

WHAT MATERIALS CAN LASER CUTTING MACHINES CUT?

Posted on 2023-08-16 by redsail



Category: [Laser Cutter News](#)



1. Carbon steel plate cutting:

The modern laser cutting system can cut the maximum thickness of carbon steel plate close to 20mm, and the slit can be as narrow as about 0.1mm for the thin plate. The heat-affected zone of laser-cut low-carbon steel is extremely small, and the cut is flat, smooth, and vertical. For high carbon steel, the edge quality of laser cutting is better than that of low carbon steel, but its heat affected zone is larger.

2. Stainless steel cutting:

Laser cutting is easier to cut stainless steel sheets. With a high-power YAG laser cutting system, the maximum thickness of stainless steel can reach 4mm.

3. Alloy steel plate cutting:

Most alloy steels can be laser cut with good edge quality. However, tool steel and hot die steel with high tungsten content will have erosion and sticky slag during laser cutting.

4. Aluminum and alloy plate cutting:

Aluminum cutting belongs to melting cutting, and auxiliary gas is used to blow away the molten material in the cutting area, so that better cutting surface quality can be obtained. At present, the maximum thickness of cutting aluminum plate is 1.5mm.

5. Cutting of other metal materials:

Copper is not suitable for laser cutting, it is cut very thin. Most of titanium, titanium alloys, and nickel

alloys can be cut by laser.