

SELECTION OF FOCUSING LENS FOR HIGH-POWER METAL LASER CUTTING MACHINE

Posted on 2023-03-08 by redsail



Category: [Laser Cutter News](#)



The focusing lens of the metal laser cutting machine is a kind of relatively precise optical element, and it is also a vulnerable element. Its cleanliness directly affects the processing performance and quality of the laser cutting machine. For domestic high-power laser cutting machine tools, there are many kinds of focus lenses that can be selected. The appropriate focusing lens can be selected according to the focal length of the focusing lens, the thickness of the focusing lens and the cutting material.

In terms of the thickness of the focusing lens, thin lenses (thickness less than or equal to 6mm) are often used to cut non-metallic plates, while thick lenses (thickness greater than 6mm) are often used to cut metal plates. It is easy to spray slag on the lens when cutting metal material plate, so thick lenses should be used when cutting metal. In addition, the focus lens base should also be cooled by cooling water when in use

In the system, indium wire is often added between the focusing mirror and the mirror base to help heat dissipation. Therefore, it is very necessary to regularly maintain the focus lens. The correct operation process of laser maintenance of laser cutting machine focus lens is as follows:

1. If you really need to clean the lens, you can only use a laboratory-grade paper soft cotton ball, dip an appropriate amount of acetone or high-alcohol, and gently clockwise from the center of the lens

Rotating and rubbing towards the edge;

2. Take out the focusing lens from the frame: loosen the fastening screws, and take down the air nozzle and the lens barrel in turn; First blow the dust on the lens surface with a balloon;
3. Install the lens barrel and air nozzle, adjust the focal length, tighten the fastening screws, and make sure to keep the convex face downward when installing the focusing lens.