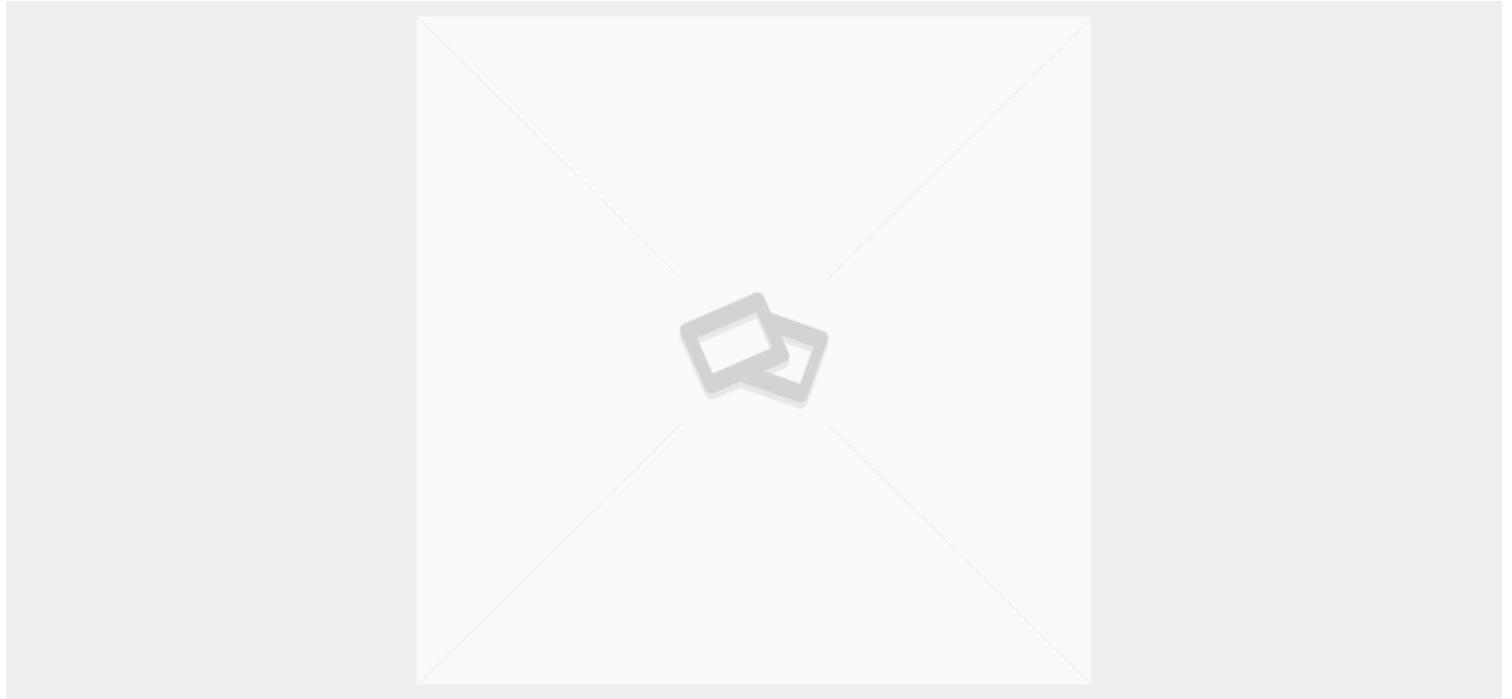


# WHAT KIND OF LASER CUTTING MACHINE IS GOOD?

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CO2 laser cutting machine

CO laser cutting machine: Due to the special performance of CO<sub>2</sub> laser, it can process metal and non-metallic materials, mainly targeting large and medium-sized enterprises and some purely external processing laser cutting and processing enterprises.

Advantages: High power, usually between -, capable of cutting traditional materials such as stainless steel and carbon steel up to 25mm in full size, as well as acrylic and wood materials up to 4mm aluminum plate. PVC cutting thin plates is fast. In addition, because CO<sub>2</sub> laser outputs continuous laser, the cutting effect of the cross-section is the smoothest and best during cutting.

Disadvantages: High procurement costs, high power consumption, frequent replacement of consumables, and high processing costs. In addition, post maintenance is also very difficult.

YAG laser cutting machine: YAG laser cutting machine is the most cost-effective metal cutting machine in China, mainly targeting most users in industries such as sheet metal manufacturing, home appliance manufacturing, kitchen utensils manufacturing, decoration, advertising, etc., gradually replacing traditional processing equipment such as wire cutting, CNC punching machines, water cutting, and low-power plasma.

Advantages: It can cut aluminum plates, copper plates, and most non-ferrous metal materials that cannot be cut by other laser cutting machines, with cheap procurement prices and low usage costs.

Disadvantages: Can only cut the following materials, with relatively low cutting efficiency, complex debugging operations, and high laser professional knowledge among operators.

Fiber laser cutting machine: Fiber laser cutting machine is currently the most economical laser metal cutting machine, which not only saves processing materials, processing electricity, processing consumables, etc., but also saves processing time. It is also the most environmentally friendly high-precision metal cutting machine, mainly aimed at manufacturers of high-precision and efficient plate processing.

Advantages: High photoelectric conversion rate, low power consumption, capable of cutting stainless steel plates and carbon steel plates. Maintenance free, each without consumables. Especially for thin plate cutting, the processing speed is super fast, the cutting seam is small, and the quality of the spots is good, which can be used for fine cutting.

Disadvantage: The price is relatively high and is not suitable for cutting highly reflective metal materials.

Disc laser cutting machine: Disc laser cutting machine is the latest high-power laser cutting equipment, mainly used for cutting thick metal plates. With the emergence of the above lasers, disc laser cutting machines have been replaced by CO<sub>2</sub>, which is the most suitable equipment for high-power laser cutting machines.

Advantages: thick metal plate cutting is very suitable. In addition to inheriting the characteristics of fiber laser cutting machine, it has unique advantages in processing high anti metal materials, and can cut all types of metal materials, including high anti metal materials. The optical disc laser cutting machine can output laser with almost diffraction limited beam quality, and maintain this excellent characteristic at high power. It has special advantages for cutting thick steel plates, resulting in fast cutting speed and good quality.

Disadvantage: The price is relatively high.

From the above analysis, it can be seen that in metal plate processing, small and medium-sized power fiber laser cutting machines are definitely the king in processing. For thick metal plates with a

variety of material types, it is not wrong to choose an efficient and energy-saving laser cutting machine.