

HOW TO CONFIRM THE RELATIONSHIP BETWEEN LASER CUTTING MACHINE QUALITY AND CUTTING SPEED

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REDSAIL CM1390E LASER ENGRAVING/CUTTING MACHINE

2-Way Pass-Through
Professional Laser Machine Manufacturer

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Laser cutting machines occupy a very large field in industrial manufacturing. Many metal materials, whether stainless steel, carbon steel or alloy materials, can be cut without deformation.

The optimal cutting speed range of the metal cutting machine can be selected according to the equipment situation or determined through experiments. Due to the difference in material and thickness, the melting point after melting is also different, the thermal conductivity and surface tension, and the cutting speed are also different.

The cutting speed of the laser cutting machine is very important. The optimal cutting speed range can be selected according to the equipment description or determined through experiments. Due to the thickness of the material and factors such as material, melting point, thermal conductivity and surface tension after melting, the cutting speed also changes accordingly.

The main cutting advantages of metal cutting machine:

1. Moderately increasing the cutting speed can improve the quality of the incision, the incision is slightly narrowed, and the surface of the incision is smoother, which can reduce deformation.
2. The cutting speed is too fast, so the cutting energy is lower than the required amount. The jet in the kerf cannot quickly blow off the molten cutting melt, forming a large back drag, along with cutting slag, on the surface of the kerf. decline in quality.
3. When the cutting speed is too slow, the laser beam irradiates the surface of the material for a long time to widen the incision, and the molten material on both sides of the incision gathers and solidifies at the bottom edge, forming a hanging slag that is difficult to clean, and the upper edge of the slit is melted by heating. Too much and a fillet is formed. In order to meet the increasing demand for quality and production efficiency in industrial production, it is necessary to focus on solving various key technologies and implementing quality standards so that this new technology can be more widely used in China. Laser cutting materials have no burrs, smooth surface and high precision, which is better than CNC punching and plasma cutting. Understand that due to the slow cutting speed and poor cutting quality of fiber laser cutting machines, the maintenance and daily maintenance of laser cutting equipment should be strengthened. Only in this way can the work efficiency, product quality and economic benefits be guaranteed to the greatest extent.