LASER CUTTING MACHINE USE SKILLS AND PRECAUTIONS

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Category: Laser Cutter News

When using a laser cutting machine, it is very necessary to pay attention to many small details and some precautions. Mastering the skills of using a laser cutting machine can make the equipment more efficient and use it more worry-free.

When the laser cutting machine is cutting, in order to achieve better efficiency and cutting quality, the following laser cutting machine skills are worth learning:

1. Corner melting; when decelerating to cut the corner of thin steel plate, the laser will melt the corner due to overheating. 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 achieve good cutting quality, reduce cutting time and improve manufacturing force.

2. Spacing between parts: Usually, 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.

3. 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, a transition line is often drawn at the beginning and end of cutting, which are called lead and tail respectively. Lead and tail The wire is useless to the workpiece itself, so 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 a sharp corner. The connection between the lead wire and the slit adopts a circular arc transition as much as possible to make the mechanical movement stable and avoid burns caused by corner stop.

4. Co-edge cutting: combine two or more parts into a combination, and try to co-edge a large number of regular graphics. Co-edge cutting can greatly shorten the cutting time and save raw materials.

5. Collision of parts; In order to increase the manufacturing efficiency, many laser cutting machines run continuously for 24 hours, and use unmanned automatic loading/unloading devices to hit the overturned parts after cutting, causing damage to the cutting head and manufacturing Disruption will cause great loss. When you need to sort, pay attention to:

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

B. Choose a good cutting route to reduce cutting time.

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

In order to achieve a better operating state of the laser cutting machine, regular maintenance is also essential. The maintenance of the laser cutting machine should pay attention to the following points:

1) Check the straightness of the track and the verticality of the machine every six months, and maintain and debug in time if abnormalities are found. Otherwise, the cutting effect may be affected, the error will increase, and the cutting quality will decrease.

2) Check the steel belt frequently and make sure it is tight. Otherwise, if something goes wrong during operation, people may be injured. Steel strips may seem inconspicuous, but problems should not be underestimated.

3) Once a week, use a vacuum cleaner to suck off the dust and dirt in the machine, and all electrical cabinets should be tightly closed to prevent dust.

4) Each guide rail should be cleaned frequently to remove dust and other sundries to ensure the normal operation of the equipment. The rack should be wiped frequently and lubricated to ensure lubrication without debris. Guide rails and motors should be cleaned and lubricated frequently, so that the machine can move better during travel, cut more accurately, and the quality of cut products will improve.

5) The dual focal length laser cutting head is a vulnerable item on the laser cutting machine. Long-term use may easily cause damage to the laser cutting head.