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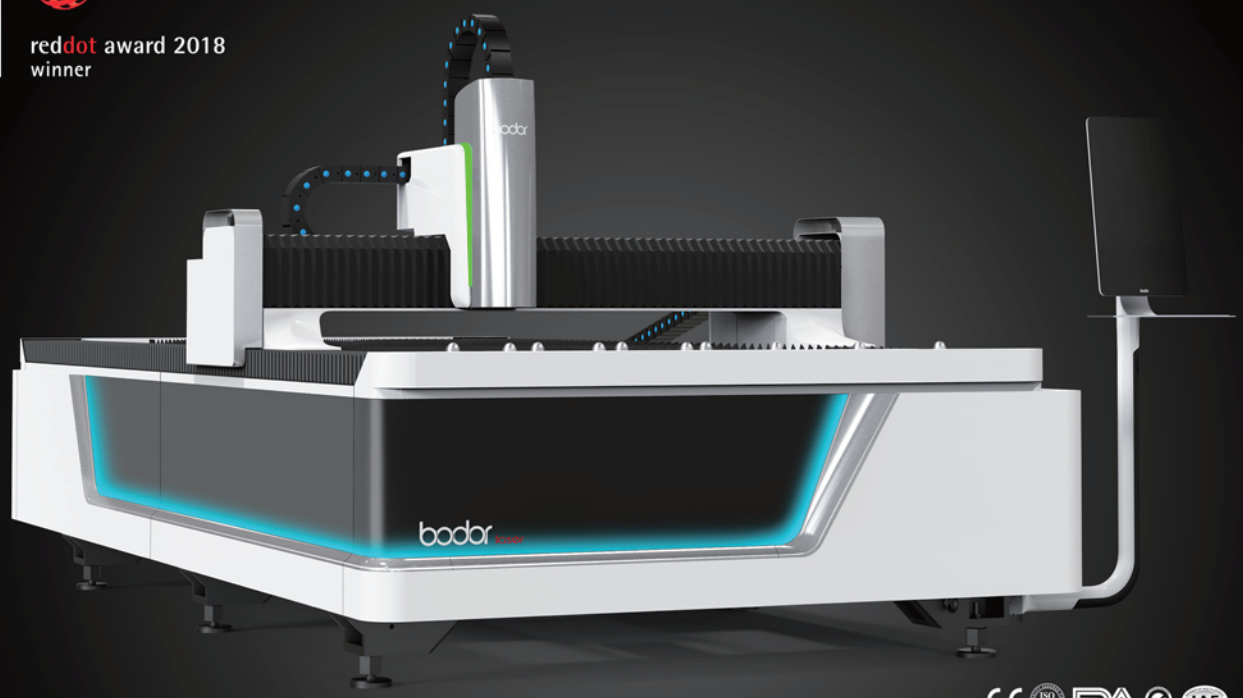
FOR SHEET METAL, BEST-SELLING MODEL

Sheet Metal Laser Cutting Machine — F SERIES

DESIGN AWARD 2019

reddot award 2018 winner



Sheet Metal Laser Cutting Machine — F 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.

Model	F3015	F4020	F6020	F6025
Working Area	3000*1524mm	4000*2000mm	6100*2000mm	6100*2500mm
LaserPower	6000w/3000w/2000w/1500w/1000w			
X/Y-axis Positioning Accuracy	0.03mm	0.05mm		
X/Y-axis Repositioning Accuracy	0.02mm	0.03mm		
Max. linkage speed	140m/min			

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

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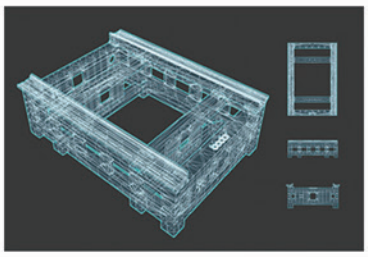
CAST IRON BED

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.

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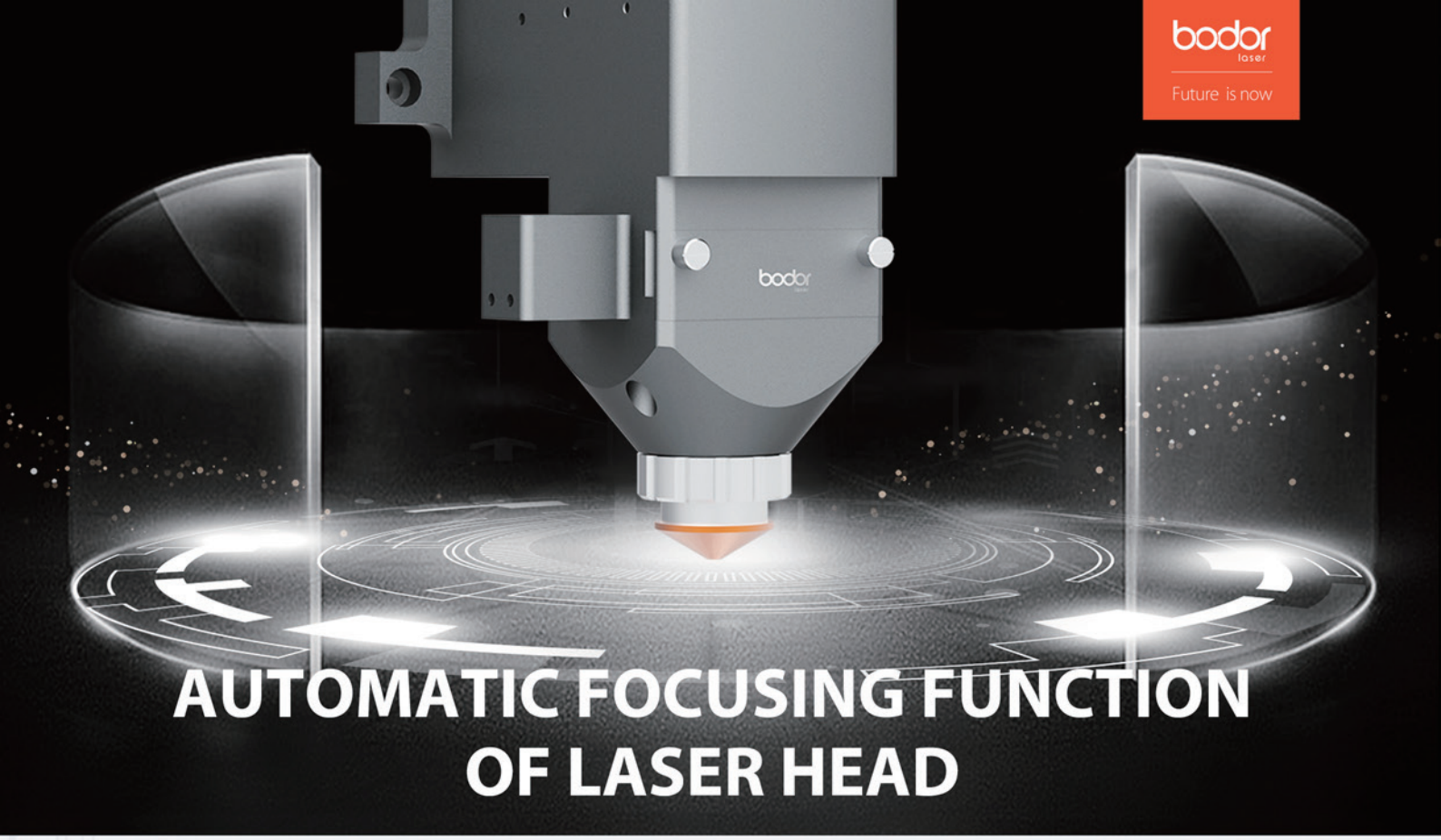

AUTOMATIC FOCUSING FUNCTION OF LASER HEAD

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.

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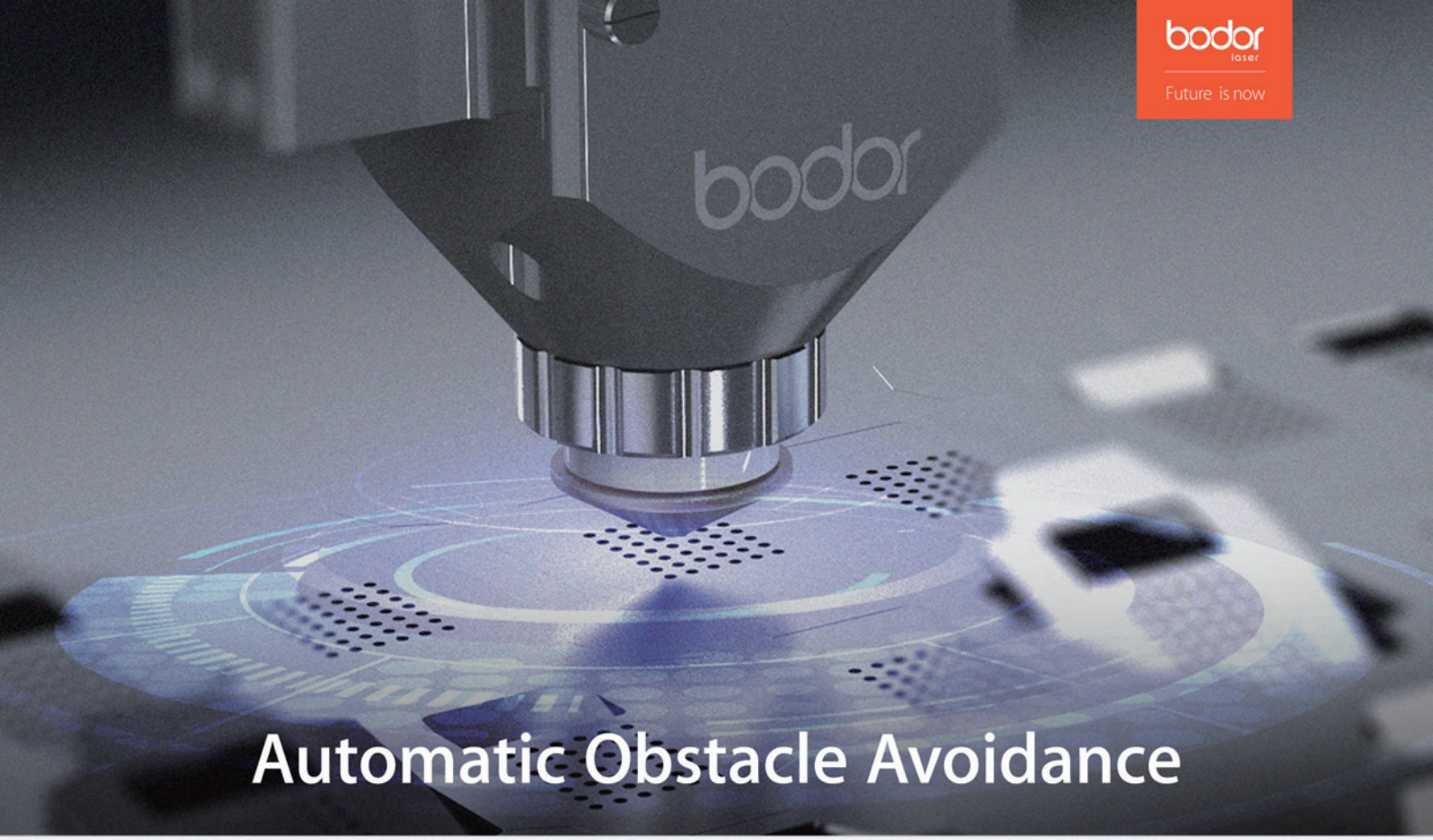

Intelligent anti-collision

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.

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Intelligent WIFI Remote Assistance

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

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Auxiliary Gas Low Pressure Alarm Function

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

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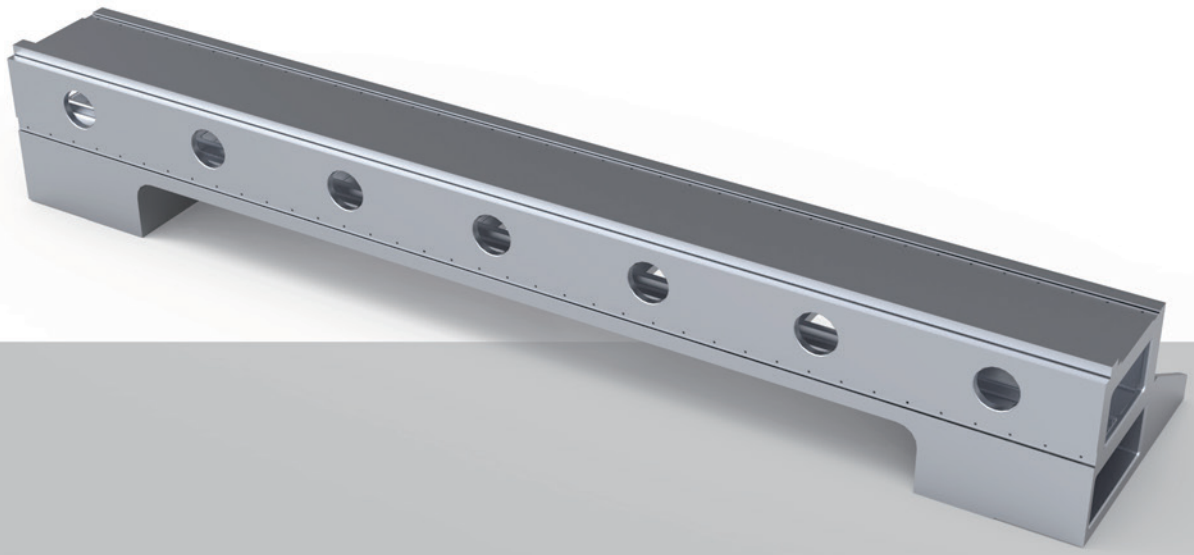
CAST ALUMINUM CROSSBEAM



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.

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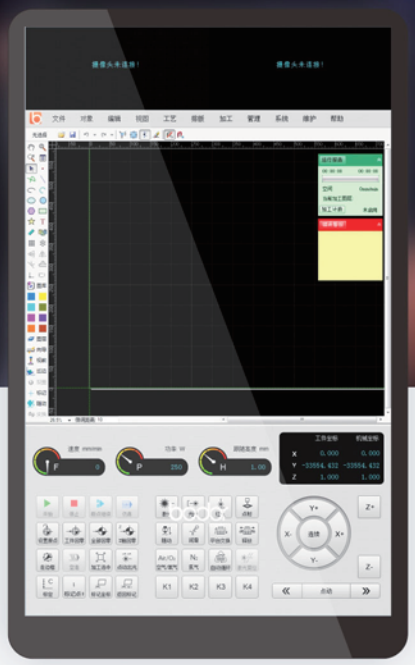
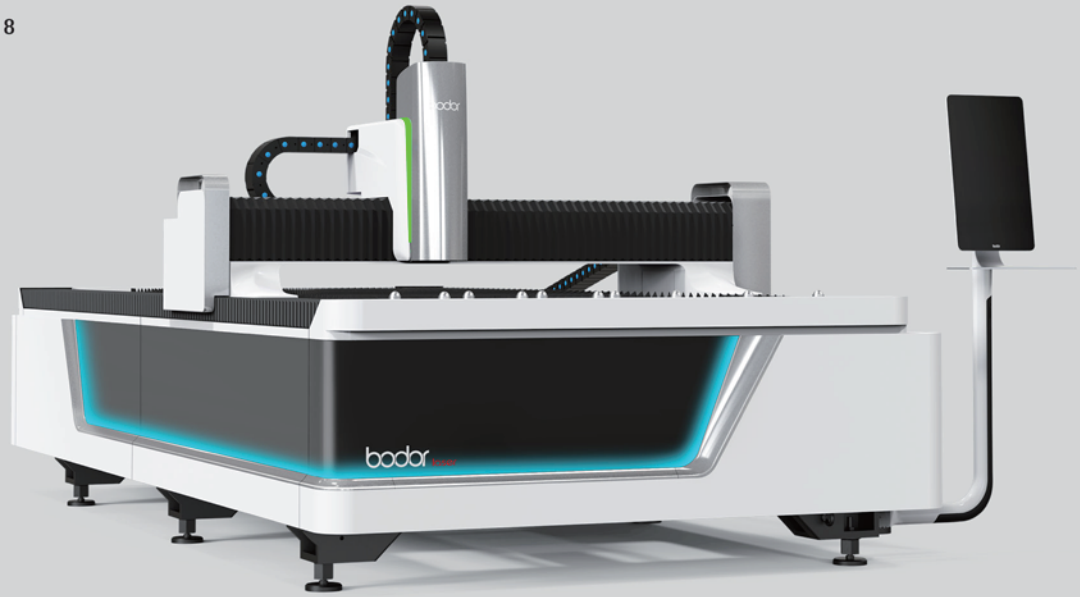
Bodor Pro 2.0

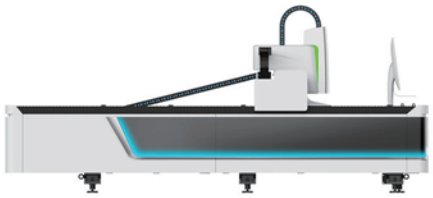


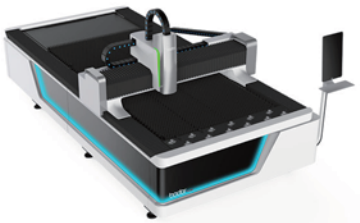
Bodor Pro 2.0

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.

reddot award 2018
winner





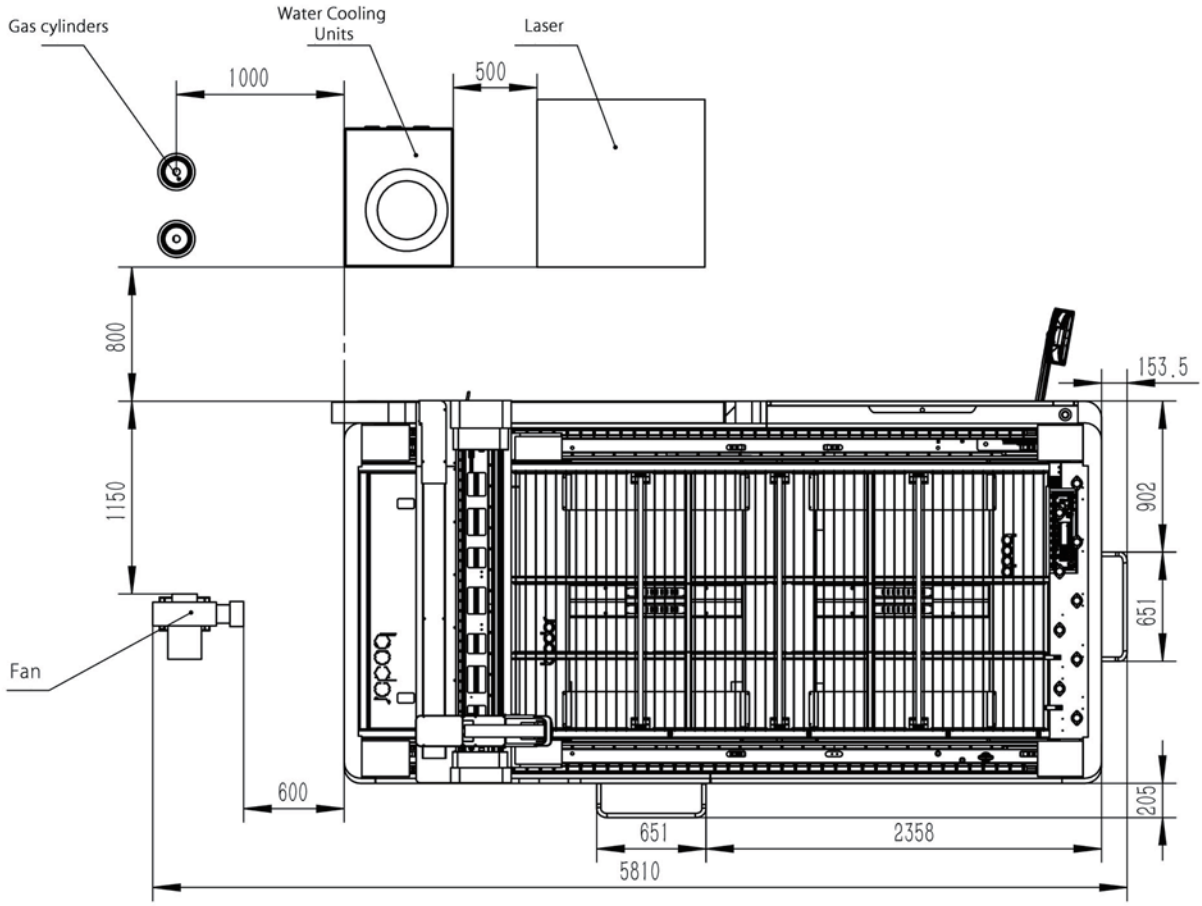


Appearance design

Reddot Award Winner-Oscar in Industrial Design

The new injection molding and anti-flaming Z-axis cover is 1/10 of weight of the original and satisfys the maximum acceleration while making it simpler. High-pressure cast aluminum cantilever supports for a stronger, long-lasting shape. The flowing ice blue light gives processing feedback directly. Brand new injection curved hocky-shaped decoration is a perfect combination between PMMA and metal plate. The whole product is more coordinated into a perfect artwork.

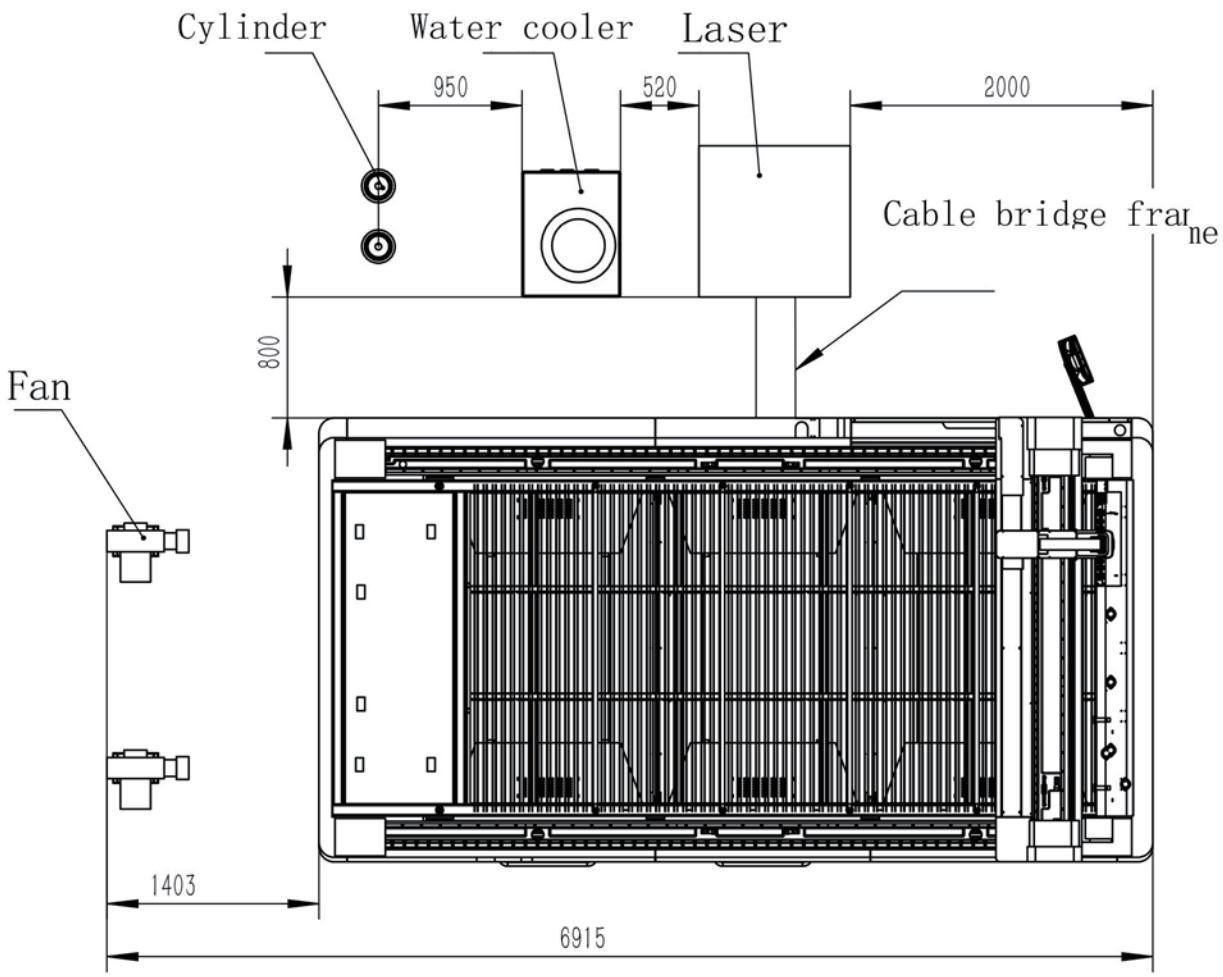
F3015 • FLOOR PLAN



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% .

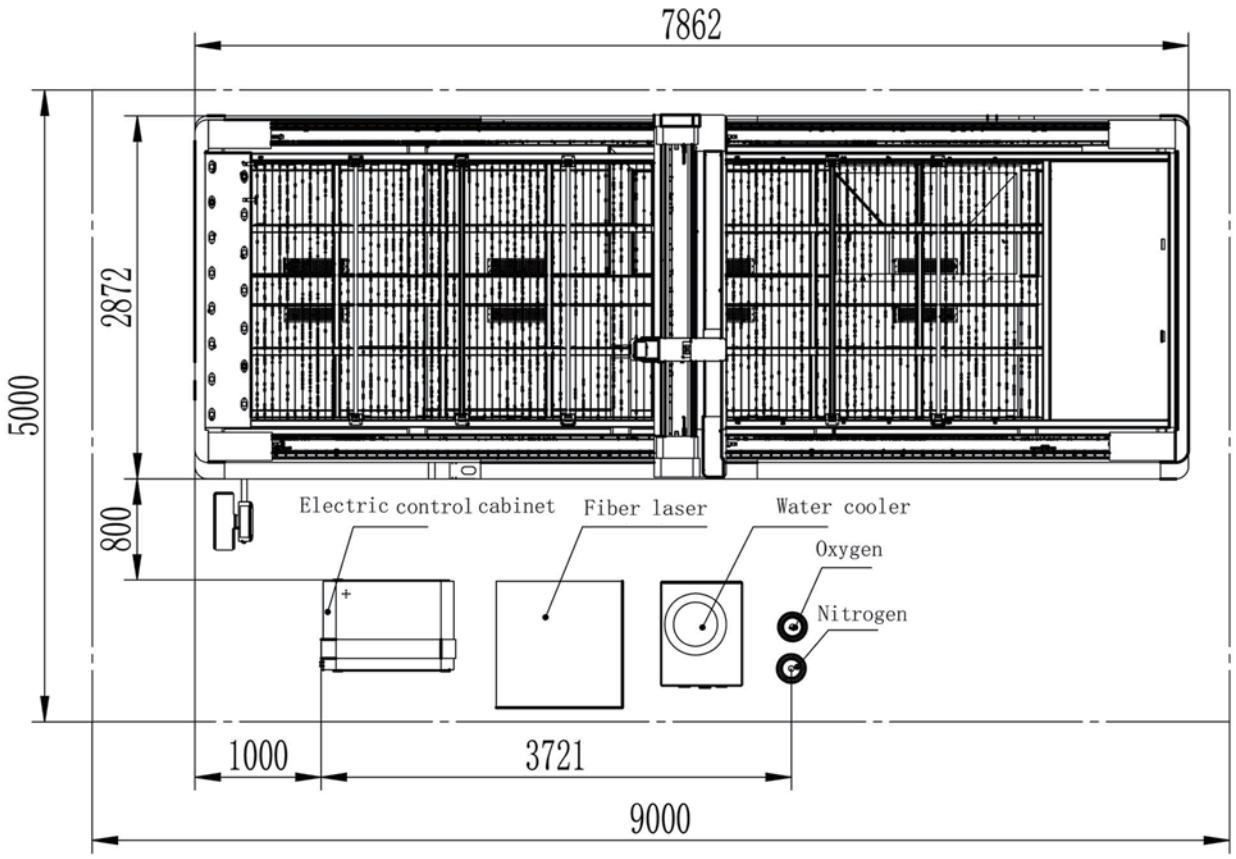
F4020 • FLOOR PLAN



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% .

F6020 • 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% .

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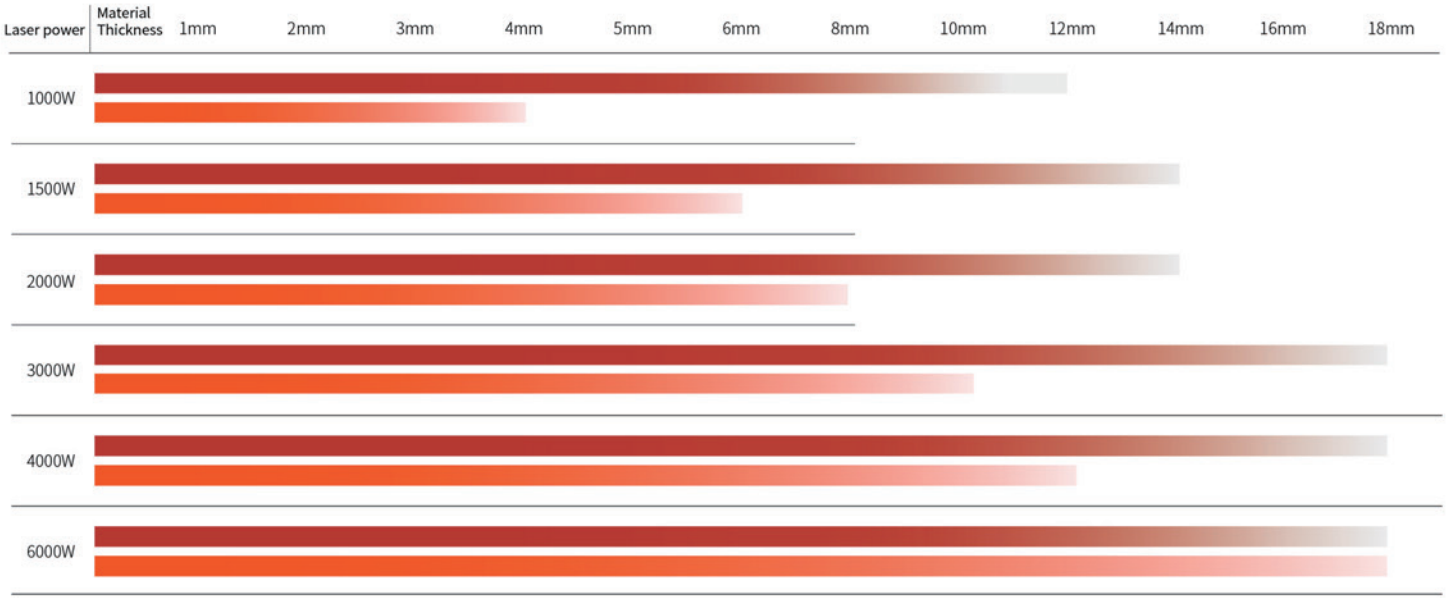
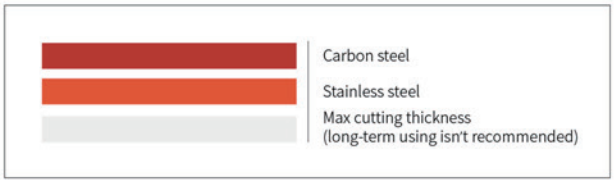
Cutting Capacity





Above data is only for reference

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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
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
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	
	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	
	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	
	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	
	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	
	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	
	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	
	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	
	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	
	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	
	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	
	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	
	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	
	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	
	25											0.3--0.55	0.2--0.5	
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	
	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	
	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	
	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	
	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	
	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	
	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	
	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	
	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	No support
	14									0.4--0.6	0.4--0.6	0.6--0.8	0.5--0.8	
	16											0.5--0.8	0.4--0.7	
	18											0.4--0.6	0.3--0.6	
	20											0.3--0.5	0.2--0.5	
	25											0.2--0.4	0.2--0.4	
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	
	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	
	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	
	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	
	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	
	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	
	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	
	10							0.4--0.7		0.6--1.2	0.6--1.2	1.0--1.5	1.0--1.5	
	12							0.3-0.45		0.4--0.6		0.8--1.0	0.8--1.0	
	16									0.3--0.4		0.5--0.8	0.5--0.8	
	20											0.5--0.7		
	25											0.3--0.5		
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	
	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	
	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	
	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	
	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				0.4--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	
	8							0.5--0.7		0.7--1.2		1.6--2.2	1.6--2.2	
	10									0.2--0.5		0.8--1.2	0.8--1.2	
	12											0.3--0.5	0.3--0.5	
	14											0.3--0.4	0.3--0.4	
	16													
	18													
	20													
	25													
	30													
	35													

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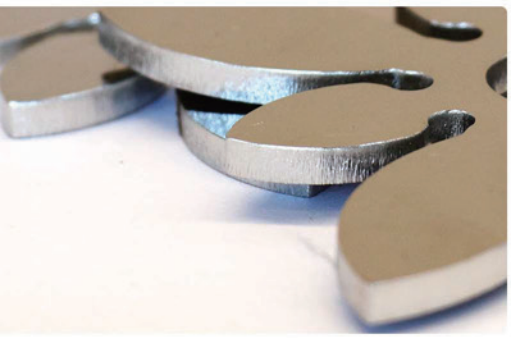

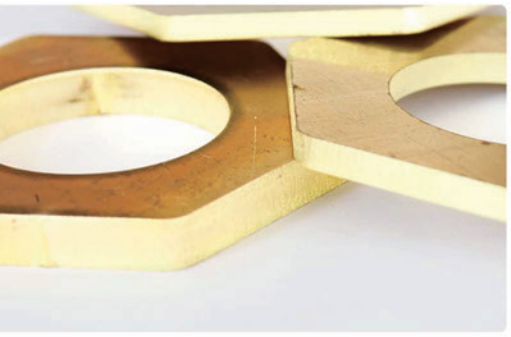

Metal Samples

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OFFICE

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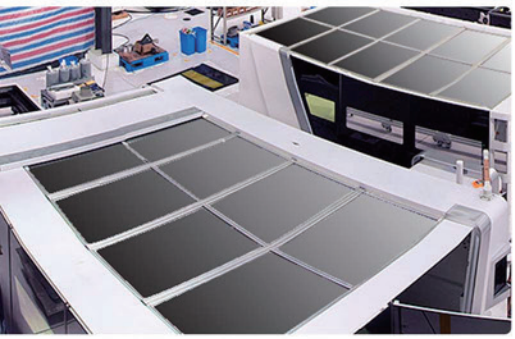

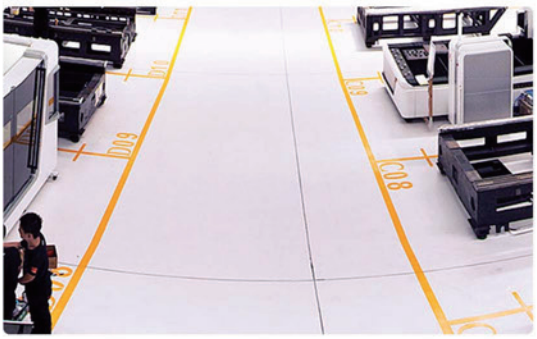

WORKSHOP

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