

P SERIES FIBER LASER CUTTING MACHINE FOR METAL SHEET

With all-around protective covering and double exchange tables



With all-around protective covering and double exchange tables

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	P3015	P4020	P6020	P6025	P8025					
Working Area	3000*1500mm	4000*2000mm	6100*2000mm	6100*2500mm	8100*2500mm					
Laser Power	40000w/30000w/20000	w/15000w/12000w/8	0w/8000w/6000w/4000w/3000w/2000w/1500w/1000w							
X/Y-axis Positioning Accuracy	0.03mm	0.	0.05mm							
X/Y-axis Repositioning Accuracy	0.02mm	0.	0.03mm							
Max. linkage speed	140m/min									

Version number 2020 10.26 (Above data is only for reference)



Higher Safety Level



O The all-around protective covering isolates laser radiation and pollution, offering higher safety level.

P Series Protective cover

- O Smoke and dust produced during cutting will be automatically collected to ensure a clean operating area.
- Smart monitoring system helps reduce accident rate.



Auto-focusing Laser Head

Auto-focusing

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

Bodor Lightening Perforation Technology

Suitable for multiple focal lengths, and focal position will be automatically adjusted based on thickness of different sheets. Focal length is controlled by operating system, avoiding errors and deviations caused by manual operation.

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.





Cast Iron Bed A CAST IRON BED LAST FOREVER



Material is more suitable



Technique is more suitable



Structure is more reasonable

Clone production

• Pouring Mold, clone production; integrally formed, reject splicing.

Durable

- The usage of flake graphite with the lowest tensile strength of 200MPa gives the whole equipment strong shock absorption, wear resistance, high hardness, high carbon content, high compressive strength.
- Low notch sensitivity and thermal sensitivity of cast iron bed reduces the loss of equipment in using, keeps the precision of cutting unchanged permanently and no deformation in its life cycle.



Unique Anti-burning Mechanism Of Table And Bed Surface





Unique anti-burning mechanism of table and bed surface(above 6kW)

- The table adopts the way of cast iron plate cushion backing the copper plate to absorb cutting heat and prevent table from being damaged.
- The bed surface is covered with additional cast iron plates to prevent the bed from being damaged by the falling material and cutting splash.





Rapid smoke exhaust (V2.0)

The newly upgraded smoke extraction system re-analyzes the equipment air duct structure, optimizes the air duct structure, the true power of the fan, and passes various rigorous dust removal and smoke exhaust tests, which can be achieved even in the face of complex smoke exhaust requirements exhaust smoke quickly.



360°

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.



Stretched Aluminum Beam



Stretched Aluminum Beam(V2.0)

- High-strength inner cavity design gives anti-deformation quality, effectively dispersing internal and external stress.
- Adopt aviation aluminum ultra-high pressure stretching process to acquire anti-twisting and anti-overturning qualities, achieving optimal mechanical performance.
- Greatly improved rigidity of the gantry beam and the light weight ensure high speed, high precision, and high responsiveness.



Double Fast Exchange Tables



Double Fast Exchange Tables

Fast exchange of two tables greatly improves efficiency. Rack and gearwheel transmission system has better rigidity and higher accuracy, saving feeding time.





Mango wireless remote control handle

Mango shape, elegant curve, use with one hand, magnetic attraction design.

	bodor	





21.5-INCH SCREEN

21.5-inch Screen

21.5-inch screen offers larger display area.

Bodor Pro Operating System

bodor



Bodor's independent R&D operating system can realize intelligent layout of graphics. Use optimal logic programming and software interactions in control aspect to achieve stunning using experience, effectively improve utilization of sheet metal and reduce leftover material.



More Practical Ultimate Experience



Unique anti-burning mechanism of table and bed surface

- The newly optimized table load-bearing capacity(the full format is 30mm carbon steel when the power is below 6kw.
- O The full format 40mm carbon steel when 6kw and above), it is not afraid of thick plate processing.
- O Cantilever type rotatable mobile console, flexibly adapt to the processing needs of different scenes.
- O The large enclosure is integrated with the bed, which simplifies on-site installation and is beautiful and smooth.



Auxiliary Gas Low Pressure Alarm Function

Auxiliary Gas Low Pressure Alarm Function

Providing real-time pressure detection and reporting abnormal information ensure cutting effect, precision and timely replace gas.

FUNCTIONS

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.

Safety Following Module

Laser head is kept in a safe distance from the material during cutting. And laser head will stop its motion once colliding with the sheet, reducing collision risks.

Automatic lubrication system

Quantitative lubricants provided for equipment guarantee the normal and high-speed operation, greatly improving the cutting accuracy.

The function of abnormal liquid level alarm can effectively extend the service life of the transmission mechanism.



Cutting Capacity

Laser power	Material Thickness	10mm	20mm	30mm	40mm	50mm	60mm	70mm	10mm	80mm	90mm	100mm	110mm
500W												rbon steel inless steel	
1000W												iminum	
MAX-1000W (25um)	-										Bra		
1500W											Ma (lo	x cutting thickness ng-term using isnt r	ecommended)
2000W													
MAX-2000W													
YLP-2000W													
3000W													
MAX-3000W													
4000W													
MAX4000W													
IPG6000W													
MAX600W													
8000W													
10000W													
12000W													
15000W	/ /												
20000W													

Above data is only for reference



Fiber Laser Cutting Process Parameters

		1000W	MAX- 1000W(25um)	1500W	2000W	MAX- 2000W(50)	YLR- 2000W	3000W	MAX- 3000W(50)	4000W	MAX- 4000W(50)	IPG 6000W	MAX 6000W	8000W	10000W	12000W	15000W	20000	20000 W
Material	Thickness	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min
	1	8.010	8.010	8.010	8.010	8.010	8.010	8.010	8.010	810	810	810	810	810	911	911	911	911	911
	2	4.06.5	4.57.0	4.56.5	4.76.5	4.76.5	4.76.5	4.87.5	4.87.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5
	3	2.43.0	2.43.0	2.64.0	3.04.8	3.04.8	3.04.8	3.35.0	3.35.0	3.55.0	3.55.0	3.55	3.55	3.55	3.55.5	3.55.5	3.55.5	3.55.5	3.55.5
	4	2.02.4	2.02.4	2.53.0	2.83.5	2.83.5	2.83.5	3.04.2	3.04.2	3.04.0	3.04.0	3.04.5	3.04.5	3.04.5	3.55	3.55 3.34.8	3.55	3.55	3.55 3.34.8
	6	1.41.6	1.41.6	1.62.2	1.82.6	1.82.6	1.82.6	2.33.2	2.33.2	2.53.4	2.53.4	2.53.5	2.53.5	2.63.7	3.04.0	3.04.2	3.04.2	3.04.2	3.04.2
	8	0.81.2	0.81.2	1.01.4	1.21.8	1.21.8	1.21.8	1.82.6	1.82.6	2.03.0	2.03.0	2.23.2	2.23.2	2.33.5	2.53.5	2.53.5	2.53.5	2.53.5	2.53.5
	10	0.61.0	0.61.0	0.81.1	1.11.3	1.11.3	1.11.3	1.22.0	1.22.0	1.52.4	1.52.4	1.82.5	1.52.2	22.5	2.02.7	2.22.7	2.22.7	2.22.7	2.22.7
	12	0.50.8	0.50.8	0.71.0	0.91.2	0.91.2	0.91.2	1.01.6	1.01.6	1.21.8	1.21.8	1.22.0	1.22.0	1.22.1	1.22.1	1.22.1	1.22.1	1.42.1	1.42.1
	14			0.50.7	0.70.8	0.70.9	0.81.0	0.91.2	0.91.2	0.91.2	0.91.2	1.21.8	1.01.5	1.21.9	1.71.9	1.71.9	1.51.9	1.51.9	1.51.9
arbon steel (Q235A)	16				0.6-0.7	0.60.8	0.6-0.8	0.71.0	0.71.0	0.81.0	0.81.0	0.81.3	0.71.2	0.81.5	1.11.7	1.21.7	1.21.7	1.21.8	1.21.8
02	18				0.40.6	0.50.7	0.50.7	0.60.8	0.60.8	0.60.9	0.60.9	0.60.9	0.60.9	0.81.5	0.81.6	1.01.8	1.21.5	1.21.8	1.21.8
	20 22							0.50.8	0.50.7	0.50.8	0.50.8	0.50.8	0.50.8	0.61.3	0.61.4	0.61.5	1.21.5	1.21.6	1.21.6
	25							0.3**0.1	0.5**0.1	0.4=0.8	0.4=0.8	0.30.55	0.40.5	0.30.7	0.51.0	0.51.1	0.81.5	0.81.4	0.81.4
	30													0.20.7	0.30.8	0.30.9	0.61.0	0.81.2	0.81.2
	35														0.20.4	0.30.5	0.40.6	0.60.9	0.60.9
	40															0.20.4	0.30.5	0.50.8	0.50.8
	45															0.20	0.20.5	0.30.5	0.30.5
	50																0.10.5	0.20.4	0.20.4
	60																	0.20.4	0.20.4
	70	1825	2436	2027	2430	2450	2450	3035	3058	3245	4072	4252	4252	5065	6072	7085	72100	0.10.3 72100	0.10.3
	2	1825	2436	2027 8.012	2430 9.012	2450 9.014	2450 9.015	3035	3058	3245	4072	4252	4252	3040	6072 3545	7085	72100	72100 5075	72100 5075
	3	1.82.5	2.23.5	3.012	4.06.5	4.07.0	4.87.5	6.010	614	7.015	7.018	1522	1522	1827	2030	3545	3850	3855	3855
	4	1.21.3	1.21.6	1.52.4	3.04.2	3.24.5	3.24.5	4.06.0	4.07.0	5.08.0	6.010.0	1015	1015	1216	1522	2032	2535	2533	2533
	5	0.60.7	0.60.75	0.71.3	1.8-2.5	2.0-2.8	2.0-2.8	3.05.0	3.05.0	3.55.0	4.05.0	8.012	6.58.0	1015	1018	1825	2030	2230	2230
	6			0.71.0	1.2-1.8	1.2-2.0	1.2-2.0	2.04.0	2.04.0	2.54.5	3.04.5	4.88.0	4.26.0	6.010.0	812	1215	15.025.0	1725	1725
	8				0.7-1.0	0.7-1.0	0.7-1.0	1.52.0	1.52.0	1.62.0	1.62.0	3.04.0	2.53.5	3.55.0	5.07.5	812	8.012.0	1218	1218
	10							0.60.8	0.60.8	0.81.2	0.81.2	1.62.5	1.22.0	2.02.7	3.07.0	6.08.0	6.010.0	6.012.0	6.012.0
	12							0.40.6	0.40.6	0.50.8	0.50.8	0.81.5	0.81.5	1.22.0	2.53.9	4.05.5	4.06.0	4.08.5	4.08.5
	14									0.40.6	0.40.6	0.60.8	0.50.8	1.21.8	1.82.8	3.05.0	3.56.0	3.56.0	3.56.0
	16 18											0.50.8	0.40.7	1.01.6	1.72.3	2.22.8	2.53.0	2.53.3	2.53.3
Stainless steel	20											0.40.6	0.20.5	0.40.7	0.91.5	1.22.0	1.22.2	1.52.0	1.52.0
(201) N2	25											0.20.4	0.20.4	0.30.5	0.60.7	0.50.8	0.61.2	1.01.5	1.01.5
	30													0.20.4	0.30.6	0.30.6	0.51.0	0.51.1	0.51.1
	35														0.30.5	0.30.5	0.40.8	0.40.8	0.40.8
	40														0.30.5	0.30.5	0.30.6	0.30.6	0.30.6
	45															0.20.4	0.20.5	0.20.6	0.20.6
	50															0.10.2	0.10.5	0.20.5	0.20.5
	60																0.1-0.2	0.1-0.3	0.1-0.3
	70 80																0.050.1	0.1-0.3	0.1-0.3
	90																	0.1-0.3	0.1-0.3
	100																	0.070.1	0.070.1
	110																	0.050.1	0.050.1
	1	6.010	6.010	1020	1525	1525	2030	2538	2540	3545	3545	4255	4255	4865	5565	6085	70100	70100	70100
	2	2.83.6	2.83.6	5.07.0	710	710	1015	1018	1320	1324	1324	2040	2040	2548	3345	3850	4055	4055	4055
	3	0.71.5	0.71.5	2.04.0	4.06.0	4.06.0	5.07.0	6.58.0	6.58.0	7.013	7.013	1525	1525	2033	2535	3040	3545	3545	3545
	4			1.01.5	2.03.0	3.54.0	3.55.0	3.55.0	3.55.0	4.05.5	4.05.5	9.512	9.512	1318	1525	2030	3040	3040	3040
	5			0.71.0	1.21.8	1.21.8	1.82.5	2.53.5	2.53.5	3.04.5	3.04.5	5.08.0	5.08.0	9.012	1320	1525	2030	2030	2030
	6 8				0.71.0	1.01.5	1.01.5	1.52.5	1.52.5 0.71.0	2.03.5	2.03.5	3.85.0	3.85.0	4.58.0	9.012 4.56.5	1015	1524 8.012.0	1524 8.012.0	1524 8.012.0
	10				0.0-0.0		0.0-0.0	0.40.7	0.1-4.0	0.61.2	0.61.2	1.01.5	1.01.5	2.23.0	2.84.0	4.58.0	6.010.0	6.010.0	6.010.0
Aluminum	10							0.3-0.45		0.40.6		0.81.0	0.81.0	1.51.8	1.92.5	4.05.0	4.06.0	4.06.0	4.06.0
N2	16									0.30.4		0.50.8	0.50.8	1.01.6	1.52.0	1.52.5	2.03.0	2.03.0	2.03.0
	20											0.50.7		0.71.0	0.81.2	0.91.5	1.31.8	1.31.8	1.31.8
	25											0.30.5		0.40.7	0.60.8	0.60.9	0.61.2	0.61.2	0.61.2
	30													0.30.6	0.30.7	0.30.8	0.51.0	0.51.0	0.51.0
	35															0.30.6	0.30.8	0.30.8	0.30.8
	40															0.20.4	0.20.5	0.20.5	0.20.5
	50 60															0.10.2	0.30.7	0.30.7	0.30.7
	65																0.2-0.5	0.10.3	0.10.3
	1	6.010	6.010	8.013	1016	1016	1218	2035	2035	2535	2535	3545	3545	4055	5060	5565	7585	7585	7585
	2	2.83.6	2.83.6	3.04.5	4.57.5	5.06.0	6.08.5	6.010	6.010	8.012	8.012	2030	2030	2840	3340	3850	4055	4055	4055
	3	0.51.0	0.51.0	1.52.5	2.54.0	2.54.0	2.54.0	4.06.0	4.06.0	5.08.0	5.08.0	1218	1218	2030	1523	2030	3250	3250	3250
	4			1.01.6	1.52.0	2.03.0	2.03.0	3.0-5.0	3.0-5.0	3.25.5	3.25.5	5.08.0	5.08.0	1015	1016	1520	2735	2735	2735
	5			0.50.7	0.91.2		0.91.2	1.52.0	1.52.0	2.03.0	2.03.0	4.56.0	4.56.0	6.09.0	9.013	1015	1826	1826	1826
	6				0.40.7		0.40.9	1.01.8	1.01.8	1.42.0	1.42.0	3.04.5	3.04.5	4.56.5	7.09.0	6.08.0	1018	1018	1018
	8							0.50.7		0.71.2		1.62.2	1.62.2	2.44.0	4.56.5	5.07.0	8.010.0	8.010.0	8.010.0
Brass N2	10									0.20.5		0.81.2	0.81.2	1.52.2	2.44.0	4.56.5	5.07.0	5.07.0	5.07.0
	12 14											0.30.5	0.30.5	0.81.2	1.52.2	2.44.0 0.81.5	2.84.2	2.84.2	2.84.2
	14											0.0-0.4	0.0.0.4	0.40.6	0.40.6	0.6-1.2	0.81.5	0.81.5	0.81.5
	18														0.30.5	0.40.6	0.60.8	0.60.8	0.60.8
	20															0.30.5	0.40.6	0.40.6	0.40.6
	25																0.30.5	0.30.5	0.30.5
	30																	0.20.4	0.20.4
	35																	0.1-0.2	0.1-0.2

Above data is only for reference



Metal Samples





















OFFICE















WORKSHOP



