



# STEVEN SEPVEST CORP

INDUSTRIAL LASER SOLUTIONS PROVIDER

## Sheet Metal Cutting

- **Overview**

Sheet metal is metal formed by an industrial process into thin, flat pieces. It is one of the fundamental forms used in metalworking and it can be cut and bent into a variety of shapes.

China has gradually become the international processing and manufacturing center. With the increasing demands of foreign investment and sheet metal processing capacity, there are higher requirements on sheet metal processing precision.

### **The Existing Problems of Sheet Metal Industry**

Traditional processing methods about sheet metal are shearing plates, blanking and bending. The blanking technology needs a lot of molds in processing one product. The mold processing spends time on design and manufacturing, the trial cycle also wastes a lot of time. In addition, equipping a lot of molds causes high costs.

- **Our Solution**

As a leading enterprise in domestic laser industry, FARLEY · LASERLAB is committed to developing advanced laser equipment. With high precision, fast speed and good flexibility, FARLEY · LASERLAB CNC laser cutting tools have become the development direction of the sheet metal processing technology. The high cost performance and high performance CNC laser cutting machine of FARLEY · LASERLAB are unique and favored in sheet metal industry.

### **The Shortages of Traditional Sheet Metal Cutting Technology:**

- Can only be used on straight cutting processing of sheet metal because of the restrictions of CNC shearing machines;
- The punch has limit to steel plate thickness above 1.5mm, and it has low surface quality, high costs and noise, which is not conducive to environment;
- As the original traditional cutting method, flame cutting has great thermal deformation, wide cuts, material-wasting and slow processing speed, which is only suitable for rough machining;
- High pressure water cutting has slow processing speed, high costs, and will cause pollution.



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## The New Type Sheet Metal Cutting Technology——Laser Cutting:

Laser cutting is a technological revolution and processing center of sheet metal processing. Based on the existing problems of traditional sheet metal cutting machine, the demands of laser cutting are growing too. The advantages of new type sheet metal cutting technology are as following:

- Good flexibility, fast cutting speed, high productivity, short production cycle, one-time molding;
- Narrow cuts, good cutting quality, high automation, easy operation, low labor intensity and no pollution;
- Automatic blank layout and jacking improve material utilization, no tool wear, good material adaptability;
- Low costs, good economic benefits.

Laser processing technology can save large use of molds, shorten production time and reduce costs, which is conducive to various low-volume production and mass production.

### • Customer Benefit

With laser technology, customers will benefit much:

- Fast cutting speed improves production efficiency and shortens production cycle greatly;
- Narrow cuts, good cutting quality and good material adaptability improve the quality of products;
- High automation and easy operation reduce the labor intensity;
- No pollution in processing, won't cause harm to human body;
- Without tool wear, the operating and material costs are reduced;
- High reliability and strong stability can meet the demand of mass industrial production.

### • Related Application

