

GS-LFDS4015 CNC fiber laser cutting metal machine

Product Introductions



GS-LFDS4015 Exchangeable Working Table Fiber Laser Cutter (double drive)

2.1 Advantage of Fiber Laser Cutting Machine

Compare of different laser sources

Model of Laser Source	Fiber	CO2	Disc
Electro-optical Conversion Efficiency	30%	10%	15%
Max. Output	50Kw	20Kw	8Kw
BPP (4/5Kw)	<2.5	6	8
Life of Diode Pumped	> 100,000	NA.	10,000
Occupied Area (4/5Kw)	<1M ²	3M ²	>4M ²
Maintenance	no need	need	Often
Soft Processing	more suitable	unsuitable	suitable
Stability	best	good	good
Absorption rate%--steel	35	12	35
Absorption rate%--aluminum	7	2	7
Replaced Parts	High brightness semiconductor laser broadband single core, more than 100,000 hours of pump. Damage to one of the semiconductor does not affect the	Laser work requires gas supplement, reflection lens replacement.	Semiconductor Bar (array) maximum pulse model 5000 hours or 10000 hours continuous mode.

	<p>normal work of the laser, but less and less power, because each semiconductor pump sources are used to separate each other.</p>	<p>Laser use the pump sources are used in the process of often need to change, each time change need to be between \$200,000-230,000.</p>
--	--	---

2.2 External Cooling Water Circulation System with deionizer, filter, constant temperature control to avoid frequent change of the cooling water.



- 4.10.1 The inside chassis use cold reduced sheet with baking finish. Split design with low noise and compact structure
- 4.10.2 The compressor of the cooling system, expansion valve, pressure controller and other control device are all international famous brand to ensure the good quality of the machine and long term reliability.
- 4.10.3 The water pump, water tank and coupling of the water circulation system are all made of stainless steel 304 material, no worry about the corrosion
- 4.10.4 The water tank and the outlet are all equipped with filter and deion device to ensure the water electric conductivity.
- 4.10.5 The water chiller has the function of noise & light alarm in case of high & low temperature, water flow, water pressure, water level and water quality.
- 4.10.6 The system use electricity for heating, PLC control with ± 0.3 control precision.

2.3 Servo Motor of strong rigidity, excellent control ability, accurate, sensitive response

- 4.8.1 Outstanding performance with the highest level of response of amplifier in the industry, the setting time is shortened in a high degree.
- 4.8.2 Enhancement of the Vibration suppression function to improve the track ability and decrease the setting time. Reduce the vibration when driving and reduce the fore-end vibration when stop working
- 4.8.3 Easy start up: simple installation and setting. The connection can be finished one time with Sigma Win+C connection confirmation function.
- 4.8.4 Standard configuration with analog quantity, instruction form of pulse sequence type and MECHATROLINK-II communication command type.



YASKAWA Servo Motor

2.4 Cutting Materials

It is used to cut the metal materials, such as stainless steel, carbon steel, alloy steel, silicon steel, spring steel, galvanize plate, pickled plate, copper plate, aluminum plate, etc.

2.5 Application Industry

Widely used in sheet metal processing, aviation, aerospace, electronics, electrical appliances, tube fittings, automobile, food machinery, engineering machinery, precision parts, ships, metallurgical etc.

equipment, elevators, household appliances, kitchen utensils and appliances, craft gifts, tool processing, decoration, advertising and other manufacturing industries.

Samples



1mm stainless steel



3.5mm stainless steel



5mm carbon steel



5mm stainless



10mm carbon steel



10mm stainless steel