WHAT EXACTLY CAN A LASER CUTTING MACHINE DO?

Posted on 2023-03-29 by redsail

×

Category: Laser Cutter News Tag: laser cutting machine



What can a laser cutting machine do? Strictly speaking, laser cutting machines are laser processing equipment used to cut, carve, and punch metal plates. It uses the light beam emitted by the laser to irradiate the surface of the object to be processed, instantly releasing a large amount of energy, melting the irradiated part of the workpiece, achieving the purpose of cutting and processing.

Laser cutting machines cut a wide range of materials, including stainless steel, carbon steel, alloy steel, silicon steel, spring steel, aluminum, aluminum alloy, galvanized plate, aluminum zinc plate, pickling plate, titanium and other metal plates. Application industries include sheet metal processing, kitchenware manufacturing, chassis and electric cabinet, automobile parts manufacturing, and metal sheet metal processing industries such as electric saw blades. Today, we will learn about the specific work that laser cutting machines can do?

"After focusing the laser beam of a laser cutting machine, a very small action point with extremely strong energy is formed, and the heat energy applied is maintained in a very small area. Therefore, the cutting seam is small, the heat affected area adjacent to the cutting edge is small, and there is no other local deformation.".

The laser cutting machine processes the workpiece without any applied force and does not require contact cutting, so the processed workpiece has no mechanical deformation, and there is no tool wear during cutting, and there is no problem of tool conversion. It is not necessary to consider the hardness of the workpiece, which means that the laser cutting ability is not affected by the hardness of the material being cut, and any material with any hardness can be cut.

3. The laser cutting machine has strong beam controllability, high adaptability, and flexibility, so it is convenient to combine with automation equipment, and it is easy to automate the cutting process. Due to the absence of restrictions on cutting workpiece, the laser beam has unlimited profiling cutting ability, and combined with a computer, it can layout the entire sheet, saving materials.