

K SERIES

TUBE LASER CUTTING MACHINE

1kW-6kW



INTRODUCTION

Now the company has more than 2,000 employees from more than 20 countries around the world. Headquartered in Jinan, China, Bodor sets up 9 oversea subsidiaries, respectively in the US, India, Hungary, Turkey, Brazil, Mexico, Japan, South Korea, and Germany. The global footprint of Bodor has now covered over 180 countries and regions on six continents, building a complete sales channel and service network around the world to provide global customers with the best laser cutting application solutions.

51000m²

Production Base

7000+

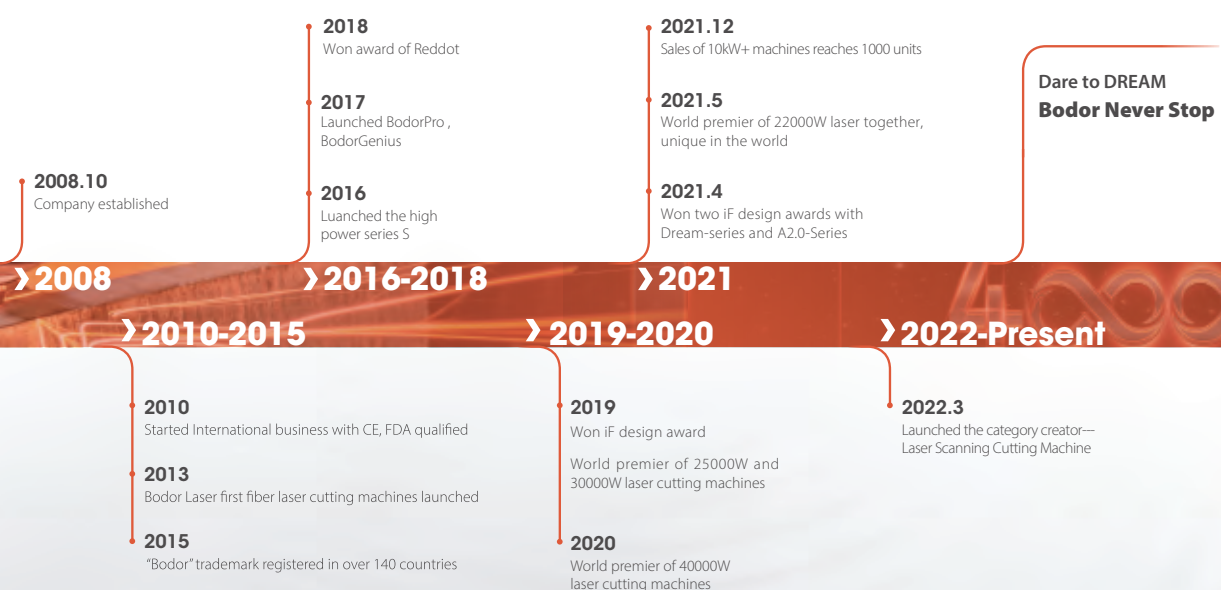
Delivery Capability

2000+

Global Employees



COMPANY HISTORY



GLOBAL NETWORK

180

countries covered

10+

global branches

4

Technical centers



ULTRA-HIGH POWER CAPABILITY

● **World premier**

World premier of 25000w, 30000w, 40000w and world unique 22000w laser cutting machine.

● **Sales record(Until 31th, Dec. 2021)**

Choice of 1000 companies worldwide on 10kW+ laser cutting machines, in 46 different countries and regions

● **No. 1**

Leading sales volume of 10kW+ laser cutting machines

R&D CAPABILITY



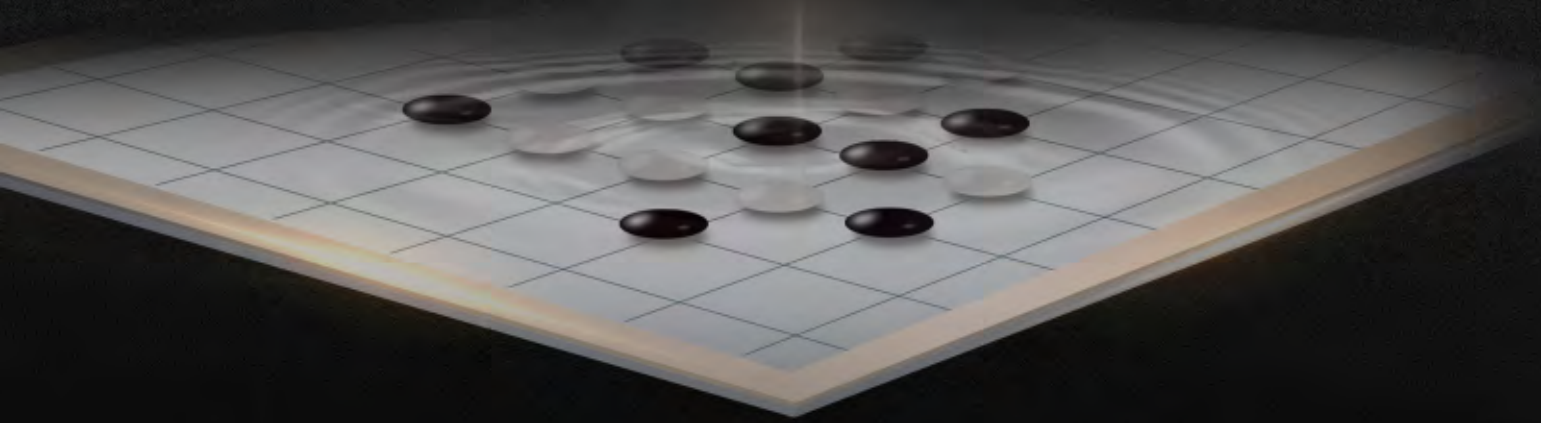
- Strong R&D team lead by the drafter of National Standards for CNC laser cutting machines
- Over 200 R&D Technicians, the R&D level is in line with international standards
- 10 subdivision platforms, including plate cutting, pipe cutting, application engineering, etc.
- 2 core R&D Centers in China and 4 overseas Technology Centers
- More than 200 patent certificates, 5 international awards, 22 industry awards

 **200+**
R&D Team

 **200+**
Patents

 **10**
R&D Platform

THE BLACK GO CHESS



Black Go chess — inspired by Go

Circular — endless loop, endless exploration

Black — derived from obsidian crystal, steady and deep



SMALL AND SMART



Advantages

- Compact design, easy to operate, specially tailored for new users in the market
- Customized sheet metal material, stable and durable, high space utilization
- Widely used in different industries, such as guardrails, fitness equipment, shelves, crafts processing, small home appliances, and lighting etc.

BODORTHINKER



Advantages

- High-end intelligent system, stable and reliable, easy to setup and debug, keep safe in production, rich in functions, and excellent in performance. It supports modular, personalized, automated, and informationized solutions.

APPLICABLE FOR VARIABLE TYPES OF TUBE



Advantages

- K Series is applicable for different kinds of tubes, such as round, square, rectangle, triangle, I-beam etc.
- The dedicated control system of tube cutting machine integrated with the most advanced technology, can cut angle steel and channel steel directly without nesting and zero-returning.

BODORNEST TUBE



Advantages

- The system, presenting convenient layout and processing all the time even when offline, applies to groove steel, I-shaped steel, and other special-shaped tubes and is accessible for third-party machine tools.

AUTOMATIC TUBE DETECTION

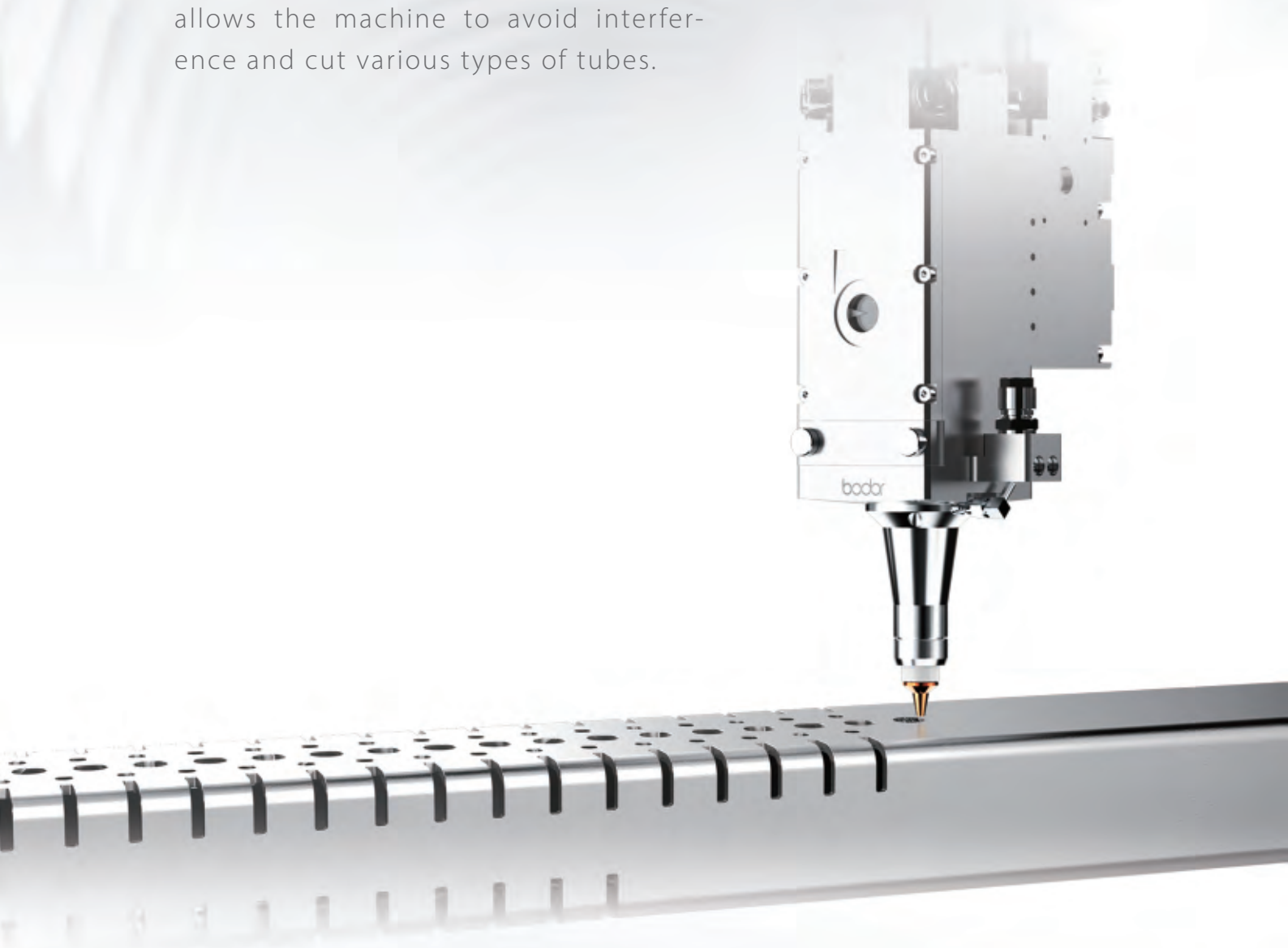


Advantages

- Optimized edge searching method and algorithm guarantee higher cutting precision and better steadiness.

BodorGeniusT

- The specialized design of slender nozzle allows the machine to avoid interference and cut various types of tubes.



PNEUMATIC CHUCK



Advantages

- Quick clamping improves the work efficiency.
- The clamping force is large, stable and adjustable.
- Strong safety and reliability.

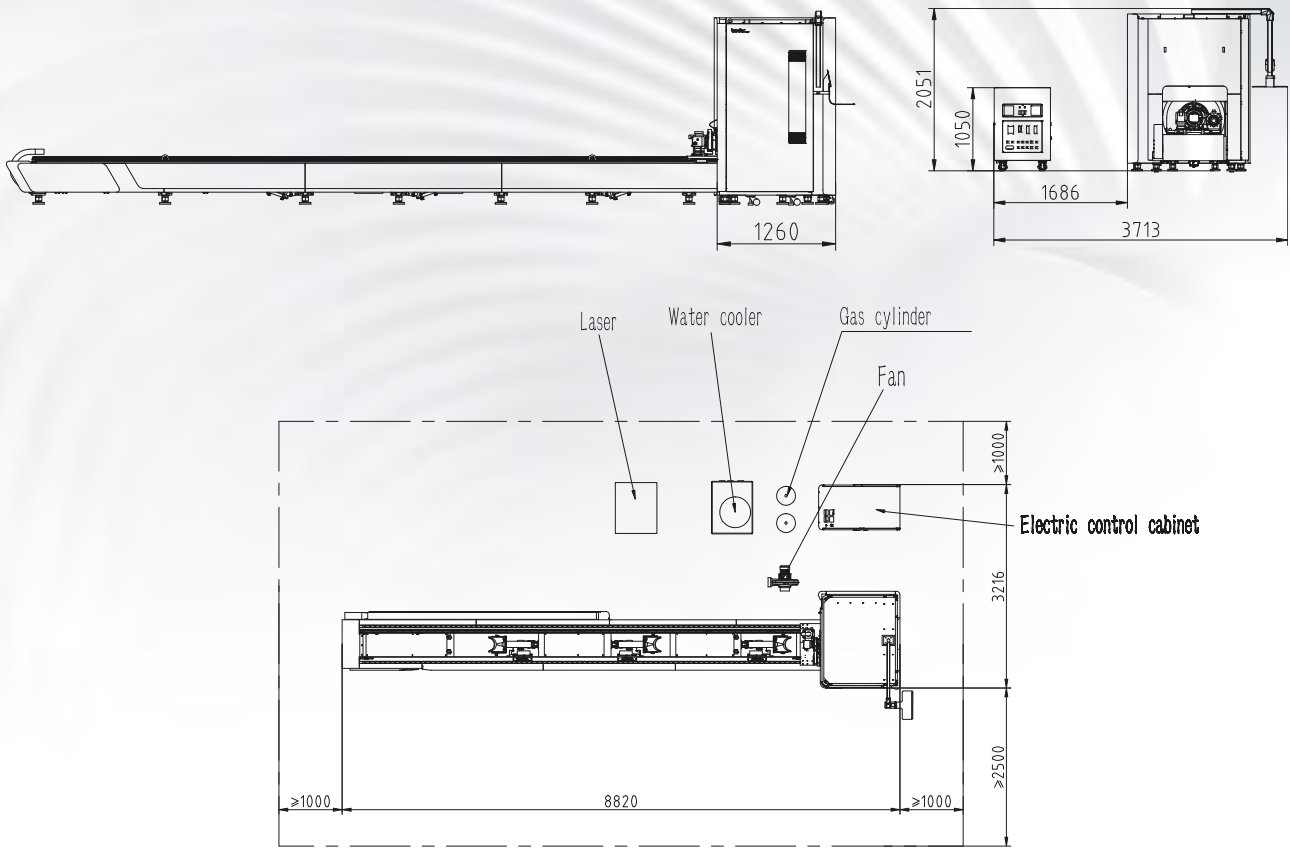
BODOR CLOUD



Advantages

- Daily equipment status management (processing data, report forms)
- Alarm and maintenance reminder
- Cloud transmission for processing programs
- Remote online service access with one key
- Real-time information of the latest cutting process

Layout



The above layout drawings and figures are for reference only, the actual drawing shipped with machine prevails.



K120
8649×1398×1811mm



K230
8800×3200×2100mm



K350
8820×3500×2100mm

Technical Data

ITEM	K350	K230	K120
Tube cross-sectional shape	Round, square, rectangular, oval, rounded rectangular, Angle steel, channel steel and other tubes		
Tube size range	Round tube: $\phi 20\text{-}\phi 350\text{mm}$ Square tube: $\square 20\text{-}\square 250\text{mm}$ Rectangular tube: $300\text{mm} \geq \text{Side length} \geq 20\text{mm}$ Circumscribed circle diameters $\leq 350\text{mm}$	Round tube: $\phi 20\text{-}\phi 230\text{mm}$ Square tube: $\square 20\text{-}\square 230\text{mm}$ Rectangular tube: $170\text{mm} \geq \text{Side length} \geq 20\text{mm}$, Circumscribed circle diameters $\leq 230\text{mm}$	Round tube: $\phi 10\text{-}\phi 120\text{mm}$ Square tube: $\square 10\text{-}\square 110\text{mm}$ Rectangular tube: $120\text{mm} \geq \text{Side length} \geq 10\text{mm}$ Circumscribed circle diameters $\leq 165\text{mm}$
Maximum machinable tube length	6300mm	6300mm	6500mm
Maximum tube weight	300Kg 50kg/m	200Kg 33.4Kg/m	80Kg 13.3Kg/m
Max. Chuck rotating speed	75r/min	75r/min	130r/min
X axis maximum speed	30m/min	30m/min	100m/min
Y axis maximum speed	60m/min	60m/min	60m/min
X maximum acceleration	1G	1G	0.8G
Y maximum acceleration	1G	1G	0.8G
Z axis maximum speed	$\geq 50\text{m/min}$	$\geq 50\text{m/min}$	$\geq 60\text{m/min}$
Dimensions	8820x3500x2100mm	8800x3200x2100mm	8649x1398x1811mm
Overall weight	3650kg	3450kg	1730kg
Positioning accuracy	0.05mm	0.05mm	0.05mm
Repositioning accuracy	0.03mm	0.03mm	0.03mm
Total power capacity/current with 6KW source	51.5KVA/78.2A	50KVA/76A	45.5KVA/69A
Total power capacity/current with 3KW source	35.8KVA/54.3A	34.5KVA/52.5A	31.2kVA/47.4A
Total power capacity/current with 2KW source	27KVA/41.1A	25.6KVA/39A	22.5kVA/34.18A
Total power capacity/current with 1.5KW source	33.3KVA/50.5A	32KVA/48.5A	28.7kVA/43.6A

Configuration And Components

laser head	Bodor Genius T		
Laser source	Bodor Power		
Chuck	pneumatic chuck		
Waste Trolley	●		×
Standard tube support holder	●		
Linear Rails	bodor		
Rack	bodor		
X-axis、Y-axis、Z-axis Servo motor and driver	Bodor		
Control system	Bodor Thinker		
Display size	21.5 inches		
Water Chiller	●		
Dust removal	Centrifugal fan	Centrifugal fan	× K120(GB)

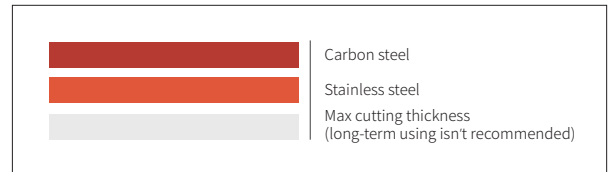
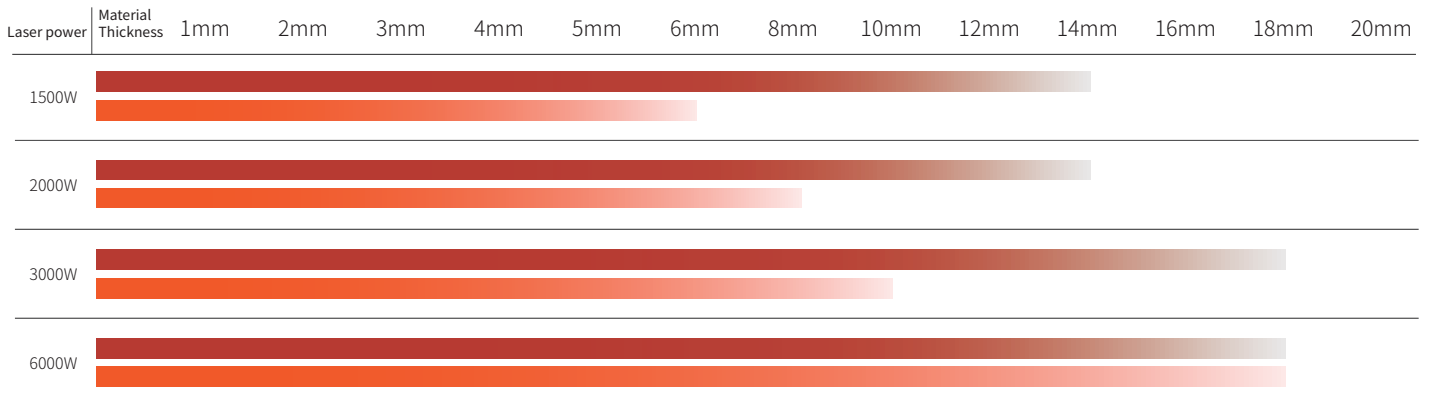
Additional options

Blanking support (tube)	<input type="radio"/> K120、K230	Integrated compressed air system	<input type="radio"/>
BodorNest Tube	<input type="radio"/>	Electric cabinet with air conditioner	<input type="radio"/> K120
T-Loader eco	<input type="radio"/> K120、K230	Adding air conditioner for laser source	<input type="radio"/>
T-Loader eco	<input type="radio"/>	Bodor MES (Digital Factory Management System)	<input type="radio"/>

Tube Cutting Parameters

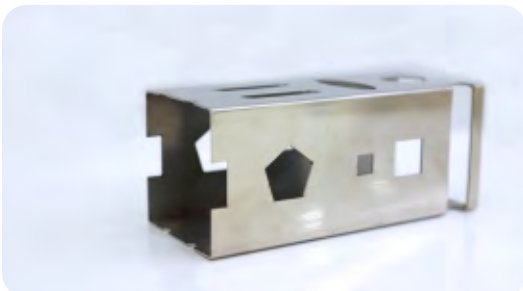
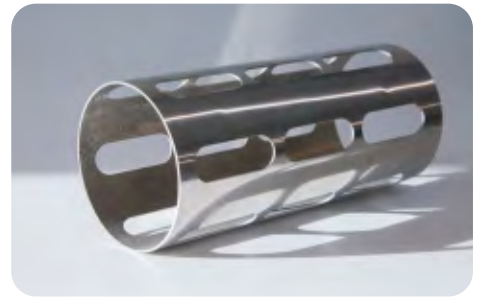
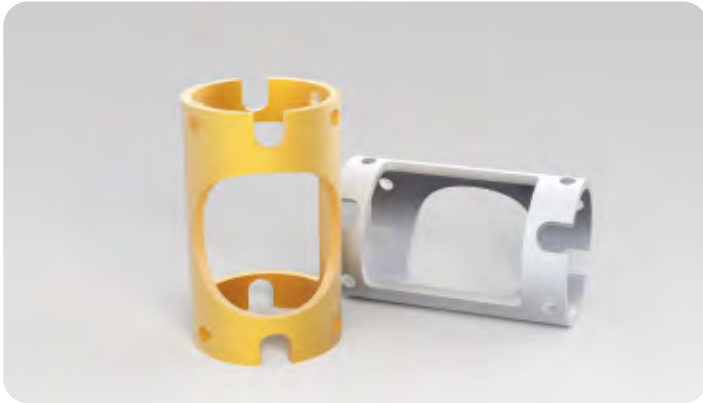
		1000W	1500W	2000W	3000W	6000W	12kW
	Thickness (mm)	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min
Carbon steel	1	12--15	17--19	16--20	18--21	18--21	18--21
	2	5--7	6--8	8--10	10--12	15-20	15-20
	3	2--3	2.5--3.5	3.0--4.8	3.5--5	3.8--5.5	4--6
	4	2--2.4	2.3--2.8	2.8--3.5	3--3.8	3.2--4.3	3.3--4.5
	5	1--1.6	1.8--2.4	2.5--3	2.6--3.2	3--4	3.5--4.3
	6	1.1--1.4	1.4--1.8	1.8--2.2	1.9--2.4	2.5--3.5	2.7--4
	8	0.8--1.1	1--1.4	1.4--1.8	1.6--2	2--3	2.5--3.5
	10	0.6--0.9	0.8--1.1	1.0--1.3	1.2--1.6	1.3--2.2	1.8--2.5
	12	0.6--0.7	0.6--0.9	0.8--1	0.9--1.3	1.2--1.7	1.5--2
	14		0.5--0.6	0.6--0.7	0.8--1	0.9--1.3	1.2--1.8
	16				0.6--0.9	0.6--1.1	1--1.5
	18				0.5--0.6	0.5--0.7	0.8--1
20						0.5--0.8	
Stainless steel	1	12--16	15--20	20--24	23--28	23--28	23--28
	2	7--9	9--12	10--15	14--18	20--22	20--22
	3	2--2.5	2--3	3--4	4.2--5.4	8--10	8--12
	4	0.6--0.9	1.2--1.5	2--3	2.8--3.6	9--12	12--14
	5		0.6--0.9	1.2--1.6	1.8--2.4	6--8	7--9
	6		0.5--0.6	0.8--1.1	1--1.5	4--5.5	6--8
	8			0.5--0.6	0.8--1.2	2--3	3--4
	10				0.4--0.6	1--1.5	1.5--2.5
	12					0.5--1	1--2
	14					0.4--0.7	0.8--1.5
	16					0.2--0.4	0.6--1
	18					0.2--0.4	0.6--0.8
20						0.4--0.5	

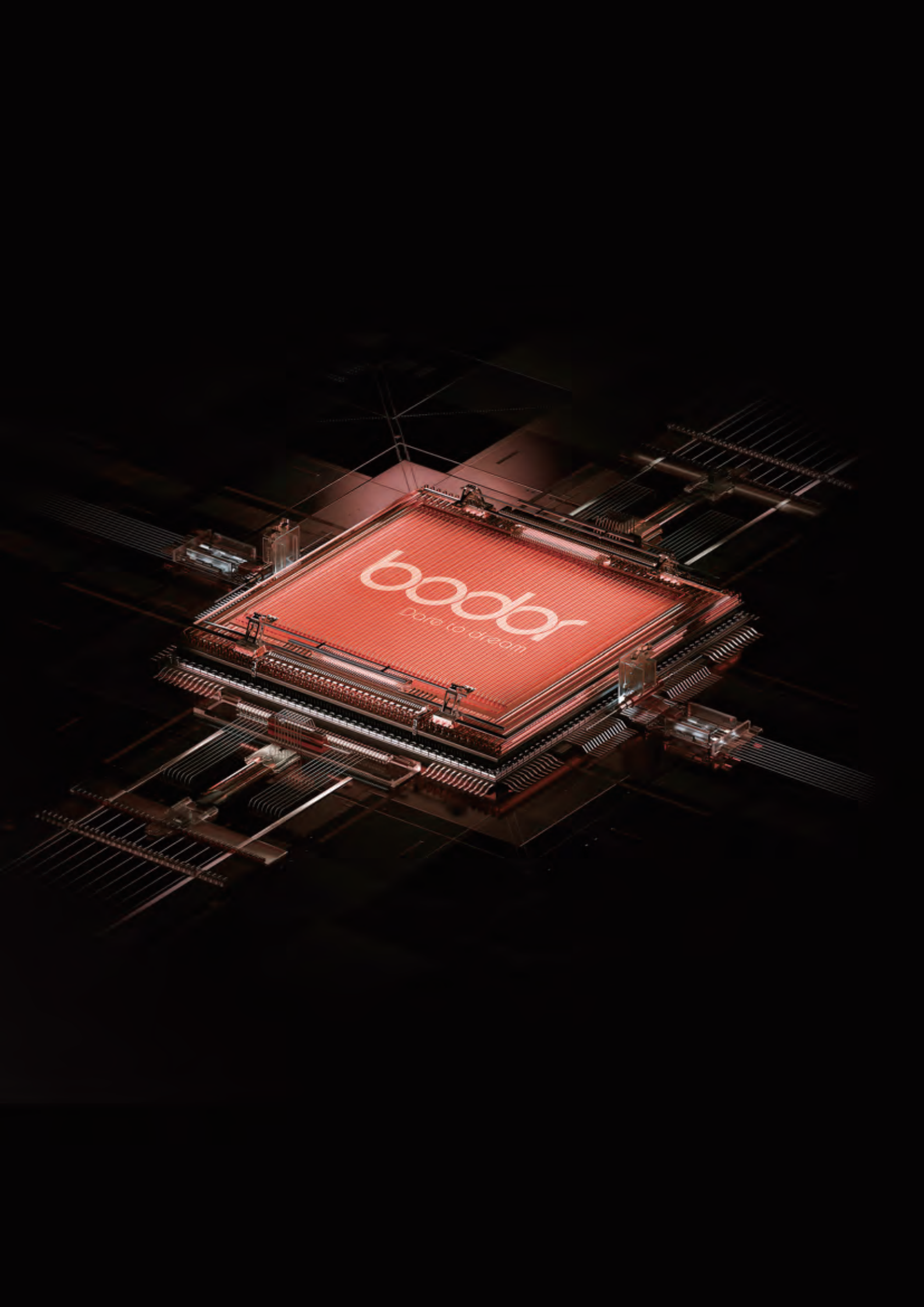
Cutting Capacity



Above data is only for reference

Cutting Samples





boddor
Care to dream