

6000 x 2500 mm GA SERIES

– SHEET LASER – EXCHANGE TABLE

– FIXED COVER – HIGH PERFORMANCE



6KW cutting power

or

8KW cutting power

October 2024



▶ **PRODUCT OVERVIEW**

- LF6025GA fiber laser cutting machine can carry up to 8000W laser power, so for most thickness, it is a very good choice.
- For example, agricultural machinery, textile machinery, food machinery and construction machinery and other large machinery and equipment manufacturing, usually use high power fiber laser cutting machine for processing. Suitable for stainless steel, carbon steel, silicon steel, aluminum alloy, titanium alloy, galvanized steel, aluminum-plating zinc plate, copper, and other metals.

▼ **ADVANTAGE**

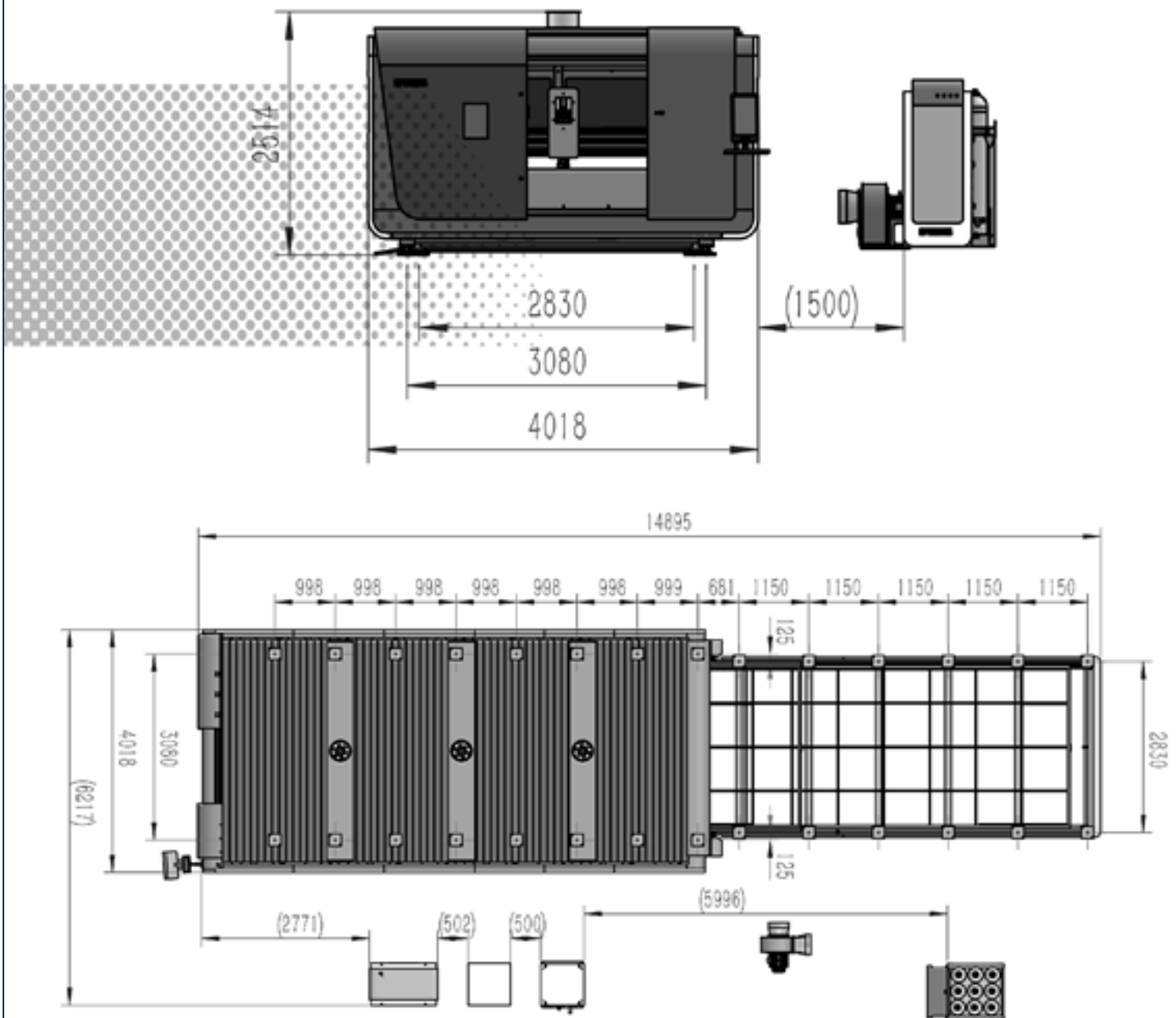
- Aviation Aluminum Gantry
- CE protection standard
- High configuration





▶ **PRODUCT DESCRIPTION**

— LF6025GA —





► TECHNICAL PARAMETERS

Model	LF6025GA
Maximum processing range	2500x6000mm
X-axis travel	2500mm
Y-axis travel	6000mm
Z-axis travel	330mm
X / Y axis positioning accuracy	±0.03mm
X / Y axis repeated positioning accuracy	±0.02mm
X / Y axis maximum moving speed	180m/min
X / Y maximum acceleration	2.0G
Transmission type	Dual drive rack
Y-axis motor power	2.9KW*2
Working platform exchange time	25-35s
Guide width	35MM
Working platform max load	5500kg
Enclosed laser protection	Yes
Lubrication type	Automatic oiling
Power available	3000-20000W
Dimension	15000*4018*2755MM
Total Weight	18000KG

**LF6525GH Main Specification**

No.	Name	Quantity	Brand
1	Laser source	1 set	MAX/Raycus laser source
2	Laser head	1 set	BOCI
3	Machine body	1 set	Gweike
4	Gear and Rack	1 set	Taiwan YYC
5	Reducer	1 set	France Motoreducer
6	Motor on X, Y axis	1 set	YASKAWA/INOVANCE
7	Motor on Z axis	1 set	YASKAWA/INOVANCE
8	Exhaust Smoke System	1 set	China
9	Guide rail	1 set	Taiwan HIWIN
10	Electronic Components	1 set	France Schneider
11	Pneumatic Components	1 set	Japan SMC/Taiwan AirTac
12	Control system	1 set	FSCUT6000
13	Water chiller	1 set	S&A Water Chiller
14	Control cabinet	1 unit	Gweike
15	3rd generation aviation aluminum Beam	1 unit	Gweike
16	Auto higher	1 unit	Cypcut
17	Auto lubrication	1 set	China
18	Industrial computer	1 set	HP
19	All closed protective cover	1 set	Gweike
20	Exchange table	1 set	Gweike



MAIN CONFIGURATION



▼ RAYCUS Laser Source

- High Electro-optic Conversion Efficiency
- High reliability, long service life
- Maintenance-free Operation



▼ BOCI Laser Head

- High power series designed for metal sheet production industry.
- Adopts EtherCAT bus technology.
- Featured by easy-install-and-adjust benefits,
- Robust performance, is the most intelligent laser on the market.



▼ France MOTOREDUCER

- Stable operation
- Low noise
- Large output torque
- High speed ratio



▼ Taiwan - YYC

- High precision
- Accurate instantaneous transmission ratio
- High transmission efficiency;
- Long life



MAX Laser source

Alternative 6000 W & 8000W options with G5 connection to laser head to offset reflection.



MAIN CONFIGURATION



▼ Square Rail-Taiwan HIWIN

- Low noise
- Wear-resistant
- Smoothly, enable fast speed



▼ Servo Motor-Japan YASKAWA

- High accuracy
- High-speed performance
- High adaptability & stability
- Timeliness, short dynamic response time of motor



▼ CYPCUT control system

- Easy to use
- Various file editing functions
- Support remote control
- Real-time alarm and protection



▼ TongFei / S&A Water Chiller

- Dual cooling function
- Real-time alarm
- Machine protection

CNC Operating System & PC nesting

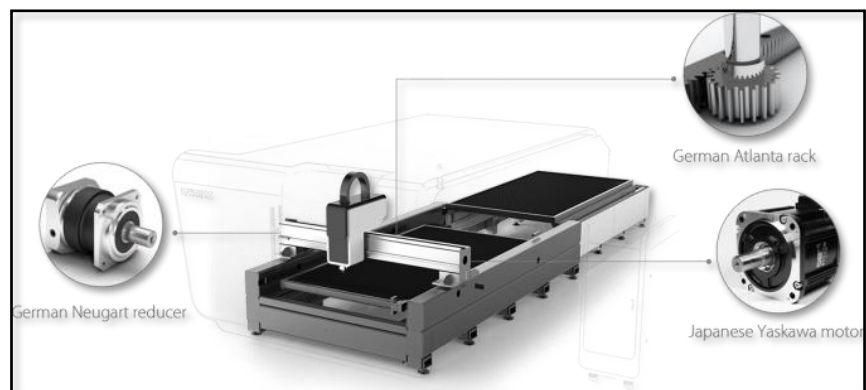
- The Cypcut2000C control system integrates high productivity and simple operation.
- Cypcut Nesting supports .dxf and most of the drawing outputs.
- In-built drawing and nesting tools for simple and quick jobs
- Different cutting strategies can be applied to the nest.



Main cutting bed : 6.0m x 2.5 m

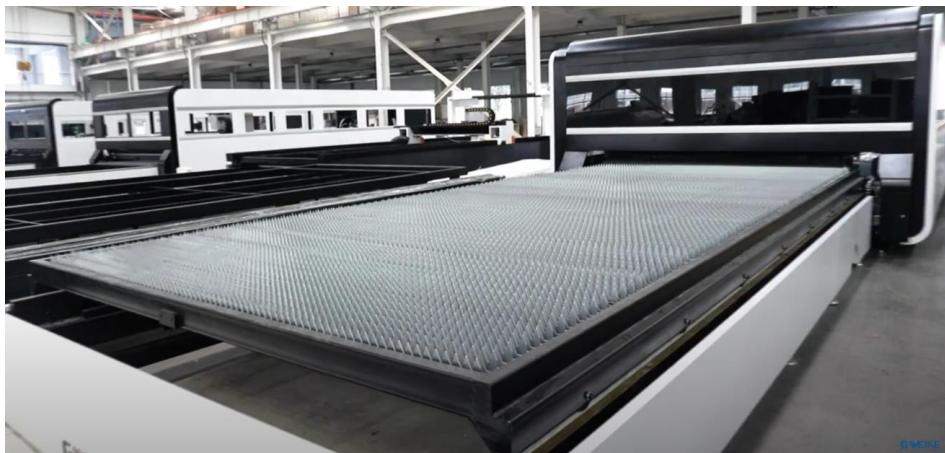
Transmission and Precision

- Fiber laser cutting machine is equipped with German Atlanta rack, Japanese Yaskawa motor and German Neugart reducer gear unit
- The positioning accuracy of the machine tool is 0.02mm
- The cutting acceleration is 1.5G



Exchange Platform

- The Exchange Platform acts as a loading & unloading platform which saves feed time and improves productivity
- The platform exchange is completed within 15s



Safety and No Smoke

- With a **fully enclosed safety design**
- The watch window adopts an European CE Standard laser protective glass
- The smoke produced by cutting can be filtrated inside. Hence, a non-polluting and environmentally friendly design is achieved

TOPSINN 6 X CARTRIDGE DUST EXTRACTOR 6000 cum/hour



TODC-6L

Cutting with air v's nitrogen _ 16 bar

Thinner sheet **stainless** and **aluminium** material will cut using higher pressure compressed air.

The resulting cut SS edge has less shine than when cut with concentrated nitrogen gas.

The cost saving is considerable.



CUTTING PARAMETERS

6000W

Material	Thickness	Assisted Gas	Max Speed
Carbon steel	0.5	Nitrogen	80.0-100.0
	1.0		35.0-48.0
	2.0	Oxygen	6.0-7.5
	3.0		4.0-5.0
	4.0		3.5-4.5
	5.0		3.0-3.8
	6.0		2.6-3.2
	8.0		2.0-2.5
	10.0		1.8-2.1
	12.0		1.6-1.9
	14.0		0.8-1.1
	16.0		0.7-0.9
	20.0	0.65-0.85	
	25.0	0.4-0.6	
Stainless steel	0.5	Nitrogen	80.0-100.0
	1.0		50.0-65.0
	2.0		30.0-40.0
	3.0		18.0-22.0
	4.0		10.0-14.0
	5.0		8.0-12.0
	6.0		6.0-8.0
	8.0		4.0-5.0
	10.0		1.8-2.5
	12.0		1.2-1.5
	16.0		0.6-0.8
Brass	1.0		45.0-55.0
	2.0		25.0-30.0
	3.0		12.0-18.0
	4.0		8.0-10.0
	5.0		6.0-7.0

CUTTING PARAMETERS

6000W			
Material	Thickness	Assisted Gas	Max Speed
Brass	6.0	Nitrogen	3.5-4.5
	8.0		1.6-2.2
	10.0		0.8-1.2
Copper	1.0	Oxygen	30.0-40.0
	2.0		9.0-11.0
	3.0		3.0-4.0
	4.0		1.2-2.0
	6.0		0.8-1.3
	8.0		0.6-1.0
Aluminum	1.0	Nitrogen	55.0-60.0
	2.0		25.0-35.0
	3.0		13.0-18.0
	4.0		10.0-12.0
	5.0		5.0-8.0
	6.0		4.0-6.0
	8.0		2.0-3.0
	10.0		1.0-2.1
	12.0		0.8-1.4
16.0	0.6-0.9		

8000W

Material	Thickness	Assisted Gas	Max Speed
Carbon steel	1.0	Nitrogen	50.0-65.0
	2.0		6.8-7.2
	3.0		4.7-5.3
	4.0		3.8-4.3
	5.0		3.3-3.8
	6.0		3.0-3.4
	8.0	Oxygen	2.3-2.6
	10.0		2.0-2.5
	12.0		1.7-2.2
	14.0		1.4-1.6
	16.0		1.2-1.4
	26.0		1.0-1.1
	20.0		0.9-1.0
	25.0		0.6-0.7
30.0	0.3-0.6		
Stainless steel	0.5	Nitrogen	80.0-100.0
	1.0		63.0-66.0
	2.0		40.0-44.0
	3.0		25.0-28.0
	4.0		15.0-18.0
	5.0		12.0-14.0
	6.0		9.0-9.5
	8.0		5.0-5.3
	10.0		3.8-4.0
	12.0		2.5-2.7
	14.0		1.8-1.9
	16.0		1.3-1.5
	20.0		0.7-0.8
	25.0		0.5-0.6
	1.0		48.0-60.0

8000W

Material	Thickness	Assisted Gas	Max Speed
Brass	2.0	Nitrogen	27.0-32.0
	3.0		13.0-20.0
	4.0		10.0-12.0
	5.0		7.0-9.0
	6.0		4.0-5.5
	8.0		2.0-2.5
	10.0		1.6-2.2
	12.0		0.8-1.2
Copper	1.0	Oxygen	30.0-40.0
	2.0		9.0-11.0
	3.0		3.0-4.0
	4.0		1.2-2.0
	6.0		0.8-1.3
	8.0		0.6-1.0
Aluminum	1.0	Nitrogen	53.0-65.0
	2.0		30.0-40.0
	3.0		15.0-23.0
	4.0		12.0-16.0
	5.0		7.0-10.0
	6.0		5.0-7.0
	8.0		2.5-4.0
	10.0		1.5-2.8
	12.0		1.0-1.6
	14.0		0.8-1.2
	16.0		0.6-0.8
	20.0		0.5-0.7
25.0	0.3		

SUPPLY & INSTALLATION

PPT ships this machine in fully enclosed containers to your nearest container capable port, transports contents to your premises, assembles, tests, production trains personnel.

Your commitment is to supply required power to the machine and connect controller WIFI or internet.

ONGOING SUPPORT

PPT provides online support at no charge.

Machines parts, that are under warranty, along with the labour required to install are provided.

Service hours for the initial 6 x months is inclusive of initial pricing.

Consumables are stocked for cutting head, air compressor, and dust extractor.