

Fiber Laser Cutting Machine

Brand : Hightech

Model : HT-FC



Hightech Industry Group

No. 8188 Weichang Road, Weicheng District, Weifang City, Shandong Province, China

www.hightech001.com



Machine configuration

NO.	Item	Description
1	Working bed size:	1300*2500/3000*1500/2000*4000 1500*6000
2	Fiber Laser Source	Raycus
3	Laser Head	BLT 421H
4	Control System	Cypcut
5	Y Axis Driving System	Taiwan Delta 1.3KW Servo Motor*2
6	X Axis Driving System	Taiwan Delta 0.85KW Servo Motor*1
7	Z Axis Driving System	Taiwan Delta 0.4kw Servo Motor*1
8	Motor Reducer	France Motoreducer
9	Electric Components	Germany Schneider
10	Guide Rail	Taiwan Laak
11	Gear Rack	PEK
12	Proportional Valve (O2, N2)	Japan SMC
13	Computer	Standard Industrial PC
14	Gantry Beam	Standard Aviation Aluminum
15	Water Chiller Cooling System	Hanli chiller for 1000 watt power
16	Laser wavelength	1080 nm
17	ZAxis Stroke	300 mm
18	Max Idle Speed	120 m/min
19	Max Acceleration	1.5 G
20	Positioning Accuracy	±0.03 mm
21	Re-Positioning Accuracy	±0.02 mm
22	Lubrication System	One Touch Automatic Lubrication
23	Total Power Consumption	<23 KW

*Machine spare parts pictures



Working Bed

Honeycomb carbon structure, after annealing to eliminate internal stress, finished after secondary vibration aging treatment, guarantee long-term use without deformation.



Gantry Beam

Adopt high-strength steel structure or aluminum alloy beam. Lightweight and dynamic, after annealing to eliminate internal stress, finished after secondary vibration aging treatment, ensure the overall strength and stability of the beam.



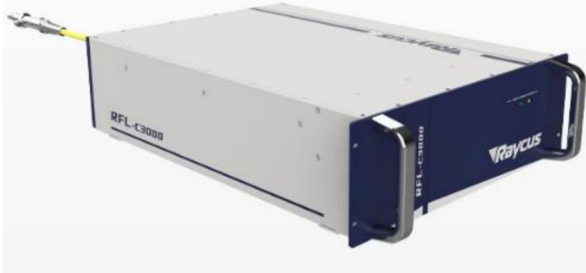
6000E System

CYPCUT system, with features such as intelligent diagnosis, multithreaded operation, tertiary perforation, laser energy control, adaptive edge finding, corner automatic acceleration and deceleration, fly cutting, mechanical accuracy compensation and so on.



Servo Motor

This high performance servo motor, One-step locking connector, Strong shock resistance, Debugging is more convenient and operation is more stable, shorter positioning time, better cooperate with servo drive to complete position control, speed control and torque control.



Laser Source

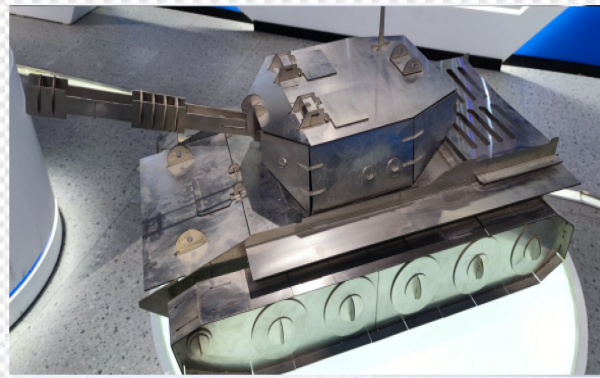
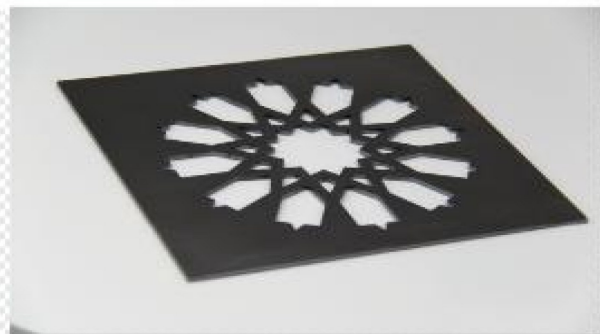
The Multi-module CW Fiber Lasers developed by Raycus ranges from 3,000W to 30kW, with high electro-optical conversion efficiency, high light beam quality, high energy density, wide modulation frequency, high reliability, long service life, maintenance-free operation and advantages..



Laser Cutting Head

This cutting head has strong advantages in medium power large format fiber laser cutting applications. The inside of the laser head is completely sealed to avoid dust pollution on the optical part. The laser head adopts two-point centering adjustment, Focusing is driven by imported motor, Significantly improved efficiency in perforation.

*Cutting samples



*cuttingparameters

Material	Thickness (mm)	1000w	1500w	2000w	3000w	4000w	6000w
		Speed (m/min)	Speed (m/min)	Speed (m/min)	Speed (m/min)	Speed (m/min)	Speed (m/min)
Carbon Steel	1	24-26	30-38	34-39	37-42	40-50	43-52
	2	8-9	12-14	16-17	18-20	21-23	23-29
	3	2.8-3.0	2.9-3.2	3.4-3.6	4.0-4.2	5.0-5.2	6-10
	4	2.2-2.4	2.4-2.6	3.1-3.2	3.3-3.5	3.5	3.5-3.7
	5	1.5-1.7	1.8-2.0	2.7-3.0	2.8-3.0	3.0-3.2	3.2-3.3
	6	1.2-1.4	1.6-1.8	2.0-2.2	2.3-2.5	2.6-2.8	2.6-2.8
	8	1.0-1.1	1.1-1.3	1.5-1.7	2.1-2.2	2.1-2.3	2.4-2.5
	10	0.75-0.85	0.9-1.0	1.2-1.4	1.7-1.7	1.8-2.0	2.2-2.3
	12	0.6-0.65	0.8-0.9	1.0-1.1	1.2-1.4	1.5-1.6	1.9-2.0
	14		0.6-0.7	0.9-1.0	1.0-1.1	1.2-1.4	1.2-1.5
	16		0.5-0.6	0.8-0.85	0.85-0.9	0.85-0.95	0.8-0.9
	18			0.7-0.75	0.7-0.75	0.9-1.0	0.7-0.8
	20			0.55-0.6	0.6-0.65	0.65-0.7	0.6-0.65
	25				0.45-0.5	0.45-0.5	0.5-0.55
30						0.3-0.2	
Stainless Steel	1	28-32	32-35	35-41	38-42	40-45	45-47
	2	6-7	9-10	14-15	20-30	32-35	35-37
	3	2.8-3.0	4.2-4.5	6.5-7.0	13.5	14-17	18-20
	4	0.9-1.2	2.1-2.3	3.5-4.0	5.0-6.5	6.5-7.0	14-15
	5	0.8-0.9	1.6-1.8	2.0-2.2	3.0-4.5	4.8-5.0	8-10
	6	0.5-0.6	1.0-1.2	1.3-1.5	3.5	4.5	6.0-6.5
	8		0.5-0.6	0.7-0.8	1.6	2.0	4.0-4.2
	10			0.55-0.6	0.8	1.4	1.8-2.0
	12				0.6	0.9	1.1-1.3
	14					0.4	0.9-1.0
	16						0.8-0.85
	18						0.6-0.7
20						0.5-0.6	
Aluminu m	1	19-21	20-28	25-30	30-33	35-37	50-52
	2	4.5-5.0	8-9	8-12	10-15	15-17	28-29
	3	1.8-2.0	3.8-4.2	5.5-6.0	5.5-5.9	6.5-7.0	15-17
	4		2.0-2.2	2.5-3	2.8-3.2	4.5-4.8	9-10
	5		0.8-1.0	1.5-2	2.0-2.2	3.8-4.2	6.0-6.5
	6			0.6-0.8	0.7-0.8	2.0-2.2	4.5-5.0
	8					1.0-1.2	2.8-2.9
	10					0.5-0.6	1.9-2.0
	12						1.1-1.2
	16						0.5-0.6
Brass	1	16-18	25-27	31-35	35-40	35-40	44-55
	2	3.0-3.5	7-8	8-10	10-12	12-14	25-35
	3	1.1-1.3	2.7-3.0	5.5-6.0	4.5-5.0	6.5-6.8	17-20
	4		1.5-1.7	2.5-3.0	3.0-3.5	4.5-4.7	10-12
	5			1.8-2.0	2.8-3.0	3.8-4.2	7-8
	6			0.9-1.1	1.0-1.2	1.3-1.5	5-6
	8				0.5-0.7	0.7-0.8	2-3
	10						1.6-2.0
	12						1.3-1.7
	16						0.6-0.6

Quality Control System

This is Laser interferometer for testing machine precision and using this Laser interferometer to improve machine precision carefully. only few companies in China use this Laser interferometer to test machine precision. In Weifang only our company use Laser interferometer to test machine precision.



*Package Details

Strengthened by plastic film and steel pallet, waterproof treatment. Reinforced again inside the container.



After-sales service

We prioritize a customer-centered approach and strive to provide excellent pre-sales and after-sales services to ensure customer satisfaction. Our range of services includes:

Pre-sales Service:

- . Our knowledgeable sales managers will offer detailed answers to your inquiries, helping you understand the machine's parameters and functions before signing a contract.
- . We have a separate machine showroom and are ready for online demos and demonstrations at your convenient date and time

Shipment Service:

- . We have a complete Door-to-Door route. We will first transport the machine to a local warehouse close to you, and then deliver it to your door from the warehouse. During this period we will keep in communication with you and confirm the location of the machine.
- . Timeliness: Depending on the city, we will provide you with an approximate transportation time, and we will confirm the delivery time for you after the machine arrives at the warehouse. We will keep in touch with you during this period
- . No need to do anything yourself, just wait for delivery.

Training and Technical Services:

- . We provide free online training or local technical services to customers.
- . Training covers essential machine and software operations, basic maintenance and cleaning, as well as troubleshooting common software and hardware issues.

Warranty:

- . The entire machine is covered by a 1-year warranty.
- . During the warranty period, we offer free replacement of spare parts, with the customer responsible for freight costs.
- . Lifetime software upgrades are provided to ensure continuous improvement.

Additional Services:

- . We offer free lifetime technical consultation, addressing any questions or concerns you may have.
- . Our dedicated support team responds to customer inquiries within 24 hours.
- . After the warranty period, users can still access our lifetime service, with associated expenses being borne by the customer.

Policies may vary depending on the country, please consult with your local agent or distributor.

