WHAT ARE THE ADVANTAGES OF CO2 LASER CUTTING MACHINE?

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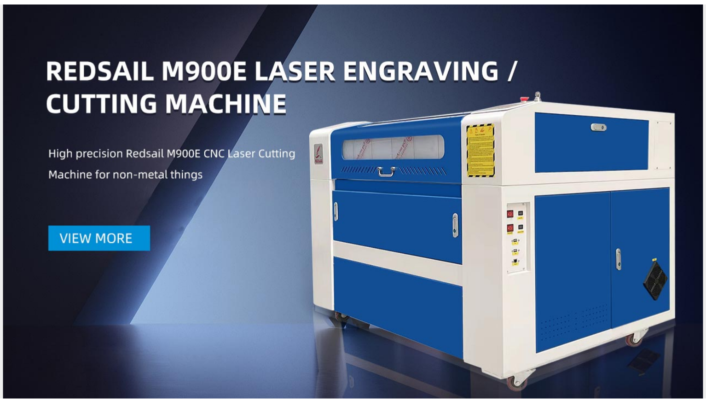

Category: Laser Cutter News

The CO2 laser cutting machine is a CNC laser for cutting and engraving materials, using CO2 laser technology for cutting and engraving. Since CO2 laser cutting machines can also engrave, CO2 laser cutting machines are also called CO2 laser engraving machines or CO2 laser engraving machines. Also, some people are also known as wood laser cutters or acrylic laser cutters. The CO2 laser cutting machine uses a focusing lens that can focus on the surface of the material to melt the material. At the same time, the compressed gas equipped with the machine blows away the molten material. The laser beam moves along a certain path, forming a certain shape of the slit. Then complete the cutting process.

Advantages of CO2 laser cutting machine

Fast cutting speed, high cutting efficiency, small heat-affected zone, narrow incision, suitable for cutting non-metallic materials, no direct contact with processing materials, and not limited by the shape of cutting materials.

Disadvantages of CO2 laser cutting machines

Low light conversion rate, high energy consumption, high operating costs, need to maintain several consumables CO2 laser cutting machine application 40W CO2 laser wood cutting machine can be made on steel, 90W CO2 laser engraving box can directly form steel structure. Due to the use of oxygen as an auxiliary gas, CO2 CNC laser cutting machines of 150W and above can cut 1mm thick steel plates. Generally speaking, although CO2 laser cutting machines can work with soft metals such as aluminum and titanium, the cutting efficiency is low. So CO2 laser cutting machine is very suitable for cutting and engraving non-metallic materials.

CO2 laser engraving machine can cut and engrave materials include:

metal: low carbon, steel, aluminum, titanium, alloy. Non-Metallic: Wood, Acrylic, Paper, Fabric, Epoxy, Resin, Plastic, Rubber, Crystal, Leather, Stone. CO2 laser cutting machines are widely used in clothing, leather, fabric toys, computer embroidery and cutting, electronic appliances, models, manual technology, advertising, decoration, packaging, printing, paper products and other fields.