# DIFFERENCES BETWEEN LASER MARKING MACHINES AND LASER ENGRAVING MACHINES

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Category: Laser Marker News



The maturity of industrial technology has spawned many industries, and the laser equipment industry has flourished in this wave, creating new opportunities and challenges for many enterprises. Especially with the development of laser technology, the types and performance of laser equipment are continuously improving and improving. Common laser marking equipment includes laser engraving machines and laser marking machines. Many new customers are still unclear about the main differences between the two when praising the industry. They cannot distinguish between laser marking machines and laser engraving machines. They believe that the two types of equipment are the same product, so what is the difference between laser marking machines and laser engraving machines?

## 1. The meaning of equipment is different:

The laser marking machine uses a laser beam to evaporate the surface material to expose the deep material, resulting in chemical and physical changes in the surface material and carving out traces, or uses light energy to burn off some of the material to display the desired etching effects such as graphics and text. Laser engraving machine is a technological device that uses lasers to carve materials that need to be carved. Laser engraving machines can also be referred to as laser depth marking machines or laser engraving machines, which process laser light onto almost all available materials such as wood products, acrylic particles, plastic plates, metal plates, and stones.

# 2. The marking machine processes are different:



Laser marking machines are relatively fast and efficient, such as flying assembly lines on the market that mark hundreds of products per hour, and some can print fewer characters faster, meeting customer production needs. However, laser engraving machines have a relatively large working range, and some require automatic travel to meet their needs. It can also be used for large-scale carving and cutting, with a depth far exceeding that of a laser marking machine.

# 3. Different industrial applications:

Laser engraving machines are generally used to carve or cut non-metallic materials, such as marble, wood, crystal, acrylic, and so on. Since laser marking machines do not require deep engraving, they only achieve identification through marking and names. Most metal and non-metallic materials can

### be marked basically. Cutting is rarely done.

#### 4. Price differences:

The price of laser marking machines varies depending on the configuration model and the laser selected, so the range of price differences is relatively large. From more than 10000 to more than 100000 yuan, choose the appropriate laser equipment according to the material properties of the customer. Materials such as metal and non-metal can be marked. The laser engraving machine is mainly used for large-scale cutting or marking with depth requirements. This type of machine is also configured according to the product and customer requirements, and the price is relatively cheap compared to the special application of the laser marking machine.