HOW TO SOLVE THE BURR IN LASER CUTTING

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Laser cutting machine is very common in sheet metal processing. Because of its high efficiency and good finished product effect, it has become the standard configuration of many sheet metal processing manufacturers. However, when some customers use the laser cutting machine, the cut workpiece has a lot of burrs. Many people think that it is the quality problem of the laser cutting machine product, but it is not always the case.

In the sheet metal processing process, the gas purity and parameter settings of the laser cutting machine will affect the final processing effect. If the equipment + gas + parameters are adjusted to the best, the cut workpiece will have no burrs.

How did the burr come about?

Burrs are excessive residue particles on the surface of metal materials. When the laser cutting machine is processing the workpiece, the high energy generated by the laser beam irradiating the surface of the workpiece quickly vaporizes the surface of the workpiece and evaporates to achieve the purpose of cutting. But there is a core device here that we must pay attention to, that is, the auxiliary gas.

The auxiliary gas is to blow off the slag on the surface of the workpiece after the irradiated surface is vaporized. If the auxiliary gas is not used, the slag will form burrs and attach to the cutting surface after cooling. Therefore, the purity of the gas is very important. The purity should be high, and a gas supplier with better quality can be selected.

Another reason is the quality of the equipment itself, as well as parameter setting factors. Therefore, after the customer purchases the laser cutting machine, a professional operator must debug the equipment. Air pressure, flow, focal length, cutting speed, etc., adjust the cutting parameters to the best.

The more burrs, the lower the quality. Specifically, when there are burrs in laser cutting, you can check and solve them from the following aspects

1. The upper and lower positions of the focal point of the beam deviate

Solution: Adjust the position of the focal point and adjust it according to the resulting offset position.

2. The output power of the laser cutting machine is not enough

Solution: Check whether the laser cutting machine is working normally. If it is abnormal, it needs to be repaired and maintained in time. If it is normal, check whether the output value is correct.

3. The wire cutting speed of the cutting machine is too slow

Solution: Adjust and increase the wire cutting speed in time.

4. The purity of the auxiliary gas of the cutting machine is not enough

Solution: Explain to increase the purity of auxiliary gas

5. The point of the laser beam of the cutting machine is offset

Solution: Debug the focus and make timely adjustments

6. Instability caused by the laser cutting machine operating for too long

Solution: Turn off the machine and restart it and let the machine rest

The fiber laser cutting machine is a precise machine, and its operation is also a delicate work. Often a data error will cause its work to run abnormally. Therefore, it must be rigorous and precise in the work to reduce and avoid errors.