

# Smart industrial Laser Welding



**Application** 



Advantage



Specification





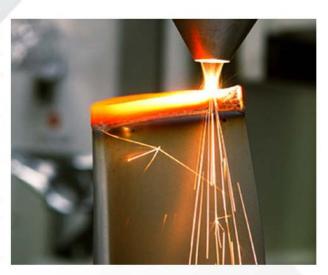


Laser for industrial material processing



## **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

**Butt welding** Overlap welding The joint welding Spot welding Lap joint welding **Corner joint welding** 



## **Advantage**

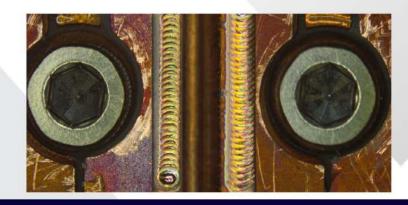
It is LASER. Isn't that enough? Welding dissimilar metals together Higher resistance Minimal thermal effect Direct welding of material without a feed wire Low power consumption Fast process Low waste of material





#### Material

Gold Silver platinum Steel alloy Nickel Copper alloy Brass **Titanium** Carbon steel **Aluminum alloy** other metal materials







### Specification

Laser welding machine adopts a high energy density of laser beam to create fine, deep weld seams and high welding rates. Those laser welders for metals have the ability to weld dissimilar materials. Because of these unique features, it is widely used in processing of precious jewelry or welding of precision parts. Jewelry Laser welding Soldering Machine is specially used for spot welding, perforating, repairing, retyping and resizing of gold/silver/titanium/platinum jewelry and small accessories. Also widely used in aviation, aerospace, sports products, medical instrument, titanium denture, instrument, electronics, alloy automobile, etc. In regard to quality, speed, and economy, laser welding machines for metals are superior to conventional processes for industrial projects, making laser welding systems and services popular offerings for sale.



Type of Laser	Flash lamp Nd:YAG Laser
Laser power	200W
Laser wavelength	1064nm
Mode of Operation	Pulsed
Pulse energy	≤40j @5Hz
Repetition Rate	1-20 Hz
Pulse Duration	0.5-20 ms
Power supply	$AC220V \pm 10\% 50 / 60HZ$
Cooling system	water cooling
Smart & Automatic Focusing	(Optional)
High Accuracy & Stability of Rotary Machine	(Optional)

#### 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.

