by double 170 profile lifting mechanism.
- High strength cabinet and load capacity, internal device
- with good grounding, and strong anti-interference ability.
- For laser protection use.
- Air cooling.



PRODUCTS

CONVINCING MARKING EFFECT





Wuhan HCLaser Engineering Co.,Ltd I 33-34

Continuously persist "Client as God and Market Orientation", HGLASER has established perfect market service system. More than 40% of employees are market sales and service staffs. We have set up more than 40 offices in domestic, distributed in major central cities, so as to implement "Closer to the user, extending the service". The nationwide sales network ensures timely and quick response to customers.

For more examples please see: http://en.hglaser.com/

Automobile Industry

3C Industry

Semiconductor 111117

White home appliances

Brittle material

Printed circuit board

ALL DE LE DE







Wuhan Huagong Laser Engineering Co.,Ltd.

ADD: HUST Industry District East Lake Hi-tech Development Zone, Wuhan, Hubei, P.R. China PC: 430223 TEL: 0086 27 87180263 FAX: 0086 27 87180210 EMAIL: info@hglaser.com WEB: en.hglaser.com High Efficient and Precision HGLASER Laser Online Marking Application Solution

HGLASER

ONLINE LASER MARKING APPLICATION SOLUTION

Company Vision

HGLASER is a high-tech enterprise with business scope of laser processing technology and manufacture . As the pioneer of laser industry in China, HGLASER takes customers' requirement and service as our fundamental interests.

HGLASER Flying Series products can noncontact mark clear characters or graphs on fast moving material . The main advantages of our products are consumable free and working well even in the adverse working condition or complex production line.

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2

HGTECH



Diversified Products

Flying UV Laser Marking Series Flying Fiber Laser Marking Series Flying CO2 Laser Marking Series





There are two ways for anti-counterfeit, that is laser mark and jet ink . Coding has been used in commodity business, food and pharmaceuticals

Laser Mark VS Ink Jet

Laser Marker	Ink Jet
e dot matrics or line ict surface and changeable	Removable and changeable
laser marking state and dynamic state	Only working on dynamic state
nber, lot number, bar code, raphic	Marking bar code, lot number and simple graphic
ous working e and little environment	High failure rate Great environment affection
erface with high resolution	Low resolution
nd marking head can be uction line in various plant	Some machines should be connected with air compressor
	Low
	High
data transmission and	Limited ability of data transmission and processing
friendly (GB7247-87;	Environmental-pollution

Application Field

Bottle Beverage

- 1) Production Date Marking
- 2) QR Code Marking
- 3) Traceability Code Marking





- There are two ways for anti-counterfeit, that is laser mark and jet ink . Coding has been used in commodity business, food and pharmaceuticals industry.
- Flying 5U Laser Marking Machine is applied for QR code marking on bottle cap made of HDPE, PE and PP material.

Canned Beverage

- 1) QR Code or Winning Number Marking Inside the Tab 2)QR Code Marking on Can
- Surface
- 3) Production Date Marking on Can Surface





• Flying 20F Fiber Laser Marking Machine is applied for QR code or production date marking on aluminum can

• Flying 50C CO₂ Laser Marking Machine is applied for QR code or production date marking on tin plate

這州走客

君乐宝

雪花器SNOW

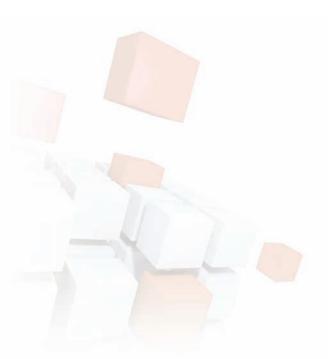
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- Flying UV Laser Marking Machine is applied for production date or QR code marking on HDPE material.
- Flying CO₂ Laser Marking Machine is applied for production date marking on TETRAPAK.



• Flying CO₂ Laser Marking Series are applied for production date marking on glass and ceramics bottle ,and is also the best choice for traceability code and product information marking on corrugated box.









- 1) Production Date Marking
- 2) QR Code Marking
- 3) Traceability Code Marking





- 1) Production Date Marking
- 2) QR Code Marking
- 3) Traceability Code Marking





Application Field

• Flying CO₂ Series are applied for production date marking on PE or PET film and best choice for QR code and production date marking on paper box.



LEAF

WHITE

20150422 06

• Flying UV Series are applied for QR code and production date marking on PE or PET film.









Production Date and QR Code Marking





Packed Food







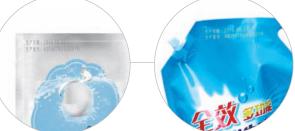
• Flying UV Series are applied for production date marking on • PE or ABS material

• Flying Fiber Series are applied for QR code and production date marking on package

Flying CO_2 Series are applied for QR code and production date marking on PE or HDPE material



Bag Production Date and QR Code Marking











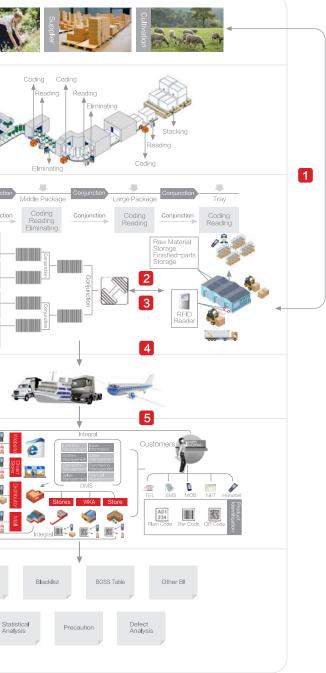




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QCTS—Quality Control Tracing System is a user-configurable, validated, off-theshelf tool, used to quickly identify issues that impact quality and cost, and to ensure that appropriate follow-up and actions are taken. It's widely used in consumer products manufacturers, such as liquor, food, beverage, tobacco, medicine, daily chemical, household appliances, clothing, mechanical manufacturing and etc.



Flying CO₂ Laser Marking Series



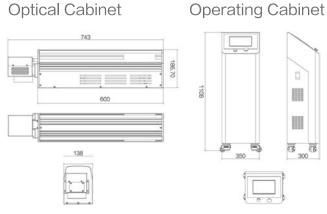
Details

- Professional industrial laser source to ensure high speed and consistency of marking
- 24-hour's stable working to meet the need of volume production
- Human conversation interface

Application

It's suitable for various non-metallic material and some metallic material, such as PVC, paper, rubber, wood, glass, ceramics, PET, plastic, HDPE, leather and etc. It's mostly applied for package box, package bag, thin film, food can, glass bottle, beverage bottle, HDPE bottle, tube, cable and electronic components.

Optical Cabinet



Technical Parameters

Model		Flying10C / 30C / 55C / 70C / 100C			
	Focusing Lens	F=160	F=100(Optional)	F=210(Optional)	F=254(Optional)
	Marking Area	110*110	69*69	145*145	175*175
	Working Distance	152.7 ± 6mm	100.9 ± 4mm	204.3 ± 8mm	256 ± 10mm
Marking	Marking Speed	400 cha	/sec(350/500 Optior	nal),Times New Roma	an, 2mm(Height)
Parameter	Repositioning Resolution	<24 µ rad(F160,3.7 µ m)			
	Min.Marking Character	0.4mm			
	Min.Line Width	0.1mm(Depending on Material)			
	Wavelength	CO2/10.6 µm,CO2/10.2 µm,CO2/9.3 µm			
Marking Laser	Output Power	10/30/55/70/100			
	Power Stability	±5%rms			
	Pulse Repetition Frequency		0 <	≤ F ≤ 25kHz	
Indicator Laser	Wavelength	Red Light ,650nm			
	Output Power	<5mW			
	Operating Environment	0-35℃, Humidity≤ 90%			
Others	Cooling Method	Air Cooling			



Technical Parameters

Model		Flying 10F/20F/30F/50F				
	Focusing Lens	F=160	F=100(Optional)	F=210(Optional)	F=254(Optional)	
	Marking Area	110*110	69*69	145*145	175*175	
	Working Distance	180 ± 3.6mm	107 ± 2mm	226 ± 4.5mm	278±5.6mm	
Marking Parameter	Marking Speed	500 cha/sec(400/640 Optional),Times New Roman, 1mm(Height)				
	Repositioning Resolution	<2 µ rad(F160,0.36 µ m)				
	Min.Marking Character	0.2mm				
	Min.Line Width	60 µ m(Depending on Material)				
	Wavelength	Fiber / 1064nm				
Marking Laser	Output Power	10/20/30/50				
	Power Stability	<3%rms				
	Pulse Repetition Frequency		20KHz ≤	F ≤ 80kHz		
Indicator Laser	Wavelength	LD Red Light ,650nm				
	Output Power	<5mW				
Others	Operating Environment	0-35℃, Humidity≤ 90%				
Others	Cooling Method	Air Cooling				

Flying Fiber Laser Marking Series

HGLASER PRODUCTS

Details

- Compact size and easy-installed bracket to satisfy production line in complex working conditions
- Professional industrial laser source to ensure high speed and consistency of marking
- 24-hour's stable working to meet the need of volume production
- High photoelectric conversion efficiency , consumable free and long life time
- Human conversation interface

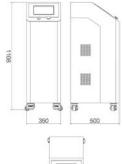
Application

It's suitable for various metallic material and some non-metallic material. It's applied for metallic material after surface processing, PVC, aluminum film, rubber, plastic and HDPE.

Optical Cabinet

638.5 115

Operating Cabinet





Flying UV Laser Marking Series



Details

- Compact size and easy-installed bracket to satisfy production line in complex working conditions
- Professional industrial laser source to ensure high speed and consistency of marking
- 24-hour's stable working to meet the need of volume production
- High photoelectric conversion efficiency , consumable free and long life time
- Human conversation interface

Application

It's widely applied for eletronic components, intergrated circuit, metallic tool, auto parts.

Optical Cabinet

Operating Cabinet 111 8 8 16 500 560 250

Technical Parameters

Model	Flying3U	Flying5U	Flying12U	Remarks
Wavelength		355nm		
Laser Source		HUARAY		
Output Power	≥3	≥5	≥12	
Marking Speed	≥7m/s			
Marking Area	110*110mm			145*145mm(Optional)
Focal Length	180mm			
Character		Dot Matricx / Line		
Mode	Static/Dynamic			Depend on Marking Content
Online Marking Speed	≤ 120m/min			
Material	Label/Paper/PET/HDPE/PE			
Working Temperature	5−35℃			
Working Humidity	Humidity≤ 95%			
Structural Material	Aluminium Alloy/Stainless Steel			
Edit Mode	Computer Software			
Communication Interface	USB;RS232;Internet Access			
Power Supply	AV220V/50HZ			
Power Consumption	1500W	1600W	2000W	





8h Feedback online + 24h Solution Local Installation and Training Service

As the pioneer of Chinese laser industry, HGLASER has sold thousands of machines all around the world. HGLASER has overseas branches and offices in Australia, USA, India, Vietnam, Malaysia and Taiwan. With local installation and service members, HGLASER has always provided customer-oriented solutions.