

LASER CUTTING PROCESS AND CHARACTERISTICS

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REDSAIL CM1390E LASER ENGRAVING/CUTTING MACHINE

2-Way Pass-Through
Professional Laser Machine Manufacturer

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Customers who have used laser cutting technology know that laser cutting processing technology is realized by using the laser beam to move continuously on the surface of the accessory, and the laser beam in this type of work has good orientation and good correlation Resilience, its cutting ability is good and the density is also great. The following is the introduction of specific laser cutting processing.

Laser cutting features:

1. The cutting quality is high quality and fine.

The laser beam used by this type of laser equipment for cutting can be focused on a small spot, so that the laser cutting machine can achieve high power, so the cutting speed is fast, the precision is very high, and it can also ensure that the workpiece will not appear Deformation situation.

2. Strong adaptability and high sensitivity.

This cutting method adopts hot cutting technology, and when cutting, the affected area is very small and will not have a large-scale impact. Another advantage is that it can process some non-metals, which of course cannot be done by other laser cutting equipment.

3. The energy is large, and the change of its density can be controlled at will, and local operations can also be performed.

This type of laser has good control performance, can control the running track of the laser cutting machine at will, and can cut any hard material accordingly. With these small accessories, we can also complete the cutting locally.

Second, the laser cutting process has the following types:

1. The fusion cutting method is to irradiate the laser incident light speed into the plate. When the laser power reaches a certain critical value, the local area will be melted to achieve the cutting effect.
2. Vaporization cutting uses a high-power-density laser to heat the processing material to avoid slag and burrs formed by melting caused by heat conduction. Part of the material evaporates and disappears after evaporation, and the edge is more beautiful.
3. Oxidation cutting refers to the thermal processing caused by blowing oxygen in the nozzle to ignite the laser, and the oxygen undergoes a violent chemical reaction; for brittle materials that are easily damaged by heat, the cutting can be controlled at high speed by heating the laser beam, resulting in a large thermal gradient in the area and mechanical The deformation is severe enough to cause the material to crack, also known as controlled fracture cutting.