

**EXCHANGE TABLE LASER CUTTING MACHINE NO COVER**  
**TECHNICAL SOLUTION**

**2000W IPG**



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## Technical Specifications

Working area (L/W)	3000mm×1500mm	Floor size	8800mm×5500mm
X axis travel distance	1520mm	Main body dimension	8400mm×2500mm×1800mm
Y axis travel distance	3030mm	CNC system	Cypcut system
Z axis travel distance	290mm	screen	17"LCD
X/Y axis geometry positioning accuracy	≤0.05mm (of total distance)	Transmission Mode	Double driver system with Pinion & Rack
X/Y axis repeat positioning accuracy	≤0.03mm	Worktable max. weight capacity	1060Kg
X/Y axis max. positioning speed	100m/min	Frame weight	4.5T
X/Y axis max. acceleration	1.2G	Phases	3
Cutting kerf width	0.1mm-0.5mm	Cutting surface roughness	Ra3.2-25.4um
Frequency	50Hz	Rated voltage	380V
Min. setting unit	0.001mm	Total power protecting level	IP54

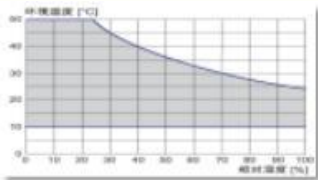
## Product Configuration Table

No.	Name	Place of Origin	Brand	Place of Brand Registration
1	Laser generator		IPG	Germany
2	Specialized cutting head for optical fiber			Germany
3	Main body	X/Y/Z axis high precision rack	APEX/YYC	Taiwan
		Precision linear guide rail	HIWIN/CSK	Taiwan
		Precision Reduction gearbox	EREFAT	Germany
		Servo Motor & Driver	Panasonic	Japan
		Precise ball screw	HIWIN/TBI	Taiwan
		High speed flexible cable	IGUS	Germany
		Electrical element	SCHNEIDER	France
		Machine body	STARMAC	Taiwan
4	CNC system		CYPCUT	Taiwan
5	Standard accessories	Water Chiller		Taiwan
		Slag discharging hopper device		Taiwan
		Exhaust fan		Taiwan

## Cutting Parameters

Material	Auxiliary Gas	Thickness (mm)	2000W
			Cutting speed (m/min)
Carbon Steel	O2	1	7-12
		2	5-6.5
		3	3-4
		4	2.8-3.5
		5	2.2-2.8
		6	2.0-2.6
		8	1.4-2.0
		10	1.2-1.4
		12	0.9-1.2
		14	0.8-0.9
		16	0.7-0.8
	18	0.6-0.7	
	20	0.5-0.6	
	N2/Air	1	22-28
		2	10-13
Stainless Steel	N2	1	30-45
		2	10-15
		3	5-7
		4	3-4
		5	1.6-2.0
		6	1.2-1.5
		8	0.6-0.8
		10	0.4-0.6
Aluminum	N2	1	20-30
		2	6-10
		3	3-5
		4	2-3
		5	1.0-1.5
		6	0.8-1.2
Brass	N2	1	16-20
		2	5-8
		3	2.5-4.0
		4	1.5-2.5
		5	0.8-1.2
			Indicates that the workpiece can be cut off, but cannot be mass produced.

## Machine Working Conditions

No.	Item	Parameters / Specifications																						
1	Power supply	380V 50Hz $\pm$ 5%																						
2	Required distribution capacity (KVA/kW)	<table border="1" style="width: 100%; text-align: center;"> <tr> <td>700W</td> <td>1K W</td> <td>15K W</td> <td>2K W</td> <td>3K W</td> <td>4K W</td> <td>6K W</td> <td>8K W</td> <td>10K W</td> <td>12K W</td> <td>15K W</td> </tr> <tr> <td>30</td> <td>30</td> <td>30</td> <td>40</td> <td>40</td> <td>50</td> <td>60</td> <td>80</td> <td>100</td> <td>120</td> <td>150</td> </tr> </table>	700W	1K W	15K W	2K W	3K W	4K W	6K W	8K W	10K W	12K W	15K W	30	30	30	40	40	50	60	80	100	120	150
700W	1K W	15K W	2K W	3K W	4K W	6K W	8K W	10K W	12K W	15K W														
30	30	30	40	40	50	60	80	100	120	150														
3	Oil-free air compressor(Need to be equipped with: Dry cooling machine whose capacity is more than 50 cubic meters / hour and the accuracy of filtration is 0.01 $\mu$ m )	Flow rate $\geq$ 0.9m <sup>3</sup> /min, Pressure $\geq$ 1.2MPa (pressure $\geq$ 0.8MPa when no air cutting) oil $\leq$ 0.003ppm waterless dew point 2-3 degrees																						
4	Cutting gas	High purity oxygen (O2) and nitrogen (N2) purity above 99.9%																						
5	Distilled water (for water cooler)	200L Conductivity30-50 $\mu$ s																						
6	Grounding resistance	$\leq$ 4 $\Omega$																						
7	Laser working environment																							
8	Installation site requirements(Detailed reference to foundation diagram )	The concrete foundation thickness of the site is greater than 250mm (or 5 tons of foundation foundation per square meter), and the flatness is less than 10mm per 3 meters. Installation site is recommended to avoid punching, forging and other large shocking equipment within 20 meters.																						
9	Operator standard	Strictly follow the job training, be familiar with the laser cutting process, and hold a professional skills certificate.																						