

HGTECH Wechat



HGTECH Mob Web

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SERVICE CENTRE

Korea / Thailand / Malaysia / Mexico / USA / Argentina / Brazil / Iran / Russia / Taiwan / India / Indonesia / Poland / Vietnam

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.

High Efficiency and Precision

# HGLASER

Inline Marking Application Solution

Version : No.HG-FD-01



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HGLASER  
PRODUCTS



## 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.





## Diversified Products

FlyingU UV Laser Marking Series  
FlyingF Fiber Laser Marking Series  
FlyingC CO2 Laser Marking Series

## Laser Mark VS Ink Jet

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.

Laser Wave Length :355 nm  
UV Laser Source  
Limit Thermal Region  
Small Focusing Spot Size  
Especially for Special Material Marking

### FlyingU UV Laser Marking Series



### FlyingF Fiber Laser Marking Series








Good Beam Mode  
Reliable and Stable System  
Laser Source Life Over 100,000 Hours  
Especially for Long-distance Transmission  
in Complex Production Line

Imported MRF CO2 Laser Source  
Good Beam Mode  
Maintenance-free and Installation-flexible  
Especially for Working in Various Conditions

### FlyingC CO2 Laser Marking Series



## Laser Marking VS Ink Jet

		 Laser Marker	 Ink Jet
 Performance	Anti-counterfeit	Character can be dot matrix or line Marking on product surface Non-removable and changeable	Removable and changeable
	Working Condition	High efficiency Online Non-stop laser marking Working on static state and dynamic state	Only working on dynamic state
	Flexibility	Marking serial number, lot number, bar code, QR code, logo, graphic	Marking bar code, lot number and simple graphic
	Reliability	24-hour continuous working Maintenance free and little environment affection	High failure rate Great environment affection
 Operation & Installation	Use	Windows and interface with high resolution	Low resolution
	Installation	Compact size and marking head can be installed on production line in various plant	Some machines should be connected with air compressor
 Cost	Initial Cost	High	Low
	Operating Cost	Low	High
 Data Processing	——	Strong ability of data transmission and processing	Limited ability of data transmission and processing
 Environmental Protection and Safety	——	Environmental-friendly ( GB7247-87; GB10320-88 )	Environmental-pollution

Beverage Industry

Food Industry

Bottle Beverage

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



- FlyingC 30C Laser Marking Machine is applied for production date marking on bottle beverage made of PVC, PP, PE and PET material , is also best choice for traceability code and product information marking on corrugated box .
- FlyingU 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 InsidetheTab
- 2) QR Code Marking on Can Surface



- FlyingF 20F Fiber Laser Marking Machine is applied for QR code or production date marking on aluminum can
- FlyingC 50C CO2 Laser Marking Machine is applied for QR code or production date marking on tin plate.

Dairy Package

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



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

Liquor Package

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



- FlyingC 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.

Canned Food

Production Date and QR Code Marking



Bagged Food

Production Date and QR Code Marking



Packed Food

Production Date and QR Code Marking



Typical Clients



Typical Clients







## Pipe Industry



## Daily Chemical Industry

- FlyingU UV Series are applied for production date marking on PE or ABS material
- FlyingF Fiber Series are applied for QR code and production date marking on package
- FlyingC CO2 Series are applied for QR code and production date marking on PE or HDPE material



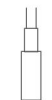
### Pipe

Production Date and QR Code Marking



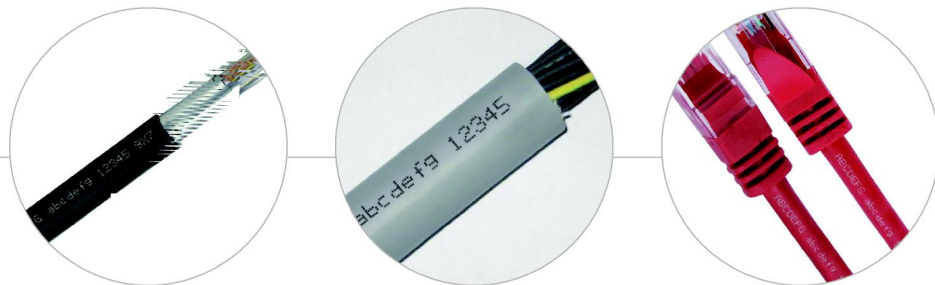
### Bottle Package

Production Date and QR Code Marking



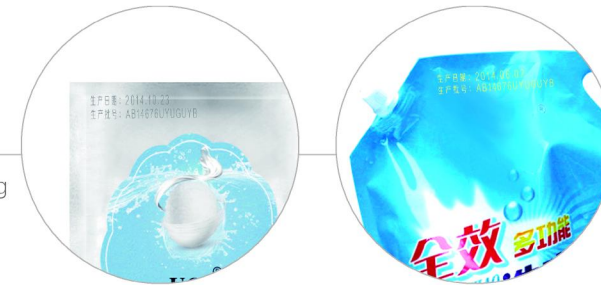
### Cable

Production Date and QR Code Marking



### Bag

Production Date and QR Code Marking



### Profile

Production Date and QR Code Marking



### Carton

Production Date and QR Code Marking



### Typical Clients



### Typical Clients

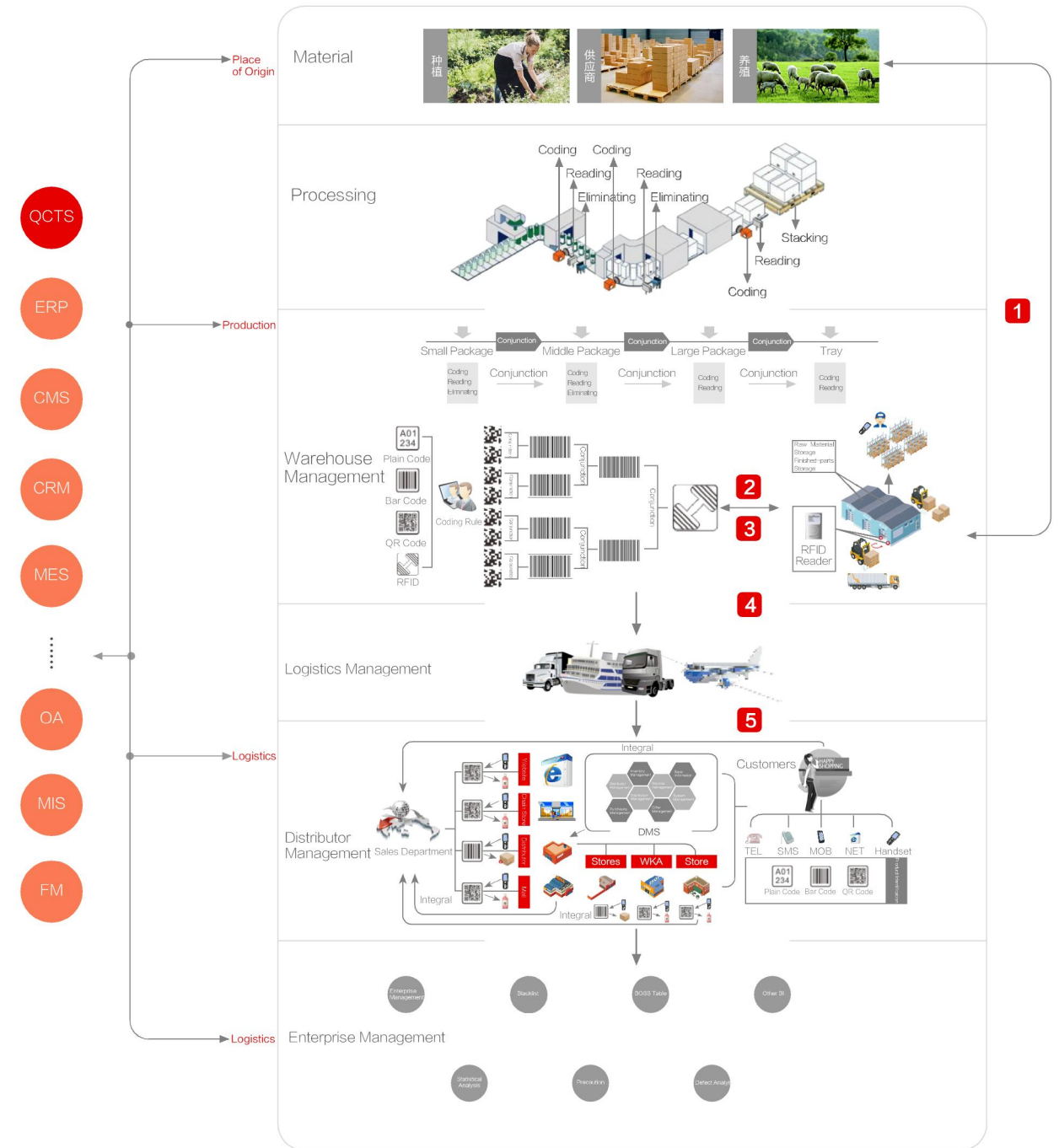


# Typical Applications



# Qcts Quality Control Tracing system

QCTS-Quality Control Tracing System is a user-configurable, validated, off-the-shelf 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.



## Typical Clients





## FlyingC CO2 Laser Marking Series



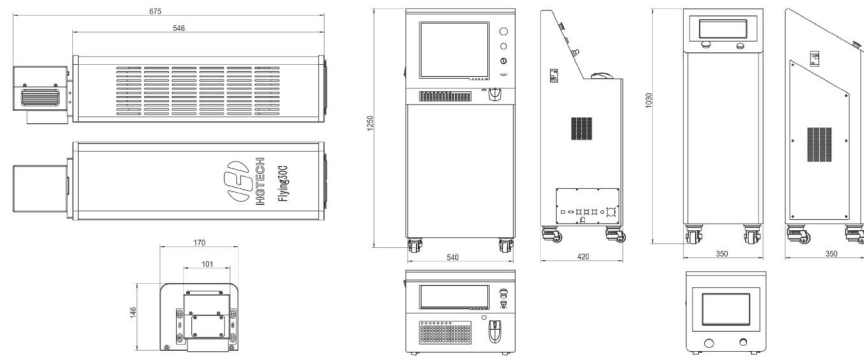
### Details

- 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 ——— Operating Cabinet



### Technical Parameters

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

## FlyingF Fiber Laser Marking Series



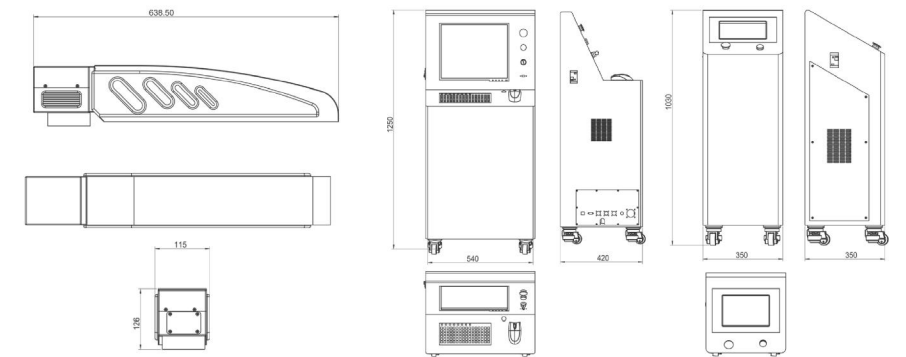
### Details

- 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 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 ——— Operating Cabinet



### Application

Model		FlyingF 10F / 20F / 30F / 50F			
Marking Parameter	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 Speed	500 cha/sec(400/640 Optional), Times New Roman, 1mm(Height)			
	Repositioning Resolution	<2μ rad(F160, 0.36μm)			
	Min.Marking Character	0.2mm			
	Min.Line Width	60μm(Depending on Material)			
Marking Laser	Wavelength	Fiber / 1064nm			
	Output Power	10/20/30/50			
	Power Stability	<3%rms			
Indicator Laser	Pulse Repetition Frequency	20KHz ≤ F ≤ 80KHz			
	Wavelength	LD Red Light ,650nm			
	Output Power	<5mW			
Others	Operating Environment	0-35℃, Humidity≤ 90%			
	Cooling Method	Air Cooling			

# FlyingU UV Laser Marking Series



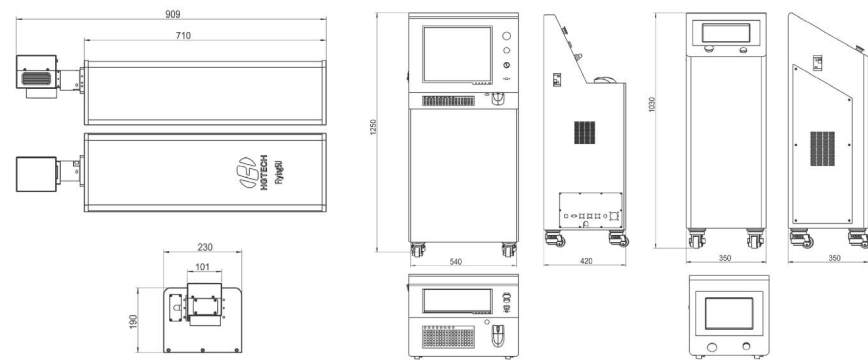
## Details

- 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 electronic components, intergrated circuit, metallic tool, auto parts, plastic products

## Optical Cabinet ——— Operating Cabinet



HUARAY

## Application

Model	FlyingU 3U / 5U / 12U / 20U			Remarks
Wavelength	355			
Marking Speed	≥ 7m/s			
Marking Area	110x110mm			45x145mm(Optional)
Focal Length	180mm			
Character	Dot Matrixx / Line			
Mode	Static/Dynamic			
Online Marking Speed	≤ 120m/min			Depend on Marking Content
Material	Label/Paper/PET/HDPE/PE			
Working Temperature	5-35°C			
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	

# After-sale Service



## 8h Feedback inline + 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 .