## MATTERS NEEDING ATTENTION WHEN LASER CUTTING MACHINE IS CUTTING DIFFERENT MATERIALS

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Laser cutting machines are becoming more widely used and more and more materials are available. However, different materials have different properties, so you need to pay attention to different things when using a laser cutter. The following is a brief analysis of the main materials used in laser cutting:

Matters that should be paid attention to when laser cutting machine is cutting different materials Matters that should be paid attention to when laser cutting machine is cutting different materials

- 1. Structural steel: Good results have been obtained when cutting materials with oxygen. When oxygen is used as the processing gas, the cutting edge oxidizes slightly. For sheets up to 4 mm thick, nitrogen can be used as the process gas for cutting.
- 2. Stainless steel: Oxygen is required to cut stainless steel, and nitrogen is used where the edge oxidation is not tight to obtain an oxide burr-free edge without further processing.
- Aluminum Despite its high reflectivity and thermal conductivity, depending on the type of alloy and the capabilities of the laser, it is possible to cut aluminum with a thickness of less than 6mm.
  - 4. Titanium Titanium plates were cut using argon and nitrogen as process gases. synthetic material

5. Organic matter All organic cutting presents a fire hazard (use nitrogen as assist gas or compressed air as assist gas). Wood, leather, cardboard and paper can all be laser cut, but the cut edges will burn