HOW TO ADJUST THE FOCUS OF A LASER CUTTING MACHINE?

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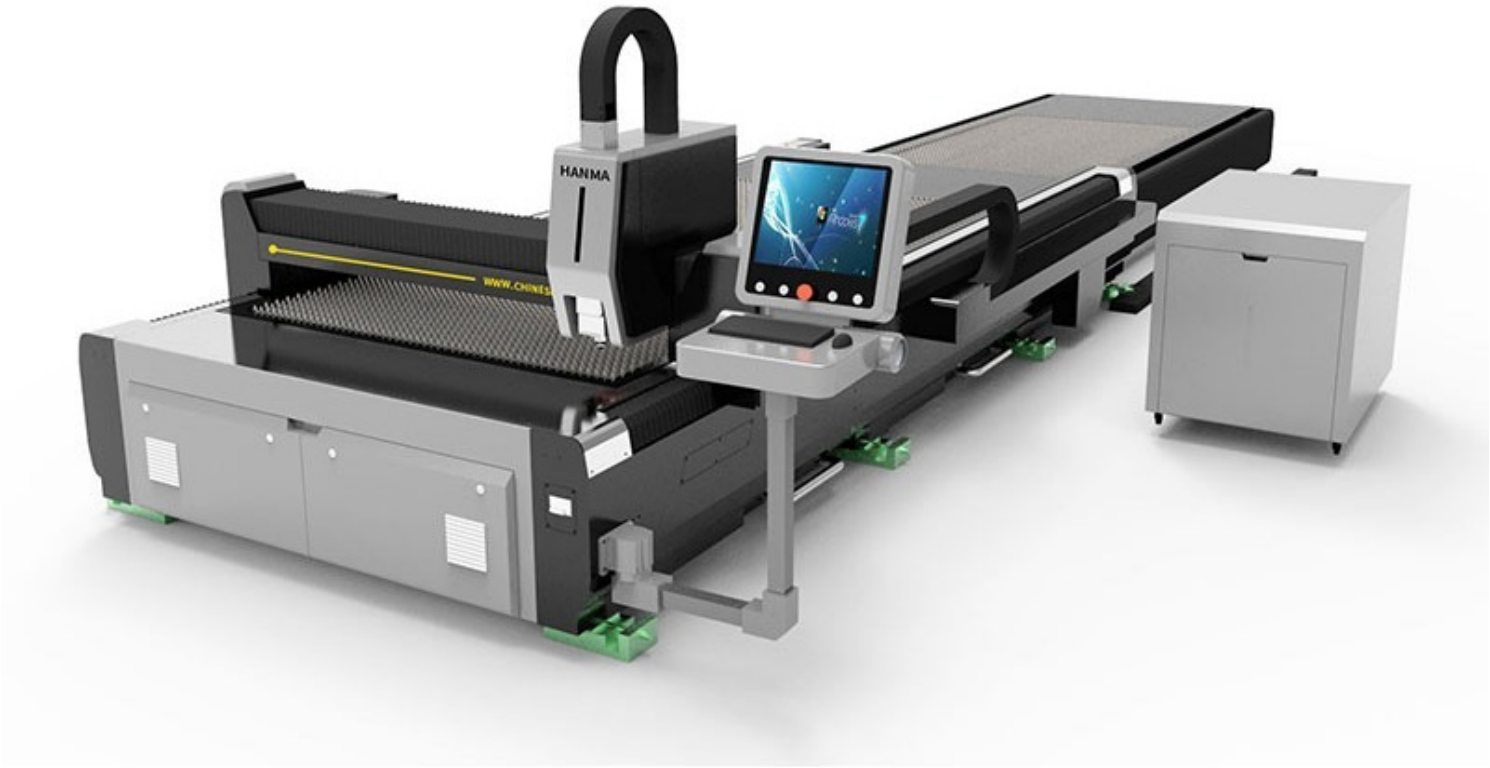

Laser cutting machine

There are three simple methods for determining the focal point position in industrial production:

1. Printing method: Move the cutting head from top to bottom and print the laser beam on the plastic board with the smallest printing diameter.

2. Oblique plate method: horizontally pull a plastic plate at an angle to the vertical axis, and find the smallest part of the laser beam as the focal point.

3. Blue spark method: Remove the nozzle, blow air, and apply a pulse laser to the stainless steel plate, causing the cutting head to move from top to bottom until the blue spark reaches its maximum.

2. For the cutting machine of the flying optical path, the beam size before focusing varies due to the divergence angle of the beam and the time length of cutting the near and far ends. The larger the diameter of the incident beam, the smaller the diameter of the focusing spot.

3. In order to reduce the changes in the size of the focusing spot caused by changes in the beam size before focusing, domestic and foreign laser cutting system manufacturers have provided users with some specialized equipment:

1. Directional light tube. This is a commonly used method, where a collimator is added to the output end of the CO2 laser. The expanded beam diameter increases and the divergence angle decreases, making the size of the near and far focused beams close to the same within the cutting working range.