

WHAT IS THE ACCURACY OF LASER CUTTING MACHINE

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The question of how much accuracy a laser cutting machine can achieve may be a matter of great concern to many buyers who require accuracy. High precision laser cutting machines can achieve a cutting accuracy of 5 threads or more. With the development of laser technology, the development and production of picosecond, nanosecond, and femtosecond lasers have made a qualitative leap in the accuracy of laser cutting. However, cutting accuracy is not fixed, and there are relatively many factors that affect the accuracy of laser cutting machines.

What are the factors that affect the accuracy of laser cutting machines?

1. Factors of the machine itself

The cutting accuracy of a laser cutting machine is mainly affected by the light spot, that is, the smaller the light spot, the smaller the slit, and the higher the accuracy, while the light spot depends on different lasers. Secondly, the hardware configuration of the machine, such as the working platform, motor, guide rail, etc., all affect the cutting accuracy. When the machine is running for cutting, it will generate slight vibration, which has an impact on the cutting accuracy. In order to reduce the impact of these factors on the accuracy, Chuangxuan Laser uses a servo motor to replace the traditional stepper motor, a screw drive to replace the original linear guide rail, and a marble platform to reduce the impact of vibration. This has greatly improved the accuracy of laser cutting machines.

2. External factors

Different cutting materials have a significant impact on cutting accuracy. When the material is relatively smooth, the cutting accuracy is often higher. In addition, the thickness of the cutting material also has an impact on the accuracy. For example, when cutting a 1mm material, the cutting accuracy is 0.1 mm, while when cutting a 5mm material, the accuracy may not reach 0.1 mm

As a laser cutting machine manufacturer, when customers have cutting needs, we will recommend appropriate model configurations to customers based on their cutting needs, such as material, size, thickness, accuracy, etc. Of course, the higher the accuracy of laser cutting machines, the higher the product price. Therefore, when selecting laser cutting machines, the higher the accuracy, the better.

What can meet your cutting requirements is the most suitable.

