CO2 LASER CUTTING MACHINE IS USED IN NON-METAL PROCESSING

Posted on 2023-07-07 by redsail



Category: <u>Laser Cutter News</u>



The world's first CO2 laser cutting machine was born in the 1970s. After fifty years of development, CO2 laser cutting machines have been continuously improved according to market demand. It is a CNC laser machine that uses laser technology to complete material cutting and engraving. The CO2 laser cutting machine uses a focusing lens to focus the CO2 laser beam onto the surface of the material to melt it, and at the same time, the coaxial compressed gas blows away the molten material. The laser beam moves along a certain path to form a slit of a certain shape, and then completes the cutting process of the material.

The wavelength of CO2 laser is 10.6um, which is relatively easy to be absorbed by non-metal, so it can cut wood, acrylic, leather and other non-metal materials with high quality. Although it can also cut some metals, with the development of fiber lasers, CO2 gradually loses its advantages in metal cutting, so it is more used in the field of non-metal cutting and engraving. Because CO2 laser machine has the characteristics of high cutting dimensional accuracy, no burr in the incision, no deformation in the slit, fast cutting speed and no limitation of processing shape, it has brought favorable development to many industries. Here is the wide application of CO2 laser cutting machine in non-metal industry.

Wood laser cutting machine

Wood is one of the most widely used materials for CO2 laser cutters due to the great precision and aesthetics that can be produced whether laser cutting wood or laser engraving wood.

The large <u>1325 CO2 laser cutting machine</u> can be used in the furniture industry, and can carve exquisite patterns on wooden boards, making the wardrobes it forms uniquely customizable.



1325 CO2 laser cutting machine

The small 1390 CO2 laser cutting machine is often used in advertising companies or home businesses. It can make wooden signs, signboards, shop door plates and other products, and use laser beams to engrave patterns and characters on wooden boards, making them look more artistic.



laser cutting machine 1390E

For home businesses, a small <u>wood laser cutter</u> can also help you with many projects. For example, children's toys, wooden storage boxes and other wonderful gifts. Complete projects such as car models and airplane models by cutting wood boards of different specifications.

Leather Laser Cutting Machine

Leather is the main material used to make handbags, shoes, floor mats, belts and more. No matter what kind of product it is, in order to meet customers' requirements for product aesthetics, manufacturers often engrave or hollow out various patterns on the leather surface. Laser engraving leather can make the surface of the material have complex textures, making the processed products full of design sense. At the same time, because of the high precision of laser cutting and the neat cutting section, the leather products are full of delicate texture.

When laser cutting leather, it can well avoid the burrs that are easily caused by mechanical cutting technology. The CO2 laser cutting machine can minimize the product error rate as much as possible

in the process of efficient leather cutting, and reduce the cost for the enterprise.

CO2 Fabric Laser Cutting Machine

Using CO2 laser cutting machine to process cloth can complete multiple projects, such as clothing, curtains, tablecloths and other products. One of the advantages of laser cutting fabric is that it can be hemmed, and because it is cut without contact, it does not cause any surface deformation of the fabric. The CO2 laser beam can also carry out the pattern hollowing process on the surface of the fabric, so that the clothes made of it have more characteristics.

When choosing a <u>CO2 fabric laser cutting machine</u>, we recommend that you add an automatic feeding device to it. It adopts crawler workbench and negative pressure absorption conveyor, which can ensure the flatness of the material when cutting. In addition, with the automatic feeding system, it can meet the requirements of continuous automatic batch cutting.

CO2 CNC laser cutting machine can complete any shape, any pattern, any size cutting and engraving according to the graphics designed by the computer, and its cutting effect has higher precision and speed than traditional processing methods. Therefore, in the engraving and cutting applications of non-metallic materials, CO2 laser cutting machines are becoming more and more popular.