

# Technical Solution

Portable Laser Welding Machine

TA-FLPW-1000



**To:**

**From:**

**Date: 2019**

**About TA**

Wuhan TA Laser Machinery Co.,Ltd is an integration of a laser cutting machine manufacturer and industrial machinery trading company based in south central China, Wuhan city. We have two branch companies.

**Wuhan TA Laser Machinery Co.,Ltd**

**NIMO INT'L CO.,LIMITED**

**Wuhan TALaser** is dedicated and committed to represent the highest quality in equipment and customer service.

**Who we are**

- An ambitious laser cutting machine manufacturer that enjoys a leaping growth over the past 6 continuous years;
- Laser cutting machine and parts exporter in China.
- Metal sheet processing machinery & parts international trading and exporting
- Tech service provider, including machine installation, debugging, upgrading, maintenance, trouble-shooting.
- Purchasing service provider, we help purchase all the industrial machinery and parts for clients.

### ***Why choose TA-FLPW-1000 (1000W Raycus)***

- **Fast processing speed;**
- **Small thermal deformation and heat affected zone (suitable for processing high melting point, high hardness, special materials);**
- **Partial heat treatment of parts;**
- **It can process complex parts and small parts, and can also process in vacuum;**
- **No noise, no pollution to the environment;**
- **Combined with automatic control and computer technology, it is easy to realize automation;**
- **Advanced product structures and materials can be improved due to advanced processing methods.**

### ***Advantages***

- **The weld spot energy distribution is uniform and has the best spot required for welding characteristics;**
- **Adapt to seam welding of various metal materials;**
- **Using domestic 1000 watt fiber laser, excellent beam quality, maintenance-free, photoelectric conversion efficiency is greater than 25%, pump source life is greater than 100,000 hours;**
- **Processing speed is fast;**
- **Small thermal deformation and heat affected zone (suitable for processing high melting point, high hardness, special materials);**
- **local heat treatment of parts;**
- **It can process parts with complex shapes and small parts, and can also process in vacuum;**
- **No noise, no pollution to the environment;**
- **Combined with automatic control and computer technology, automation of processing can be realized;**
- **Due to advanced processing methods, existing product structures and materials can be improved.**
- **The fiber-optic welding head adopts water-cooling method to ensure the stability of laser processing for a long time.**

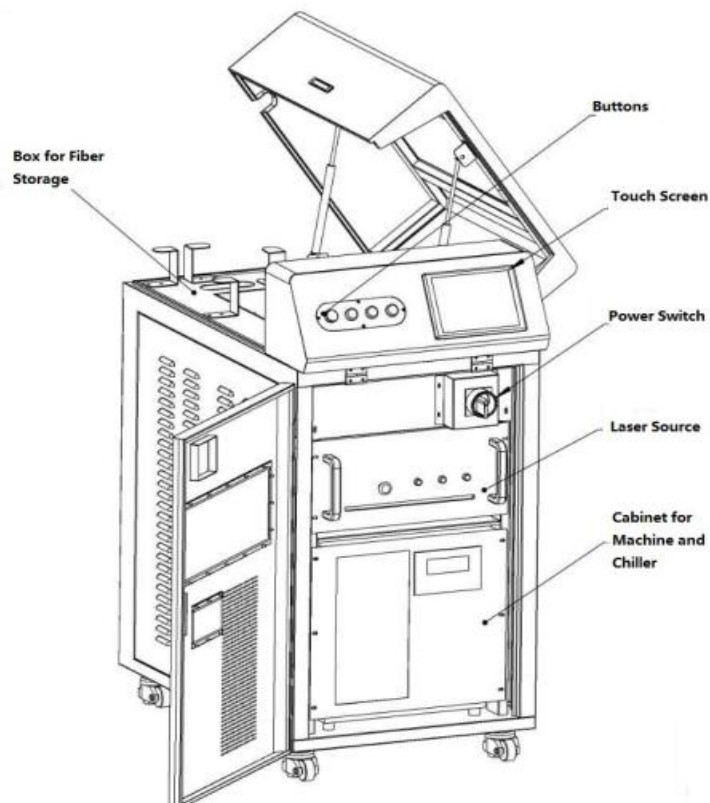
## I Standard technical Data of TA-FLPW-1000.

<b>Machine Model</b>	<b>Portable Laser welding TA-FLPW-1000</b>	
<b>Laser Generator</b>	Machine type	Cabinet -- Portable
<b>Laser Cutting Head</b>	Optical Path Transfer	By Fiber
<b>Speed Reducer</b>	Power Supply	380V ± 10%/50Hz
<b>Servo System</b>	Laser Type	Fiber Laser Generator
<b>Rack and Pinion</b>	Wavelength	1070nm
<b>Linear Guide</b>	Laser Power	1000W
<b>Proportional Valve</b>	Frequency	50KHZ
<b>X/Y Drag Chain</b>	Laser Output distance	100mm
<b>Shield Cover</b>	Cooling	Water Cooling
<b>Industrial Water Chiller</b>	Indicating System	Red light
<b>Industrial PC and LCD Screen</b>	Length of Fiber	5 m
<b>Voltage Stabilizer</b>	Gas	Argon Gas

## II 2.1 Machine Configuration of TA-FLPW-1000

Serie No	Name	Unit	Quantity	Brand
1	Laser Source	Set	1	China
2	Optical Lens	Set	1	China
3	Laser Transfer System	Set	1	China
4	Control System	Set	1	China
5	Other auxiliary electronic components	Set	1	Omron, Fuji
6	Water Chiller	Set	1	China
7	Portable Welding Hand	Set	1	China

## 2.2 Machine Structure



## 2.3 Welding Head Photos



## III Technical Training and After-sales Service

### 3.1 Technical Training

#### Training plan 1:

S.N.	Item	Content
1	Time	Before machine delivery
2	Location	Manufacturer factory
3	Training contents	① Maintenance : Routine maintenance, lubrication, assembling and disassembling lens; ② Operation: Equipment operation and basic trouble shooting; ③ Programming: the machine tool programming, transfer operations of programming procedures, the use of programming software and so on;

#### Training plan 2:

S.N.	Item	Contents	Notes
1	Time	Carried out simultaneously with the commissioning on customer's site	
2	Location	Customer's installation site	
3	Training contents	Participate in the whole process of installation and commissioning. Pls refer to the Customer Training Program for other information	

### 3.2 After sales service

- **Warranty period: From the acceptance qualified date, the warranty period will be 2 (two) years, Seller is responsible to offer free fittings in these years (except consumable part.) Buyer has to send the damaged fitting to sellers.**
- **After the warranty, we will also provide favorable service of long term technical supports and spares supply to ensure machine's stable and continuous running.**
- **The artificial damage in the warranty period and damage after warranty period, Seller offers paid service.**
- **The Seller will give 24 hours service support during warranty time, and giving technical guide by email, telephone, Fax for daily maintenance, if need local support, Buyer has to pay for the travel and accommodation & meal cost for the people from seller's side, no labor charge require.**
- **If products are out of warranty and require on site service, Buyer have to pay for the travel and accommodation & meal cost for the people from seller's side, labor charge is require, USD100/day per people.**
- **About the transportation expenses of spare parts will be supported by both parties in the warranty period, like Buyer support the cost of transportation for damage spare part back to supplier; Seller support the new spare part deliver to Buyer.**