

# SIX PRECAUTIONS FOR LASER CUTTING MACHINE TYPESETTING

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[Metal CNC laser cutting machine](#) is one of the indispensable equipment in industry. Often before we use CNC laser cutting machine, we will import the prepared drawings into the program, and then use typesetting software to arrange the graphics on a board, so that The laser cutting machine can process the products in batches. 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. The following spar editor will explain to you the six precautions for laser cutting machine typesetting:

### 1. Corner melting

When the deceleration cuts the corners of thin steel plates, the laser will 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.

### 2. 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, and when cutting sharp corners and small graphics, it is easy to burn the edge and affect the cutting quality.

### 3. Lead setting

In the process of cutting thicker plates, in order to make the slits well connected and prevent the beginning and end, a 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 not important to the workpiece itself. Therefore, it should be arranged outside the scope of the workpiece, and at the same time, be careful not to set the lead wire in a place that is 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 to make the machine move smoothly and avoid corner stop.

#### 4. Common edge cutting

Combine two or more parts on the same side to form a combination, and try to co-edge large quantities of regular graphics. Co-edge cutting can greatly shorten the cutting time and save raw materials.

#### 5. Part collision

In order to maximize production efficiency, many laser cutting equipment operate continuously for 24 hours, and use unmanned automatic loading/unloading devices, which will cause damage to the cutting head and interrupt production when they hit the overturned parts after cutting, resulting in Big loss. This requires attention when sorting:

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

Choose a better cutting route to reduce cutting time.

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

#### 6. Surplus material treatment

After the parts are cut, the skeleton-shaped 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.