WHAT ARE THE APPLICATIONS AND ADVANTAGES AND DISADVANTAGES OF LASER CUTTING MACHINES

Posted on 2023-07-05 by redsail



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



To understand the application, advantages and disadvantages of <u>laser cutting machines</u>, you must first know that laser cutting machines are mainly divided into two categories: fiber laser cutting machines and carbon dioxide laser cutting machines. Fiber laser cutting machine is also called metal laser cutting machine, carbon dioxide laser cutting machine is also called non-metal laser cutting machine. In the past, there was a laser cutting machine on the market that could cut metal materials and non-metal materials, called a hybrid cutting machine. However, due to the high failure rate and short service life, it has been gradually eliminated by the market.

Application of laser cutting machine:

There are three main uses for laser cutters: cutting, engraving, and drilling. Carbon dioxide cutting machines are mainly used for cloth cutting, acrylic cutting, plastic and rubber cutting, while fiber laser cutting machines are used for metal cutting, such as stainless steel plate cutting, copper plate cutting, carbon steel cutting, etc.

Advantages and disadvantages of laser cutting machine:

Compared with traditional manual cutting, the advantages of laser cutting machine are clear at a glance, and the cutting efficiency is higher. Mechanical cutting has countless advantages over traditional hand cutting. In addition, laser cutting is a non-contact cutting, which has little effect on the product itself. It is a thermal cut. The edge of this product is smooth and burr-free, the cutting effect is good, the laser centering precision is high, and the cutting precision is high. Any product has its own process limitations. The disadvantage of lasers is that they cannot cut multiple layers. Because it is thermal cutting, the edge part of multi-layer cutting is easy to stick, which has a great influence on the cutting effect. Multi-ply cutting is not recommended.