USES, ADVANTAGES AND DISADVANTAGES OF LASER CUTTING MACHINES

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Category: Laser Cutter News

To understand the uses, advantages, and disadvantages of laser cutting machines, we first need to know that currently, laser cutting machines are mainly divided into two categories: optical fiber laser cutting machines and carbon dioxide laser cutting machines. Optical fiber laser cutting machines are also known as metal laser cutting machines, and carbon dioxide laser cutting machines are also known as non-metallic laser cutting machines. Previously, there was a machine on the market that can cut both metallic and non-metallic materials, known as hybrid cutting machines, However, due to its high failure rate and short service life, it has gradually been eliminated from the market.

Uses of laser cutting machines

The uses of laser cutting machines are mainly divided into three categories: cutting, carving, and drilling. It is mainly used widely in the cutting category. Carbon dioxide cutting machines are mainly used for cutting cloth, acrylic cutting, plastic rubber and other materials, while optical fiber laser cutting machines are used for cutting metal materials, such as stainless steel plate cutting, copper plate cutting, carbon steel cutting, and so on.

Advantages and disadvantages of laser cutting machines

The advantages of laser cutting machines compared to traditional manual cutting are clear at a glance, with many high cutting efficiency, and numerous advantages of mechanization compared to traditional manual cutting. Moreover, laser cutting is non-contact cutting, which has little impact on the product itself. It belongs to a type of thermal cutting, with smooth and smooth edges and no burrs, good cutting effect, accurate laser alignment, and high cutting accuracy. Of course, any product has its own process limitations. The disadvantage of laser cutting machines is that they cannot cut in multiple layers. Due to thermal cutting, the edges are prone to adhesion during multiple layer cutting, which has a significant impact on the cutting effect. Therefore, multiple layer cutting is not recommended.