LASER CUTTING MACHINE APPLICATIONS IN VARIOUS INDUSTRIES

Posted on 2023-07-06 by redsail



Category: Laser Cutter News



In the laser cutting machine industry, laser cutting machines play an important role in industrial production. Edgeless cutting is possible for most metal materials, regardless of their hardness. Today, let's take a closer look at the practical applications of Laser cutting machines in various industries.

Sheet metal processing industry

Sheet metal processing technology is developing rapidly, and domestic sheet metal processing technology is also changing with each passing day. Traditional sheet metal processing equipment (shearing machines, punching machines, flame cutting machines, plasma cutting machines, high-pressure water cutting machines, etc.) It occupies a relatively large market share in the market, but it can no longer meet the current technical requirements. Laser cutting is a technological regression of sheet metal machining, and it is the processing center of sheet metal machining. Laser cutting has high softness, fast cutting speed, and low consumption. High efficiency and short product consumption cycle have won the favor of customers. Laser cutting has no cutting force, no deformation in processing, tool wear, and good data adaptability. Whether it is simple or complex parts, they can be cut by laser for one-time fine rapid prototyping. The cutting is narrow, the cutting quality is good, the automation level is high, the operation is troublesome, the labor intensity is low, and there is no pollution. Complete cutting automatic nesting set, improve data utilization, low consumption cost, good economic benefits. The application of laser cutting machine in sheet metal processing in the future is an inevitable trend.

Agricultural machinery industry

With the continuous development of agriculture, various agricultural machinery are also constantly updated. The types of agricultural machinery products tend to be diversified and specialized, and are divided into dozens of types according to processing power, processing objects and processing types. The upgrading and renewal of these products also put forward new requirements for the manufacture of agricultural machinery products. The laser cutting machine has advanced laser processing technology, drawing system and numerical control processing technology to speed up the manufacturing and development of agricultural machinery products and improve economic benefits. The production cost of agricultural machinery products is reduced.

Laser processing has gradually become an important means of processing and production of agricultural machinery and equipment, promoting the rapid development of the agricultural

machinery industry and realizing the win-win and mutually beneficial development of different industries.

Advertising industry

For the advertising production industry, the generally processed products are metal and non-metal. Therefore, the laser cutting machine technology applied in multiple industries provides huge advantages for advertising processing. For traditional advertising processing equipment, materials such as ordinary processing advertising fonts are used. Due to the unsatisfactory processing accuracy and cutting surface, those who have a relatively high rework probability are a waste of cost in the advertising industry and greatly reduce work efficiency.

However, using laser cutting machine equipment for processing can effectively solve this problem. Using high-precision laser cutting technology, the cutting surface is processed with pure auxiliary gas, which is perfectly expressed. In addition, the laser cutting machine equipment can carry out complex graphics processing, and the processing that can be completed by the traditional technology department can be completed. It can process products for advertising companies and improve the market. The micro-enterprises on the side can increase additional benefits without secondary rework. The completed operation can maintain the customer's mood and stabilize the customer's resources.

Apparel Manufacturing

In the future, the garment industry, as an important part of the Chinese economy, will become a downstream market for the promotion and development of laser cutting equipment. At present, most of the clothing industry adopts manual cutting mode, and only a few high-end factories use computer-controlled mechanical cutting tables for automatic cutting.

Kitchenware Manufacturing

In the kitchenware processing industry, range hoods and fuel appliances use a large number of sheet metal panels. Traditional processing methods have low work efficiency, large mold consumption, and high cost of use, which restricts the development of this new product. The emergence of laser cutting machine equipment has solved the problem that kitchenware

manufacturers have been troubled. Laser cutting machines are used to process panel samples and develop new products quickly. The cutting speed of laser processing equipment is extremely fast, and the processing efficiency is greatly improved. At the same time, the cutting precision of laser processing equipment is extremely high, which improves the yield of range hoods and fuel appliances. For some shaped products, laser cutting machines have unique advantages.

The laser cutting machine breaks through the problems of slow speed and difficult typesetting of traditional manual and electric cutting, and fully solves the problems of insufficient efficiency and waste of materials. The cutting speed is fast and the operation is simple. You only need to input the graphics and dimensions to be cut into the computer, and the machine will cut the entire material into the finished product you need. It does not need tools or molds to use laser to realize non-contact processing, which is simple and fast.

In addition to the above-mentioned industries where laser cutting machines are most widely used, such as automobiles, aerospace, steel structure construction, elevator manufacturing, printing, etc., there is corresponding development space, so laser cutting machines will become the mainstream of future development.