

WHAT IS THE CUTTING THICKNESS OF THE LASER CUTTING MACHINE

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The main cutting objects of metal laser cutting machines are various metal materials, including stainless steel, carbon steel, alloy steel, aluminum plate, silver, copper, titanium and other metal materials. The key advantage of metal laser cutting machines is that in practical applications, the cutting ability of fiber laser cutting machines is also related to various factors such as cutting machine quality, laser type, cutting environment, cutting speed, etc. The use of auxiliary gas can also improve a certain cutting ability, so there is no absolute standard to determine its cutting thickness. So, how thick metal sheets can various power fiber laser cutting machines cut?

The maximum thickness of different materials cut by a 1.500W metal laser cutting machine is 6mm for carbon steel; The maximum thickness of stainless steel is 3mm; The maximum thickness of aluminum plate is 2mm; The maximum thickness of copper plate is 2mm;

2.1000W metal laser cutting machine, maximum cutting thickness for different materials: carbon steel, maximum thickness 10mm; The maximum thickness of stainless steel is 5mm; The maximum thickness of aluminum plate is 3mm; The maximum thickness of copper plate is 3mm;

3.2000W metal laser cutting machine, maximum thickness for cutting different materials: carbon steel, maximum thickness 16mm; The maximum thickness of stainless steel is 8mm; The maximum thickness of aluminum plate is 5mm; The maximum thickness of copper plate is 5mm;

4.3000W metal laser cutting machine, maximum thickness for cutting different materials: 20mm maximum thickness for carbon steel; The maximum thickness of stainless steel is 10mm; The maximum thickness of aluminum plate is 8mm; The maximum thickness of copper plate is 8mm;

5.4000W laser cutting of stainless steel can reach a maximum of 16mm, but the quality of the cutting surface above 12mm is not guaranteed. Cutting below 12mm is definitely a bright surface cutting. A cutting capacity of 6000W would be better, but the price is also higher.

A general 1000W fiber laser cutting machine can cut carbon steel plates of about 10mm, while stainless steel plates are slightly difficult to cut. To increase the cutting thickness, it is necessary to sacrifice edge effect and speed. The cutting thickness of different power metal laser cutting machines for different metal materials is closely related to the cutting material. Due to numerous external influencing factors, the actual cutting ability is also related to various factors such as the quality of the laser cutting machine, cutting environment, auxiliary gas, cutting speed, etc.