## Tube Laser Welding Machine

Cooperating with crimping forming equipment, the tube laser welding machine of Farley can weld steel plate to steel tube automatically at a high-speed production line. With fast welding speed, small heat affected zone, narrow welding joint and high productivity, it has been widely used in tube manufacturing.

**● Automobile BIW Roof Cover Automatic Laser Welding Machine**

As the  first domestic provider of  automobile body-in-white laser welding machine, the automotive BIW welding system of FARLEY · LASERLAB  has become globally competitive for its high processing precision and stable performance.It has broken the monopoly of foreign companies into the automobile body-in-white processing lines.

It is competent for automatic models identification fixture graping according to interrelated processing procedures, perfectly integrating BIW fast positioning, laser brazing, laser welding and porter robots into one, which can meet the demand of multi-type production. With involvement of BIW laser welding technology, it is able to finish the welding of a car with only one minute. Its welding speed is up to 4.8 m/min, increasing the speed of nearly 30%. While making 40% reduction of its process costs and 30% enhancement of its body strength.

It stand out in dozens of automakers bids for high quality of welding efficiency and weding quality.This tech from FARLEY · LASERLAB has become key science project applying to the global PSA automobile plants for their high-end models.

Right on 8th Jan, we got the first prize of National Prize for Progress in Science and Technology in the Great Hall of the People. HGLASER, cooperating with the academy HUST, five famous automobile companies and world leading mechanical enterprises, like Farley Laserlab and HAPM, got the award by the project of Core Technology and Complete Equipment for Advanced Laser Welding and Cutting in Automobile Manufacturing.

**● Automobile Airbag Inner Laser Welding Machine**

Controlled by a gas generator, the airbag outbreak will cause oxidizing reaction and generate a lot of gas,generally with a fiece burst. With very strict requirement for airbag sealing, the automobile airbag inner laser welding machine of Farley Laserlab has large welting depth , high welding strength, small heat affected zone and small welding deformation. Without welding rods or filling materials, it can produce pure and non-polluting welding joints.

**● Automobile Tailpipe Laser Welding Machine**

Laser welding utilizes focused high-energy laser beam to melt and connect materials, forming a good welding joint. Laser welding has the advantages as fast welding speed, small deformation, big penetration ratio of welding joints, simple post-welding treatment and good welding quality. This machine is designed for the welding of same or dissimilar materials, even refractory materials under all kinds of special circumstances.

**● Automobile Gear Laser Welding Machine**

As a development trend. At present, the world's automobile manufacturers have used the laser welding gear tech to replace traditional welding modes. Laser gear welding need no vacuum working environment, without welding deformation. Also there is no need for second processing. Automobile Gear Laser Welding Machine from FARLEY · LASERLAB can accomplish the welding with aspect ratios up to 10.  In addition, the strength of welding joints is equivalent or superior to the base metal, ensuring the larger torque transmission of  working gears.

**● Automobile Trunk Laser Welding Machine**

Automobile trunk is composed of trunk lid and back panel. Braze welding is the most appropriate method for the 90-degree angles in shape. Adopted with MIG braze welding, the traditional method is difficult to form a smooth welding joint and will cause pollution of galvanized sheet processing. By contrast, laser braze welding has advantages such as fast welding speed, good welding formations, stable quality ,etc.