

UV Laser Marking Machine

—MY-UV03







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Description

UV Laser Marking Machine adopts INNGU 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		
Laser Power	3W		
Optional Laser Power	5W / 7W / 10W		
Laser Wavelength	355nm		
Working Area	100*100mm		
Optional Working Area	70*70mm / 140*140mm / 175*175mm / 200*200mm / 300*300mm		
Beam Quality	M2 <1.2		
Output Laser Power	0~100% adjustable		
Output Frequency	5KHz~80KHz adjustable		
Power Stability (8h)	<±1%rms		
Pulse Width	10-50ns		
Focus Spot Diameter	<0.01mm		
UV Laser Source (Manufacturer)	INNGU Laser		
Scan Head	GalvoTech		
Controller and Software	BJJCZ controller and EZCAD software		
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 - 32 / 64bits		
Cooling Mode	Water Cooling		
Operation Environment	15℃~35℃		
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.

WISELYlasermachine





Advantage

- 1) China top brand INNGU laser source ensures its stable performance, high-quality laser beam and excellent laser output.
- 2) Portable style, smaller size, easy to transport, can work with constomized automatic matching system.
- 3) The machine can be suitable for precision processing such as handicrafts, medicine, cosmetics, video, polymer materials packaging bottle, ect.

Main Configurations

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	1. INNGU Laser Source Beam quality: M2<1.2; average power stability: <±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. Control System & Software Genuine BJJCZ controller, with stable preformance and high reliability. EZCAD software is easy to operate, with high compatibility, can support various file, PLT, BMP, JPG, DXF, AI, ect.		5. Wavelength F-theta Lens Top brand Wavelengh F-theta Lens. Small-size focus spot, excellent marking effect, low consumption, high stability.		
	3. Scanning Head Customized scanner specially for High series laser marking application, its speed up to 7,000 mm/s, with high precision, low temperature drift and high stability.		6. 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





Automation For Laser Marking Machine

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	1. Conveyor For Bearing Marking System The machine is equipped with a set of conveyor, the tranmission speed can be adjusted easily, and the cylinder position can be adjusted according to the product.		6. Double Conveyors Bearing Marking System This machine is equipped with two sets of conveyors, designed to massive bearings marking or similar objects marking. The two conveyors can do double marking, alternately feeding and unloading, good for improving the processing efficiency.
Ť	2. Auto 1D Moving Table		7. Ruler Marking 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 expend working area, saves time and reduce labor cost.		This 4,000mm long automation is special for the aluminum, brass, stainless ruler marking, used for oil companies and gas station. It also good for other long size products marking.
1	3. Auto Feeding System	÷	8. Auto Focus 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.		This auto-focus makes it easy to achieve auto-focusing on the different thicknesses of materials, which is a perfect alternative to manual focusing, the sensor has the characteristics of high sensing precision, accurate testing distance, fast feeback.
	4. Rotary For Lamp & LED	1	9. Pen Marking System
	The rotation table is equipped with high precision DD Motor, designed for marking LED light or similar object. 8 working pistons, integrates marking and testing, are conducive to high efficiency of the production line.		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	5. Medal Auto Feeding Marking system	e	10. Medal Auto Feeding Marking system
	6 pistons automation with CCD camera, good for madels batch marking. The automation is equipped with PLC, control software, stepper driving system. can improve marking efficiency of machine, reduce labor cost.		1 piston automation with CCD camera, good for madels batch 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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