

# SIX PRECAUTIONS FOR LASER CUTTING MACHINE TYPESETTING

Posted on 2023-08-25 by redsail



Category: [Laser Cutter News](#)



Do you know the precautions for [laser cutting machine](#) typesetting? Before using the laser cutting machine, we will import the prepared drawings into the program, and then use the typesetting software to arrange the graphics on a board, so that the laser cutting machine can process the products in batches. So, let's list the six major points for attention in typography.

## **Corner melting**

When decelerating to cut the corners of thin steel sheets, the laser can overheat and melt the corners. A small radius is generated at the corner to maintain the high-speed cutting of the laser and avoid the phenomenon of overheating and melting of the steel plate when cutting the corner, so as to obtain good cutting quality, reduce cutting time and improve productivity.

## **Spacing between parts**

Generally, when cutting thick plates and hot plates, the distance between parts should be large, because the heat of the thick plates and hot plates is greatly affected. When cutting sharp corners and small graphics, it is easy to burn the edge and affect the cutting quality.

## **Lead setting**

In the process of cutting thicker plates, in order to make the slits well connected and prevent burns at the beginning and end points, a section of transition line is often drawn at the beginning and end of the cutting, which are called lead and tail lines respectively. The lead and tail lines are important to the workpiece itself. It is useless, so it should be arranged outside the scope of the workpiece, and at the same time, be careful not to set the lead wires in places that are not easy to dissipate heat, such as sharp corners. The connection between the lead wire and the slit should adopt a circular arc transition as much as possible, so as to make the machine move smoothly and avoid burns caused by corner stop.

## **Common edge cutting**

Two or more parts are co-edged into a combination, and a large number of regular graphics are co-edged as much as possible. Co-edged cutting can greatly shorten the cutting time and save raw materials.

## **Part collision**

In order to maximize production efficiency, many laser cutting equipment operate continuously 24 hours a day, and use an unmanned automatic loading/unloading device, which will cause damage to the cutting head and interrupt production when it hits the overturned parts after cutting, resulting in relatively high Big loss. This requires attention when sorting:

Choose an appropriate cutting path, bypass the cut parts, and reduce collisions.

Choose the best cutting route to reduce cutting time.

Automatically or manually combine multiple small parts with tiny connections. After cutting, the removed parts can easily disconnect the tiny connections.

## **Surplus material processing**

After the parts are cut, the skeleton-like remaining material on the laser cutting equipment workbench needs to be removed as soon as possible to facilitate subsequent cutting operations. For laser cutting equipment without an automatic unloading device, the skeleton-like residual material can be cut into small pieces for quick removal. Thereby avoiding the operator's personal injury caused by moving heavy and sharp-edged residual materials.

The above are the six precautions for laser cutting machine typesetting, namely corner melting, part spacing, lead setting, common edge cutting, part collision and residual material processing. Among them, although the typesetting process is very short, there is a lot of knowledge hidden in it. If the typesetting is slightly wrong, it will have a great impact on the cutting effect of the entire board.