

CO2 Laser Marking Machine with Metal Tube



Product Instruction & Application :

CO2 Laser marking machine uses the CO2 gas as the laser medium, which wavelength is 10.6 μm , belong to the mid-infrared band. CO2 lasers have the relatively large power and high electro-optical conversion efficiency. CO2 laser is based on CO2 gas as the working medium, the CO2 gas and the other auxiliary gas fill discharge tube. When a high voltage is applied to the electrode, a volatile discharge occurs in the discharge tube, which causes the gas molecules to emit lasers. After amplifying the released laser energy, laser processing can be carried out. CO2 Laser marking machine is widely used in craft gifts, plexiglass, garment leather, wood and paper, food packaging, electronic components, PCB, flexible circuit boards, ceramic substrates, semiconductor, crystal glass, plastic connectors, silicone rubber keys, SMD components and graphic marking on various materials.



Features :

CO2 Laser Machine can be divided into scribed and dot-matrix laser technology for marking text. Graphics and variable data are used on various material surfaces, such as plastic, glass, paper and cardboard boxes. Because the laser machine does not need ink and other consumables, the laser marking method is more economical and has no impact on the environment. The following lists are the advantages of laser printer equipment.

1. Good reliability : Laser Coding Machine has mature industrial design, wide temperature adaptability range (5–45 C), good stability, low failure rate, good abrasion resistance; It can work continuously for a long time.

2. No consumables and low cost : Laser coding Machine does not need any consumables, the operation cost of equipment is very low, and the processing cost is also low. Maintenance-free operation avoids frequent unplanned shutdown, and will not cause direct losses to production and operation enterprises.

3. Good effect, high anti-counterfeiting function : The laser printer has clear marking, high fidelity and non-erasability, which makes it have high anti-counterfeiting ability and unique effect. Laser printer marking content, suitable for a variety of color products. In the process of rapid product movement, the scribed high-quality laser jet code with no contact and no pause is carried out. Never erase.

4. Environmental protection and energy saving : Laser coding machine does not need any consumables, and does not produce any chemicals harmful to the environment and human body. It is an environmentally friendly high-tech product. The power consumption is very small and the electro-optic conversion efficiency is high.

SPECIFICATION

Model	TLPCO2-10	TLPCO2-30	TLPCO2-60
The Maximum Laser Power	10 W	30W	60W
Laser Wavelength	10.6 μm	10.6 μm	10.6 μm
Laser Frequency	≤ 20 Khz	≤ 20 Khz	≤ 20 Khz
Engraving Depth	≤ 2 mm	≤ 3 mm	≤ 5 mm
Marking Range	100x100 mm	100x100 mm	100x100 mm
Marking Speed	≤ 7000 mm/s	≤ 7000 mm/s	≤ 7000 mm/s
Minimum Character	0.20 mm	0.40 mm	0.40 mm
Minimum Line Width	0.05 mm	0.1 mm	0.15 mm
Coding Speed	≤ 60 characters/s	≤ 60 characters/s	≤ 60 characters/s
Line Speed	≤ 120 m/min	≤ 120 m/min	≤ 120 m/min
Repeatability Accuracy	0.01 mm	0.01 mm	0.01 mm
The Whole Power	600 W	800 W	1000 W
Electricity Requirement	220 V/50 Hz	220 V/50 Hz	220 V/50 Hz