

# Fiber Laser Welding



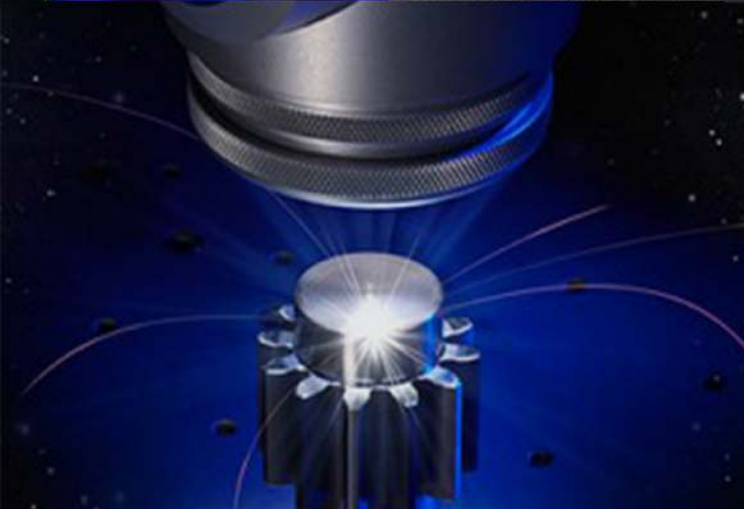
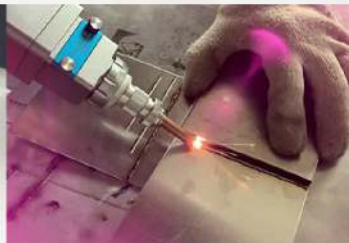
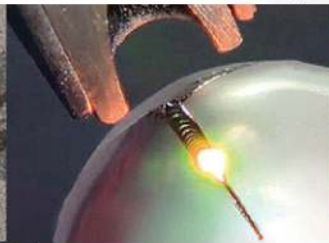
**Application**



**Advantage**



**Specification**



**Laser for industrial  
material processing**

# Laser Welding Solution

Laser welding uses an amplified beam of light with a specific wavelength to perform the welding process with the almost invisible seam in a matter of seconds. The heat of the laser beam creates a very small area that changes the molecular structure of similar or dissimilar metals at the boiling point, allowing the two materials to become an alloy there. This process is mainly used in tool welding, jewelry welding, tooth welding, watch repair, glasses welding, sensor welding, medical tool welding, and other high precision welding purposes. Laser welder can weld various metal materials such as gold, silver, platinum, titanium, palladium, etc. One of the main advantages of laser welding is that it offers a high level of accuracy and control. The fact that laser technology is accurate means that it can be used to weld the smallest parts together without damaging them.



## Application

Fiber laser welding widely used in the kitchen cabinets, staircase elevator, shelf, oven, stainless steel door, window guardrail, distribution box, medical equipment, communications equipment, battery manufacturing, craft gifts, household and other industries



## Material

- Stainless steel
- Carbon steel
- Copper
- Aluminum
- Gold
- Chromium
- Silver
- Titanium
- Nickel
- other metal materials or alloys



## Advantage

It is LASER. Isn't that enough?

- High-precision accuracy for joining even small parts
- Low heat input for minimal distortion
- Non-contact welding - no degradation in welding quality
- No current passes through the part
- Weld dissimilar metals (e.g. Cu to Al)
- Minimal maintenance – high tool availability
- Easily automated for high-productivity, high-yield manufacturing



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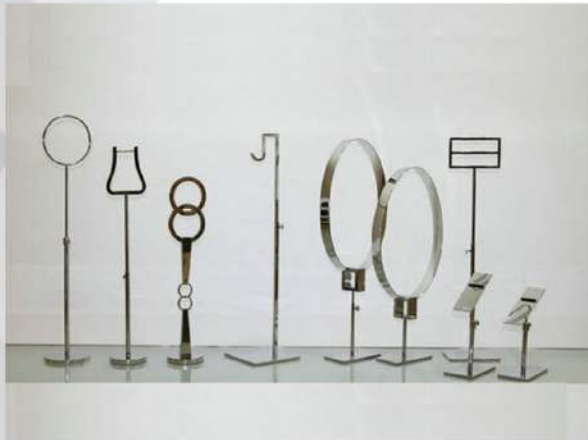
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## Specification

Fiber laser welding is one of many laser processes and is used to join various materials together by creating a strong weld between them. While this is most commonly used for metals, it is a process that isn't only limited to this type of material. you can achieve a high level of accuracy and control. Fiber lasers can create complicated joints which other traditional welding techniques are unable to do. This process uses a low heat application, which minimizes any damage which could otherwise have been caused to the components or materials. Consistent and repeatable welds can be made, and it is a much faster process than more traditional techniques. As well as consistent welds, you will find that these joints are also high in strength too



Type of Laser	Fiber
Laser Wavelength	1064 nm
Laser Power	≤2000W
Cooling Method	Water Cooling
Mode of Operation	Continues & Modulated
Welding Spot Diameter	0.2~4.0mm adjustable
Locating System	Red laser beam
Fiber Cable Length	15 meters
Welding Gun	Wobble laser gun with QBH fiber connector
Power Consumption	6 / 8 kW
Power supply	1 phase 220V ±10%/50HZ (60HZ) / 3-phase 380V ±10%/50HZ (60HZ)
Cooling system	Water cooling

## Support

Our engineers select the components of the system according to your application. In the initial installation and training phase, our technicians exclusively optimize your system parameters to maximize your productivity and provide complete training for your operators. Our support team can help you to achieve the best results and to solve your problems. we are aimed to ensure that you get the most out of your investment in laser technology.

So, WE ARE HERE TO HELP YOU.

