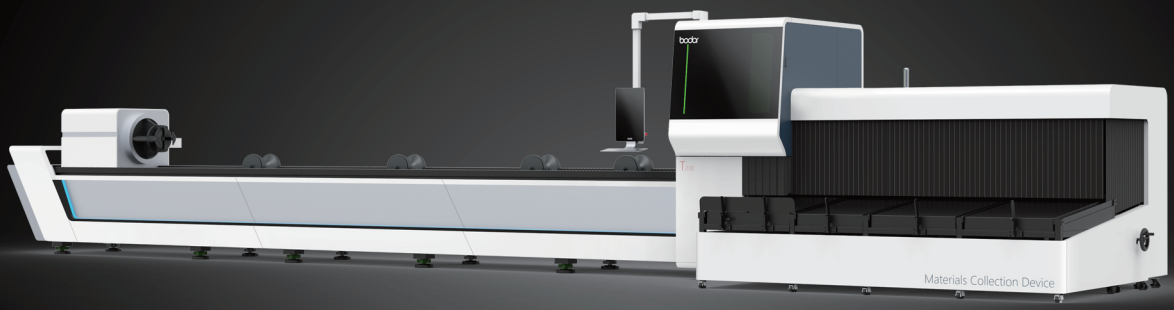
bodor laser
Future is now

T SERIES TUBE FIBER LASER CUTTING MACHINE



Tube Laser Cutting Machine--T 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	T230	T360
Maximum machinable tube length	6500mm	6500mm
Laser power	6000W/4000W/3000W/2000W/1500W/1000W	6000W/4000W/2000W/1500W/1000W
X/Y-axis positioning accuracy	0.05mm	0.05mm
X/Y-axis repositioning accuracy	0.03mm	0.03mm
X axis maximum speed	95m/min	100m/min
Y axis maximum speed	100m/min	95m/min
Round tube	Φ20-Φ230mm	Φ20-Φ360mm
Square tube	□20x20 - □160x160mm	□20x20 - □254x254mm
Rectangular Tube Side Length	20mm-170mm	20mm-300mm
Circumscribed circle diameter	⩽230mm	⩽360mm
Wall thicknes of tubes (Diameter＜φ50mm)	⩾1.2mm	⩾1mm
Wall thicknes of tubes (Diameter⩾φ50mm)	⩾2.6% x50mm	⩾2.5% x50mm

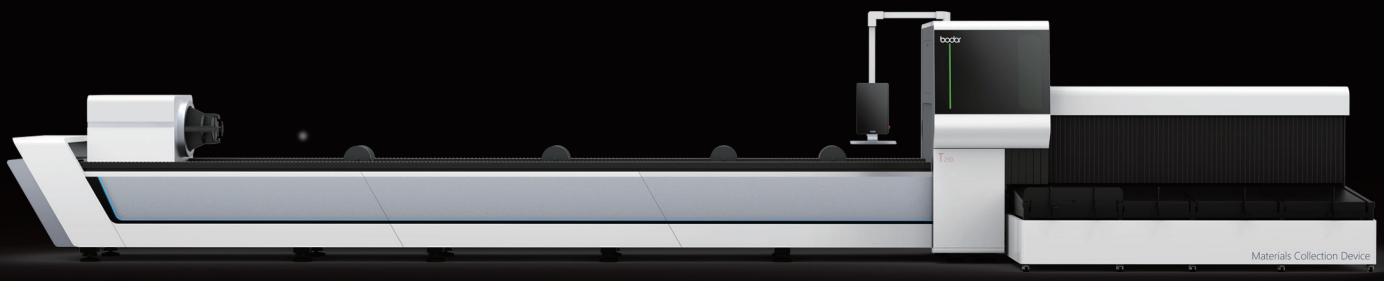
Version number 2020 07

(Above data is only for reference)

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

bodor laser

Future is now



LONGER DIAMETER, STRONGER BEARING

The maximum cutting diameter is 30% longer than average products.
The maximum bearing is 100% stronger.
Suitable for a wide range of tubes.

Four-side Edge Searching, Higher Precision

Brand new four-side edge searching
Optimized method and algorithm
Higher cutting precision and stability

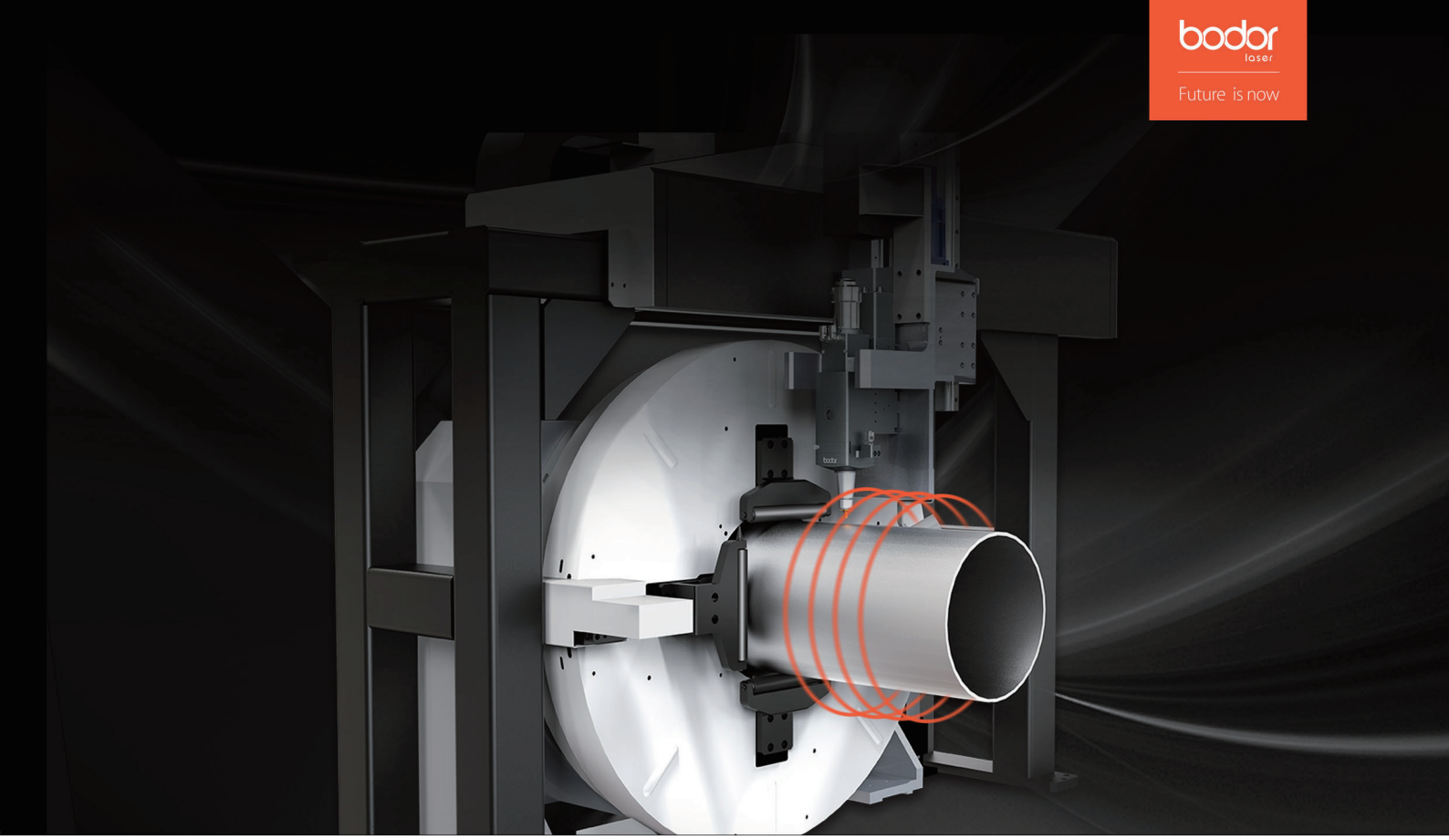
bodor
laser
Future is now

Self-centering Chuck

Clamping jaws are driven by direct-current motor, whose electricity current is adjustable. Fast automatic centering and clamping is stable and suitable for a wide range of tubes. The clamping force is strong.

Smaller chuck, lower rotating inertia, and stronger dynamic performance.

Gearwheel transmission offers higher efficiency and longer service life.



Contour Recognition

Stable and High Precision

Use innovative photoelectric positioning
replace the unstable capacitance positioning
greatly improves recognition precision and stability

Flash Recognition

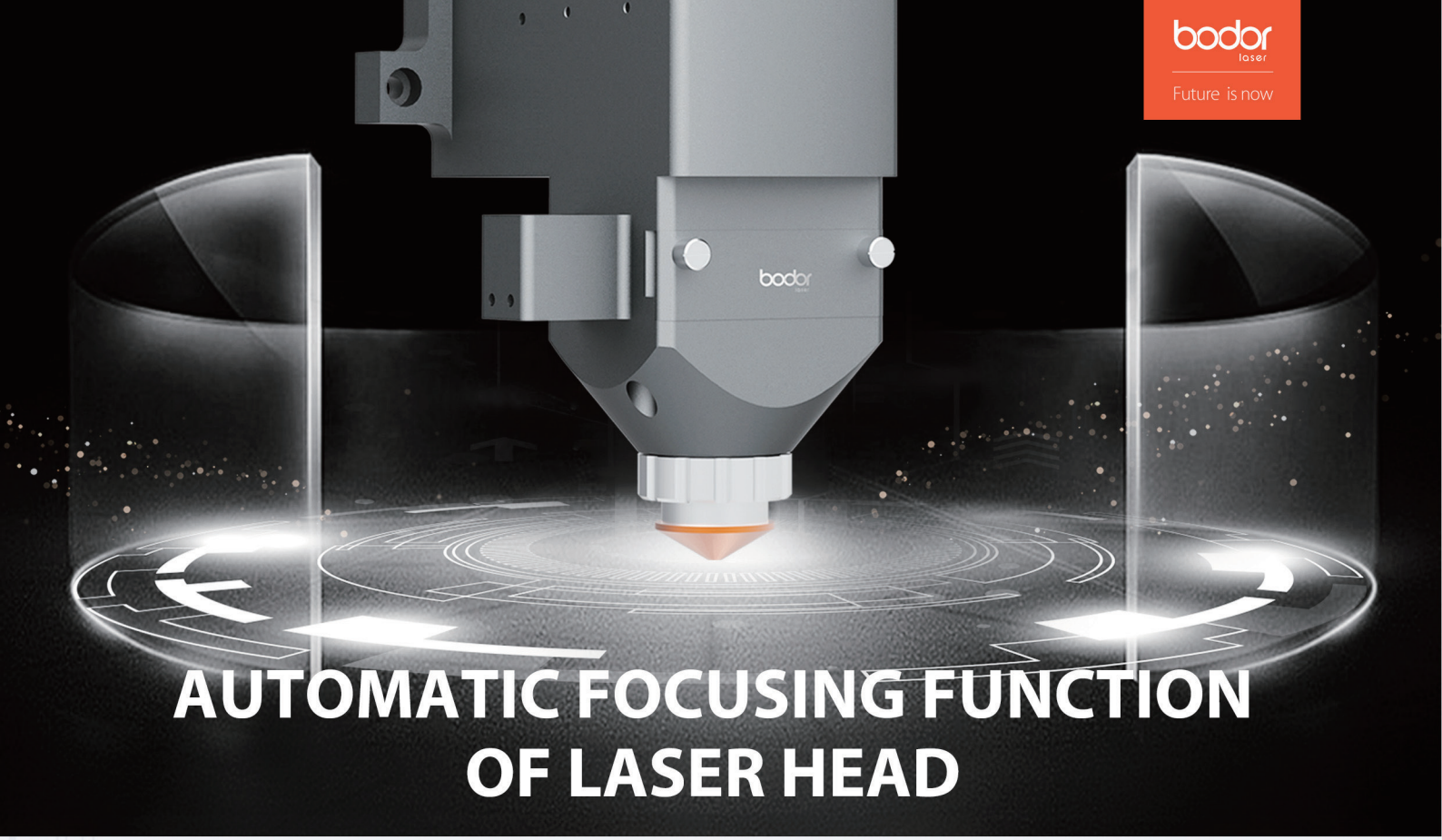
It takes only 0.8s to finish the recognition, and the processing can be started immediately

Low Deviation for All Suitable Lengths

The cutting spot deviation is within 0.15mm for tubes of all suitable lengths

High Applicablity

Automatic compensation for different tubes to achieve high-precision recognition for square tube, round tube, oval tube and waist tube.



bodor laser
Future is now

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.

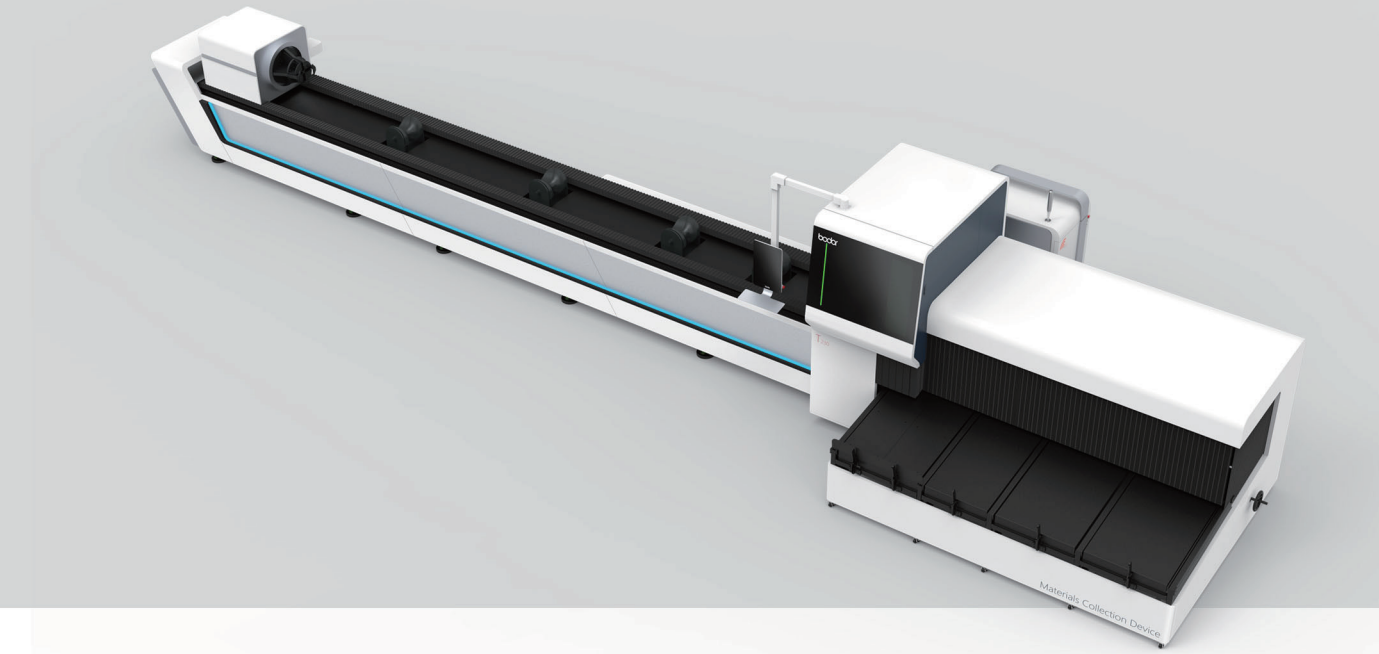
For more information, please go to the website : www.bodor.com

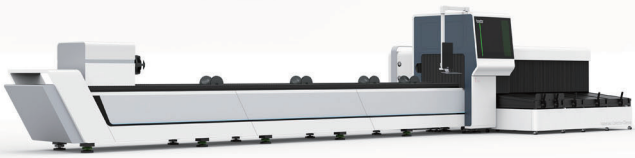
bodor laser
Future is now

Bodor Thinker 3.0

Bodor Thinker 3.0

Smart control system supports NC code. No need for nesting software, direct support for cutting angle steel and channel steel. 2D and 3D display makes it intuitive and operable. Press one button to find the edges and align laser head. Process library makes it easy to operate.





Appearance design

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

AVAILABLE OPTIONS

Full automatic loading and unloading device

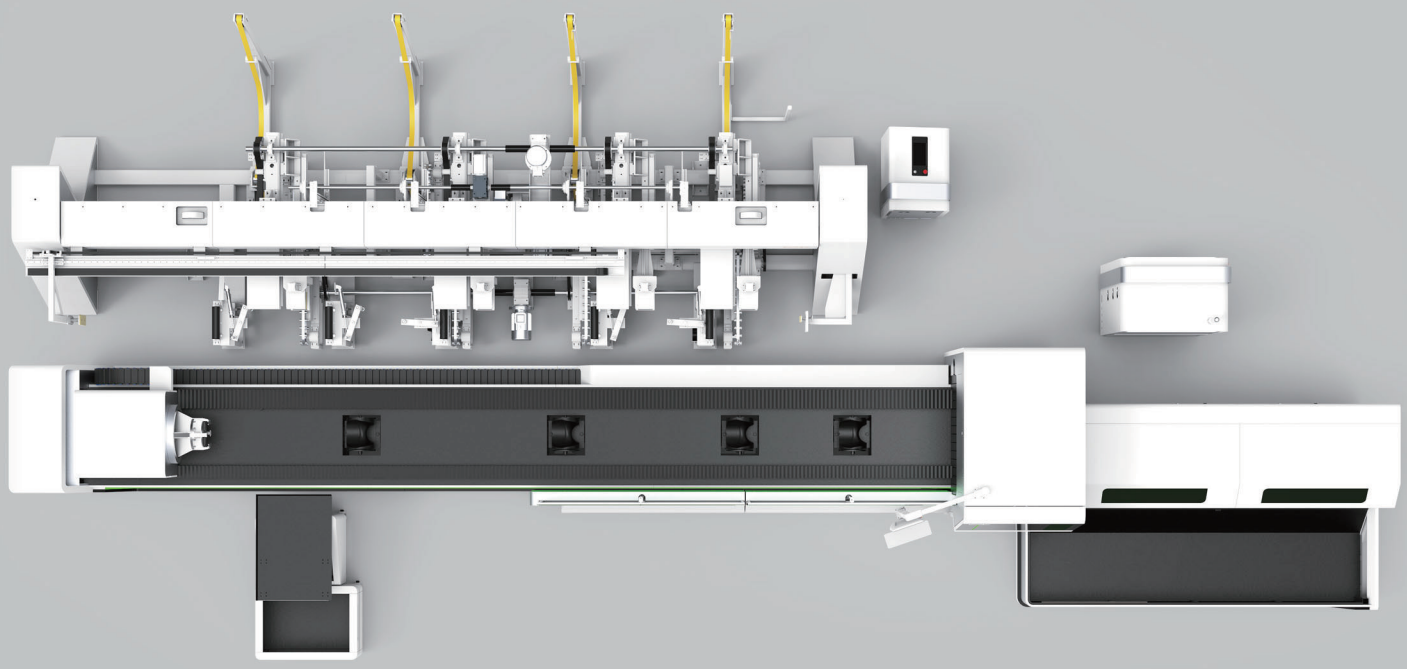
Loading:

After the whole bundle pipes were put on the feeding device, these pipes can be intelligently divided, loaded and connected seamlessly with the pipe cutter to ensure that only one pipe is transported to the delivery arm at a time.

Unloading:

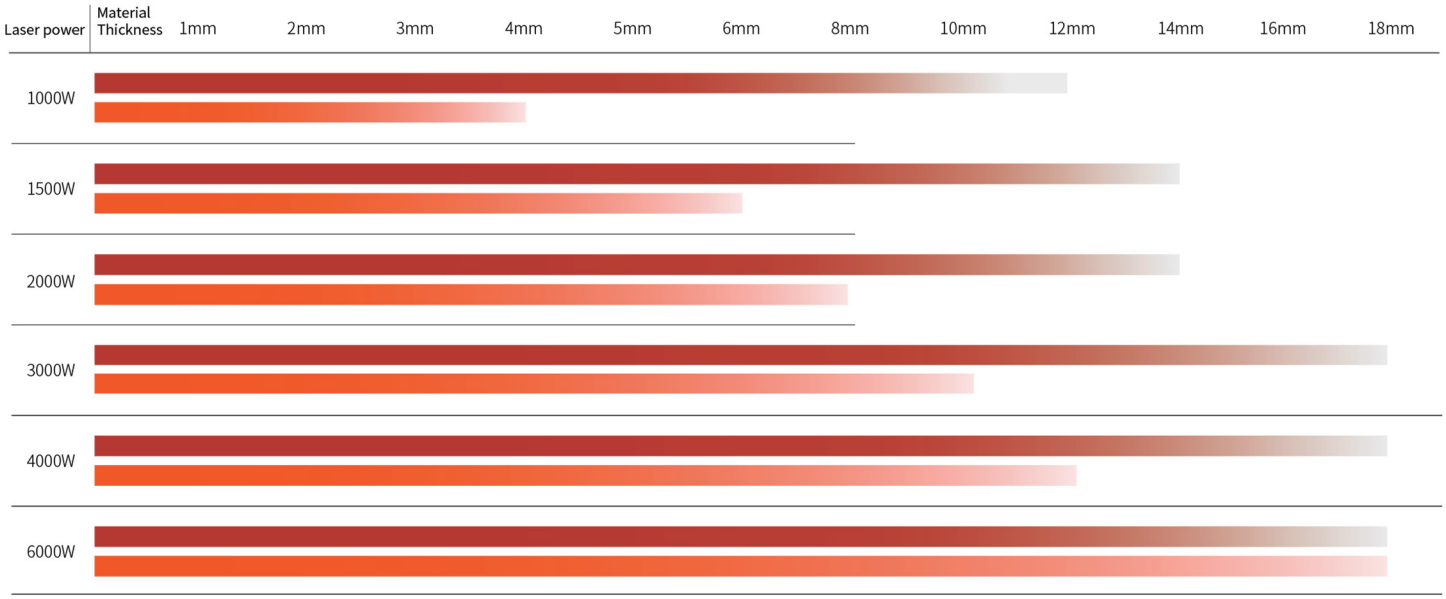
Finished material is automatically unloaded to the parts silo, double rollers auxiliary support long parts; materials can be automatic prepared during processing time, shorten the feeding time.

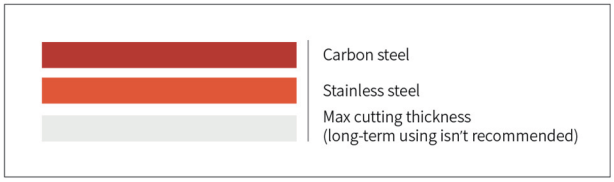
Automatic unloading, parts and scraps are automatically separated, reducing sorting, saving labor, improving machine production efficiency.



bodor laser
Future is now

Cutting Capacity





Above data is only for reference

bodor laser
Future is now

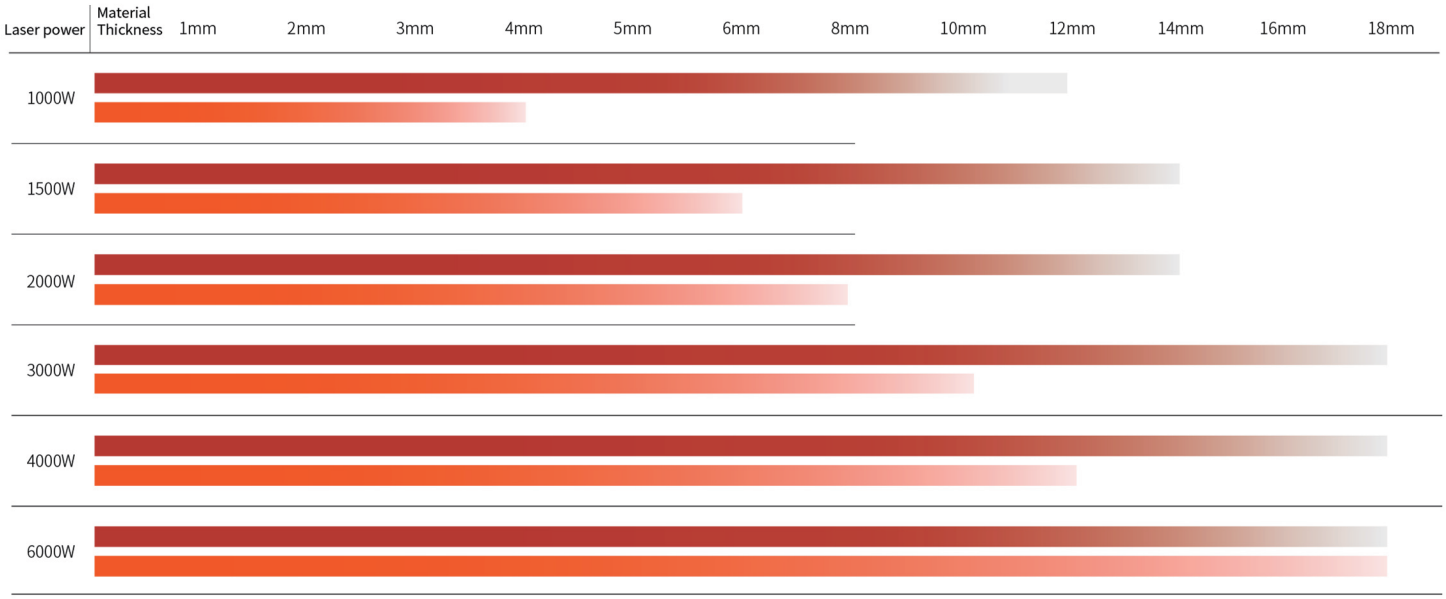
Fiber Laser Cutting Process Parameters

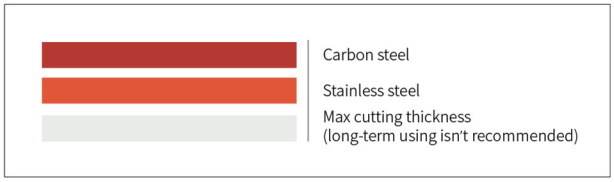
		1000W	MAX-1000W(25um)	1500W	2000W	MAX-2000W(50)	YLR-2000W	3000W	MAX-3000W(50)	4000W	MAX-4000W(50)	IPG 6000W	MAX 6000W	8000W
Material	Thickness	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min
Carbon 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													

Above data is only for reference

bodor laser
Future is now

Cutting Capacity

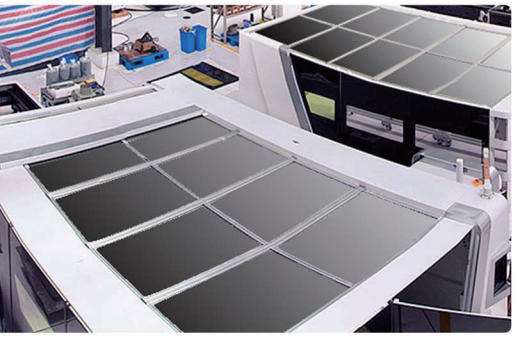


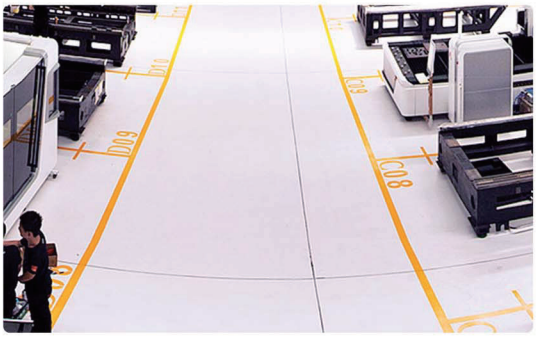


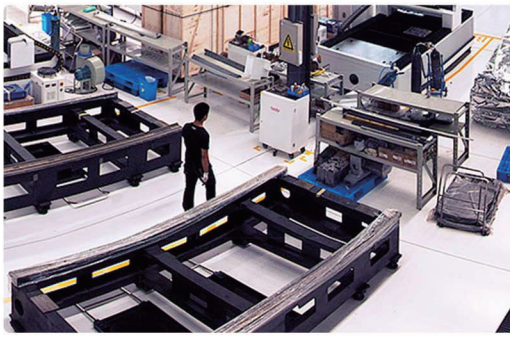
Above data is only for reference

OFFICE

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







WORKSHOP

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