

# WHAT ARE THE CUTTING PROCESSES OF LASER CUTTING MACHINES?

Posted on 2023-08-17 by redsail



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With the maturity of fiber lasers, great changes have taken place in the sheet metal processing industry, but the fly in the ointment is: [laser cutting machines](#) still have certain deficiencies. For example, when cutting aluminum alloy materials, there will be residual burrs on the cutting surface (metal slag) and rough cutting surfaces. Problems like these have been plaguing the industry, so more and more manufacturers have introduced some cutting-edge cutting techniques. Next, I will introduce several cutting techniques for you:

### 1. Super fine cutting

Ultra-fine cutting is the application of optical fiber cutting technology, aiming at cutting surface, cutting materials with wide range, high speed, high quality and low cost.

### 2. Bright cut

Bright cutting is used in cutting, which makes the laser cutting process fast, accurate, environmentally friendly and energy-saving, and greatly reduces the difficulty of using the process. Bright cut cutting effect The bottom has no dross and burrs, and the cut surface is fine and bright.

### 3. Vaporization cutting

During the laser gasification cutting process, the surface temperature of the material rises to the boiling point temperature so fast that it is enough to avoid melting caused by heat conduction, so part of the material is vaporized into steam and disappears, and part of the material is ejected from the bottom of the slit by the auxiliary gas The flow blows away.

### 4. Melt cutting

In laser fusion cutting, the workpiece is partially melted and the molten material is ejected by means of airflow. Because the transfer of the material occurs only in its liquid state, the process is called

laser fusion cutting.