

HOW TO ADJUST THE FLYING LIGHT PATH OF THE LASER CUTTING MACHINE?

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Many times we have seen that the laser emitted by the laser cutting machine is linear, but it is not ruled out that in some cases it is necessary to change the transmission direction of the laser to achieve the cutting effect. How to adjust the flying light path of the laser cutting machine? The large-format laser cutting and welding technology of thick steel plate is the key technology to solve the high-power, large-format, multi-degree-of-freedom, flying light path laser cutting system.

Gradually adjust the position of the beam to the place far away from the laser tube, and adjust the two marks until the mark center coincides. Repeat until the laser can take the specified position. The laser used for this purpose should not only have high output power; More important is the temporal and spatial characteristics of the beam, so the general transverse flow CO₂ laser cannot meet the requirements of laser cutting. In industrial production, it is more realistic to change the average laser power. The specific method is to change the pulse width; Change pulse frequency; Change the pulse width and frequency at the same time.

First of all, it is necessary to ensure that the laser emitted from the laser generator can accurately hit the center of the No. 1 reflector. When debugging, a piece of cardboard should be added in front of the No. 2 reflector to test the position of the light spot, so as to avoid laser radiation hurting people. Generally, the size of the hole is related to the thickness of the plate, and the average diameter of the blasting hole is half of the thickness of the plate, so the hole diameter of the thicker plate is larger, and

Round, not suitable for parts with high machining accuracy requirements, but only for scrap. So it is very important to choose a reliable brand laser cutting machine manufacturer. Xinquanli Laser focuses on laser cutting!

Generally, the laser generator is fixed, so the laser transmission direction is also fixed. However, in order to meet the demand, we need to take some measures to change the laser transmission direction and let the laser "fly" for a while. Previously, in the laser stamping compound machine, a punch was used to punch a hole first, and then the laser was used to cut from the small hole. Usually change the laser transmission

The transmission direction is to refract the laser through the reflector and optical fiber. The laser generator does not move and the reflector moves. This situation is called the flying optical path of the laser cutter.

The working principle of the laser beam during laser cutting processing is: during the processing, the material is irradiated by a continuous laser to form a pit in the center, and then the molten material is quickly removed to form a hole by the working airflow coaxial with the laser beam. Laser cutting is an advanced manufacturing technology, which is conducive to improving the technology and equipment innovation of the manufacturing industry

When the cutting section of the workpiece has a high roughness requirement, we should pay attention to this problem. Usually, we need to manually adjust the starting position of the laser beam when compiling the laser cutting program, that is, manually control the puncture point. In practical application, we need to constantly accumulate experience, improve cutting quality and efficiency through practice and summary, and realize the use value of light cutting machine.