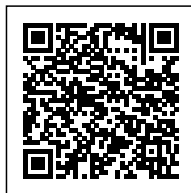


HOW THE OUTPUT POWER OF THE LASER AFFECTS LASER CUTTING

Posted on 2023-08-25 by redsail



Category: [Laser Cutter News](#)



The laser output power is a parameter directly related to the processed melting ability, and it is necessary to increase the output power in order to improve the processing ability.

The conditions for increasing processing capacity are as follows:

1. Improve the running speed of [laser cutting](#).
2. Increase the thickness of the required processing plate.
3. Processing aluminum, copper and other high reflective reflection factor materials.
4. Change from a short focal length lens to a long focal length lens.
5. The focus position is converted from the surface change of the workpiece.

We can judge whether the output energy of the processing conditions used is appropriate according to the cut surface after processing and the sparks during processing. When the output power is far greater than the standard value, the thermal influence around the cut increases, and the corners appear melting loss. Moreover, the cut noodle marks become thicker, vertically from the upper part to the lower part. If the output power value is much smaller than the standard value, the lower part of the cut becomes significantly thicker, and it becomes a dug-in state. Moreover, the amount of slag attached increases a little more, which is difficult to remove. Mars during cutting lags in the opposite direction of cutting advance. Suitable processing output conditions exist within a certain range, the thinner the processed plate thickness, the wider the range of output conditions. Processing under proper output conditions, the streaks on the cutting surface are fine, and the lower part is slightly slow relative to the speed of light.