

# REASONS FOR WATER MIST IN THE PROTECTIVE LENS OF LASER CUTTING MACHINE

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During the cutting process of laser cutting machine, auxiliary gas is indispensable! Among them, we often use oxygen and nitrogen. Of course, the higher the purity of the gas, the better the cutting quality will be. Many customers also want to use air cutting to save costs, but there is always water mist on the protective lens during the cutting process, and the cutting quality is poor. Why?

First of all, Redsail Laser will popularize the role of auxiliary gas:

1. In order to blow away the residual slag and achieve better cutting effect.
2. Use gas to blow away the metal slag while protecting the lens to prevent the slag from sticking to the lens and affecting the cutting quality.
3. It can effectively achieve the effect of smooth cutting surface without burr and slag, which is fine cutting.
4. It can react with the material and increase the cutting speed. For example, using oxygen can achieve the effect of combustion support.

Therefore, in order to achieve better cutting effect, the requirements for auxiliary gas are higher! Although air can be used as auxiliary gas, because the air contains water and oil, if not treated, it will cause lens pollution and unstable cutting head, so that the cutting effect and quality are not up to standard. Therefore, when using air cutting, it is necessary to equip the fiber laser cutting machine with a cold dryer, which can solve this problem. The cold dryer can forcibly cool the compressed air below the required dew point temperature, so as to condense a large amount of water vapor and oil mist contained in it into liquid droplets, which are discharged from the machine by the drainer through gas-liquid separation, so as to dry the compressed air.