bodor laser
Future is now

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	P12030
Working Area	3000*1500mm	4000*2000mm	6100*2000mm	6100*2500mm	8100*2500mm	12500*3200mm
Laser Power	30000w/20000w/15000w/12000w/8000w/6000w/4000w/3000w/2000w/1500w/1000w					
X/Y-axis Positioning Accuracy	0.03mm		0.05mm			0.02mm
X/Y-axis Repositioning Accuracy	0.02mm		0.03mm			0.01mm
Max. linkage speed	140m/min					80m/min

bodor laser
Future is now

HIGHER SAFETY LEVEL

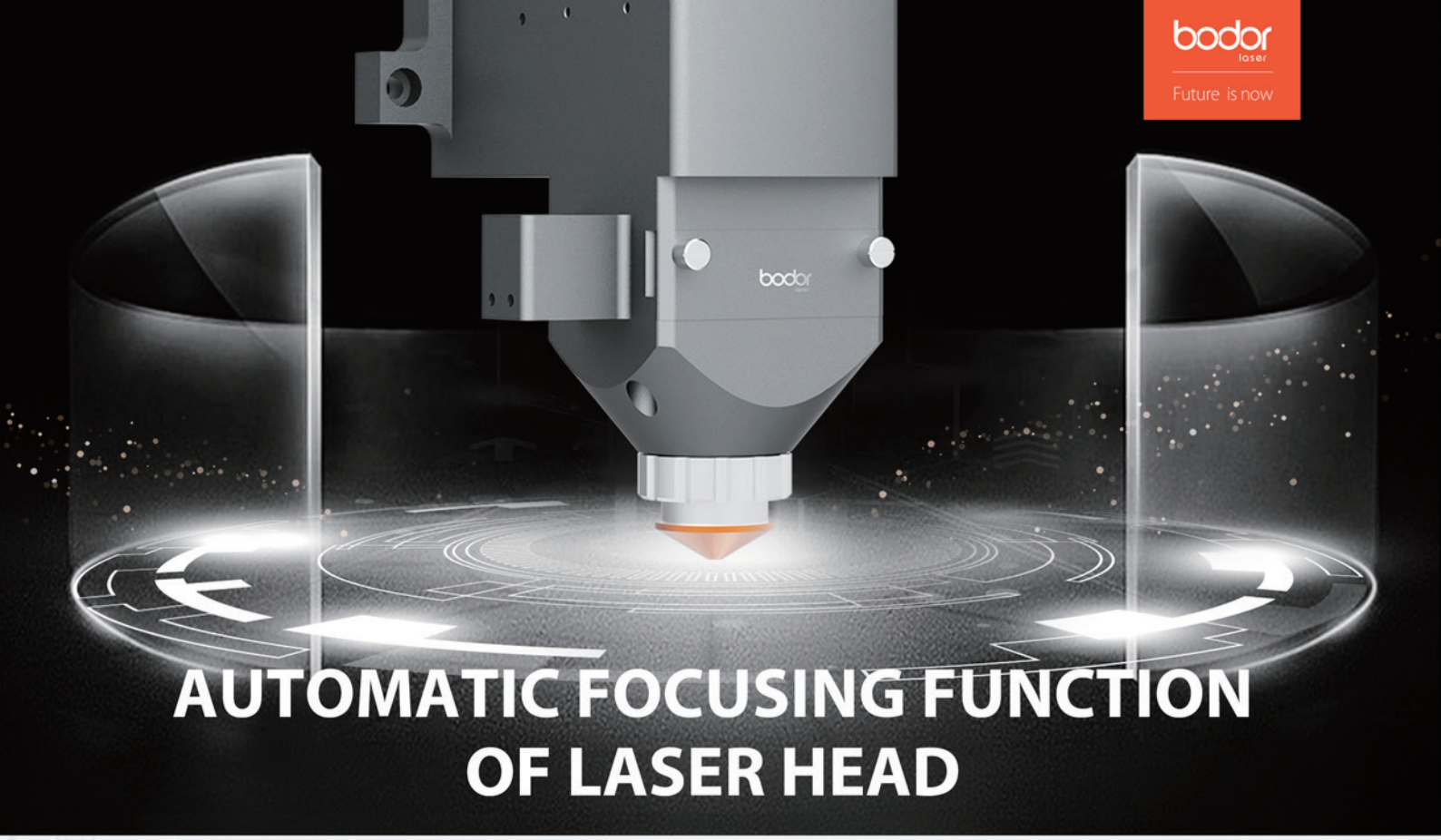
FULL PROTECTION COVER

All Cover Exchange Platform Laser Cutting Machine — P series

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

Smoke and dust produced during cutting will be automatically collected to ensure a clean operating area.

Smart monitoring system helps reduce accident rate.



AUTOMATIC FOCUSING FUNCTION OF LASER HEAD

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 technicist 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.

For more information, please go to the website : www.bodor.com

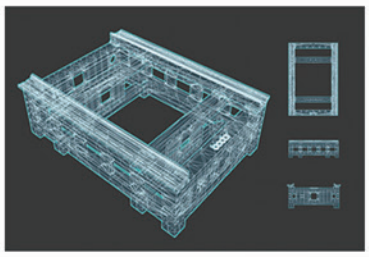
bodor
laser
Future is now

CAST IRON BED

A CAST IRON BED LAST FOREVER

Material is more suitable

Technique is more suitable



Structure is more reasonable

Clone production

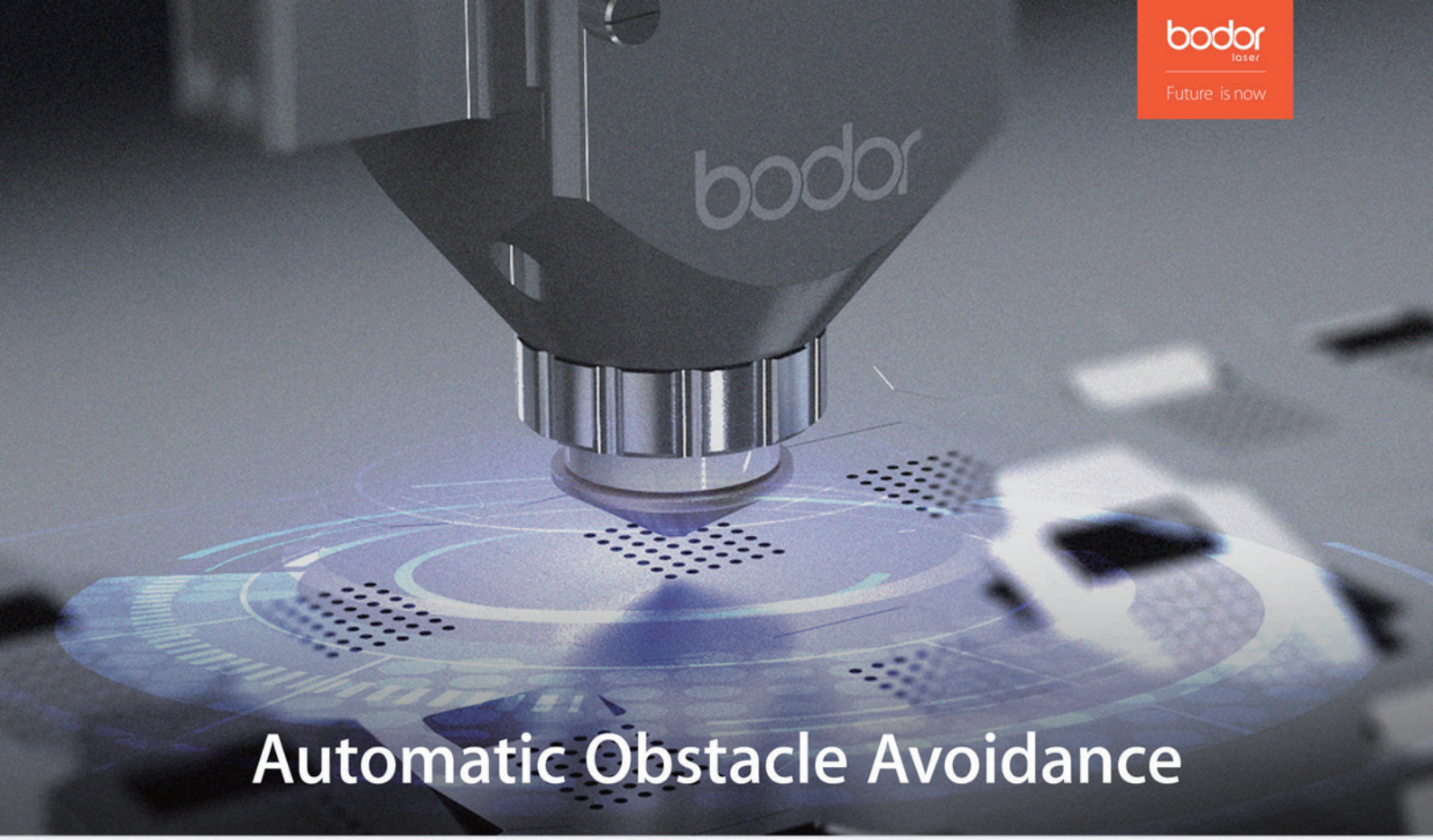
Pouring Mold, clone production; integrally formed, reject splicing

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.

For more information, please go to the website : www.bodor.com



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.

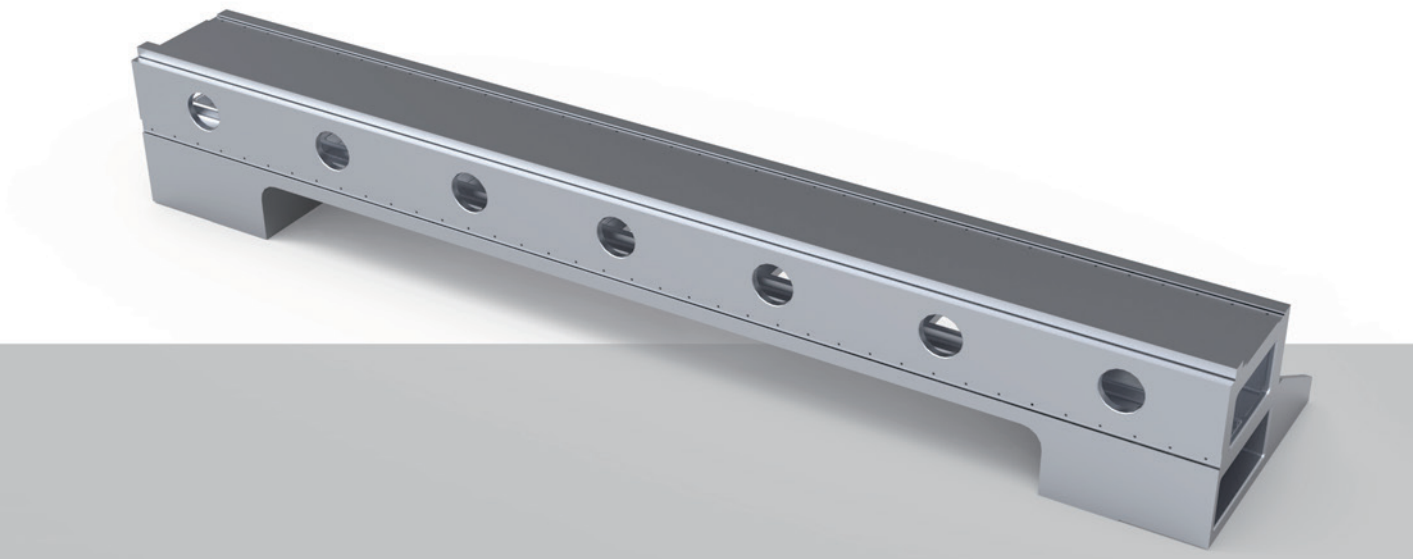
Higher Efficiency, Lower Cost

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.

For more information, please go to the website : www.bodor.com

bodor
laser
Future is now

CAST ALUMINUM CROSSBEAM



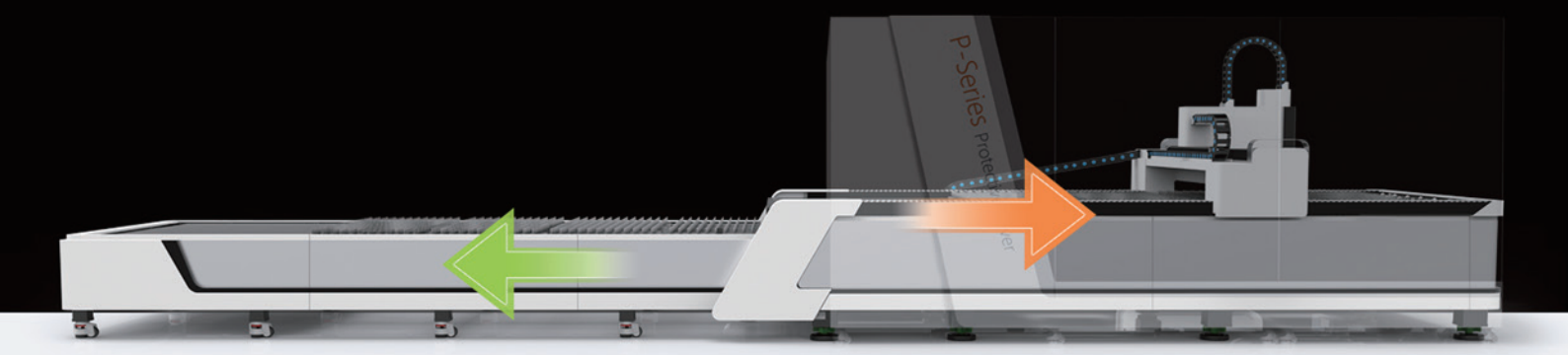
Cast aluminum crossbeam

Integral Pressure Casting by Steel Mold Makes It Light, Flexible and Efficient

Solution treatment and fine finishing give the crossbeam desirable integrity, rigidity, surface quality as well as toughness and ductility. The light weight and strong rigidity of aluminum alloy are suitable for high speed movement during processing, and the high flexibility is beneficial to high-speed cutting of various graphics if the cutting accuracy is ensured. Light crossbeam offers high operation speed, improving efficiency and ensuring quality.

bodor
laser
Future is now

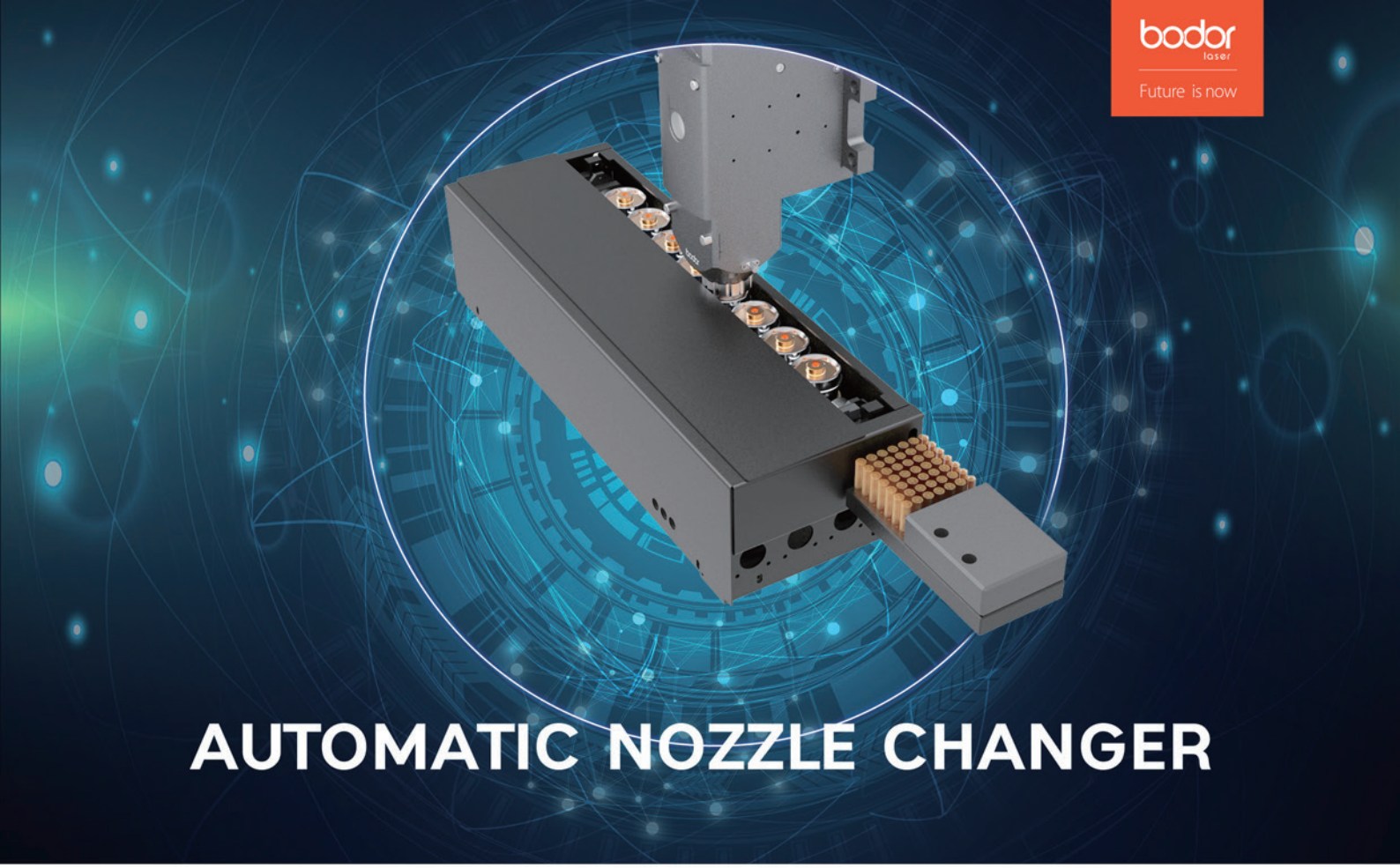
DOUBLE FAST EXCHANGE TABLES



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.

bodor laser
Future is now



AUTOMATIC NOZZLE CHANGER

Automatic Cleaning

Automatic Replacement

Automatic Calibration

Automatic Nozzle Changer, Let Machine Know More About You

Adopting abundant and accurate control system can realize automatic replacement of nozzles according to different materials and thicknesses, saving manual replacement time and improving processing efficiency, smart and convenient; Newest automatic calibration and cleaning functions can achieve fully automatic laser head calibration and nozzle cleaning, reducing the repetitive manual work; High-precision drive system provides a reliable replacement precision and stability to ensure that every replacement can be perfectly safe. Fully enclosed protection of the whole part improves the safety of parts and personal.

For more information, please go to the website : www.bodor.com

bodor
laser
Future is now

Bodor Pro 2.0

Bodor Pro 2.0

Independent R&D operating system offers simple interface and operation method, supports input of multiple types of graphics, automatically optimizes cutting orders, intelligently searches edges, and has automatic positioning function.

bodor
laser
Future is now

MANGO

Mango wireless remote control handle

Mango wireless remote control handle

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

bodor
laser
Future is now

Elegant appearance curve

The new 21.5 inch touch display with larger area and more convenient operation. 10 touch points ensures more operation accuracy.

bodor
laser
Future is now

Intelligent WIFI Remote Assistance

Global real-time feedback provides fault analysis and troubleshooting in time.

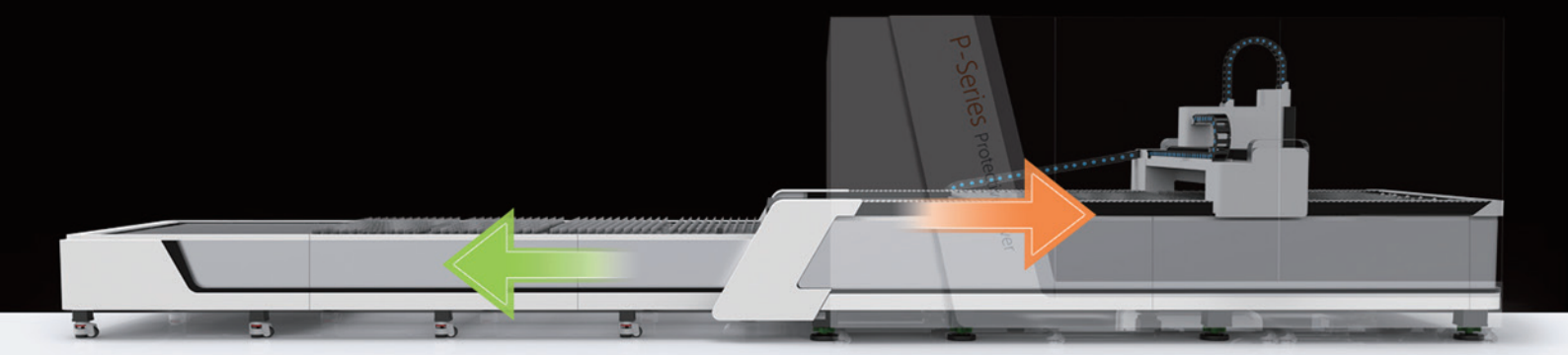
For more information, please go to the website : www.bodor.com

Auxiliary Gas Low Pressure Alarm Function

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

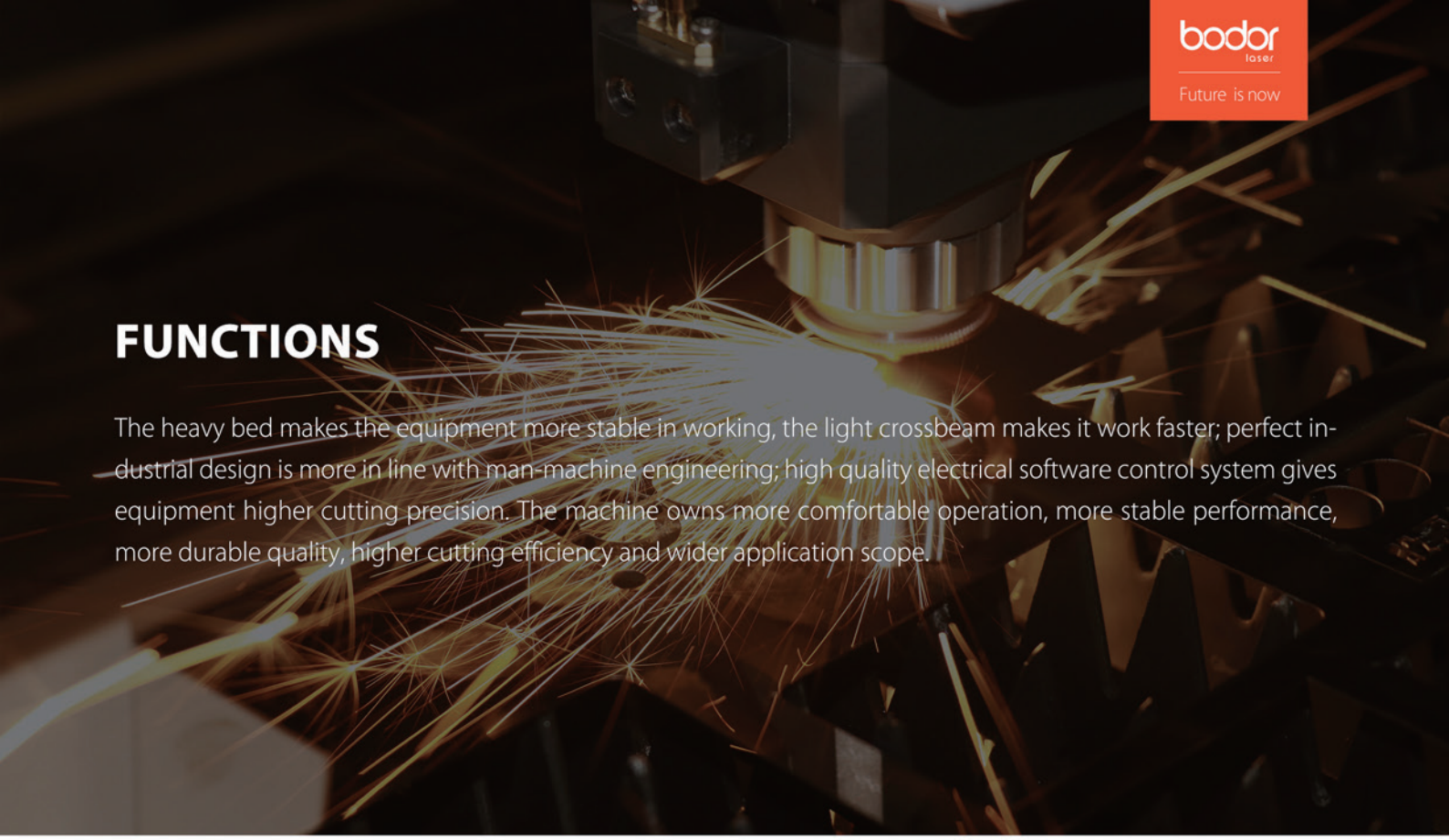
bodor
laser
Future is now

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.



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.

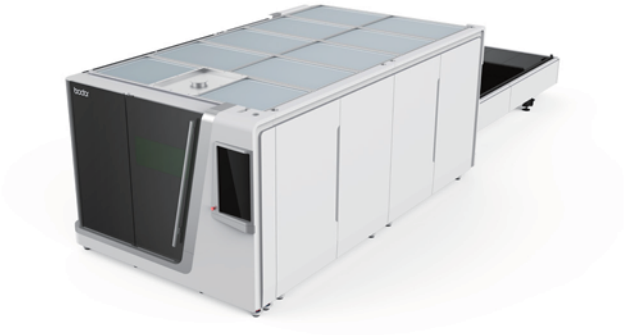
Safety Following Module

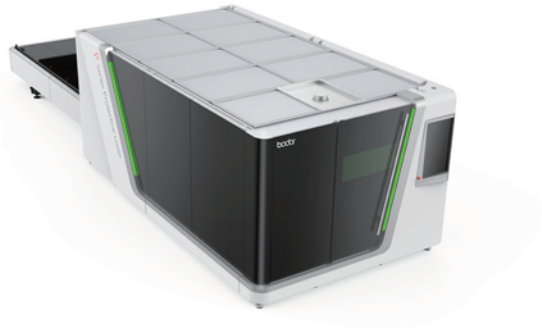
Laser head is kept in a safe distance from the material during cutting. And laser head will stop its motion once colliding with the sheet, reducing collision risks.

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.





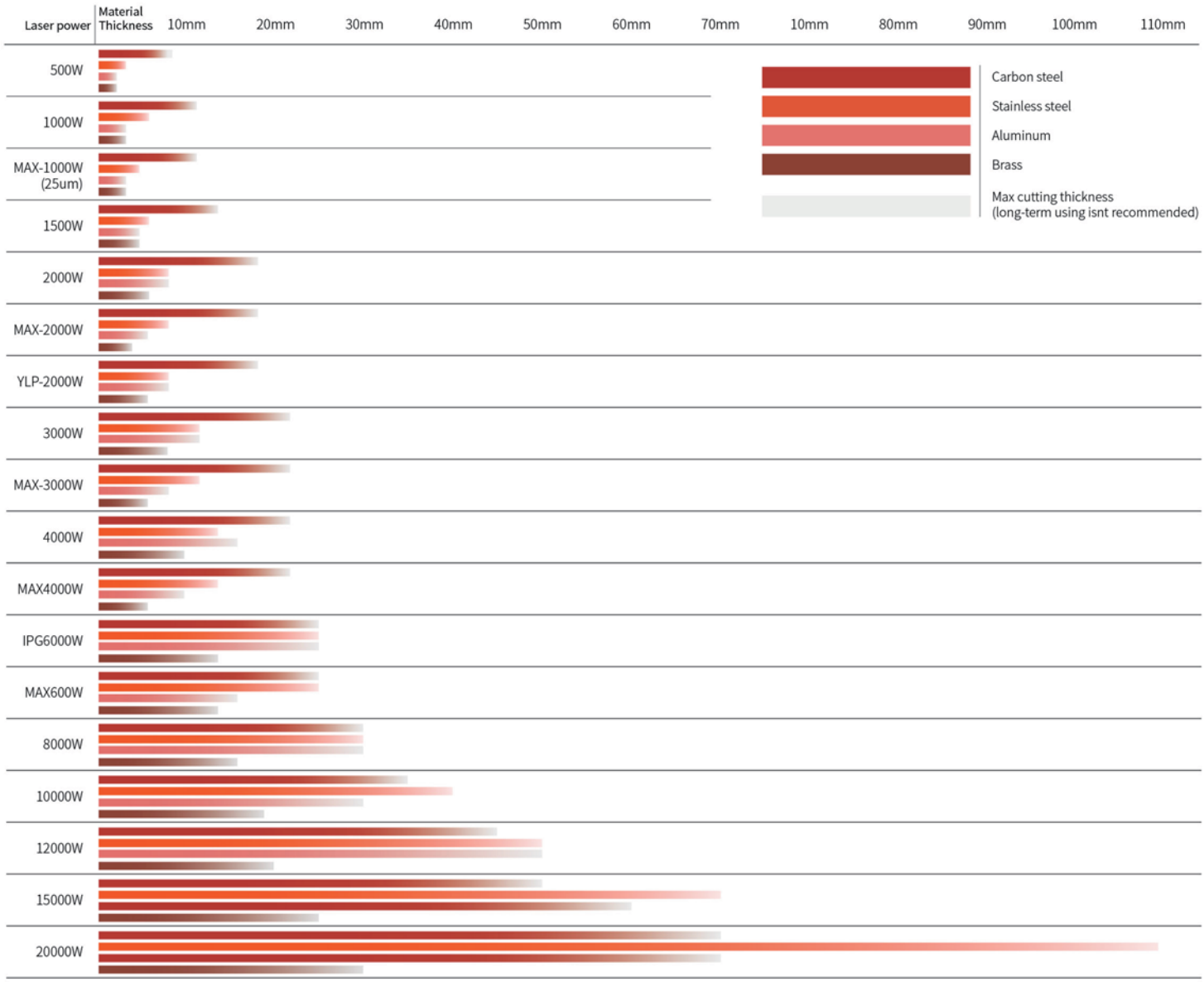
Appearance design

Aesthetics was introduced to industrial ID, perfect combination of technology and aesthetics

Surrounded by baking paint silver decoration,coordinated with diamond cutting tempered glass and alpine white sheet metal design, the international design of the machine is accepted by global consumer groups.
The workplace is neat, orderly and space-saving.

bodor laser
Future is now

Cutting Capacity



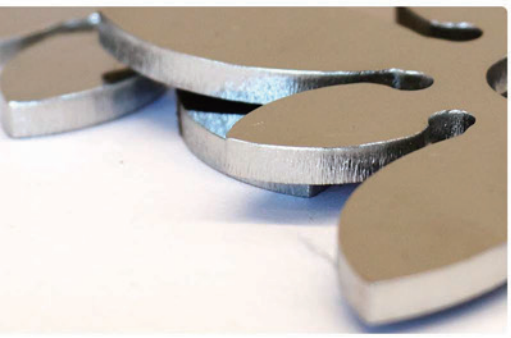
Above data is only for reference

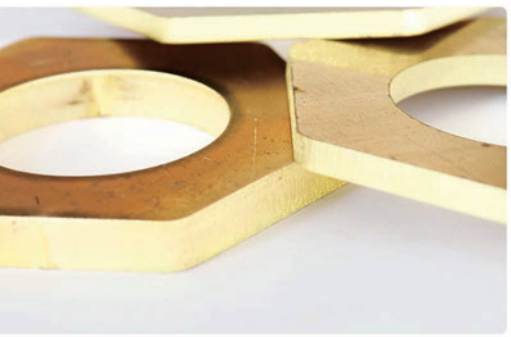
bodor laser
Future is now

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
Carbon steel (Q235A) O2	1	8.0--10	8.0--10	8.0--10	8.0--10	8.0--10	8.0--10	8.0--10	8.0--10	8--10	8--10	8--10	8--10	8--10	9--11	9--11	9--11	9--11	9--11
	2	4.0--6.5	4.5--7.0	4.5--6.5	4.7--6.5	4.7--6.5	4.7--6.5	4.8--7.5	4.8--7.5	5--7.5	5--7.5	5--7.5	5--7.5	5--7.5	5--7.5	5--7.5	5--7.5	5--7.5	5--7.5
	3	2.4--3.0	2.4--3.0	2.6--4.0	3.0--4.8	3.0--4.8	3.0--4.8	3.3--5.0	3.3--5.0	3.5--5.0	3.5--5.0	3.5--5	3.5--5	3.5--5	3.5--5.5	3.5--5.5	3.5--5.5	3.5--5.5	3.5--5.5
	4	2.0--2.4	2.0--2.4	2.5--3.0	2.8--3.5	2.8--3.5	2.8--3.5	3.0--4.2	3.0--4.2	3.0--4.0	3.0--4.0	3.0--4.5	3.0--4.5	3.0--4.5	3.5--5	3.5--5	3.5--5	3.5--5	3.5--5
	5	1.5--2.0	1.5--2.0	2.0--2.5	2.2--3.0	2.2--3.0	2.2--3.0	2.6--3.5	2.6--3.5	2.7--3.6	2.7--3.6	3.0--4.2	3.0--4.2	3.0--4.2	3.3--4.0	3.3--4.8	3.3--4.8	3.3--4.8	3.3--4.8
	6	1.4--1.6	1.4--1.6	1.6--2.2	1.8--2.6	1.8--2.6	1.8--2.6	2.3--3.2	2.3--3.2	2.5--3.4	2.5--3.4	2.5--3.5	2.5--3.5	2.6--3.7	3.0--4.0	3.0--4.2	3.0--4.2	3.0--4.2	3.0--4.2
	8	0.8--1.2	0.8--1.2	1.0--1.4	1.2--1.8	1.2--1.8	1.2--1.8	1.8--2.6	1.8--2.6	2.0--3.0	2.0--3.0	2.2--3.2	2.2--3.2	2.3--3.5	2.5--3.5	2.5--3.5	2.5--3.5	2.5--3.5	2.5--3.5
	10	0.6--1.0	0.6--1.0	0.8--1.1	1.1--1.3	1.1--1.3	1.1--1.3	1.2--2.0	1.2--2.0	1.5--2.4	1.5--2.4	1.8--2.5	1.5--2.2	2--2.5	2.0--2.7	2.2--2.7	2.2--2.7	2.2--2.7	2.2--2.7
	12	0.5--0.8	0.5--0.8	0.7--1.0	0.9--1.2	0.9--1.2	0.9--1.2	1.0--1.6	1.0--1.6	1.2--1.8	1.2--1.8	1.2--2.0	1.2--2.0	1.2--2.1	1.2--2.1	1.2--2.1	1.2--2.1	1.4--2.1	1.4--2.1
	14			0.5--0.7	0.7--0.8	0.7--0.9	0.8--1.0	0.9--1.2	0.9--1.2	0.9--1.2	0.9--1.2	1.2--1.8	1.0--1.5	1.2--1.9	1.7--1.9	1.7--1.9	1.5--1.9	1.5--1.9	1.5--1.9
	16				0.6-0.7	0.6--0.8	0.6-0.8	0.7--1.0	0.7--1.0	0.8--1.0	0.8--1.0	0.8--1.3	0.7--1.2	0.8--1.5	1.1--1.7	1.2--1.7	1.2--1.7	1.2--1.8	1.2--1.8
	18				0.4--0.6	0.5--0.7	0.5--0.7	0.6--0.8	0.6--0.8	0.6--0.9	0.6--0.9	0.6--0.9	0.6--0.9	0.8--1.5	0.8--1.6	1.0--1.8	1.2--1.5	1.2--1.8	1.2--1.8
	20							0.5--0.8	0.5--0.7	0.5--0.8	0.5--0.8	0.5--0.8	0.5--0.8	0.6--1.3	0.6--1.4	0.6--1.5	1.2--1.5	1.2--1.6	1.2--1.6
	22							0.3--0.7	0.3--0.7	0.4--0.8	0.4--0.8	0.4--0.8	0.4--0.6	0.5--0.8	0.6--1.4	0.5--1.5	1.0--1.5	1.2--1.5	1.2--1.5
	25											0.3--0.55	0.2--0.5	0.3--0.7	0.5--1.0	0.5--1.1	0.8--1.5	0.8--1.4	0.8--1.4
	30													0.2--0.7	0.3--0.8	0.3--0.9	0.6--1.0	0.8--1.2	0.8--1.2
	35														0.2--0.4	0.3--0.5	0.4--0.6	0.6--0.9	0.6--0.9
	40															0.2--0.4	0.3--0.5	0.5--0.8	0.5--0.8
	45															0.2--0	0.2--0.5	0.3--0.5	0.3--0.5
	50																0.1--0.5	0.2--0.4	0.2--0.4
	60																	0.2--0.4	0.2--0.4
	70																	0.1--0.3	0.1--0.3
Stainless steel (201) N2	1	18--25	24--36	20--27	24--30	24--50	24--50	30--35	30--58	32--45	40--72	42--52	42--52	50--65	60--72	70--85	72--100	72--100	72--100
	2	5--7.5	6--10	8.0--12	9.0--12	9.0--14	9.0--15	13--21	13--39	16--28	24--45	20--33	20--33	30--40	35--45	40--66	45--70	50--75	50--75
	3	1.8--2.5	2.2--3.5	3.0--5.0	4.0--6.5	4.0--7.0	4.8--7.5	6.0--10	6--14	7.0--15	7.0--18	15--22	15--22	18--27	20--30	35--45	38--50	38--55	38--55
	4	1.2--1.3	1.2--1.6	1.5--2.4	3.0--4.2	3.2--4.5	3.2--4.5	4.0--6.0	4.0--7.0	5.0--8.0	6.0--10.0	10--15	10--15	12--16	15--22	20--32	25--35	25--33	25--33
	5	0.6--0.7	0.6--0.75	0.7--1.3	1.8-2.5	2.0-2.8	2.0-2.8	3.0--5.0	3.0--5.0	3.5--5.0	4.0--5.0	8.0--12	6.5--8.0	10--15	10--18	18--25	20--30	22--30	22--30
	6			0.7--1.0	1.2-1.8	1.2-2.0	1.2-2.0	2.0--4.0	2.0--4.0	2.5--4.5	3.0--4.5	4.8--8.0	4.2--6.0	6.0--10.0	8--12	12--15	15.0--25.0	17--25	17--25
	8				0.7-1.0	0.7-1.0	0.7-1.0	1.5--2.0	1.5--2.0	1.6--2.0	1.6--2.0	3.0--4.0	2.5--3.5	3.5--5.0	5.0--7.5	8--12	8.0--12.0	12--18	12--18
	10							0.6--0.8	0.6--0.8	0.8--1.2	0.8--1.2	1.6--2.5	1.2--2.0	2.0--2.7	3.0--7.0	6.0--8.0	6.0--10.0	6.0--12.0	6.0--12.0
	12							0.4--0.6	0.4--0.6	0.5--0.8	0.5--0.8	0.8--1.5	0.8--1.5	1.2--2.0	2.5--3.9	4.0--5.5	4.0--6.0	4.0--8.5	4.0--8.5
	14									0.4--0.6	0.4--0.6	0.6--0.8	0.5--0.8	1.2--1.8	1.8--2.8	3.0--5.0	3.5--6.0	3.5--6.0	3.5--6.0
	16											0.5--0.8	0.4--0.7	1.0--1.6	1.7--2.3	2.2--2.8	2.5--3.0	2.5--3.3	2.5--3.3
	18											0.4--0.6	0.3--0.6	0.8--1.2	1.2--1.8	1.2--2.0	1.2--2.2	1.8--2.7	1.8--2.7
	20											0.3--0.5	0.2--0.5	0.4--0.7	0.9--1.5	1.0--1.6	1.3--1.8	1.5--2.0	1.5--2.0
	25											0.2--0.4	0.2--0.4	0.3--0.5	0.6--0.7	0.5--0.8	0.6--1.2	1.0--1.5	1.0--1.5
	30													0.2--0.4	0.3--0.6	0.3--0.6	0.5--1.0	0.5--1.1	0.5--1.1
	35														0.3--0.5	0.3--0.5	0.4--0.8	0.4--0.8	0.4--0.8
	40														0.3--0.5	0.3--0.5	0.3--0.6	0.3--0.6	0.3--0.6
	45															0.2--0.4	0.2--0.5	0.2--0.6	0.2--0.6
	50															0.1--0.2	0.1--0.5	0.2--0.5	0.2--0.5
	60																0.1-0.2	0.1-0.3	0.1-0.3
	70																0.05--0.1	0.1-0.3	0.1-0.3
	80																	0.1-0.3	0.1-0.3
	90																	0.1-0.2	0.1-0.2
	100																	0.07--0.1	0.07--0.1
	110																	0.05--0.1	0.05--0.1
Aluminum N2	1	6.0--10	6.0--10	10--20	15--25	15--25	20--30	25--38	25--40	35--45	35--45	42--55	42--55	48--65	55--65	60--85	70--100	70--100	70--100
	2	2.8--3.6	2.8--3.6	5.0--7.0	7--10	7--10	10--15	10--18	13--20	13--24	13--24	20--40	20--40	25--48	33--45	38--50	40--55	40--55	40--55
	3	0.7--1.5	0.7--1.5	2.0--4.0	4.0--6.0	4.0--6.0	5.0--7.0	6.5--8.0	6.5--8.0	7.0--13	7.0--13	15--25	15--25	20--33	25--35	30--40	35--45	35--45	35--45
	4			1.0--1.5	2.0--3.0	3.5--4.0	3.5--5.0	3.5--5.0	3.5--5.0	4.0--5.5	4.0--5.5	9.5--12	9.5--12	13--18	15--25	20--30	30--40	30--40	30--40
	5			0.7--1.0	1.2--1.8	1.2--1.8	1.8--2.5	2.5--3.5	2.5--3.5	3.0--4.5	3.0--4.5	5.0--8.0	5.0--8.0	9.0--12	13--20	15--25	20--30	20--30	20--30
	6				0.7--1.0	1.0--1.5	1.0--1.5	1.5--2.5	1.5--2.5	2.0--3.5	2.0--3.5	3.8--5.0	3.8--5.0	4.5--8.0	9.0--12	10--15	15--24	15--24	15--24
	8				0.6--0.8		0.6--0.8	0.7--1.0	0.7--1.0	0.9--1.6	0.9--1.6	2.0--2.5	2.0--2.5	4.0--5.5	4.5--6.5	7.0--12	8.0--12.0	8.0--12.0	8.0--12.0
	10							0.4--0.7		0.6--1.2	0.6--1.2	1.0--1.5	1.0--1.5	2.2--3.0	2.8--4.0	4.5--8.0	6.0--10.0	6.0--10.0	6.0--10.0
	12							0.3-0.45		0.4--0.6		0.8--1.0	0.8--1.0	1.5--1.8	1.9--2.5	4.0--5.0	4.0--6.0	4.0--6.0	4.0--6.0
	16									0.3--0.4		0.5--0.8	0.5--0.8	1.0--1.6	1.5--2.0	1.5--2.5	2.0--3.0	2.0--3.0	2.0--3.0
	20											0.5--0.7		0.7--1.0	0.8--1.2	0.9--1.5	1.3--1.8	1.3--1.8	1.3--1.8
	25											0.3--0.5		0.4--0.7	0.6--0.8	0.6--0.9	0.6--1.2	0.6--1.2	0.6--1.2
	30													0.3--0.6	0.3--0.7	0.3--0.8	0.5--1.0	0.5--1.0	0.5--1.0
	35															0.3--0.6	0.3--0.8	0.3--0.8	0.3--0.8
	40															0.2--0.4	0.2--0.5	0.2--0.5	0.2--0.5
	50															0.1--0.2	0.3--0.7	0.3--0.7	0.3--0.7
	60																0.2--0.5	0.2--0.5	0.2--0.5
	65																	0.1--0.3	0.1--0.3
Brass N2	1	6.0--10	6.0--10	8.0--13	10--16	10--16	12--18	20--35	20--35	25--35	25--35	35--45	35--45	40--55	50--60	55--65	75--85	75--85	75--85
	2	2.8--3.6	2.8--3.6	3.0--4.5	4.5--7.5	5.0--6.0	6.0--8.5	6.0--10	6.0--10	8.0--12	8.0--12	20--30	20--30	28--40	33--40	38--50	40--55	40--55	40--55
	3	0.5--1.0	0.5--1.0	1.5--2.5	2.5--4.0	2.5--4.0	2.5--4.0	4.0--6.0	4.0--6.0	5.0--8.0	5.0--8.0	12--18	12--18	20--30	15--23	20--30	32--50	32--50	32--50
	4			1.0--1.6	1.5--2.0	2.0--3.0	2.0--3.0	3.0-5.0	3.0-5.0	3.2--5.5	3.2--5.5	5.0--8.0	5.0--8.0	10--15	10--16	15--20	27--35	27--35	27--35
	5			0.5--0.7	0.9--1.2		0.9--1.2	1.5--2.0	1.5--2.0	2.0--3.0	2.0--3.0	4.5--6.0	4.5--6.0	6.0--9.0	9.0--13	10--15	18--26	18--26	18--26
	6				0.4--0.7		0.4--0.9	1.0--1.8	1.0--1.8	1.4--2.0	1.4--2.0	3.0--4.5	3.0--4.5	4.5--6.5	7.0--9.0	6.0--8.0	10--18	10--18	10--18
	8							0.5--0.7		0.7--1.2		1.6--2.2	1.6--2.2	2.4--4.0	4.5--6.5	5.0--7.0	8.0--10.0	8.0--10.0	8.0--10.0
	10									0.2--0.5		0.8--1.2	0.8--1.2	1.5--2.2	2.4--4.0	4.5--6.5	5.0--7.0	5.0--7.0	5.0--7.0
	12											0.3--0.5	0.3--0.5	0.8--1.2	1.5--2.2	2.4--4.0	2.8--4.2	2.8--4.2	2.8--4.2
	14											0.3--0.4	0.3--0.4	0.4--0.6	0.6--1.2	0.8--1.5	1.0--1.8	1.0--1.8	1.0--1.8
	16													0.3--0.5	0.4--0.6	0.6--1.2	0.8--1.5	0.8--1.5	0.8--1.5
	18														0.3--0.5	0.4--0.6	0.6--0.8	0.6--0.8	0.6--0.8
	20															0.3--0.5	0.4--0.6	0.4--0.6	0.4--0.6
	25																0.3--0.5	0.3--0.5	0.3--0.5
	30																	0.2--0.4	0.2--0.4
	35																	0.1-0.2	0.1-0.2

bodor
laser
Future is now

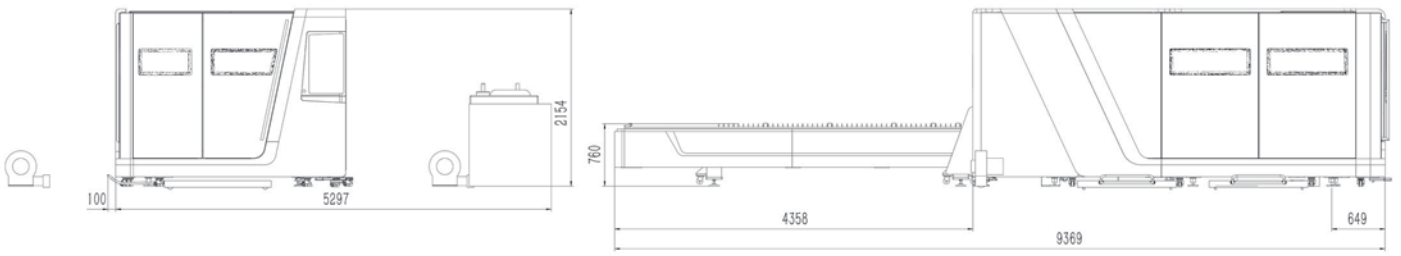


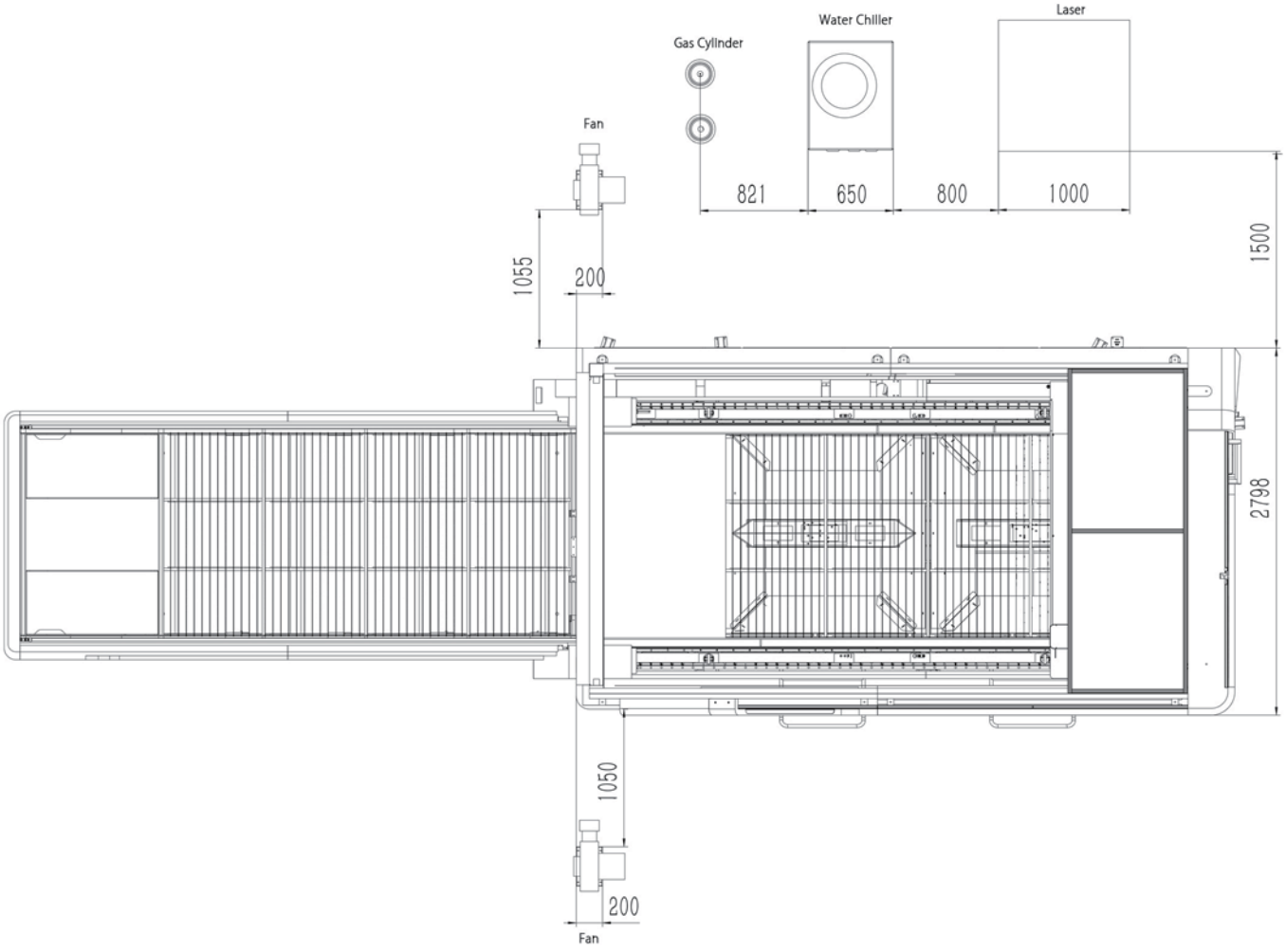


Metal Samples

For more information, please go to the website : www.bodor.com

P3015 • FLOOR PLAN

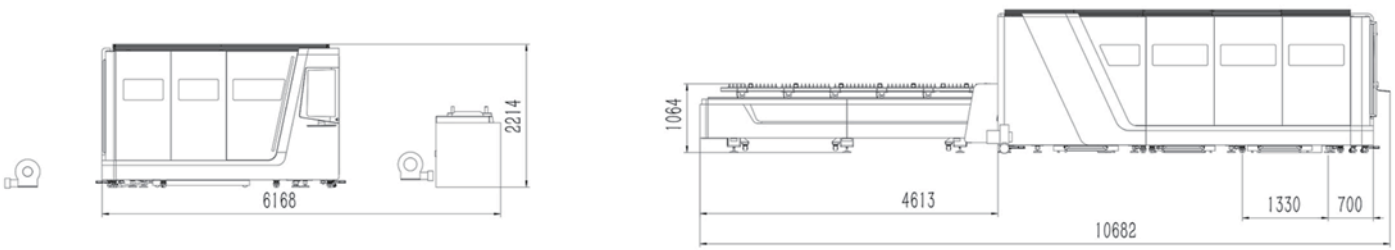


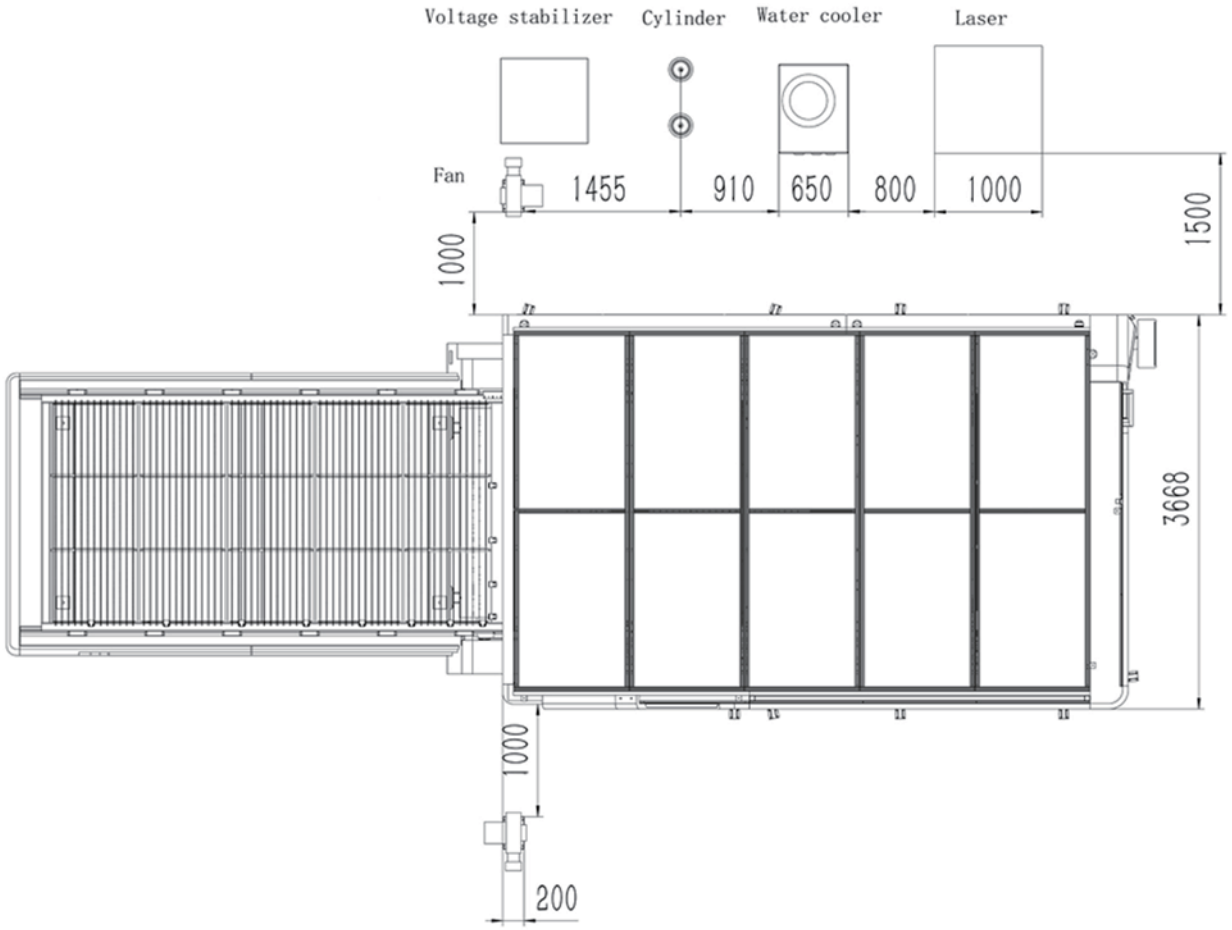


PLACING REQUIREMENT

1.The whole machine should keep away from obstacles at least 1m.
2.The whole machine should be far away from the hypocenter.
3.The planeness of placing field should be less than 5mm.
4.Voltage fluctuation of the whole machine should be kept in± 5% .

P4020 • FLOOR PLAN

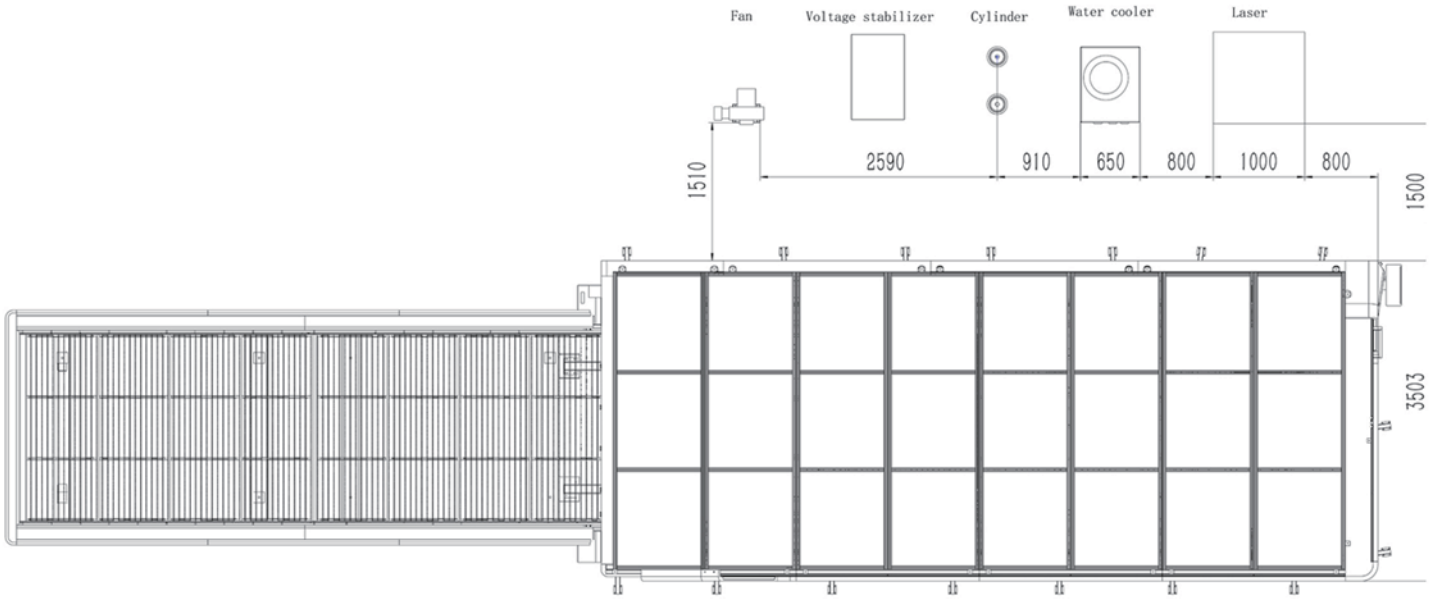




PLACING REQUIREMENT

1.The whole machine should keep away from obstacles at least 1m.
2.The whole machine should be far away from the hypocenter.
3.The planeness of placing field should be less than 5mm.
4.Voltage fluctuation of the whole machine should be kept in± 5% .

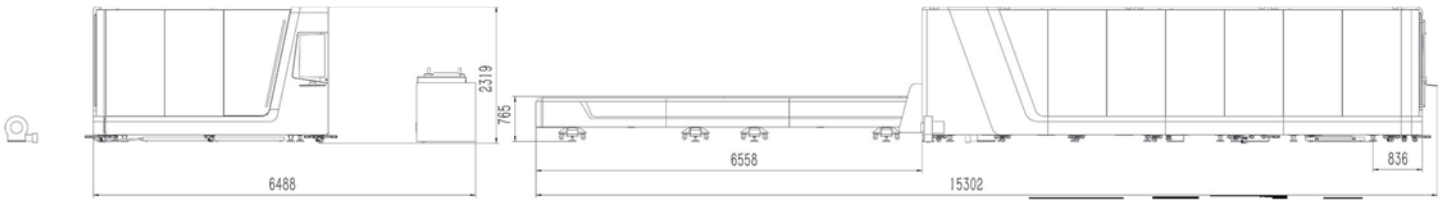
P6020 • FLOOR PLAN

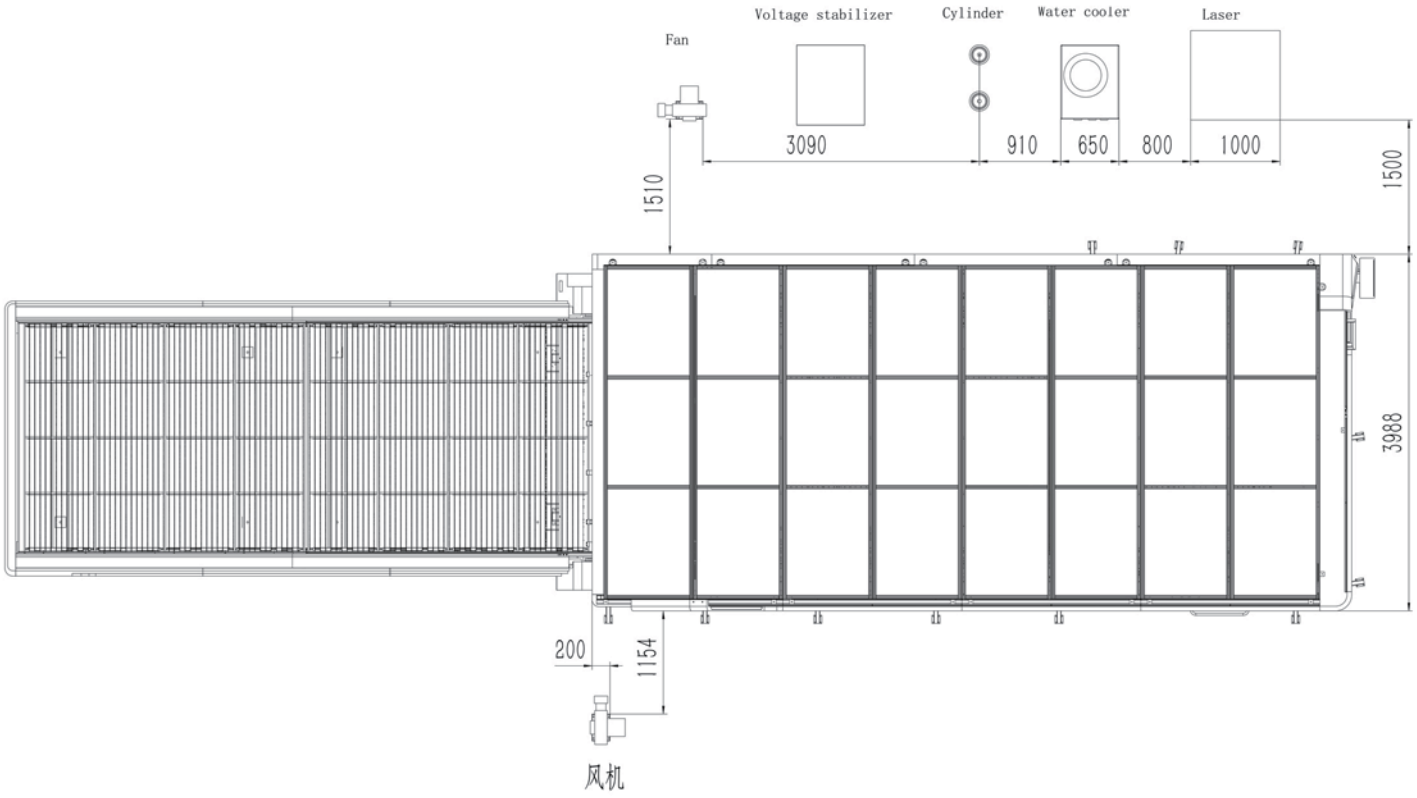


PLACING REQUIREMENT

1.The whole machine should keep away from obstacles at least 1m.
2.The whole machine should be far away from the hypocenter.
3.The planeness of placing field should be less than 5mm.
4.Voltage fluctuation of the whole machine should be kept in± 5% .

P6025 • FLOOR PLAN





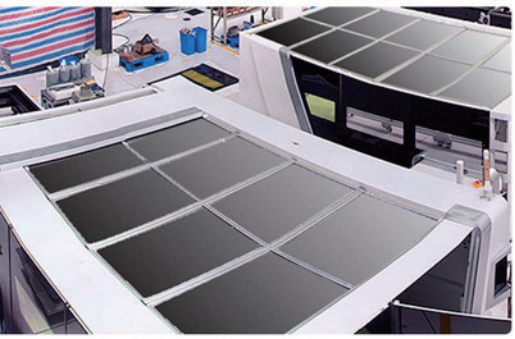
PLACING REQUIREMENT

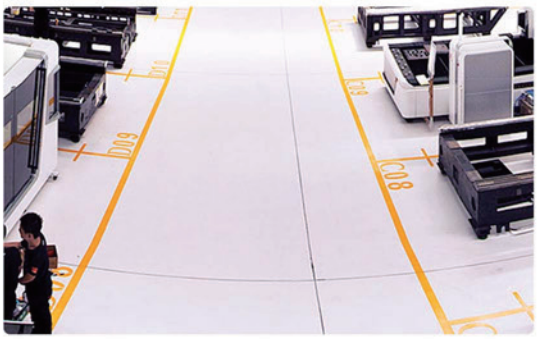
1.The whole machine should keep away from obstacles at least 1m.
2.The whole machine should be far away from the hypocenter.
3.The planeness of placing field should be less than 5mm.
4.Voltage fluctuation of the whole machine should be kept in± 5% .

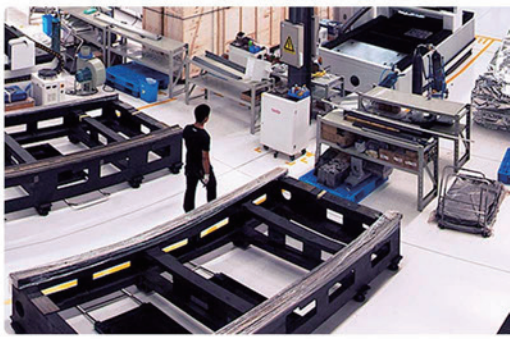
bodor
laser
Future is now

OFFICE

For more information, please go to the website : www.bodor.com







WORKSHOP

For more information, please go to the website : www.bodor.com