

ESTIMATE No.:

Client:		Contact:	
Telephone:		Cell-Phone:	
E-mail:		Fax:	
Address:		Zip Code:	
City, State:		Country:	



EAGLE – Tube Fiber Laser Cutting Machine – EG tube12028

EG tube12028 fiber laser tube cutting machine is a versatile and productive solution for cutting and hole making on square tubes, rectangular tubes, round tubes, oval tubes and profiles. It is widely used in kitchenware, lighting, automotive, fitness equipment, hardware and more industries requiring metal fabrication and tube processing machines. Available in laser power ranging between 1000W and 6000W and configured with high precision digital chucks, this laser tube cutting machine can load a single tube up to **881lb (400kg)** in weight, therefore providing a higher yield for metal fabricators.



Autofocus laser head realizes 80% less time required for piercing than normal head, which is especially suitable for thick metal sheet and highly reflective materials; Applying High-quality laser achieves higher than 30% photoelectric conversion efficiency, and the machine will blow air while cutting, which can greatly lower the cost and improve the efficiency; Variable functions available, such as scanning cutting, blasting perforation, automatic edge finding and etc.

- Sheet steel welded basement adopts annealing to relieve stress, reduces deformation and ensures good rigidity.
- It is processed by large gantry milling machine and CNC equipment, which could ensure the accuracy of basement.
- Thanks to the process of enforcement, the whole machine could resistant to high temperature and ensure the best steering stability.

EQUIPMENT CONFIGURATION LIST

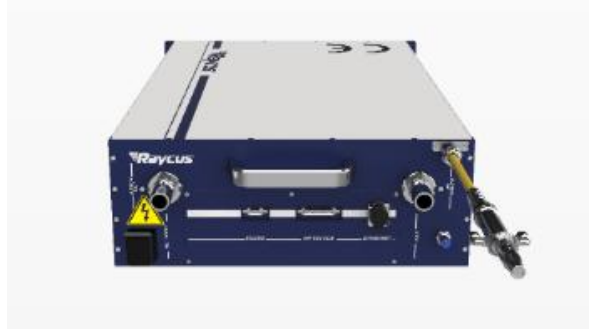
Item	Quantity	Specification	Place of Origin
Standard			
Laser	1	Raycus	China
Cutting Head	1	BOCI	China
Reducer (Including Gears)	1	TECHMECH	India
Fast Speed Servo Motor	5	INOVANCE	China
A Drive System (Rack and Pinion)	1	YYC	China (Taiwan)
B Drive System (Linear Guide)	1	AIRTAC	China (Taiwan)
Numerical Control System	1	Cypcut	China
Precise Rack	3	Hassfull	China (Taiwan)
Water Chilling	1	Hanli	China
Industrial Air Conditioning System	1	Hanli	China
Optional			
Air Compressors	1	GUEagle	China
Stabilizer	1	GUEagle	China
Dust Removal Systems	1	GUEagle	China
Automatic Programming Nesting Software	1	GUEagle	China
Air Extraction Systems	1	GUEagle	China

TECHNICAL PARAMETERS AND SPECIFICATION DESCRIPTION

Performance Index	Parameter
Laser Power	6000w
Dimension	905.51"×135.83"×98.42" (23000*3450*2500mm)
Phase	3
Rated voltage/Frequency	380V/50HZ
Protect rate	IP54
Max. Finished Tube Length	472.44" (12000mm)
Linear axis positioning accuracy	0.05mm/m(VDI/DGQ3441)
Repositioning accuracy	±0.03mm
Cutting Diameter (Square/Rectangular Tube)	Square: Φ0.39"-Φ11" (Φ10-Φ280mm) Rectangular: Φ0.39"-Φ11" (Φ10-Φ280mm)
Max. Rotation Speed of Axis	110rpm
Max. Speed	5.6 ft/s (100m/min)
Chunk Max. Load Weight	881lb (400kg)
Machine Weight	33069lb (15000kg)

EAGLE -Fiber Laser Tube Cutter-EG-Tube 12028

FIBER LASER SOURCE:



6000W Global-Series CW Fiber Laser

It has the advantages of high electro-optical conversion efficiency, good beam quality, high energy density, wide modulation frequency, strong reliability, long life, and maintenance-free operation. It can be widely used in welding, precision cutting, cladding, surface treatment, 3D printing and other fields. Its optical fiber output characteristics make it easier to integrate with robots into flexible manufacturing equipment to meet the needs of metal processing.

Cutting head



BLT 4 series, cost-effective smart cutter that focuses on 2D, 3D and bevel cutting machine, delivers a great performance with stable cutting, simple installation and setup

- Stable and Efficient Cutting

Brand new optical solutions come with closed-loop auto focusing. Slag-free Cutting, Nozzle Cooling, and Water Cooling Sensor supportable. Make cutting more stable and efficient.

- Easy to Maintain Low Cost to Repair

Ready-to-use optics drawer, lens changed in 5mins. Protective screws keep cutting head from damage.

- No time wasting on Depot RepairSmart and Safe Processing

Groups of internal sensors for real time closed-loop monitor. Rapid diagnosis brings you early warning.

BLT 421	
Power level	≤ 8000W
Laser wavelength	1030-1090nm(0.00103-0.00109mm)
Spot magnification	M=1.5/2.0 (100:150/100:200)
Focus adjustment range	±50mm(optical ratio 1:2 100:200)
Centering adjustment range	±1.5mm
Focus acceleration	7.5m/s ²
Cutting gas interface	ø10, maximum 25bar (2.5Mpa)
Nozzle cooling gas connection	ø6, maximum 5bar (0.5Mpa)
Fiber interface	QBH, EOC
Water cooling interface	ø8, maximum 5bar (0.5Mpa), minimum flow 2.0l/min
Operating temperature	5~55°C
Storage temperature	-25~+55°C
Size	404x122(mm)
NA	Max.0.13 at Fc100
Weight	~5.5kg

MACHINING CAPACITY

material	thickness (mm)	speed (m/min)	power (W)	gas	Air pressure (bar)	nozzle (mm)	focus position (mm)	cutting height (mm)	note
carbon steel	1	45	6000	N2/ Air	12	1.5S	0	1	1
	2	25			12	2.0S	-1	0.5	
	3	14			14	2.0S	-1.5	0.5	
	4	8			14	2.0S	-2	0.5	
	5	6.4			16	3.0S	-2.5	0.5	
	6	5			16	3.5S	-3	0.5	
	3	3.6-4.2	2400	O ₂	0.6	1.2E	+3	0.8	2
	4	3.3-3.8	2400		0.6	1.2E	+3	0.8	
	5	3-3.6	3000		0.6	1.2E	+3	0.8	
	6	2.7-3.2	3300		0.6	1.2E	+3	0.8	
	8	2.2-2.5	4200		0.6	1.2E	+3	0.8	
	10	2.0-2.3	5500		0.6	1.2E	+4	0.8	
	12	0.9-1	2200		0.6	3.0D	+2.5	0.8	
	12	1.9-2.1	6000		0.6	1.2E	+5	0.8	
	14	0.8-9	2200		0.6	3.5D	+2.5	0.8	
	14	1.4-1.7	6000		0.6	1.4E	+5	1	
	16	0.8-0.9	2200		0.6	4.0D	+2.5	0.8	
	16	1.2-1.4	6000		0.6	1.4E	+6	1	
	18	0.65-0.75	2200		0.6	4.0D	+2.5	0.8	
	20	0.6-0.7	2400		0.6	4.0D	+3	0.8	
22	0.55-0.65	2400	0.6	4.0D	+3	0.8			
25	0.5	2400	0.5	5.0D	+3	1			
stainless steel	1	60	6000	N ₂	10	1.5S	0	0.8	
	2	30			12	2.0S	-1	0.5	

Note: The red-labeled parameters in the table are proofing parameters, which are greatly affected by various factors in actual processing, and are only suitable for small batch production. Higher power lasers are recommended for mass production processing.

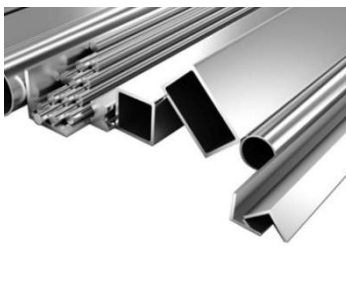
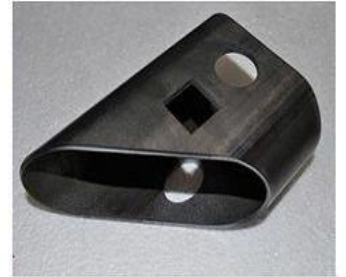
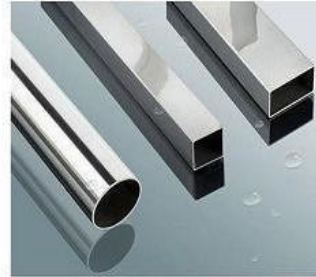
	3	18			12	2.5S	-1.5	0.5
	4	12			14	2.5S	-2	0.5
	5	8			14	3.0S	-2.5	0.5
	6	5			15	3.0S	-3	0.5
	8	3.8			15	3.0S	-4	0.5
	10	2			15	3.5S	-6	0.5
	12	1.2			16	3.5S	-7.5	0.5
	14	1			16	4.0S	-9	0.5
	16	0.6			18	4.0S	-10.5	0.5
	18	0.5			20	5.0S	-11	0.3
	20	0.3			20	5.0S	-12	0.3
aluminum alloy	1	50	6000	N ₂	12	1.5S	0	1
	2	25			12	2.0S	-1	0.5
	3	16			14	2.5S	-1.5	0.5
	4	10			14	2.5S	-2	0.5
	5	6			14	3.0S	-3	0.5
	6	4			16	3.0S	-3	0.5
	8	2			16	3.0S	-4	0.5
	10	1.2			18	3.5S	-4.5	0.5
	12	0.7			18	4.0S	-5	0.5
	14	0.5			18	4.0S	-5	0.3
	16	0.4			20	5.0S	-8	0.3
brass	1	40	6000	N ₂	12	1.5S	0	1
	2	20			12	2.0S	-1	0.5
	3	14			14	2.5S	-1	0.5
	4	9			14	3.0S	-1.5	0.5
	5	5.5			14	3.0S	-2	0.5
	6	3.8			16	3.0S	-2.5	0.5
	8	1.8			16	3.5S	-3	0.5
	10	1			16	3.5S	-3	0.5

Note 1: Air or nitrogen cutting is recommended for carbon steel 1 to 6mm, the cutting speed is faster than that with oxygen, and there will be slight slagging.

Note 2: The power used for debugging and the speed of debugging will be different depending on the gas purity and the quality of the board.

APPLICATION AND SAMPLE

Cutting material: stainless steel, carbon steel, galvanized pipe, copper pipe, aluminum pipe, aluminum alloy etc.



WARRANTY:

Mechanical, electronic components and Fiber Laser Source: 2 years against manufacturing defects. Parts and components damaged due to improper usage and operation of the equipment are not covered under warranty. The complete warranty shall be available once the customer has accepted and received the training program and the purchase agreements are signed by the customer.

6 months against manufacturing defects. Laser optical components, like focus lens are considered consumables and are therefore not covered during the warranty period.

In order to ensure the customer experience, the best performance of the equipment and the complete warranty policy of our company, we urge following the instructions on the Safety Notice in the Operation Manual and follow the instructions of our technician on the installation of the laser machine. Failure to do so may render the warranty null and void.

Installation and Training: Technical support is offered via telephone, e-mail and other means. Installation and Training will be on-site. 18 hours of training (3 days of 6 hours) in the Installation Maintenance & Operation of the Laser Machine.

For any additional questions please do not hesitate to take contact us. We will do our best to provide any support.

Cordially,



***The pictures are for reference only, the details of the site may change, you can customize the machine according to your requirements.**