

CAN LASER CUTTING MACHINES CUT ALUMINUM PLATES?

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Laser cutting of aluminum plates also depends on the power of the laser generator. The thickest material can be cut, but the processing cost is high because it is a highly reflective material. Laser cutting uses a focused high-power density laser beam to irradiate the workpiece, causing the irradiated material to quickly melt, vaporize, ablate, or reach the ignition point. At the same time, the molten material is blown away by a high-speed airflow coaxial with the workpiece, thereby achieving the cutting of the workpiece.



Laser cutting machine

Is the cutting surface of laser cutting aluminum plate as smooth as cutting other materials?

The cut of the aluminum plate is also very smooth. Aluminum plate is only a highly reflective material that requires a large laser generator. Cutting gas, like other materials, is done using nitrogen gas and will not cause surface irregularities.

Characteristics of laser cutting aluminum plates:

1. Thin cutting seam: The cutting seam of laser cutting aluminum plate is generally 0,1mm -0,2mm
2. Smooth cutting surface: Laser cutting of aluminum plates has no burrs or slag on the cutting surface.
3. Low thermal deformation: Laser processing has narrow slits, fast speed, and concentrated energy, resulting in minimal heat transfer to the material being cut and minimal material deformation.
4. Material saving: Laser processing uses computer programming, and laser equipment can cut aluminum plate processing parts of different shapes, improving the material utilization rate of aluminum plates and saving a lot of material costs.
5. The thickness of the aluminum plate that can be cut mainly depends on the power of the laser generator. The thickest aluminum plate can generally be cut and cut.

Precautions for laser cutting aluminum plate: Aluminum plate is a highly reflective material that can cause significant damage to the laser, so it should be used as little as possible. It is recommended

that aluminum plates below 6mm can be processed using CNC punching machines, and aluminum plates above 6mm can be processed by water cutting.