



# **Laser Spot Welding Machine**

## **Technical Details**

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## Company Introduction

**EtchON** is a leading professional manufacturer, integrator, exporter and supplier of Metal and Non Metal Marking & Engraving Machines and Welding Machine from **India**. **EtchON** has developed a series of WORLD class products like **Fiber Laser Marking Machines, UV Laser Marking Machine, Co2 Laser Marking Machine, Dot Pin Marking Machines, Metal Etching Machines, Fiber Laser Welding Machine, Jewellery Welding Machine and all its spares.**

We have installed more than 5000 machines in India and exported our products to around 60 countries. We provide innovative technological solutions to a wide range of customers in the fields of marking and engraving processes with the help of our team of qualified experts in mechanics, automation and instrumentation systems. We are highly experienced in the industry, and the sole goal of our experience staff is to identify challenges in order to offer clients innovative solutions that will yield substantial saving and improve their productivity. With the help of our product you can increase your efficiency by introducing a strategic production unit within your companies or by designing an overall plan to improve productivity. Our mission is to work alongside clients to develop efficient and affordable solutions to meet the most stringent requirements, constantly striving to keep our knowledge up to date in a world where technology is always evolving.

Add-on to above things **EtchON** has an excellent R & D team to strive for excellence of high technology in laser area; we dedicate to produce and provide high quality products for the domestic and international customers with the best technical support and always work in the direction of technological Upgradation.

We are also the part of FIEO (Federation of Indian Export Organisations), CII (Confederation of Indian Industries), EEPC (Engineering Export Promotion Council of India) and MASSIA (Manufacturing Association of Small Scale Industries Aurangabad) and have been honoured with different awards like Industry Excellence Award, Iconic Brand of the Year, Best Pavilion ITF Bangkok Top selling products in Metals & Non-Metals Marking and Engraving Machines, Best Employer Award, Best MSME and Innovative Business Award.

## Laser Spot Welding Machine Description

A Laser Jewelry Machine is common use for reassembly of broken bracelets, earrings and necklaces, ring resizing, repairing bezel setting, retippings prongs, filling porosity and creating made to order designs and costume jewelry.

### Product Description

1. Complete machine ergonomic design further fits jewelry industry of which the products are meticulous and artistic and property is stable and it also meets the needs of long time continuous operation.
2. The head cushion and bracket arm cushion are added especially so that long time operation is more comfortable.
3. Large inner space is convenient for setting out of tools and fixtures.
4. Electric focusing device is equipped in working region and laser parameters are applied to adjusting lights for renewal of dust screen, clearing of working region and recovery of welding dust.
5. Observation of welding positions is clearer by using adjustable high brightness of LED ring astral lamp and German brand Microscope.
6. More meticulous light points meets requirements of more meticulous welding.

## EtchON Variety of Models

### 1) EtchON Mini Spot Welding Machine JWM601 (Table -Top):



- Standard Spot Welding Machine : Model SWM601 (Table Top)
- Suitable for Spot Welding
- Laser Power: 100W
- Laser type: YAG , Flash Lamp : Germany
- Welding depth: 0.1-1mm
- Inbuilt Water Cooling
- Inbuilt Control System (Standalone 7" LED Colour CCD Screen)
- Suitable for Gold, Silver, Platinum, Titanium, SS and other metals and its alloys

#### Characteristics:

- The heat affected zone is small, the welding spot size is adjusted, the welding spot is flat and beautiful and there is no need for excessive post-weld treatment.
- Fast welding speed, high quality, non-polluting solder joints, precise positioning, no injuring of surrounding jewels during welding.
- Compact, elegant, user friendly design, ergonomic, long-term work is not fatigue.
- The display uses a 7-inch Colour LED screen, with English, Spanish, Chinese, Russian and other languages with a blowing protection device.

## Technical Parameters:

Model Number	SWM601
Laser Wavelength	1064nm
Spotlight Cavity Reflector	Metal Cavity
Max. Laser Power	100W
Pulse Width	0.1-10ms
Laser Frequency	1-50HZ
Laser energy	100J
Adjusting scope of light spot	0.1-3mm
Aim Operation	Round Point Cursor
Cooling System	Built-in
Rated Power	1KW
Lifetime	3,000,000 spots
Power Supply	220V 50HZ
Dimension	Machine(51*28*29cm)
N.W.	29kg

## Package:

- Mini Spot Welding Machine
- Inbuilt Chiller
- Manual
- Operation Manual/ CD

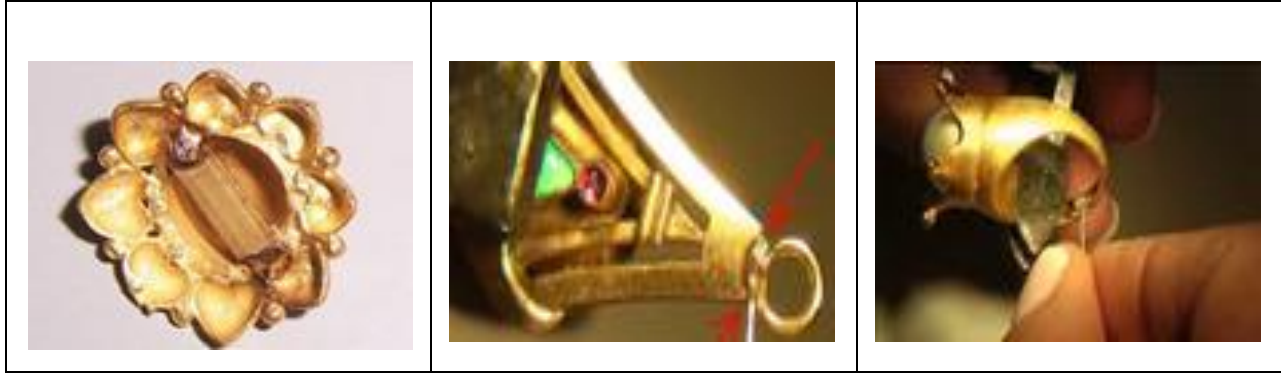
## Machine Dimensions:

- Machine Actual Size:
- Machine Actual Weight:
- Packaging Size:
- Gross Weight:

**Machine Warranty:** 12 Months

## Applications:

The welding of all kinds of metal materials such as Gold, Silver, Platinum, Copper, Titanium Stainless steel etc. and jewelry such as Gold or Silver ornaments like ring ,earring, bracelet, necklace ,tie bar cuff-link ,as well as metal decorations.



## 2) EtchON Spot Welding Machine SWM602 (Table -Top):



- Standard Spot Welding Machine: Model SWM602 (Table Top)..
- Suitable for Spot Welding.
- Laser Power: 150W/200W.
- Laser type: YAG.
- Welding depth: 0.1-3mm
- Inbuilt Water Cooler
- Inbuilt Control System ( with CCD Camera System)
- Suitable for Gold, Silver, Platinum, Titanium, SS and other metals and its alloys.

## Characteristics:

- The heat affected zone is small, the welding spot size is adjusted, the welding spot is flat and beautiful and there is no need for excessive post-weld treatment.
- Fast welding speed, high quality, non-polluting solder joints, precise positioning, no injuring of surrounding jewels during welding.
- Compact, elegant, user friendly design, ergonomic, long-term work is not fatigue.
- The display uses a 7-inch LED screen, with English, Spanish, Chinese, Russian and other languages with a blowing protection device.
- CCD monitoring system can be installed on the basis of 10X microscope.
- With 24 hours of continuous work ability and low power consumption.

## Technical Parameters

Model Number	SWM602
Laser Wavelength	1064nm
Spotlight Cavity Reflector	Metal Cavity
Max. Laser Power	200W
Pulse Width	0.1-20ms
Laser Frequency	1-50HZ
Laser energy	100J
Adjusting scope of light spot	0.1-3mm
Aim Operation	Round Point Cursor
Cooling System	Built-in
Rated Power	5.5KW
Lifetime	3,000,000 spots
Power Supply	220V 50HZ
Dimension	Machine(100*60*82cm)
N.W.	100kg

## Package:

- Mini Spot Welding Machine
- Inbuilt Chiller
- Manual
- Operation Manual/ CD

## Machine Dimensions:



Manufacturers of Fiber Laser Marking Machines, Dot Pin Marking Machines, Electro-Chemical Metal Etching Machines and Laser Engraving & Cutting Machines

- Machine Actual Size:
- Machine Actual Weight:
- Packaging Size:
- Gross Weight:

**Machine Warranty:** 12 Months

## **Applications:**

The welding of all kinds of metal materials such as Gold, Silver, Platinum, Copper, Titanium, Stainless steel and other metals and their alloys. Widely used in gold and silver jewelry, rings, pendants, bracelets, necklaces, holes, spot welding, brazing, repair seams and the welding of claw parts of the mosaic parts, etc., can also be applied to artificial teeth and small precision parts (Such as: Inheritance circuit lead, clock springs, kinescope, electron gun assembly, etc.)



## **3) EtchON Spot Welding Machine with Inbuilt Chiller SWM603 (Standalone):**



- Standard Spot Welding Machine : Model SWM603 (Standalone)
- Suitable for Spot Welding
- Laser Power: 200W
- Laser type: YAG
- Welding depth: 0.1-3mm
- Inbuilt Control System ( with CD Camera System )
- Suitable for Gold, Silver, Platinum, Titanium, SS and other metals and its alloys

## Characteristics:

- The heat affected zone is small, the welding spot size is adjusted, the welding spot is flat and beautiful and there is no need for excessive post-weld treatment.
- Fast welding speed, high quality, non-polluting solder joints, precise positioning, no injuring of surrounding jewels during welding.
- Compact, elegant, user friendly design, ergonomic, long-term work is not fatigue.
- The display uses a 7-inch LED screen, with English, Spanish, Chinese, Russian and other languages with a blowing protection device.
- CCD monitoring system can be installed on the basis of 10X microscope.
- With 24 hours of continuous work ability and low power consumption.

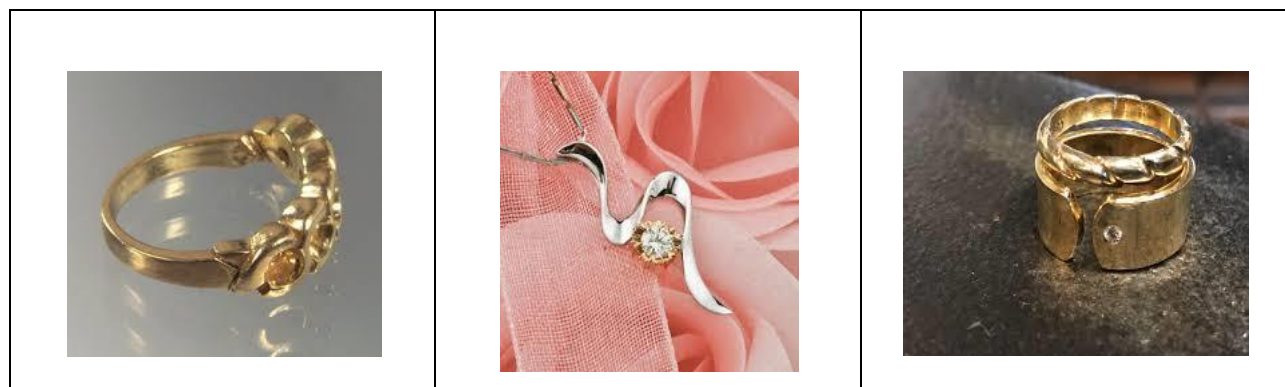
## Technical Parameters

Model Number	SWM603
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Laser Wavelength	1064nm
Spotlight Cavity Reflector	Metal Cavity
Max. Laser Power	200W
Pulse Width	0.1-20ms
Laser Frequency	1-50HZ
Laser energy	100J
Adjusting scope of light spot	0.1-3mm
Aim Operation	Round Point Cursor
Cooling System	Built-in
Rated Power	4KW
Lifetime	3,000,000 spots
Power Supply	220V 50HZ
Dimension	Machine(950mm*700mm*700mm)

## Applications:

- 1) The welding of all kinds of metal materials such as Gold, Silver, Platinum, Copper, Titanium Stainless steel and other metals and their alloys.
- 2) Widely used in gold and silver jewelry, rings, pendants, bracelets, necklaces, holes, spot welding brazing, repair seams and the welding of claw parts of the mosaic parts, etc., can also be applied to artificial teeth sand and small precision parts (Such as: Inheritance circuit lead, clock springs, kinescope, electron gun assembly, etc.)
- 3) Repair of settings without removing the stones.
- 4) Repair of watches, eyewear, and another minutia.



## 4) EtchON Spot Welding Machine with External Chiller SWM604 (Standalone):



- Standard Spot Welding Machine : Model SWM604 (Standalone)
- Suitable for Spot Welding
- Laser Power: 200W
- Laser type: YAG
- Welding depth: 0.1-3mm
- Inbuilt Control System ( with CCD Camera System )
- Suitable for Gold, Silver, Platinum, Titanium, SS and other metals and its alloys

### Characteristics:

- The heat affected zone is small, the welding spot size is adjusted, the welding spot is flat and beautiful and there is no need for excessive post-weld treatment.
- Fast welding speed, high quality, non-polluting solder joints, precise positioning, no injuring of surrounding jewels during welding.
- Compact, elegant, user friendly design, ergonomic, long-term work is not fatigue.
- The display uses a 7-inch LED screen, with English, Spanish, Chinese, Russian and other languages with a blowing protection device.
- CCD monitoring system can be installed on the basis of 10X microscope.
- With 24 hours of continuous work ability and low power consumption.

### Technical Parameters:

Model Number	SWM604
Laser Wavelength	1064nm

Spotlight Cavity Reflector	Metal Cavity
Max. Laser Power	200W
Pulse Width	0.1-20ms
Laser Frequency	1-50HZ
Laser energy	100J
Adjusting scope of light spot	0.1-3mm
Aim Operation	Round Point Cursor
Cooling System	Built-in
Rated Power	4KW
Lifetime	3,000,000 spots
Power Supply	220V 50HZ
Dimension	Machine(950mm*700mm*700mm)

## Applications:

- 1) The welding of all kinds of metal materials such as Gold, Silver, Platinum, Copper, Titanium Stainless steel and other metals and their alloys.
- 2) Widely used in gold and silver jewelry, rings, pendants, bracelets, necklaces, holes, spot welding brazing, repair seams and the welding of claw parts of the mosaic parts, etc., can also be applied to artificial teeth sand and small precision parts (Such as: Inheritance circuit lead, clock springs, kinescope, electron gun assembly, etc.)
- 3) Repair of settings without removing the stones.
- 4) Repair of watches, eyewear, and another minutia.

