## **SEVERAL MAJOR ADVANTAGES OF LASER CUTTING MACHINES**

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Category: Laser Cutter News



What are the advantages of laser cutting machines?



CM1390E

Several major advantages of laser cutting machines:

- 1. The cutting seam is narrow, with high accuracy, and good roughness. After cutting, there is no need for subsequent processing.
- 2. The laser has a high degree of automation, can be fully enclosed for processing, is pollution-free, and has low noise, greatly improving the working environment for operators.
- 3. Low processing cost. The one-time investment in equipment is expensive, but continuous largescale processing ultimately reduces the processing cost of each component.

- 4. Laser processing is non-contact, with small inertia and fast processing speed. Combined with CNC system CAD/CAM software programming, it is time-saving and convenient, and the overall efficiency is high.
  - 5. The high-energy density of laser is sufficient to melt any metal, especially suitable for materials that are difficult to process by other processes, with high hardness, high brittleness, and high melting point.

6. Laser processing has high energy density, short working time, small Heat-affected zone, small thermal deformation and thermal stress. In addition, laser is non mechanical contact processing, which has no mechanical stress on the workpiece and is suitable for precision machining.

7. The laser processing system itself is a computer system that is easy to arrange and modify, suitable for personalized processing, especially for some sheet metal parts with complex contour shapes. The batch size is small, the product life cycle is short, and from the perspective of technology, economic cost, and time, manufacturing molds is not cost-effective. Laser cutting has special advantages.