

3D UV Laser Engraving Machine

——MY-UV03-3D



3D UV Laser Engraving Machine - V

Description

UV Laser Marking Machine adopts INNO UV Laser source, the third-order cavity frequency doubling technology, compared with infrared laser, UV lasers at 355nm provide a small-size spot and a big focal depth, short laser wavelength interrupts molecular chains of material, can greatly reduces the mechanical deformation and temperature distortion of materials, it is a cold laser, mainly used for super precise marking and engraving, particularly suitable for food, pharmaceutical packaging material marking, micro porous, high-speed dividing for glass, complex graphics wafer cutting on silicon materials, etc.

UV laser is an ultraviolet laser beam which generated after the high-power multimode diode pumped laser and then frequency doubling again, and mark through computer-controlled high-speed scanning galvanometer deflection to change the path of laser beam automatically.

Feature

1. High-quality laser beam, small-size spot, can do super precise marking & engraving.
2. Perfect marking performance:
 - (1) Short UV wavelength 355nm reduces heat effect on work piece;
 - (2) Precise marking effect and available repeatable marking;
 - (3) High precision scanning galvanometer laser head;
 - (4) Extraordinary fine spot guarantees perfect marking performance;
 - (5) Non-contact marking. Permanent mark.
3. Heat affected area is very small, no heating effect, material will not be burned or deformed.
4. High marking speed, high efficiency, stable performance, small size, low power consumption.
5. Very suitable for the material which is greatly reacted by thermal radiation, can work with production line to feed and discharge materials automatically.

Application

1. UV Laser Marking Machine is mainly used in precision processing of high-end market, handicrafts, medicine, cosmetics, video and other polymer materials packaging bottle, the mark is very precise and stands wear, better than ink printing and pollution-free;
2. The flexible PCB marking and scribing, silicon and wafer micro hole, blind hole processing;
3. LCD glass QR code marking, glass wares punching, metal surface coating marking, plastic buttons, communications equipment, gifts and so on.

Parameter

Model	MY-UV03-V
Laser Power	3W / 5W / 10W
Laser Wavelength	355nm
Working Area	100*100mm
Optional Working Area	70*70mm / 140*140mm / 200*200mm / 250*250mm
Beam Quality	M2 <1.2
Output Laser Power	0~100% adjustable
Output Frequency	30KHz~150KHz adjustable
Power Stability (8h)	<±1%rms
Pulse Width	10-50ns
Focus Spot Diameter	<0.01mm
UV Laser Source (Manufacturer)	INNO UV Laser
Scan Head	FeelTech 3D Scanning System
Controller and Software	FeelTech LenMark 3DS
Marking Speed	7000mm/s
Min. Line Width	≤0.005mm
Min. Character	0.15mm
Repeated Precision	±0.003mm
Compatible Format of File	PLT, DXF, AI, BMP, JPG and so on
System Operation Environment	Windows XP / 7 / 8 / 10 / 11 - 32 / 64bits
Cooling Mode	Air Cooling
Operation Environment	15°C~35°C
Lifespan of UV Laser Source	Max. 20,000 hours
Optional (Not free of charge)	Rotary Device, Moving Table, Lens, Fume Purifier, other customized Automatic Matching System

Shipment

Within 5~7 working days after receiving your payment.

Warranty

Whole machine has a warranty period of 12 months since the production date.

Training







1~3 working-days training free of charge in factory. Oversea training is available, the buyer can discuss the details with WISELY salesman.



Advantage

- 1) China top brand INNO laser source ensures its stable performance, high-quality laser beam and excellent laser output.
- 2) Fully enclosed structure design, with a sturdy protective shell, protect the operator from laser radiation.
- 3) The machine can be suitable for precision processing such as handicrafts, medicine, cosmetics, video, polymer materials packaging bottle, ect.

Main Configurations

	1. INNO UV Laser Source Beam quality: $M2 < 1.2$; average power stability: $< \pm 3\%$ over 24 hours; longer lifespan: max 20,000 hours.		4. Taiwan MW Laser Power Supply Famous Taiwan MeanWell laser power supply. High-quality ensures its stable performance and long lifespan.
	2. FeelTech Controller Card 1. 8 channels input/4 channels output 2. Support communication protocol XYZ-100 and XYZ-100-Z 3. Four step, servo motor control		5. Industry computer and DELL monitor Genuine English OS W8/10 + Intel i7 CPU + 8G Kingston Storage + 120G Kingston SSD + 1TB WD HDD + Asus Motherboard + 2GB Asus Graphics Card + Asus DVD Drive + LOGI Keyboard and Mouse + DELL Monitor.
	3. FeelTech 3D Scanning System Double driving Z axis dynamic focus module design, response frequency $\geq 100\text{Hz}$ @ $\pm 10^\circ$, easy to achieve Z depth 150mm @ 300mm x 300mm, applied to platform, 3D surface high speed processing.		6. Water Chiller The water chiller designed for cooling UV laser source, 2 temperature control models can guarantee the temperature of water for laser source stability.

Sample Gallery



Wine Glass & Crystal Trophy & QR Code Marking



Air Switch

Adqpter & LED Light

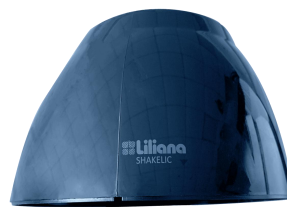


Power Bank & Charger

Keyboard & Mouse



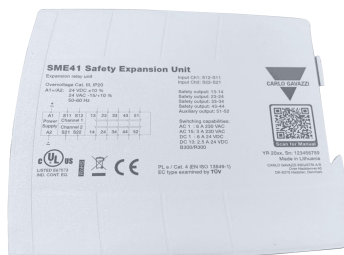
Mobile Phones Case



Electrical Shell Marking



Bottle Cap Marking



IC Card Marking



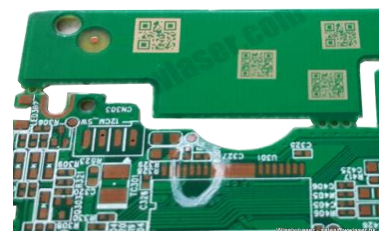
Medical wristband Marking



Face Mask Marking



Wood & Crystal Engraving











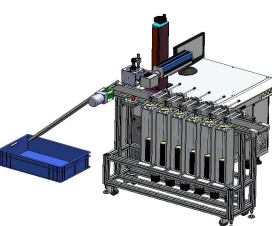

PBC

Applicate Materials

Non-metallic

ABS
 Acrylic
 Ceramics
 Glass
 Leather
 Nylon
 PCB
 Plastic
 PVC
 Rubber
 Wood
 Metal
 Aluminum
 Brass
 Copper
 Gold
 Iron
 Silver
 Stainless
 And more

Automation For Laser Marking Machine

	1. Bearings Auto Marking Machine The machine is equipped with a set of conveyor, the transmission speed can be adjusted easily, and the cylinder position can be adjusted according to the product.		6. Double Conveyors Bearings Auto Marking Machine This machine is equipped with two sets of conveyors, designed to massive bearings marking or similar objects marking. The two conveyors can do dual marking, alternately feeding and unloading, good for improving the processing efficiency.
	2. X-Slide Moving Table Laser System There are two work stations, and one fixture can be placed on each work station. The stations alternately operate to complete repetitive action as loading, marking, moving, unloading, can expand working area, save time and reduce labor cost.		7. Fiber Laser With X-slide Long Table This 1,500mm long automation is special for the aluminum, brass, stainless ruler marking, used for oil companies and gas station. It is also good for other long-size products marking.
	3. Auto Feeding System The machine is equipped with PLC controller, motor driving system and linear guide rail transmission system. The robotic arm automates feedind & unloading, suitable for nameplate of eletronics, food, beverages, small gift and so on.		8. Metal Plate Auto Feeding & Marking System The machine is equipped with PLC controller, motor driving system and air cylinder system. It is specially for thin metal palte auto feedind & marking, suitable for nameplate mass marking.
	4. Gantry Laser Marking Machine 600*600 The X/Y Slide Auto moving table 600x600mm, it is equipped with high precision X/Y ball screw slide and Leadshine / Servo Motor, designed for big size products marking and mass production are conducive to high efficiency of the production line. working size can be customized.		9. Automatic Rotation Table The rotation is equipped with multiple groove, suitable for pen, similar cylinders marking. It's good for high-efficiency marking, time-saving and lower cost.
	5. Medal Auto Feeding Marking System 6-piston automation with CCD camera, good for madels batch marking. The automation is equipped with PLC, control software and stepper driving system. can improve marking efficiency, reduce labor cost.		10. CCD&Conveyor Auto Laser Marker This conveyor automation with CCD camera, good for small and similar products mass marking. The automation is equipped with PLC, control software, stepper driving system. can improve marking efficiency of machine, reduce labor cost.

Welcome to consult for more automatic laser machine systems.....

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