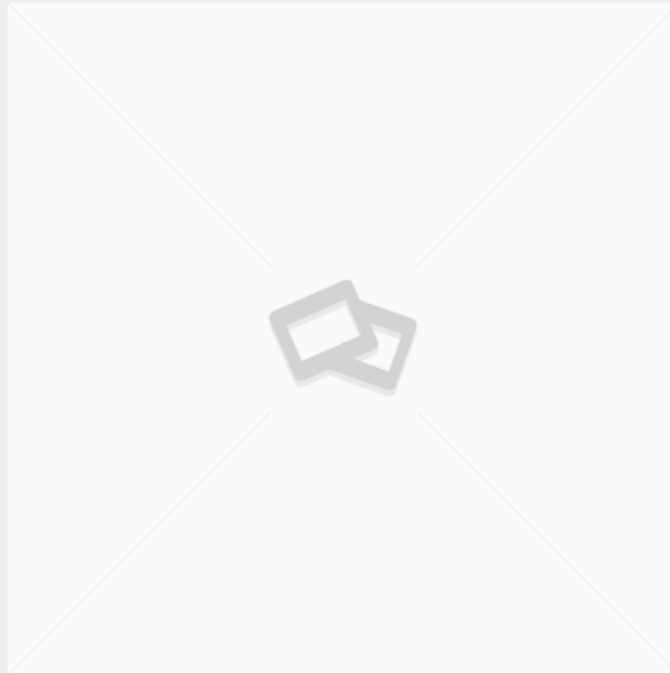
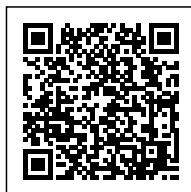


# WHAT MATERIALS ARE SUITABLE FOR LASER CUTTING MACHINES?

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Category: [Laser Cutter News](#)





Laser cutting machine

What materials are suitable for laser cutting machines?

With the maturity of laser technology, laser cutting machines can process more and more materials, and their applications are also becoming more and more widespread. Different materials choose different light sources, which is different. What is the principle of a laser cutting machine.

Metal materials: Some iron, stainless steel, copper, etc. These metal materials are all cut using optical fibers.

Cutting non-metallic materials: acrylic, wood, leather, fabric, plastic, etc.

Metal and non-metal are two types of materials, but there are also other materials that can be cut by laser, such as circuit board materials, which have high hardness and obvious thermal reactions. Although they can also be classified as non-metallic materials, carbon dioxide cannot be cut. Therefore, materials like this need to be cut by purple light, which we call cold light and can cut some materials such as glass or circuit boards.

Therefore, laser cutting machines can process more materials, but according to different materials, we choose light sources or some differences. Different manufacturers have some differences in materials and application industries, and not all material models are made by manufacturers.

What materials can fiber laser cutting machine cut?

#### 1. Stainless steel:

Laser cutting makes it easier to cut stainless steel plates. The YAG laser cutting system can cut stainless steel with a maximum thickness of 4mm. Our developed low-power YAG laser cutting system cuts stainless steel with a thickness of 4mm.

#### 2. Alloy steel:

Most alloy steel can be cut with laser, and the quality of the cut edges is good. However, tool steel and hot mold steel with high tungsten content will have corrosion and slag sticking during laser cutting. How to change the blade of an old-fashioned handheld cutting machine.

#### 3. Carbon steel:

Modern laser cutting systems can cut carbon steel plates with a maximum thickness of approximately 0.1mm, and the cutting seam of thin plates can be narrow to around 0.1mm. The Heat-affected zone of laser cutting low-carbon steel is very small, flat, smooth, and good perpendicularity. For high carbon steel, the edge quality of laser cutting is better than that of low carbon steel, but its heat affected area is larger. Our company's laser series has a maximum cutting depth of 5mm

#### 4 Aluminum and alloys:

Aluminum cutting belongs to melting cutting, which assists in blowing away the molten material in the cutting area with gas, which can achieve better cutting quality. At present, the maximum thickness for cutting aluminum plates is 1.5mm.

#### 5. Other metal materials:

Copper is not suitable for laser cutting as it is very thin. Method of disassembling blades for cutting machines.

#### 6 Non metallic materials:

Laser can cut organic materials such as plastics (polymers), rubber, wood, paper products, leather, natural and synthetic fabrics; It can also cut inorganic materials such as quartz and ceramics, as well as composite materials such as new lightweight reinforced fiber polymers.