REASONS FOR DISCONTINUITY IN LASER CUTTING MACHINE CUTTING

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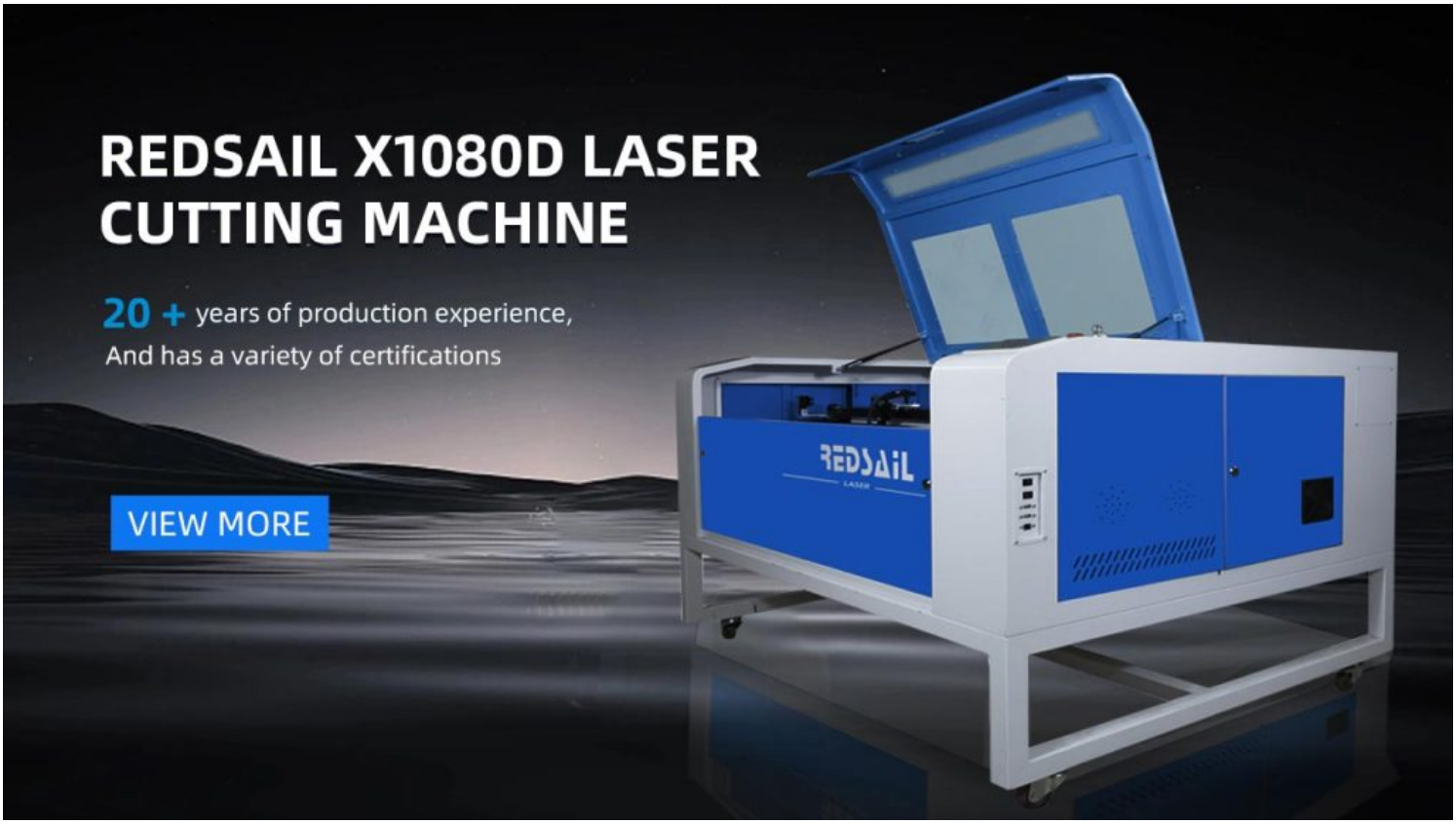
Category: Laser Cutter News

When operating a laser cutting machine, it is inevitable to encounter poor cutting quality. In today's article, we will introduce the last common laser cutting problem: discontinuous cutting.



laser cutting machine

Reason for cutting discontinuity:

Unreasonable programming may cause discontinuity in template cutting. During the cutting process of the template, the cutting head is very close to the surface of the workpiece. When cutting multiple parts of the steel plate, the laser program defaults to first marking and then cutting to avoid unnecessary damage to the cutting head and machine tool caused by the collision of the cutting head with the cut metal sheet. If the enclosed area is not enclosed during the preparation of the laser program, and there is a connection between the local steel plate and the whole after cutting, manual cutting can easily damage the sample and cause it to be scrapped.

During the laser cutting process, the exchange of auxiliary gas can also cause discontinuity in the cutting process. During the processing, the auxiliary gas mainly blows the melted metal out of the

cutting seam. When the auxiliary gas is used, the equipment automatically stops moving. After the gas is replaced, cutting can continue. This way, the cutting trajectory is slightly different from the trajectory when parking, causing discontinuity in the cutting trajectory.

How to Avoid Cutting Discontinuities

1. To solve the problem of laser cutting discontinuity, it is necessary to focus on the reasons that cause the discontinuity. For cutting discontinuity caused by programming errors, designers are required to have high professional quality. In the process of compiling cutting programs, careful inspection should be carried out to avoid errors.

2. For the cutting discontinuity caused by the replacement of auxiliary gas, after accumulating practical operating experience, we need to reduce the cutting speed to 5% of the normal cutting speed when replacing the gas bottle and re cutting. At the same time, press the start button and the speed increase button to continue cutting.

3. When the laser cutting machine suddenly stops and restarts during operation, there may be discontinuity in the cutting point interface. Therefore, in actual work, it is necessary to strictly follow the instructions to avoid stopping the cutting machine due to incorrect operation.

Whether it is carbon steel, stainless steel, or titanium alloy materials, continuous cutting trajectory can be achieved through these methods, making the workpiece fully connected, with high accuracy and quality.

The development of laser cutting technology has injected new energy into China's manufacturing industry. In future production practice, we need to make reasonable use of, carefully study, and optimize laser cutting technology to improve the utilization rate of workpieces and reduce costs while ensuring quality. I believe that with the joint efforts of experts, scholars, and manufacturing industry seniors, and through long-term practical exploration, we can overcome the shortcomings of laser cutting and significantly improve China's industrial level.