

WHY DO WE NEED A **10kW+** LASER CUTTING MACHINE



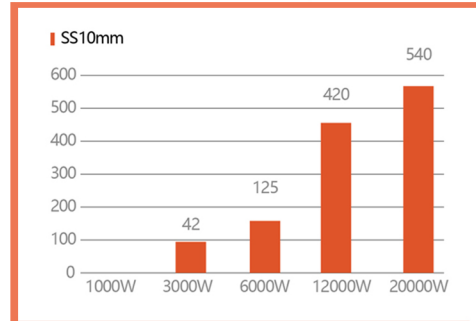
By March, the cumulative sales of 10kW+ laser cutting machines
had exceeded **400 units (sets)**

BODOR leads the laser cutting market into the era of 10kW+

I .The increasing efficiency- brings higher profits for the enterprise

Comparison of cutting length per power per hour (m/h)

Power Material	1000W	3000W	6000W	12000W	20000W
SS2mm	390	1020	1620	3180	750
SS6mm		180	385	840	1260
SS10mm		42	125	420	540
SS20mm			24	78	105
SS100mm					4.8



For laser cutting machines, the higher the power, the faster the speed and the higher the efficiency. It can help in shortening the delivery time, so as to bring a higher profit for company.

- In stainless steel cutting, the processing speed of 12000W machine is 3.4 times that of 6kW.
- Nitrogen or compressed air can be used to cut carbon steel within 12mm at most. The cutting efficiency is 6–7 times that of oxygen cutting.

II .High return on investment- enhances the competitiveness of enterprises

Cost-effective: Through large-scale production and technological innovation, Bodor has rapidly reduced the price of 10kW+ products and continues to lead the technological revolution of 10kW+ equipment. The economical processing cost bring in a high return on investment.

- The processing range is wider. The application of 10kW machines greatly expand the business scope of the enterprise and can cover a wider range of processing needs.
- The application industry of 10kW+ equipment is more extensive. In addition to spare parts processing, construction industry, handicraft cutting, etc., a 10kW+ equipment can also be extended to shipbuilding, nuclear power, national defense and other high value-added industries, which greatly enhances industry applications. Also, batch processing saves a lot in expense.

Advertising benefit: At present, there are very few ultra-high-power devices with more than 10,000 watts in the market, and the market share does not exceed 0.1%. Having one ultra-high-power laser cutting equipment over 10,000w means beating 99.9% of the competitors in the market. It is a huge advertising effect as well as a symbol of corporate strength.

Competitive Advantage: 10000W+ equipment can apply many advanced processes. It can cut 18-20mm with a bright surface in carbon steel cutting. In addition, Bodor launched many initiative technologies such as Vortex Start, Unbounded Cutting, Pierce Monitor, which has greatly improved the cutting efficiency of medium and thick plate processing. 10kW products will soon become the mainstream of medium and thick plate processing. Traditional cutting equipment and laser equipment of low or medium power will lose their competitiveness.

III .TOP 1 in sales volume-- best quality

- In 2019, Bodor delivered 2,700 sets of laser cutting equipment, which is the largest sales volume in the world.
- Till June 2020, Bodor Laser has sold more than 150 sets of laser cutting machines over 10kW, which is also the largest sales volume in the world.
- On May 28, 2020, the world's first 20kW laser cutting machine manufactured by Bodor was delivered to the customer.
- By July, the cumulative sales of 10kW+ laser cutting machines had exceeded 160 units (sets). Bodor ranks first in the world in both production and sales, which provides a good evidence for product quality. Bodor provides a 3-year warranty and the local after-sales service, guaranteeing the well operation of the machine.

With the rapid development of laser technology, 10kW+ equipment is bound to become a trend. Bodor leads the laser cutting market into the 10kW+ era and continues to lead the technological revolution of 10kW+ equipment.

ADVANTAGES OF 10kW+ MACHINES

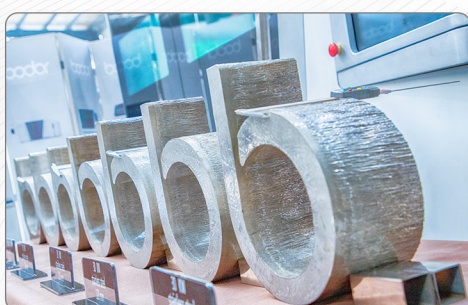
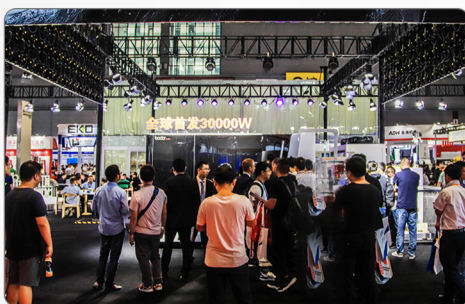
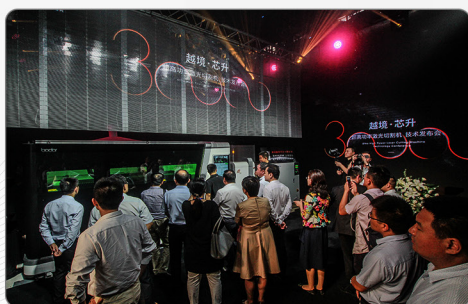
Master the core technology of 20kW/30kW fiber laser cutting machine



- Low processing costs
- High cutting precision
- Wide cutting range
- High cutting efficiency
- Lead the laser industry
- High return on investment

Suitable for S-Series, P-Series, G-Series, C-Series, Dream products

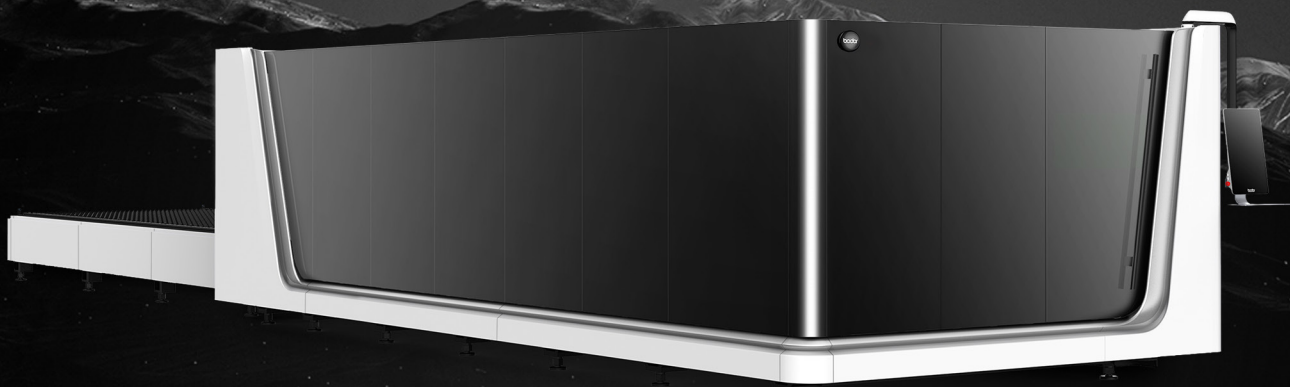
Global premiere conference site of 20kW+ laser cutting machine



P Series

Fiber laser cutting machine for metal sheet

Hot seller



High-performance fiber laser cutting machine -P Series

The equipment meets the parts processing requirements of most industries, working accuracy is stable. Selecting the optimal force and supporting structure, the overall mechanical property of equipment is perfect. Adopting cutting-edge optical concept to improve cutting performance. High speed cutting, auxiliary loading and unloading and efficient production reduce labor costs. At present, laser cutting machines have been widely used in electronics, electrical, mechanical hardware, new energy lithium, packaging, solar, LED, automotive and other industries.

Product Parameters

Model	P3	P4	P6 Lean	P6	P8
Working Area	3000*1500mm	4000*2000mm	6100*2000mm	6100*2500mm	8100*2500mm
Laser Power	30000w/20000w/12000w/6000w/3000w/2000w/1500w				
X/Y-axis Positioning Accuracy	0.03mm		0.05mm		
X/Y-axis Repositioning Accuracy	0.02mm		0.03mm		
Max. linkage speed	169m/min				

Version number 2021.03
(Above data is only for reference)

S Series

Ultra high power fiber laser cutting machine



The laser cutting machine speaks for perfect performance - S Series

Equipped with high/super power laser device, efficient thick plate cutting is no longer a dream, thin plate cutting is more speedy; BODOR database of cutting process will provide you with data support of performance and energy saving to save your cutting cost. Equipped with Beckhoff System, which can customize Bodor interface and Bodor specific features to support multi-touch screens and monitor device processing condition remotely.

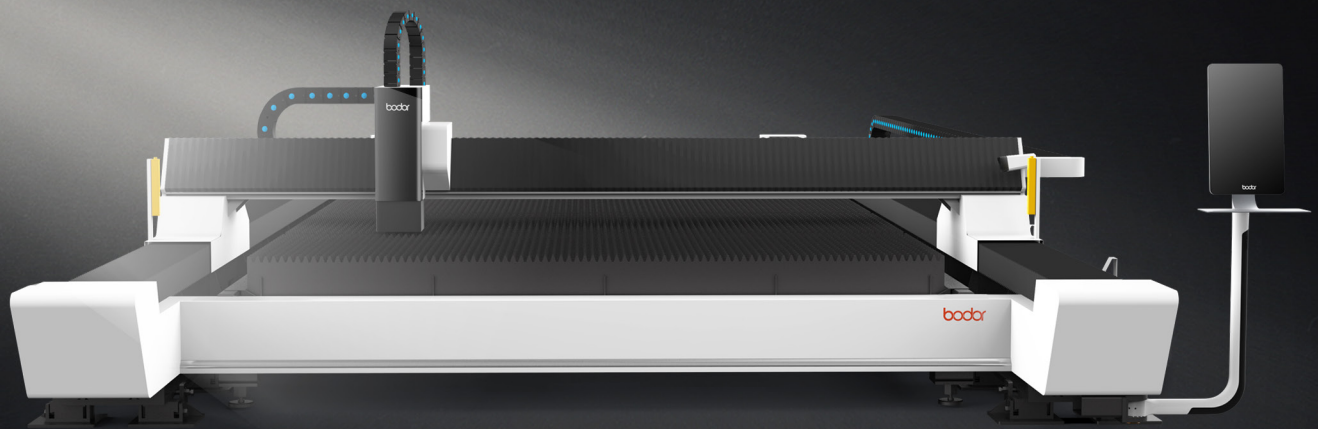
Product Parameters

Model	S3	S4	S6025	S8
Working Area	3048*1524mm	4000*2000mm	6100*2500mm	8100*2500mm
Laser Power	40000w/30000w/20000w/12000w/6000w			
X/Y-axis Positioning Accuracy	0.03mm	0.05mm		
X/Y-axis Repositioning Accuracy	0.02mm	0.03mm		
Max. linkage speed	200m/min			

Version number 2021.03
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G Series

Large cutting format, super-power



Large format metal laser cutting machine -G Series

The heavy bed makes the equipment more stable in working, the light crossbeam makes it work faster; perfect industrial design is more in line with man-machine engineering; high quality electrical software control system gives equipment higher cutting precision. The machine owns more comfortable operation, more stable performance, more durable quality, higher cutting efficiency and wider application scope.

Product Parameters

Model	G24	G20	G16	G12
Working Area	24500mm*3200mm	20500*3200mm	16500*3200mm	12500*3200mm
Laser Output Power	40000w/30000w/20000w/12000w/6000w			
X/Y-axis positioning accuracy	0.02mm			
X/Y-axis repositioning accuracy	0.01mm			
X/Y-axis Max. linkage speed	80m/min			

Version number 2021.03
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C Series

The first step into laser cutting machine with full protection



The C series is safe, smart and environment-friendly

The equipment meets the parts processing requirements of most industries, working accuracy is stable. Selecting the optimal force and supporting structure, the overall mechanical property of equipment is perfect. Adopting cutting-edge optical concept to improve cutting performance. High speed cutting, auxiliary loading and unloading and efficient production reduce labor costs. At present, laser cutting machines have been widely used in electronics, electrical, mechanical hardware, new energy lithium, packaging, solar, LED, automotive and other industries.

Product Parameters

Model	C3	C4	C6	C8	C12
Working Area	3048*1524mm	4000*2000mm	6100*2500mm	8000mm*2500mm	12500mm*2600mm
LaserPower	1.5kw/2kw/3kw/6kw/12kw/20kw/30kw/40kw			3kw/6kw/12kw/20kw/30kw/40kw	
X/Y-axis Positioning Accuracy	0.05mm				
X/Y-axis Repositioning Accuracy	0.03mm				
Max. linkage speed	110m/min				

Version number 2021.03
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Dream

Maglev laser cutting machine



Passion for High-quality Cutting-Dream

The equipment meets the parts processing requirements of most industries, working accuracy is stable. Selecting the optimal force and supporting structure, the overall mechanical property of equipment is perfect. Adopting cutting-edge optical concept to improve cutting performance. High speed cutting, auxiliary loading and unloading and efficient production reduce labor costs. At present, laser cutting machines have been widely used in electronics, electrical, mechanical hardware, new energy lithium, packaging, solar, LED, automotive and other industries.

Product Parameters

Model	Dream3	Dream4	Dream6
Working Area	3048mmx1524mm	4000mm*2000mm	6100mm*2500mm
LaserPower	6kw/12kw/20kw/30kw/40kw		
X/Y-axis Positioning Accuracy	0.03mm	0.05mm	
X/Y-axis Repositioning Accuracy	0.02mm	0.05mm	
Max. linkage speed	200m/min		

Version number 2021.03
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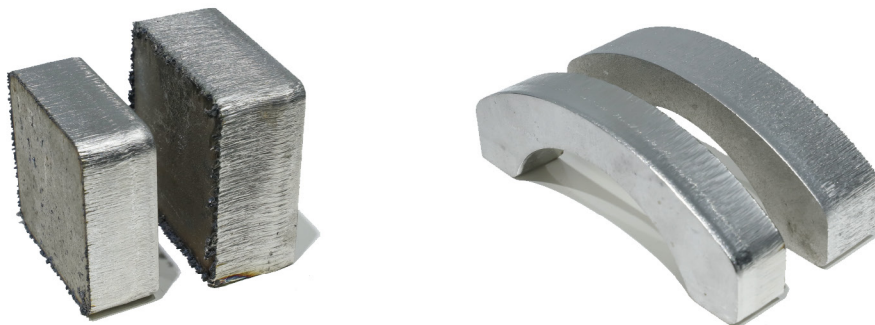
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HIGHER CUTTING ACCURACY AND QUALITY

(12kW/6kW Comparison of surface brightness, slag and taper on SS\CS cutting)

Thickness(mm)	Laser model	Difference of upper and lower surface size (mm)	Taper
CS25	6000W	0.87	$\theta=1.01^\circ$
	12000W	0.30	$\theta=0.34^\circ$
CS 20	6000W	0.70	$\theta=0.99^\circ$
	12000W	0.18	$\theta=0.26^\circ$
CS 12	3000W	0.45	$\theta=0.89^\circ$
	6000W	0.12	$\theta=0.21^\circ$

12kW vs. 6kW cutting stainless steel: less slag



SS 16mm / 20mm

12kW vs. 6kW on carbon steel cutting: brighter cutting surface and smaller taper

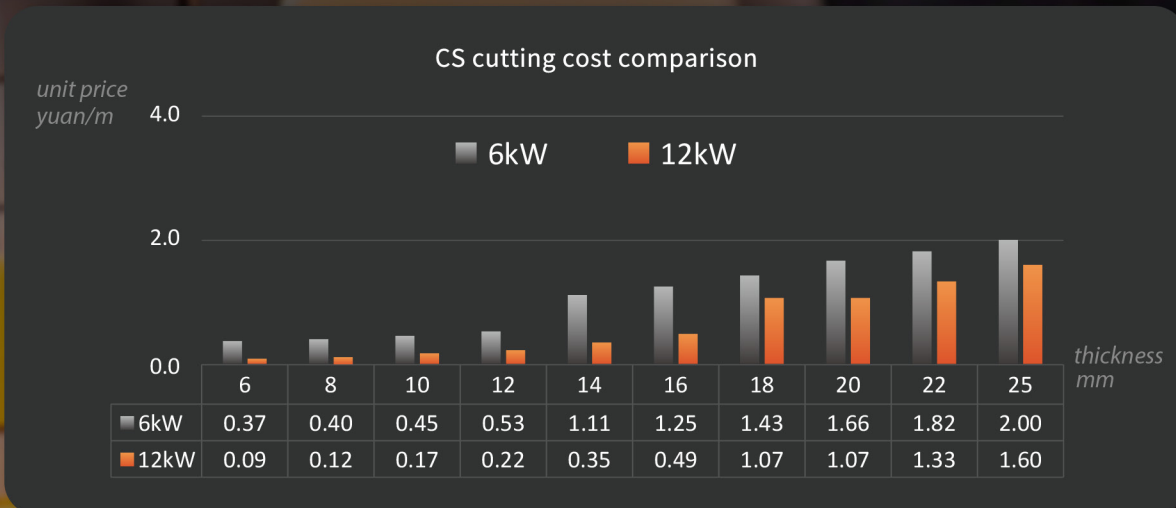


CS 20mm / 25mm

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LOW PROCESSING COST

(12kW/6kW Comparison of cost on SS\CS cutting)



For cutting CS, the processing cost of the 12kW cutting machine is 20%-77% less than the 6kW cutting machine (yuan/m).

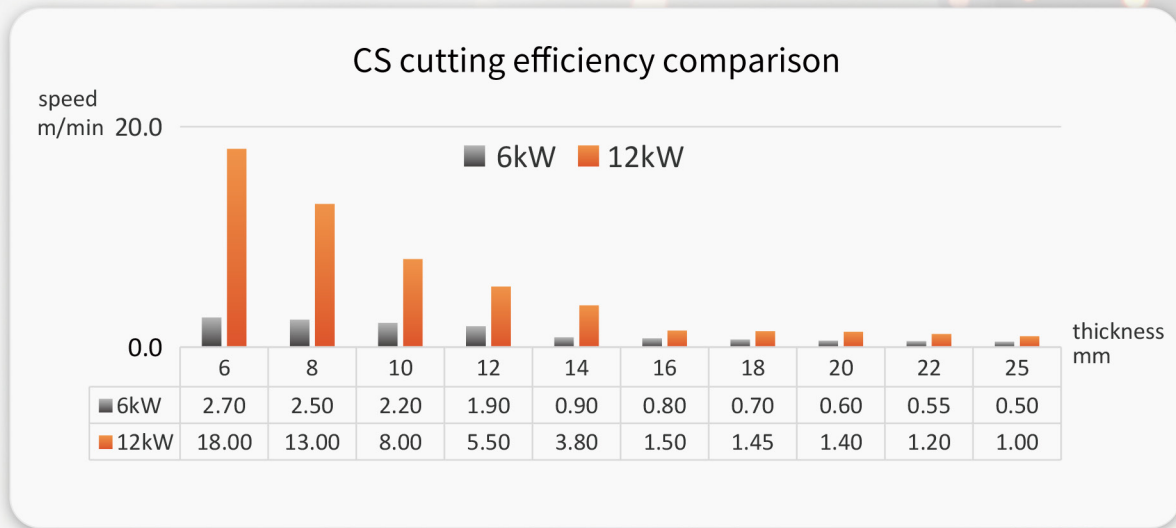


For cutting SS, a 12kW cutting machine can save 50%—74% of the processing cost (yuan/m) compared to a 6kW cutting machine.

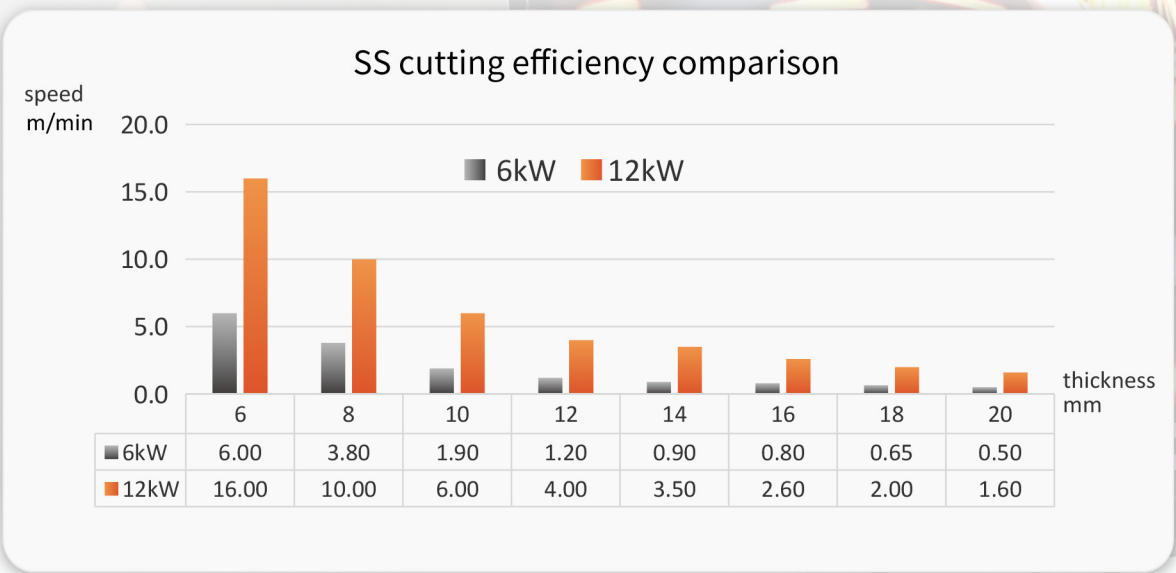
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FAST CUTTING SPEED

(12kW/6kW/3kW Comparison of speed on SS\CS cutting)



For CS cutting , the efficiency of the 12kW cutting machine is 88%—567% higher than that of the 6kW cutting machine.



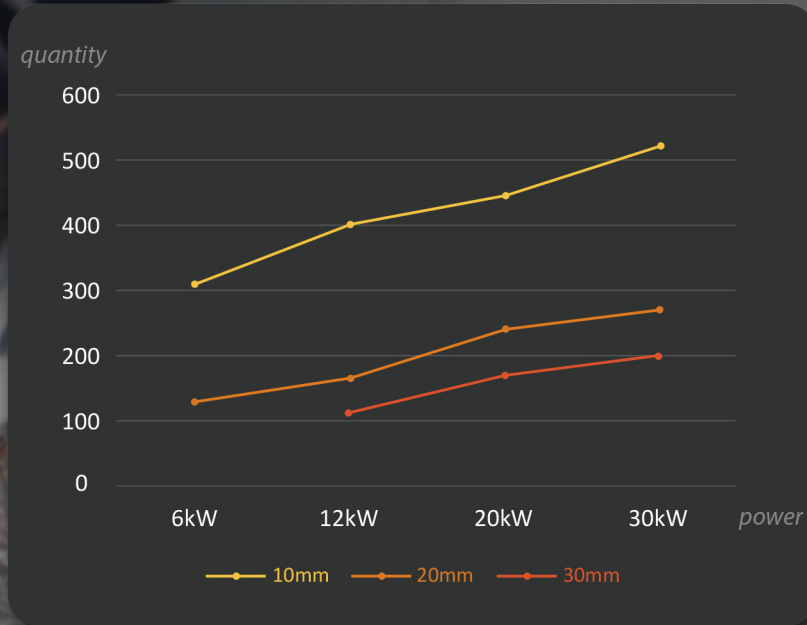
For SS cutting , the efficiency of the 12kW cutting machine is 163% -289% higher than that of the 6kW cutting machine.

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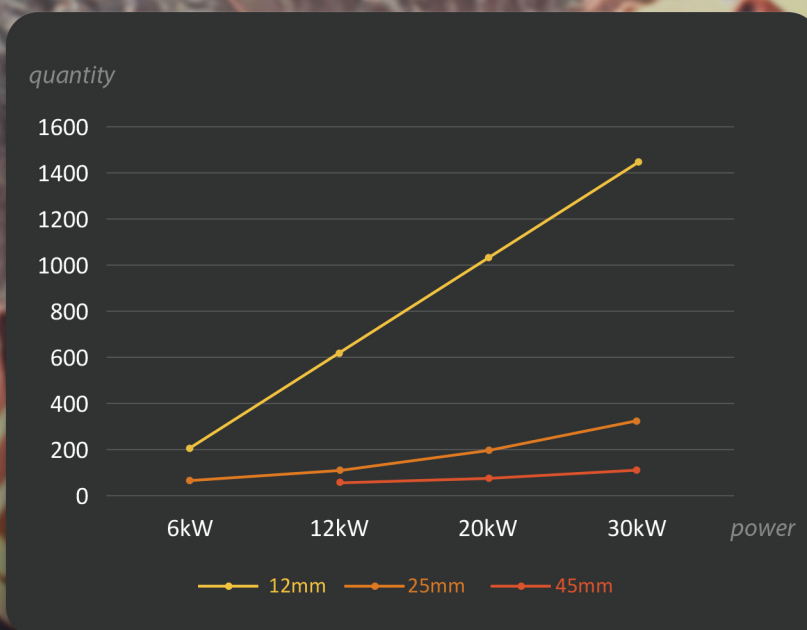
WIDE CUTTING RANGE

(30kW/20kW/12kW/6kW Comparison of efficiency and thickness on SS\CS cutting)

Quantity of the CS steel parts processed with different powers

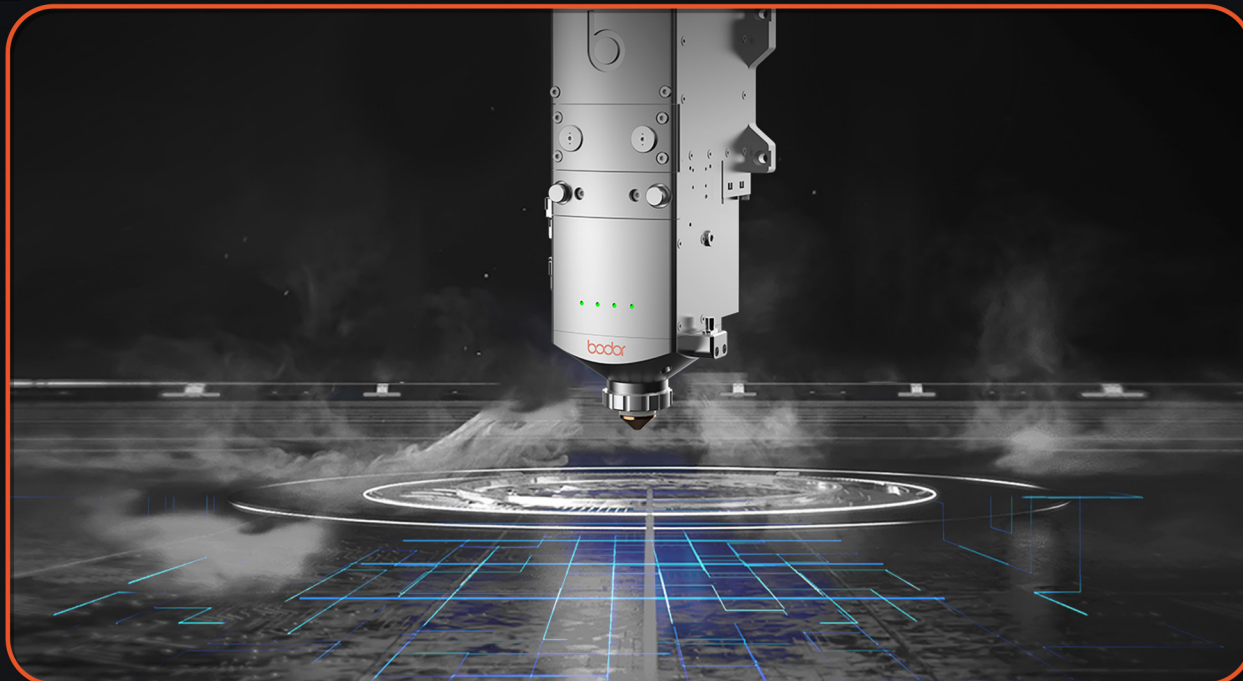


Quantity of the same SS parts processed with different powers



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Auto Focus Laser Head



Automatically adjust focal position

SSuitable for all Bodor Laser products

Auto focus

Applicable to multiple focal lengths, automatically adjusts focal position in cutting process by different sheet thickness.

Free your hands

Focal length is controlled by operating system, which effectively avoids errors or faults caused by manual operation.

Simple and fast

Applying Bodor lightning perforation technology reduce almost 90% work time. When technician changes different metal sheet, Auto focus laser head can automatically read system storage parameters, which make the cutting process less gas, less electricity, lower cost, high efficiency.

Accurate

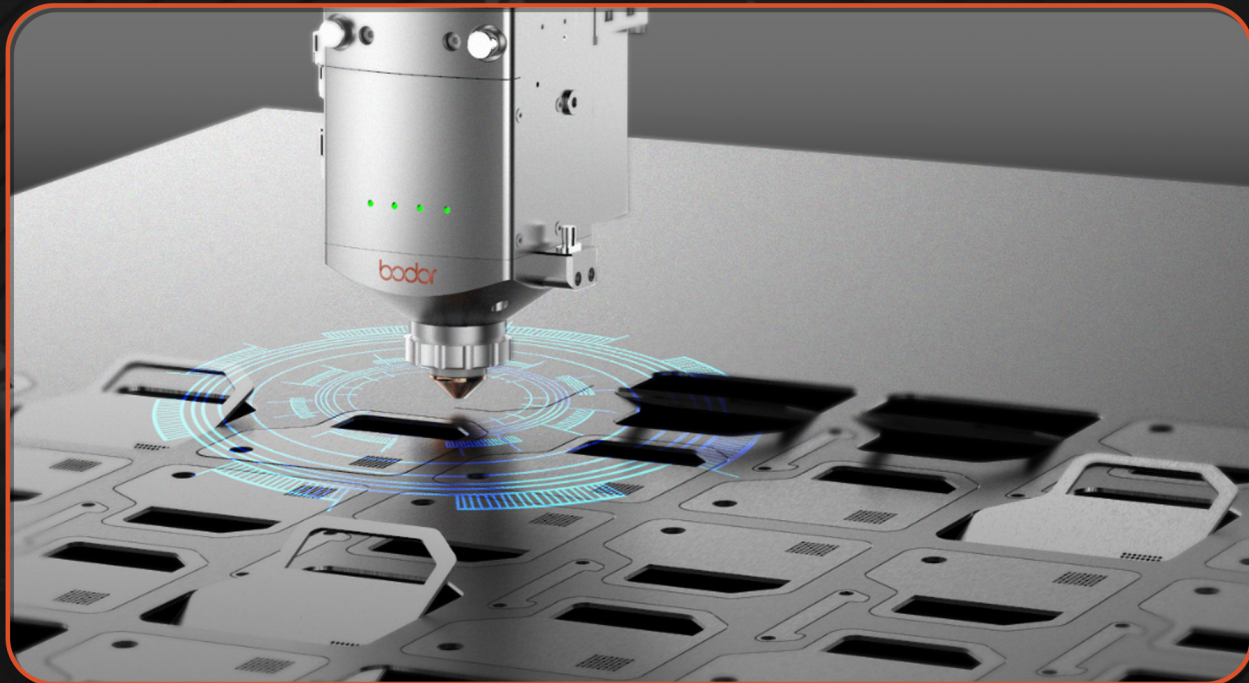
By setting perforation focal length and cutting focal length respectively, the cutting is more accurate.

Durable

By increasing collimation & focus protective lens, the key components can be protected. Built-in double water-cooling structure ensures constant temperature of collimating and focusing components, prevents lenses from overheating and prolongs service life of lenses.



Automatic Obstacle Avoidance



Intelligent anti-collision

SSuitable for all Bodor Laser products



Intelligent anti-collision

360° radar system can detect any obstacles in advance, and Z axis high-speed motion will be activated to immediately avoid obstacles, avoiding collisions.



Higher efficiency, lower cost

This function Lowers the damage rate of laser head, and accordingly reduces maintenance cost, prolonging service life of the machine. Avoid production halt caused by collisions, ensuring continuous production.

Bodor Cloud



IoT Cloud platform for laser CNC machines

SSuitable for all Bodor Laser products

IoT Cloud Platform for Fiber Laser CNC Machines

Digital Management of Equipment, Storage of Traceable Data.

Access through Multiple Devices, All-around Information Display.

Real-time Equipment Monitoring, Automatic Malfunction Alert.

Apply for After-sale Service on Bodor Cloud Platform.

Automatic Nozzle Changer



Automatic and standard

Suitable for P-Series (<6000w) and S-Series/Dream products

Automatic Cleaning

Automatic Replacement

Automatic Calibration

High performance

EtherCat bus control provides quick signalling and high-accuracy of sync, especially for high-speed cutting.

Smart and convenient

Newest automatic calibration and cleaning functions achieve fully automatic laser head calibration and nozzle cleaning reduce repetitive manual labour.

Safe and standard

Fully enclosed protection of the whole equipment improves the safety performance of parts and human safety.

Pierce Monitor



Equipped with Beckhoff System

Suitable for G-Series (Equipped with Beckhoff System) and S-Series products

Reduce the perforation time to 4s

- ④s Significantly reduce perforation time, average perforation time of medium & thick plate is reduced to 4s.
- ① Avoid blasting holes and avoid the failure of sheet overheating for prolonged perforation.
- Ⓐ The system automatically matches perforation parameters, which ensures the consistency of perforation parameters in continuous perforation process without repeatedly modification.

Vortex Start



Equipped with Beckhoff System

Suitable for G-Series (Equipped with Beckhoff System) and S-Series products

Slag treatment process during perforated cutting of thick plates

- ⚙️ Smartly choose vortex process according to the material and its thickness, sparing the need for repeated adjustments and reducing operating difficulty.
- ⊖ Remove the slag produced during perforation to the greatest extent, improving the cutting effects and making sure that the cutting edges are smooth and material surface intact.
- ⤴️ Greatly improve stability of cutting follower, and prolong service life of nozzle and ceramic ring.

Unbounded Cutting



Equipped with Beckhoff System

Suitable for G-Series (Equipped with Beckhoff System) and S-Series products

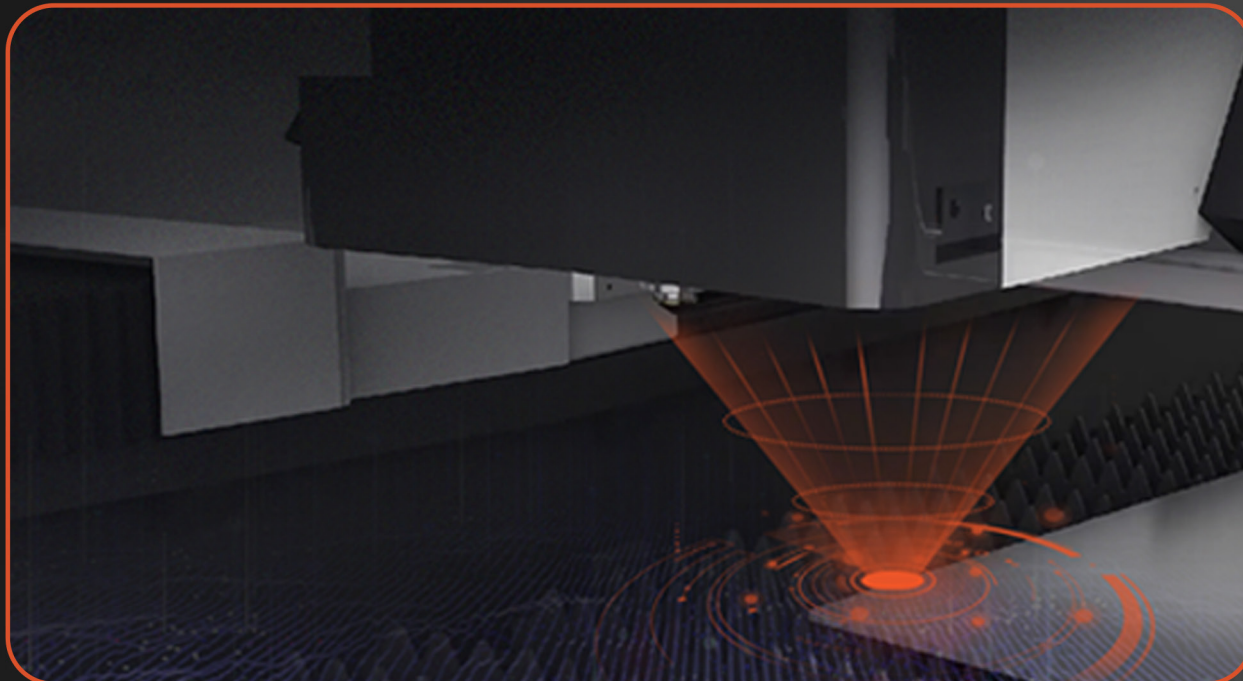
Process for cutting leftover material

Automatic adjustment without programming, operating more easily.

Cutting leftover materials, reduce waste, lower cost.

6 programs to realize arbitrary cutting of metal plate.

Four-side Edge Detection



Equipped with Beckhoff System

Suitable for G-Series (Equipped with Beckhoff System) and S-Series products

Flash positioning

It only takes 200ms to complete single image processing and 1-3s to complete edge searching and positioning.
5 times faster than capacitance searching.

Ultimate precision

Apply smart sensor system to achieve $\pm 1.0\text{mm}$ comprehensive positioning precision and 0.1mm max cutting precision, improving both material usage rate and product passing rate.

Safety and reliability

Use digital processing to avoid the risk of probing collision of the following module, guaranteeing the safety.

High applicability

Widen the application situations, suitable for not only standard rectangle sheets but multiple sheet shapes.

Witness of Bodor Laser's 10kW+ clients

Master the core technology of **20kW/30kW** fiber laser cutting machine.



Bodor laser staff visited Zhengteng Company

Shandong Zhengteng Machinery Co., Ltd., is mainly engaged in sheet metal processing. The company is mainly committed to the production of property accessories, sports equipment accessories and wind power industry accessories.

They purchased Bodor Laser **P6025 20000W** product in April this year.

This is the first **20000W** laser cutting equipment in **Dezhou**, and it has been operating stably for three months.



Bodor Laser after-sales team's followup visit to the client

Rizhao XS Machinery Factory has been cooperating with **Sinotruk** for more than ten years, mainly producing iron parts for Sinotruk. XS purchased **two Bodor Laser machines** in 2017.

Owing to the better cutting effect than the plasma cutting, they bought a **P6025**

"I rely on Bodor laser, especially for the 10kW+ equipment. The quality is guaranteed and the cutting speed is fast, which is more than 3 times that of the previous machine. The after-sales service is also great."

——President Gao from XS.



Interview

President Li, Cangzhou, Hebei purchased an **F4020/1500W** device in 2017.

So far, it has been running in good condition, providing a powerful support for Mr. Li's business. With the company's business expansion, Mr. Li successively purchased **Bodor P6025/3000W** and **S6025/12000W**.

According to Mr. Li, products over 10,000W are the developing trend of the laser cutting market. As the "ruler" of the 10kW+ product camp, Bodor Laser is worthy of trust by all metal processing enterprises.

By March,
the cumulative sales of 10kW+
laser cutting machines had exceeded **400 units (sets)**





Bodor laser staff visited the factory

Since 2015, Mr.Zhang has purchased 6 sets of laser cutting machine from Bodor, and three of which are above 10kW laser cutting machines. Currently, 2 sets of 12000W laser cutting machines have been delivered, and 1 set of 20000W has not yet been delivered.

"Our customer's production volume is relatively large, and the cutting speed of the 12000W machine is quite fast. Whether cutting carbon steel or stainless steel, it can meet the production. Compared with the 4000W and 6000W laser cutting machines, the 12000W laser cutting machines have not only doubled its efficiency but also reduced the cost a lot. This is because the 12000w laser cutting machine is air cutting, which costs lower than oxygen cutting, making it a great market competitive advantage in cost savings."

"Compared with other companies, Bodor's cutting accuracy is the best and meets the high requirements of our auto parts processing."



Manager Mu purchased the Bodor Laser 2000W laser cutting machine in May 2017. He is very satisfied with the fast cutting speed and good effect of the machine.

Mr. Mu purchased two higher-power laser cutting machine in 2018 and 2019 consecutively. One set is 12000w, which meets the multiple requirements of cutting speed and thickness. He is Bodor Laser's first high power client in Hebei Province.

"Bodor Laser has the great after-sales service. If there is a problem with the machine, they will respond immediately, ensuring the normal operation of the equipment."



In May 2019, CH company purchased the Bodor Laser F6025 3000W laser cutting machine. Due to the market demand, they purchased the P6025 12000W equipment in December.

Mr. Yang believes that Bodor Laser is a well-known company in the industry with a good reputation and a professional sales team. By visiting Bodor Laser's Super Factory and R&D team, he expressed the great satisfaction with Bodor. Excellent R&D capabilities and production process are also important reasons for customers to choose Bodor.

"After so many years of business cooperation, I rely on Bodor Laser because of their brand and strength. I hope that more processing enterprises can use Bodor's laser cutting machine in the future to help them increase efficiency and enlarge their business"

By March,
the cumulative sales of 10kW+
laser cutting machines had exceeded **400 units (sets)**





Witness of 10kW+ LCM clients



Bodor Laser's 2019 production and sales volume rank first in the world

In 2020,
Bodor released **the world's first**
40kW ultra-high power laser cutting machine.





Master the core technology of **20kW/30kW** fiber laser cutting machine



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