

HOW TO JUDGE THE CUTTING QUALITY OF LASER CUTTING MACHINE?

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Today, with the continuous development of science and technology, the use of laser is also more and more extensive. As a kind of cutting machine commonly used in industry, laser cutting machine, how do we judge the cutting quality of laser cutting machine when we choose and buy many laser cutting machines?

The quality of laser cutting machine mainly depends on its cutting quality. The cutting quality should be checked from the aspects of perpendicularity, cutting width and cutting roughness.

How to select a laser cutting machine and how to judge the cutting quality of the laser cutting machine?

Perpendicularity deviation

If the thickness of the metal workpiece cut exceeds 10mm, the perpendicularity of the cutting edge is very important. When away from the focus, the laser beam will become divergent, and the cutting will be widened towards the top or bottom according to the position of the focus. The cutting edge will deviate several millimeters from the vertical line. The more vertical the edge is, the higher the cutting quality is.

Cutting width size

Generally speaking, the cutting width does not affect the cutting quality. The cutting width has an important impact only when a particularly precise contour is formed inside the workpiece. This is because the cutting width determines the minimum inner diameter of the contour. When the plate thickness increases, the cutting width also increases. Therefore, in order to ensure the same high accuracy, no matter how large the cutting width, the object should be constant in the processing area of the laser cutting machine.

Roughness

When the laser cutting machine finishes machining the workpiece, its cross section will form some relatively vertical lines, and the depth of this line determines the roughness of the cutting surface.

The shallower the cross section line, the smoother the cutting surface. On the contrary, the deeper the cross section line, the rougher the cutting surface. The cutting surface not only affects the appearance of the edges, but also affects the friction characteristics. In most cases, the roughness needs to be minimized, so the shallower the grain, the higher the cutting quality.