

PPT PRESENTS

CNC 3kW SHEET FIBER LASER

G WEIKE 3000 X 1500 mm SHEET PROFILE CUTTER for



aluminum, stainless steel, copper, brass, and mild steel

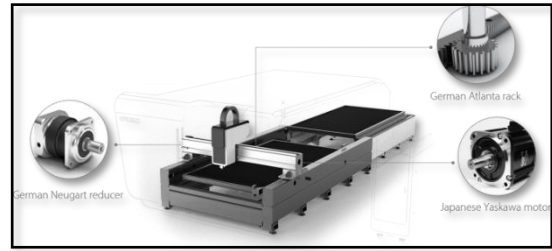
the CNC profile cutter provides

- **INCREASED PRODUCTIVITY WITH EXCHANGE TABLE**
- **FULLY ENCLOSED FIBER LASER MACHINE**
- **INTEGRATED ELECTRICAL CABINET & CNC SYSTEM**
- **ALUMINUM, STAINLESS STEEL, GALV SHEET & MILD STEEL**
- **CUT WITH HIGH DEFINITION AND HOLES THAT CAN BE SMALLER IN DIAMETER THAN MATERIAL THICKNESS.**
- **NEAR ZERO COST CUTTING WITH COMPRESSED AIR**
- **LOW CONSUMABLE COST**

FEATURES:

Transmission and Precision

- The positioning accuracy of the machine tool is 0.02mm
- The cutting acceleration is 1.2G



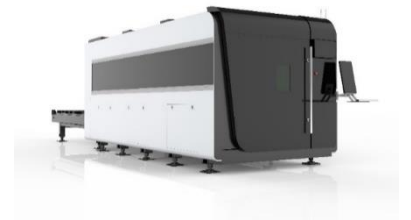
Exchange Platform

- The Exchange Platform acts as a loading & unloading platform while cutting is in operation, easy to load, and saving in downtime to improve production throughput.



Safety and No Smoke

- With a **fully enclosed safety design**
- The watch window adopts a European CE Standard laser protective glass.
- The smoke produced by cutting is extracted into an external dust collection system.



CNC Operating System & PC nesting software

- 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.



Monitored Control System

- In the processing process, each dead corner area can be monitored at any time, the process can be controlled.



SPECIFICATION & PARMETERS:

SPECIFICATION LF3015GAI	TECHNICAL PARAMETERS LF3015GAI
Raytools autofocus laser head(1000W-6000W)	Working area: 1500*3000mm
Cypcut2000C control system	Travel of X axis: 1500mm
Yaskawa motor	Travel of Y axis: 3000mm
Motoreducer reducer	Travel of Z axis: 200mm
S&A /Hanli /tongfei Water cooling system	Positioning accuracy(X,Y axis): ± 0.03mm
France SCHNEIDER/China Zhengtai electronic components	Repeatability accuracy(X,Y axis): ± 0.02mm
CKD/Airtec pneumatic component	Max moving speed(X,Y axis): 100m/min
Taiwan Hiwin/Lapping guide rail	Max acceleration: 1.2G
Taiwa YYC/APEX gear and rack	Transimission: High precision gear and rack
Aviation aluminum beam	Max loading weight of body: 800KGS
Exhausting system(segmented bed+axial fan)	Motor power: X:0.85KW Y: 1.3KW, Z:400W
Industrial Computer	
Auto lubrication system	
Exhausting system - TopSINN	
Compressor - DHH - 15.8 bar	

RAYTOOL SERIES AUTOFOCUS CUTTING HEAD




- An automatic focusing fiber cutting head that is aligned to the power of the laser power source. The product has a built-in motor drive unit, and the linear mechanism drives the focus lens to automatically change the position within 22mm. The user can set the continuous focus through the program to complete the rapid perforation of thick plates and automatically cut plates of different thicknesses and materials.
- The product is equipped with a D30 compound lens group to integrate the beam and optimizes the optical and water-cooling design so that the laser head can work continuously and stably for a long time under high power.

Fiber Laser Power Source - 3KW GW Lasertech

GW LaserTech SMAT fiber lasers is built to meet the highest standards of reliability and performance. The SMAT series lasers have been designed to deliver up to 3000W of continuous wave (CW) single spatial mode optical power at a wavelength between 1070 and 1080nm.

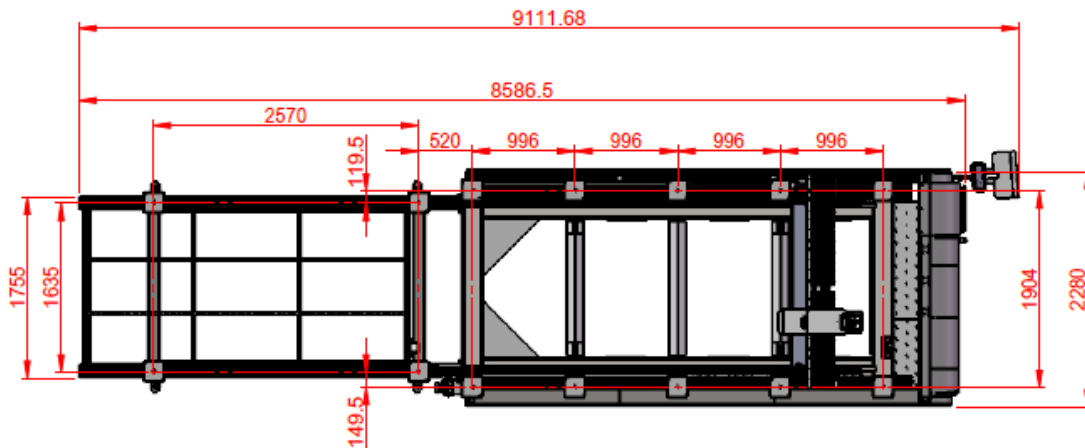
GW power sources where volumes aluminium and copper are to be processed with their respective high reflective indexes.

 GW 3KW Continuous laser (50 μ m)								
material type	thickness mm	velocity m/min	gas	laser power W	pressure bar	focal position	The nozzle type	Cutting height of mm
Air carbon steel	1	30	Air	3000	10	0	2.0 S	0.8
carbon steel	1	10	O2	1500	0.5-0.8	3	1.2 D	0.8
	2	5-5.5		1800	0.5-0.8	3	1.2 D	0.8
	3	3.6-4.2		2400	0.5-0.8	3	1.2 D	0.8
	4	3.3~3.5			0.5-0.8	3	1.2 D	0.8
	5	3.0~3.2		3000	0.5-0.8	5	1.2 D	0.8
	6	2.4~2.6			0.5-0.8	5	1.2 D	0.8
	8	2.0~2.2		2200~3000	0.5~0.8	5	1.2 D	0.8
	10	1.9~2.0			0.5~0.8	6	1.2 D	0.8
	12	1.1~1.2		0.6~0.8	3~4	3.0D	0.8	
	14	0.9~1.0			3~4	3.5D	0.8	
	16	0.7~0.8		0.6~0.8	3~4	3.5D	0.8	
	18	0.6~0.7		0.7~0.9	4~5	4.0D	0.8	
	20	0.5~0.65		0.7~0.9	4~5	4.0D	0.8	
	22	0.5~0.6		0.7~0.9	4.5~6	4.5D	0.8	
stainless steel	1	30	N2	3000	16	0	1.5 S	0.8
	2	12				-1	2.0 S	0.5
	3	6				-1.5	2.5 S	0.5
	4	4				-2	2.5 S	0.5
	5	3				-2.5	3.0 S	0.5
	6	2.5				-2~-3	3.0 S	0.5
	8	1.1				-3.5~-4.5	3.0 S	0.5
	10	0.7				-4.5~-6	4.0 S	0.5
aluminium	1	20	N2	3000	16	0	1.5 S	0.8
	2	13				-1	2.0 S	0.5
	3	7				-1.5	2.5 S	0.5
	4	4				-2	2.5 S	0.5
	5	2.5				-3	3.0 S	0.5
	6	1.8				-3	3.0 S	0.5
	8	0.7				-4	3.0 S	0.5

Layout Floor plan

Room effective layout

The power source, regulator, and water cooler have a stand beside control tower and are linked to the rear of the main cutting cabinet.



Cutting with air vs Nitrogen _16 bar _optional

Rotary screw compressor complete with drier and filters



Stainless and **aluminium** sheet material can cut using higher pressure compressed air.

With Stainless Steel the resulting cut edge has less shine than when cut with concentrated nitrogen gas.

The cost savings verse Nitrogen are considerable .

DUST COLLECTOR EXHAUST SYSTEM TODC-4L



The dust collector operates in conjunction with fiber laser ceiling air intake fans to provide a dust extraction system. PPT can customize the dust collector to be manual or auto start

Dust removal comes from a tray – trolley located below the unit that can be lined with a plastic bag.

Connection to the fiber laser outlet is via flexible ducting.

PPT Laser _ Supply, Installation, training, and ongoing support.

Supply & Install a fully operational CNC fiber laser

Operational run up and parameter adjustments are undertaken to align with your material and cutting requirements.

G Weike provides remote assistance to support this process.

Training requires operating personnel that understand CNC machine management. Onsite training is provided to satisfy immediate needs with further assistance available when added complexity occurs.

Support continuing WIFI allows for Team Viewer connection from PPT and or GWeike to investigate and make any required parameter adjustments.

Support Maintenance: PPT carries a range of Raytools cutting head consumables along with Focus and Collimation lens units. PPT has a clean chamber facility for cutting head maintenance. Scheduled service available for all other aspects.

Power Source support: Power source backup is also available should by remote chance this be required.

Warranty

The IPG, MAX, GW, or Raycus power units come with a 2- 3 year warranty. The CNC operating system, cutting table, cover, and safety systems come with a 12-month warranty.

Operating units of fiber connection cable, and consumables are not covered by warranty.

To watch the Video, Click on the link below or scan the QR code below

[LF3015GA II](#)



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