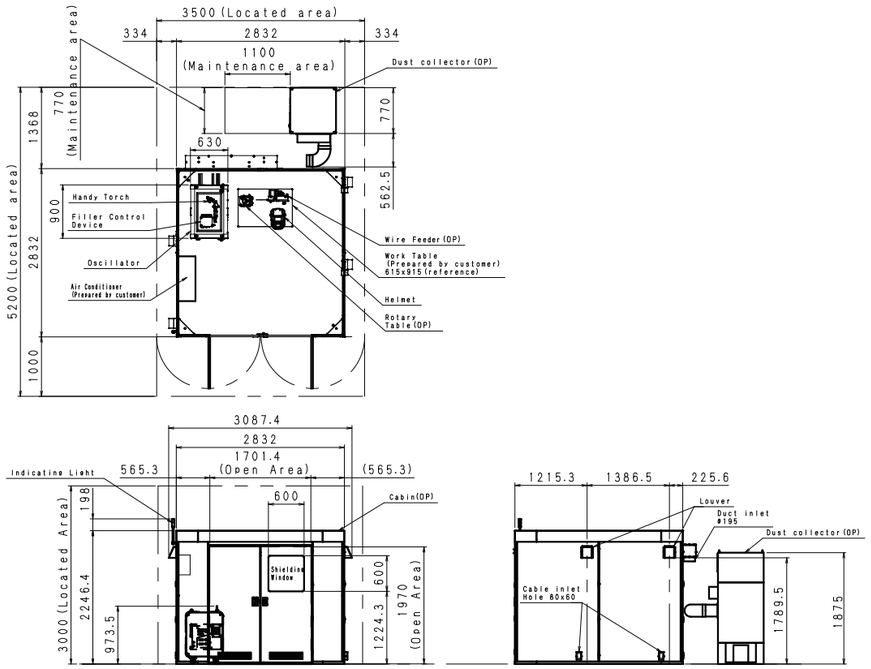
■Dimensions

Unit：mm



■Machine Specifications

Machine Model		FLW-1500MT
Registered Machine Name		FLW1500MT
Rated Laser Power	W	1500
Max. Laser Power	W	2500
Wavelength	μm	1.07
Cabin W×D×H	mm	2832×2832×2246.4
Safety Devices		Door interlock, Wired protective helmet, Nozzle contact detection (Ground) and Plasma sensor
Power Requirements	kVA	5.9

■Options

◆Cabin
◆Wire feeder
◆Rotary table
◆Dust collector

For your safe use,
Be sure to read the operator's manual carefully before use.

●When using this product, a dedicated cabin is required to prevent hazards.
●This system requires a dedicated shield material against wavelength 1.07μm.

*Specifications, appearance and equipment are subject to change without notice by reason of improvement.
*Use the registered machine name when you contact the authorities for installation, exporting or financing.
The hyphenated spellings like FLW-1500MT are used in some parts of this catalog for the sake of readability.
This also applies to other machines.

This laser product uses a Class 4 invisible laser for processing and a Class 2M visible laser for indicating position.

●Class 4 invisible laser : Avoid eye or skin exposure to direct or scattered radiation.

●Class 2M visible laser : Do not stare into beam or expose users of telescopic optics.

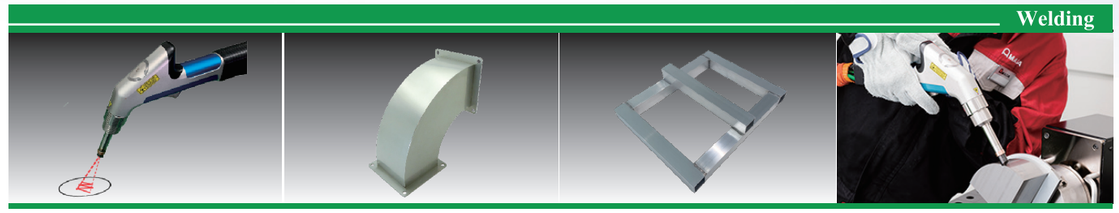
AMADA CO., LTD.
www.amada.com

Inquiry

E141-HQ02en
Aug. 2022

SOLUTION

Handy Fiber Laser Welder FLW 1500 MT



The Engineering AMADA

AMADA

New Standard for Sheetmetal Welding

Handy Fiber Laser Welder "FLW-1500MT" uses an oscillator with 1500W rated power.
The combination of a high power oscillator and the latest wobbling feature provides wide-range welding, from "smooth welding unique to fiber laser" to "deep penetration welding with minimal distortion using focused beam".
In addition, high energy-saving performance of fiber laser and compact footprint by an oscillator with a built-in control device support customers' manufacturing as a high cost-performance machine.

Handy Fiber Laser Welder

FLW-1500MT Debut!

FLW-1500MT enables processing of various parts with a range of auxiliary equipment.

1.5kW
Wobbling Technology

*Cabin, rotary table and wire feeder are the optional features
*iOS device and surface plate are prepared by customers

FLW-1500MT 3 Points

Point 1

Wide-range Welding Capacity

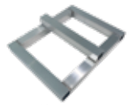
The combination of a high power oscillator and the latest wobbling feature provides wide-range welding, from "smooth welding unique to fiber laser" to "deep penetration welding with minimal distortion using focused beam.

【Thin Material with Small Distortion】

Stainless steel
1.0+0.8mm

【Smooth R Bead】

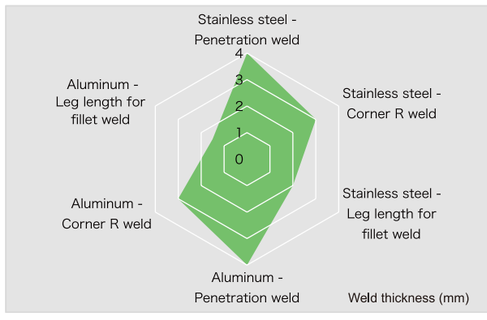
Stainless steel
1.0mm

【Reflective Material】

Aluminum
2.0mm

<Oscillator Power 1500W>

Welding Capacity

Penetration welding is possible up to 4.0mm for mild steel, stainless steel and aluminum.



Welding Speed

Even with the maximum thickness 4mm, welding can be performed at a speed equivalent to 1mm.

<Wobbling Feature>

Moving the laser beam left and right provides a wider bead. It improves the ability to respond to gaps between workpieces and offers stable wire welding.

【Changed Wobbling Width/Frequency by Condition Settings】

Weld width

0mm 1mm 3mm 5mm

Point 2

Unskilled, Easy Laser Welding

<Work Contact Torch>

The carbon nozzle at the tip of the torch contacts the workpiece when welding, thus providing stable operation regardless of operators' skill level.

【Work Contact by Carbon Nozzle】

*Ground clamp must be attached to the workpiece

<Process Condition Setting>

Process conditions can be set using the app of the dedicated device. The standard conditions are already installed for each material/thickness at the time of machine installation. In addition, customers' original conditions can be registered under custom conditions.

Point 3

Safety Solutions

Cabin, protective helmet and handy torch are equipped with hazard protection devices.

<Cabin>

Operate the machine in the cabin to prevent the laser beam from leaking outside. An "interlock" is provided on the door of the cabin to stop the laser emission immediately when anyone other than the operator enters into the cabin.

<Wired Protective Helmet>

The full-face helmet prevents reflected light from the operator. Due to the "helmet wearing sensor" and "protective shield with damage detector", laser welding cannot be performed when the helmet is not worn or when the helmet is defective.

<Handy Torch>

The laser beam cannot be emitted if the tip of the torch is not touching the workpiece.

FLW 1500 MT