



GEM Laser Welding Machine

GEMHJ-500



GEM LASER LIMITED

A Legend Laser machine Manufacture & Solutions

Add . : No.442 ,Wuluo Road,Wuhan,430061 P.R.China .

Tel. : +86-27-84793136

Fax : +86-27-84793136

E-mail: sales@gem-lasers.com

Web : www.gem-lasers.com



OVERVIEW

Laser welding is the local heating in a small region of materials using high energy laser pulses; the internal diffusion of laser radiation energy transfer material oriented by heat, the material is melted after the formation of specific to achieve the purpose of welding molten pool.

FEATURES

1. Welding quality, high dimensional accuracy.
2. Welding production efficiency is high.
3. Low production costs. As the welding machine power is small, welding time is short, it can save energy.
4. Compared with the flash butt welding, saving about 80% to 90% of electricity. Compared with arc welding. Processing costs can be reduced by about 30%.
5. Can weld dissimilar steel and dissimilar metals.
6. Easy to mechanize and automate.
7. Fast, small deformation, small heat affected zone, with high and aspect ratio.
8. Weld beautiful, smooth, no pores, no need to deal with after welding or need to be simple to deal with.
9. Minor point small, non-polluting, high-precision positioning.
10. Can be a small open parts and precision welding.

SPECIFICATIONS

Model	GEMHJ-500
Maximum laser output power	500W
Laser wavelength	1064nm
Welding stroke	300mm*400mm*300mm(X,Y,Z)
Laser welding depth	0.1-3mm
The smallest pool	0.1mm
Laser welding frequency	0.5-40Hz
Minimum spot diameter	0.15mm
Power consumption of the whole machine	≤16KW
electricity demand	380V/50Hz/70A
Pulse frequency	0-1000Hz
Pulse Width	0.1ms-20ms
Host dimensions	1400mm*700mm*1200mm
cooling method	Water cooled
Targeting	Red (CCD optional)

Device configuration list (Standard, Option)

Item	Subsystem	Component	Model	Quantity	Mark
1	Laser marking head	High speed scanning galvanometer	Light Φ10mm	1pcs	China
		Galvanometer drive card		1pcs	
		Scanning field mirror	f=160mm	1pcs	China/Import
		Beam expander	10X	1pcs	China/Import
2	Laser	Green Laser	pulse-532-005	1set	China
3	Laser marking machine cabinet	Cabinet		1set	GEM
4	Computer&software	Computer	Desktop	1set	Lenovo
		Software	Software	1set	GEM
6	Workbench	Precision workstation		1set	GEM
7	Seat				

Applications

Widely used in sheet metal, metal products, lamps, kitchen utensils, sanitary ware, chassis cabinets, steel structure, frames, jewelry, nameplate, advertising, handicrafts, electronics, toys, packaging and other industries

Laser Marked Samples

