

HOW CAN A LASER CUTTING MACHINE ACHIEVE HIGH-PRECISION CUTTING?

Posted on 2023-07-03 by redsail

REDSAIL CM1610 AUTO FEEDING LASER CUTTER

Redsail Laser Cutter / Engraving Machine
1610 for Cutting Soft Materials

[VIEW MORE](#)



Category: [Laser Cutter News](#)

Tag: [laser cutting machine](#)



Due to the high cutting precision, [laser cutting machines](#) are more and more used in the processing of components in aerospace, medical equipment, precision instruments and other industrial fields.
So how can we achieve high-precision cutting of laser cutting?

Laser is known as the brightest light, the most accurate ruler, and the fastest light. The laser can gather a large amount of energy with high energy on a small unit area, so that substances such as metals can be melted or evaporated rapidly, thus playing the role of cutting.

The focus light can generally reach about 0.1mm, like a very delicate knife, which is much better than "drastic".

At the same time, due to the high energy density processed, the time it acts on the material is very short, so the heat-affected zone is small, the thermal deformation is small, and the laser is non-mechanical contact processing, which has no mechanical stress on the workpiece and is suitable for precision processing. .

Second, a solid machine tool system is the basis for ensuring the accuracy of laser cutting. Strict mechanical design, precision welding, stress relief treatment and other operations make the laser cutting machine work smoothly and stably, and can remain unchanged for a long time.

In addition, the laser cutting machine can achieve precision cutting thanks to its high-precision transmission structure, including rack and pinion, servo motor, reducer, etc.