

# T SERIES

ALL-ROUND FIBER LASER METAL TUBE CUTTING MACHINE

1.5kW-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.

**51000m<sup>2</sup>**

Production Base

**7000+**

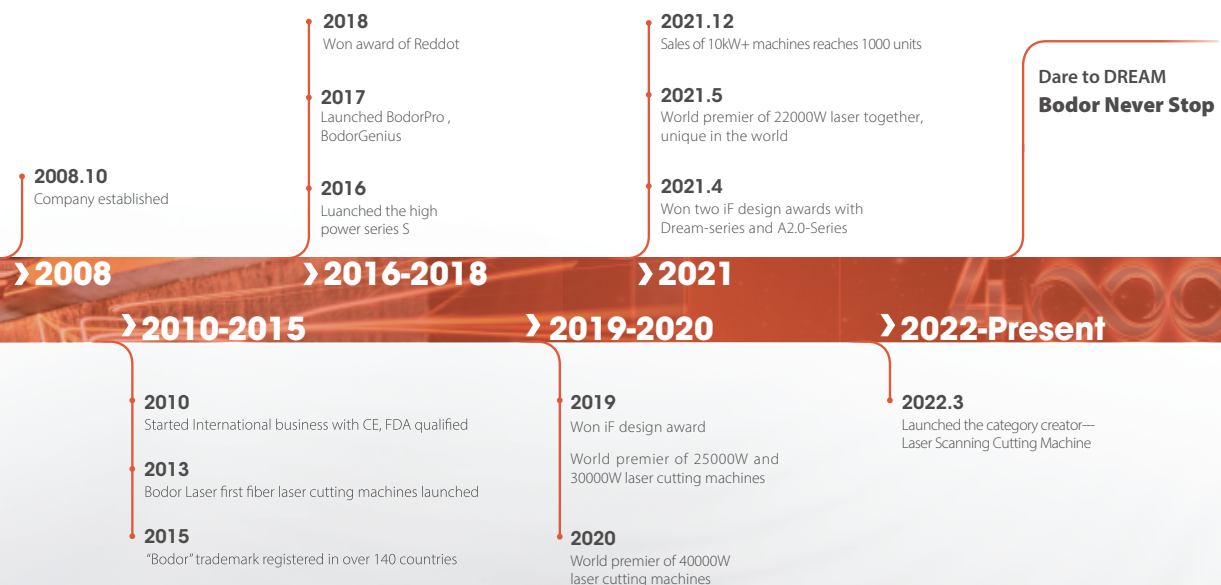
Delivery Capability

**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



# BODOR THINKER

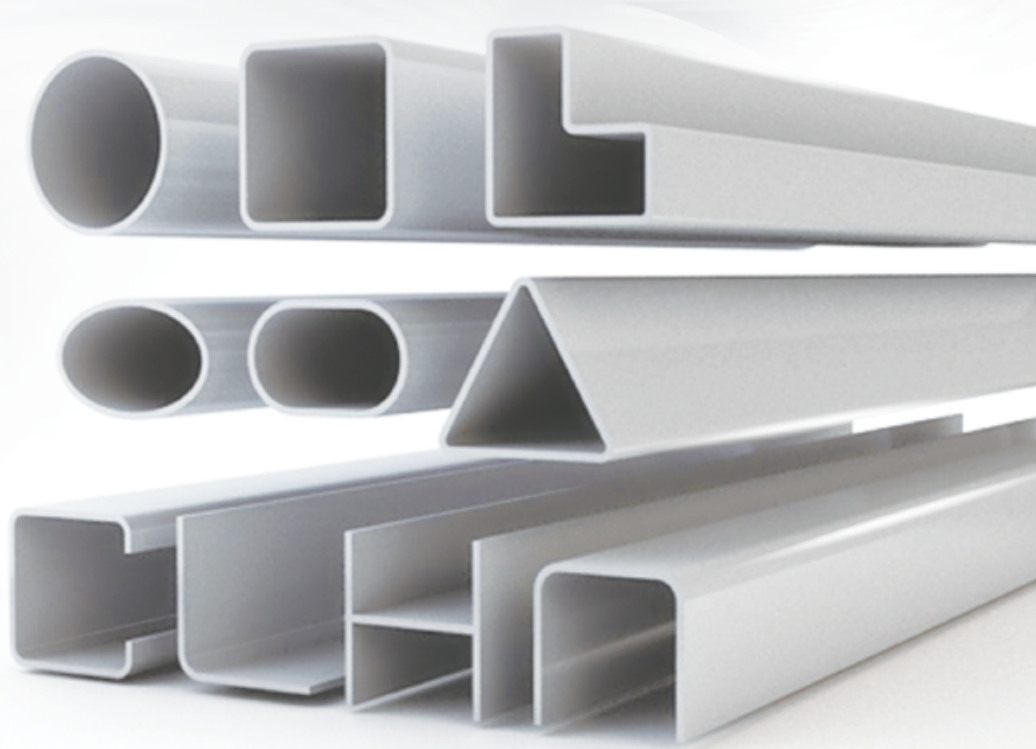


## Advantages

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- 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

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- T 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



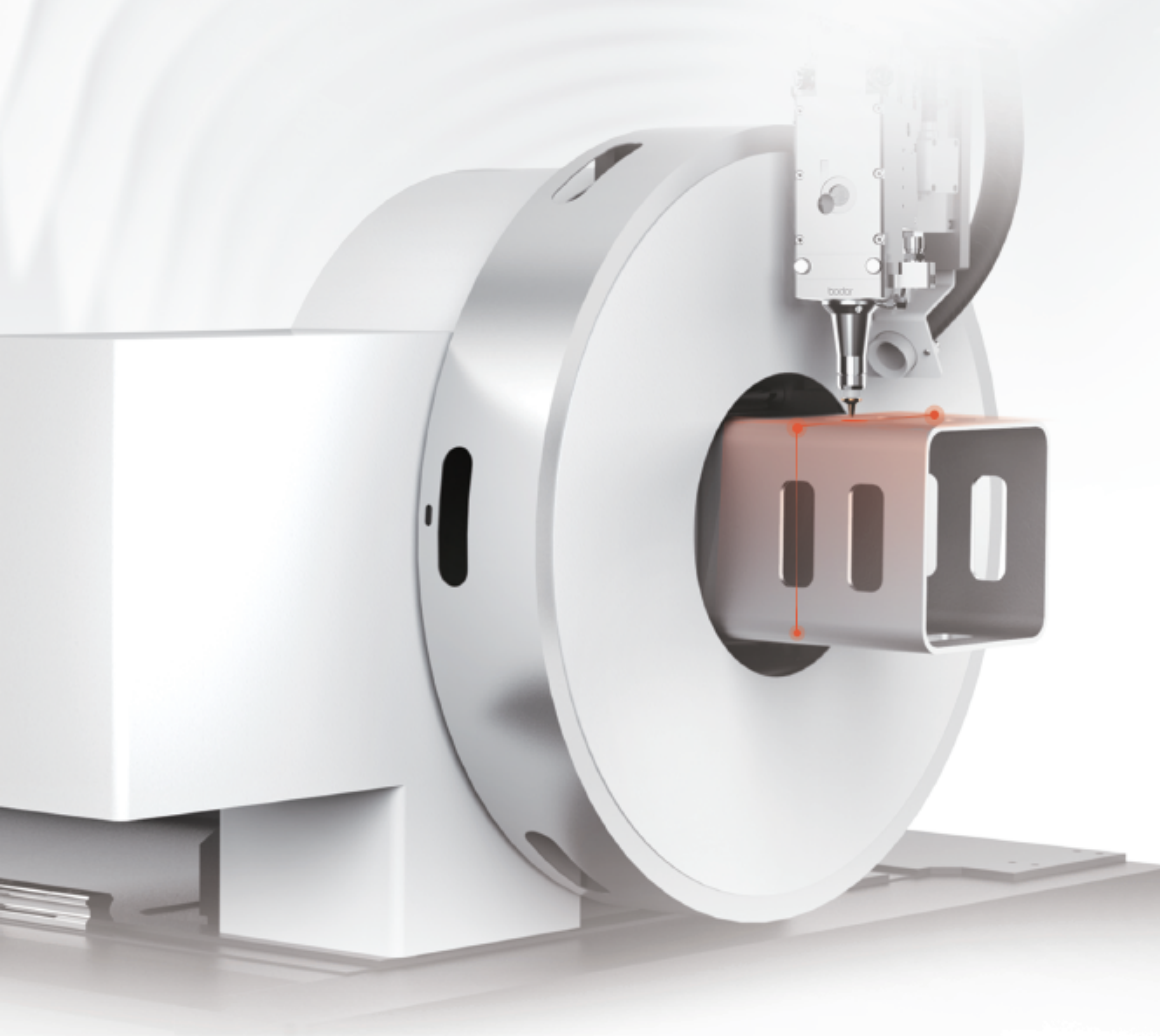
## Advantages

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- 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

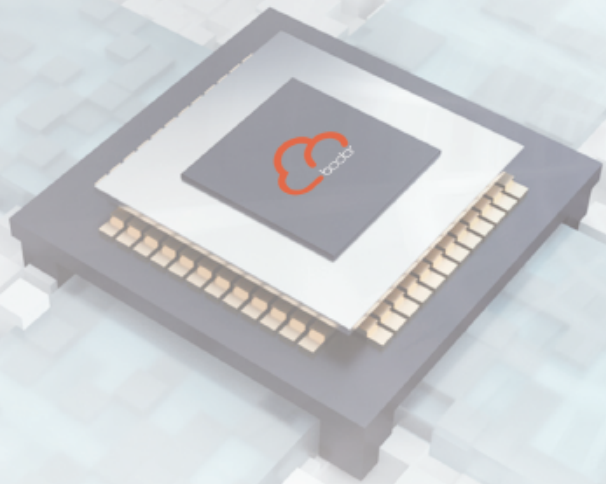


## Advantages

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

# AIR PRESSURE INTELLIGENT CONTROL

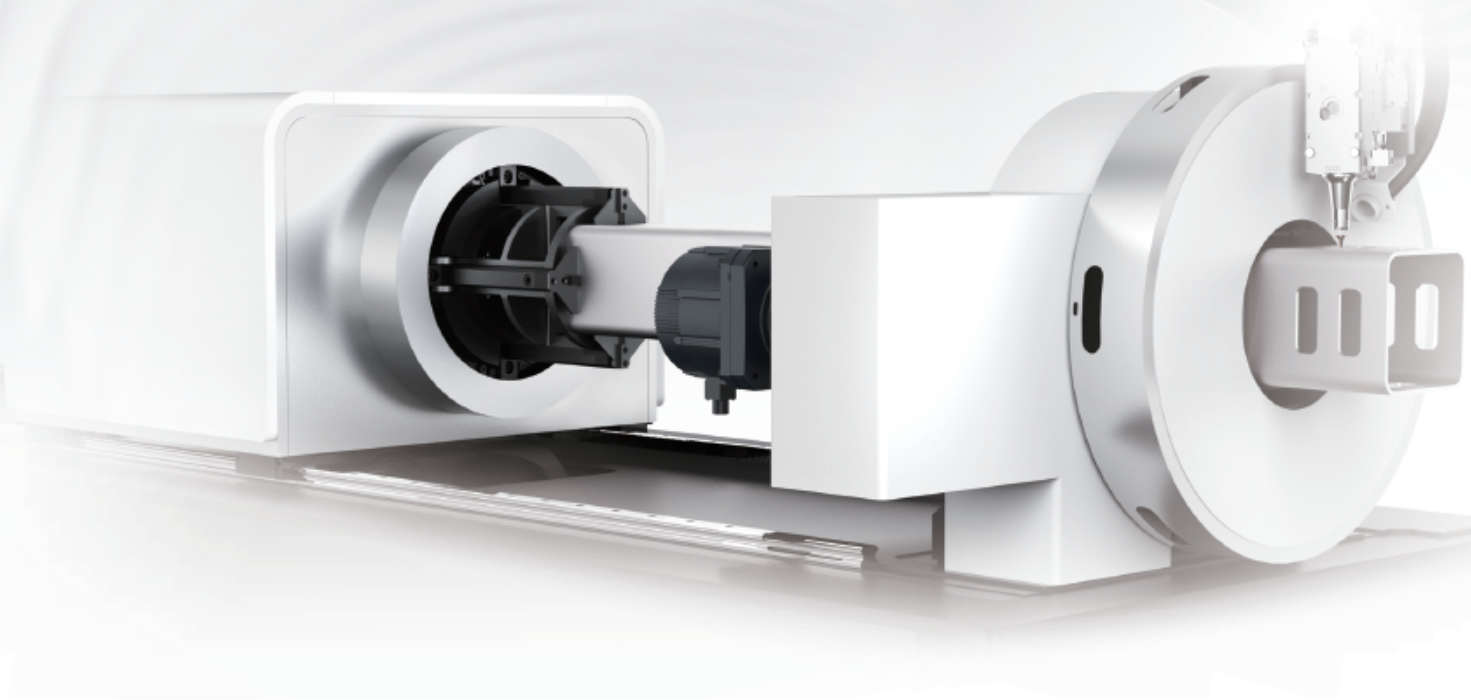


## Advantages

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- Accurate monitoring of gas pressure, full closed-loop control, ensures stability of cutting and reduces production cost.
- The operation is simplified with no need of manual calibration, and improve the sensitivity and accuracy of air pressure changes through machine autonomous learning.

# PNEUMATIC CHUCK



## Advantages

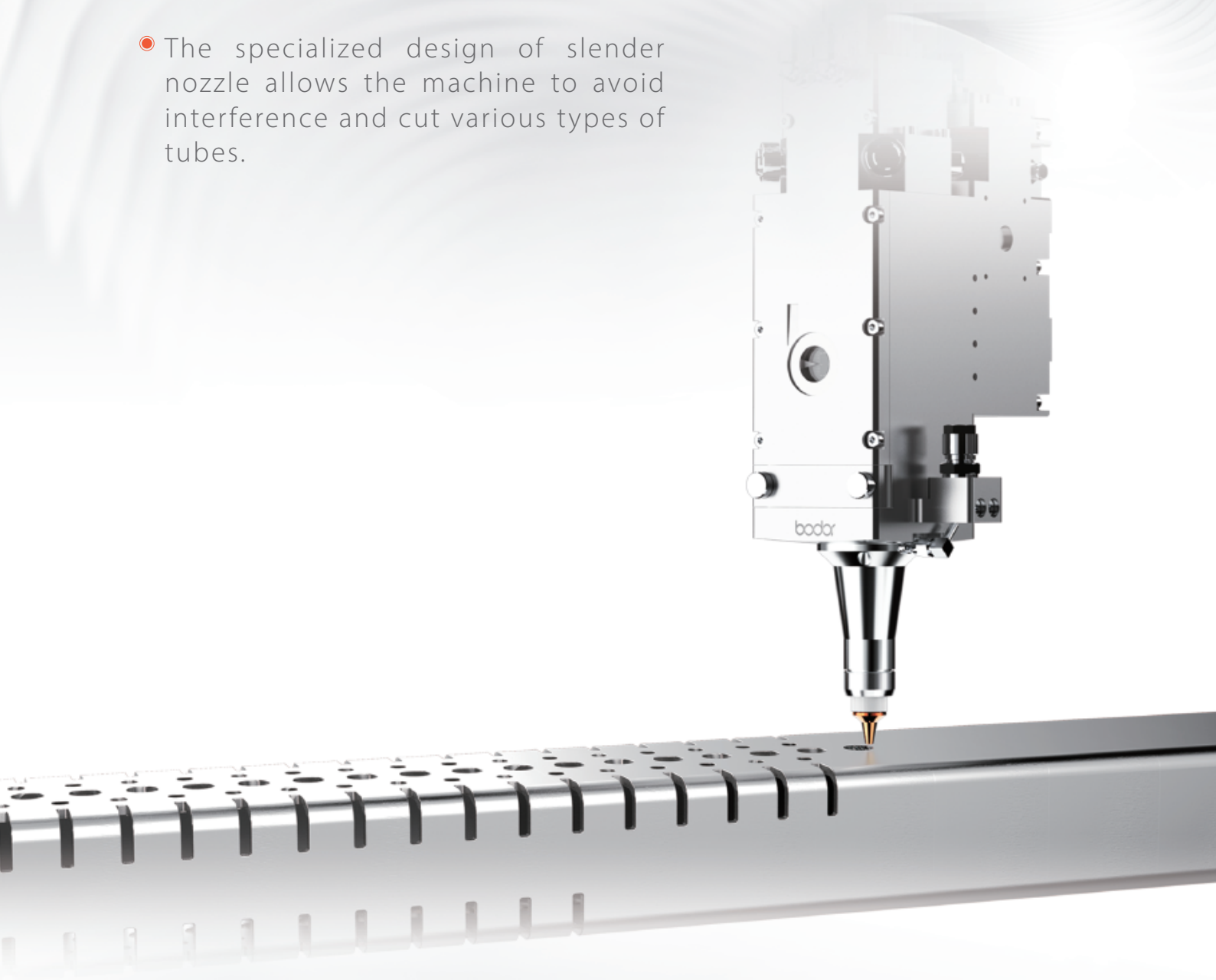
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- Quick clamping improves the work efficiency.
- The clamping force is large, stable and adjustable.
- Strong safety and reliability.

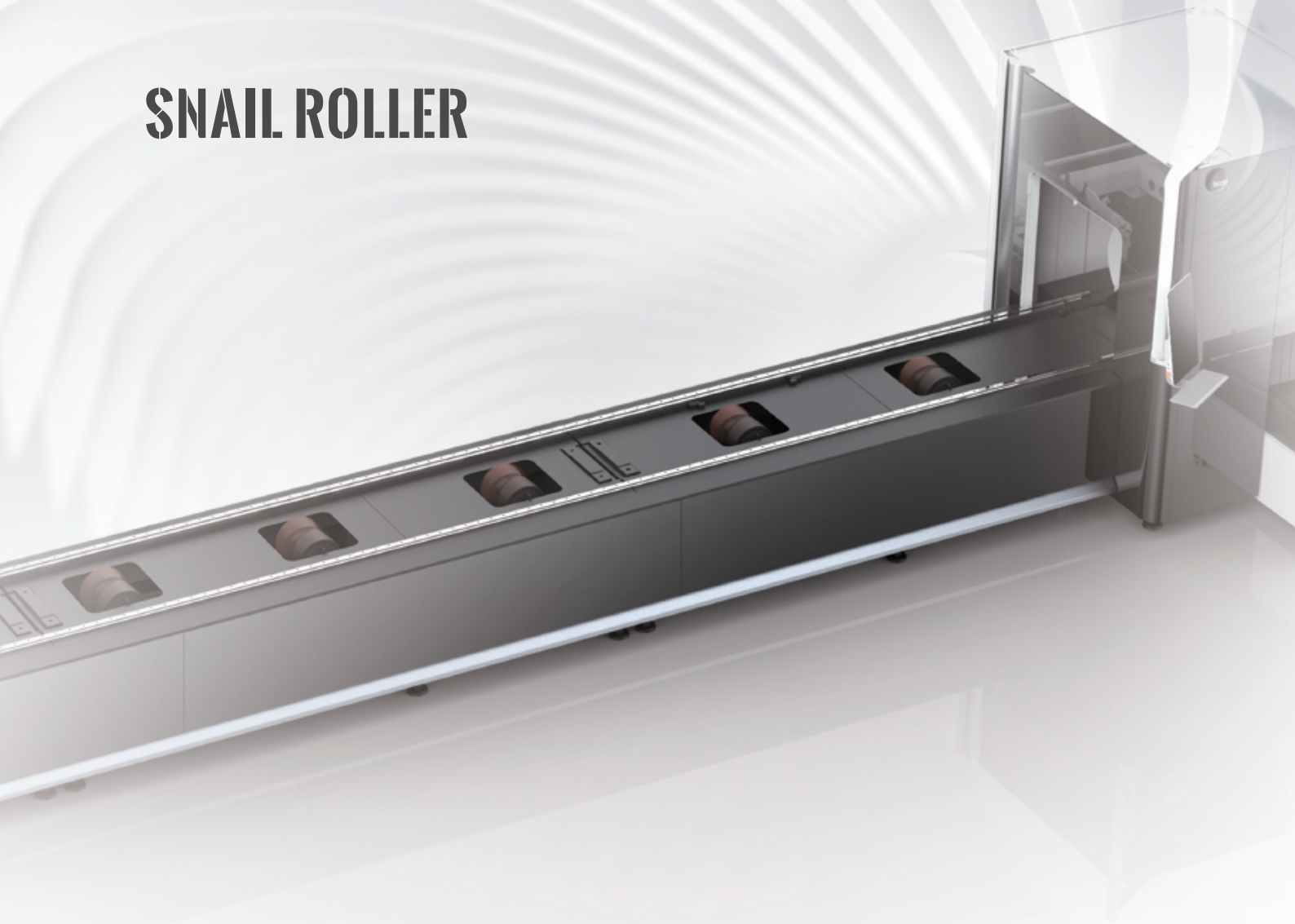
# BodorGeniusT

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



# SNAIL ROLLER



## Advantages

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- The roller prevents tubes from shaking from side to side effectively.
- The lift cylinder runs quickly and cutting efficiency improves.

# BLANKING RACK



## Advantages

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- During cutting process, provide auxiliary support for the workparts according to pipe length.
- Intelligent cutting, wastes receiving and automatically flip and unload the workpieces, make the operation more convenient and smart.
- Avoid of collision and scratches to the workpieces and laser head components when cutting off and blanking.

# BODOR CLOUD

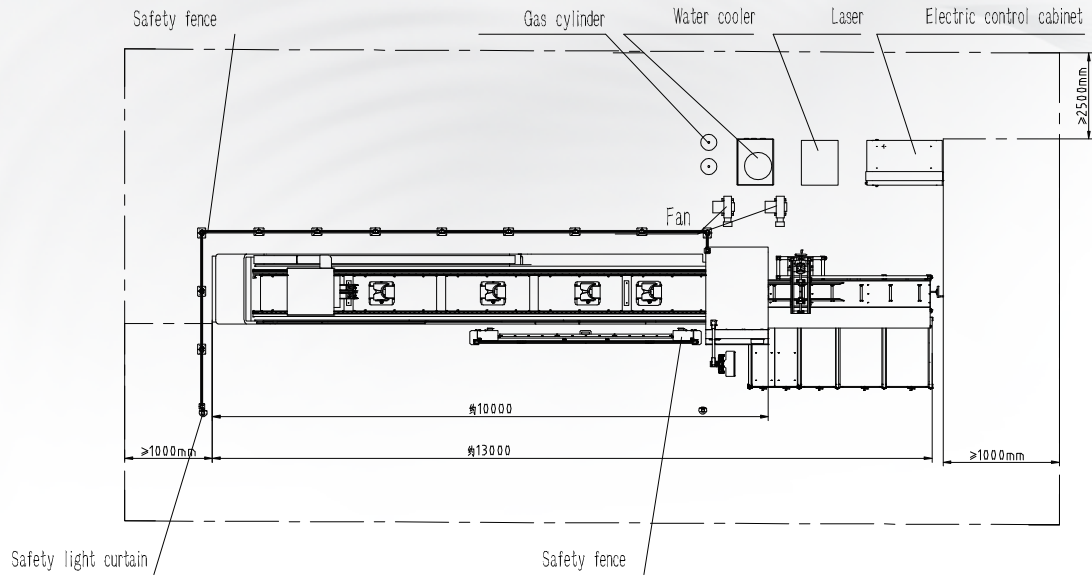
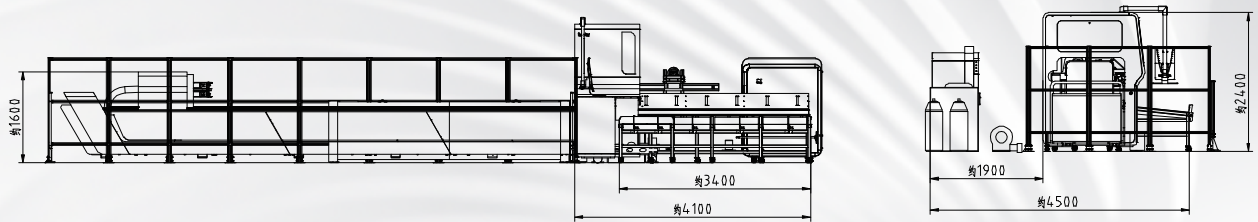


## Advantages

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- 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.



**T230**  
13500×3200×2500mm



**T230(9.2M)**  
16000×3200×2500mm



## Technical Data

ITEM	T230	T230(9.2m)
Tube cross-sectional shape	Round, square, rectangular, oval, rounded rectangular, Angle steel, channel steel and other tubes	
Tube size range	Round tube: $\Phi 20$ - $\Phi 230$ mm Square tube: $\square 20$ - $\square 170$ mm Rectangular tube: $170\text{mm} \geq \text{Side length} \geq 20\text{mm}$ Circumscribed circle diameters $\leq 230\text{mm}$	"Round tube: $\Phi 20$ - $\Phi 230$ mm Square tube: $\square 20$ - $\square 170$ mm Rectangular tube: $170\text{mm} \geq \text{Side length} \geq 20\text{mm}$ Circumscribed circle diameters $\leq 230\text{mm}$
Maximum machinable tube length	6500mm	9200mm
Maximum tube weight	200Kg 30Kg/m	200Kg 21.7Kg/m
Max. Chuck rotating speed	120r/min	120r/min
X axis maximum speed	100m/min	100m/min
Y axis maximum speed	95m/min	95m/min
X maximum acceleration	1G	1G
Y maximum acceleration	1G	1G
Z axis maximum speed	$\geq 60\text{m/min}$	$\geq 60\text{m/min}$
Dimensions	13500x3200x2500mm	16000x3200x2500mm
Overall weight	6700kg	6800kg
Positioning accuracy	0.05mm	0.05mm
Repositioning accuracy	0.03mm	0.03mm
Total power capacity/current with 6KW source	61.48KVA/93.4A	61.48KVA/93.4A
Total power capacity/current with 3KW source	45.78 KVA/69.6A	45.78 KVA/69.6A
Total power capacity/current with 2KW source	37.08 KVA/56.3A	37.08 KVA/56.3A
Total power capacity/current with 1.5KW source	43.28 KVA/65.8A	43.28 KVA/65.8A

## Configuration And Components

laser head	Bodor Genius T
Laser source	Bodor Power
Chuck drive types	Pneumatic chuck
Standard blanking rack	●
Linear Rails	bodor
Rack	bodor
"X-axis、Y-axis、Z-axis、A-axis Servo motor and driver"	bodor
Control system	Bodor Thinker
Display size	21.5 inches
Water Chiller	●
Dust removal	Centrifugal fan

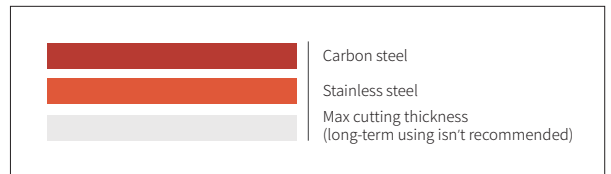
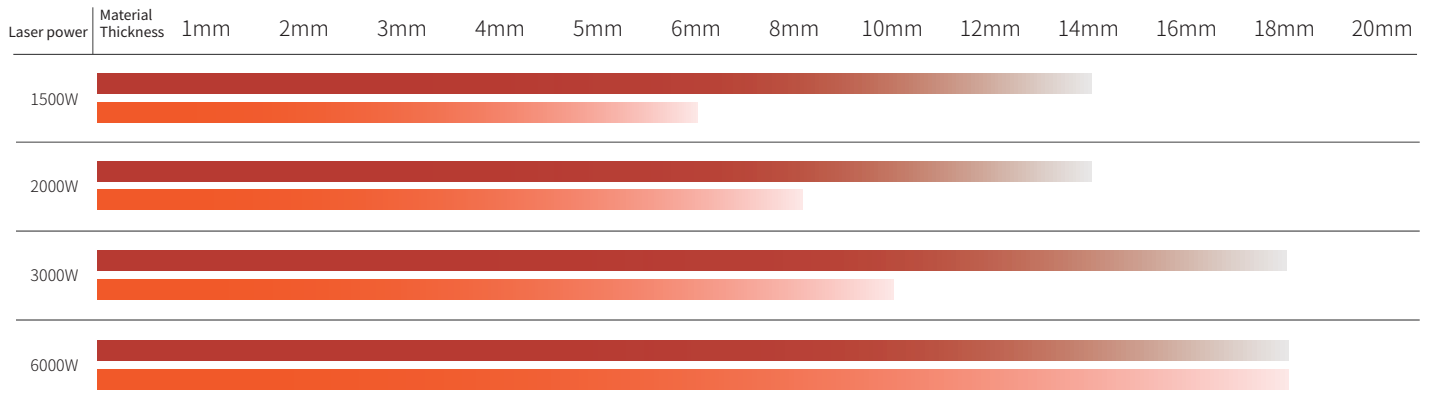
## Additional options

T-Trans	<input type="radio"/>	Integrated compressed air system	<input type="radio"/>
T-Loader	<input type="radio"/>	Electric cabinet with air conditioner	<input type="radio"/>
laser fume filter	<input type="radio"/>	Adding air conditioner for laser source	<input type="radio"/>
BodorNest Tube	<input type="radio"/>	Bodor MES (Digital Factory Management System)	<input type="radio"/>

## Tube Cutting Parameters

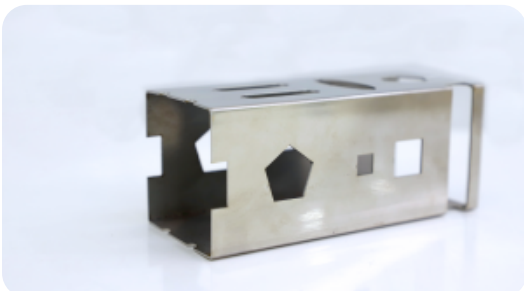
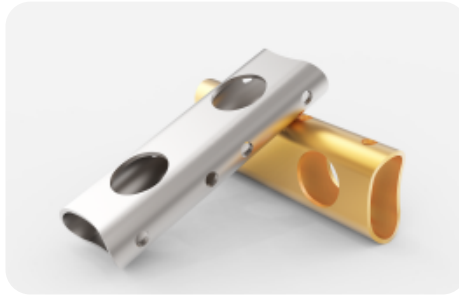
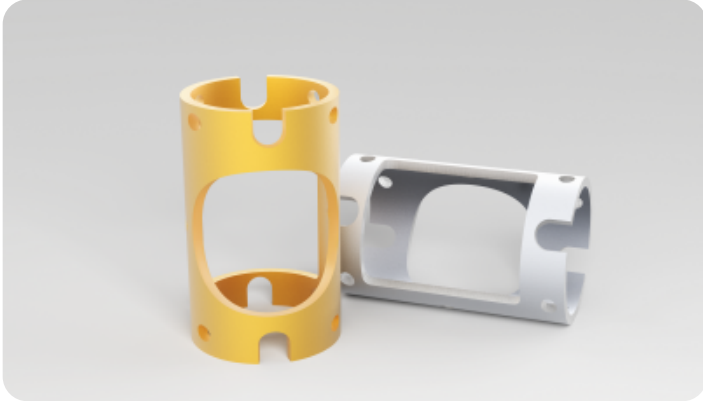
		1000W	1500W	2000W	3000W	6000W	12kW
	Thickness (mm)	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min	speed m/min
Carbon steel	1	12--15	17--19	16--20	18--21	18--21	18--21
	2	5--7	6--8	8--10	10--12	15--20	15--20
	3	2--3	2.5--3.5	3.0--4.8	3.5--5	3.8--5.5	4--6
	4	2--2.4	2.3--2.8	2.8--3.5	3--3.8	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	

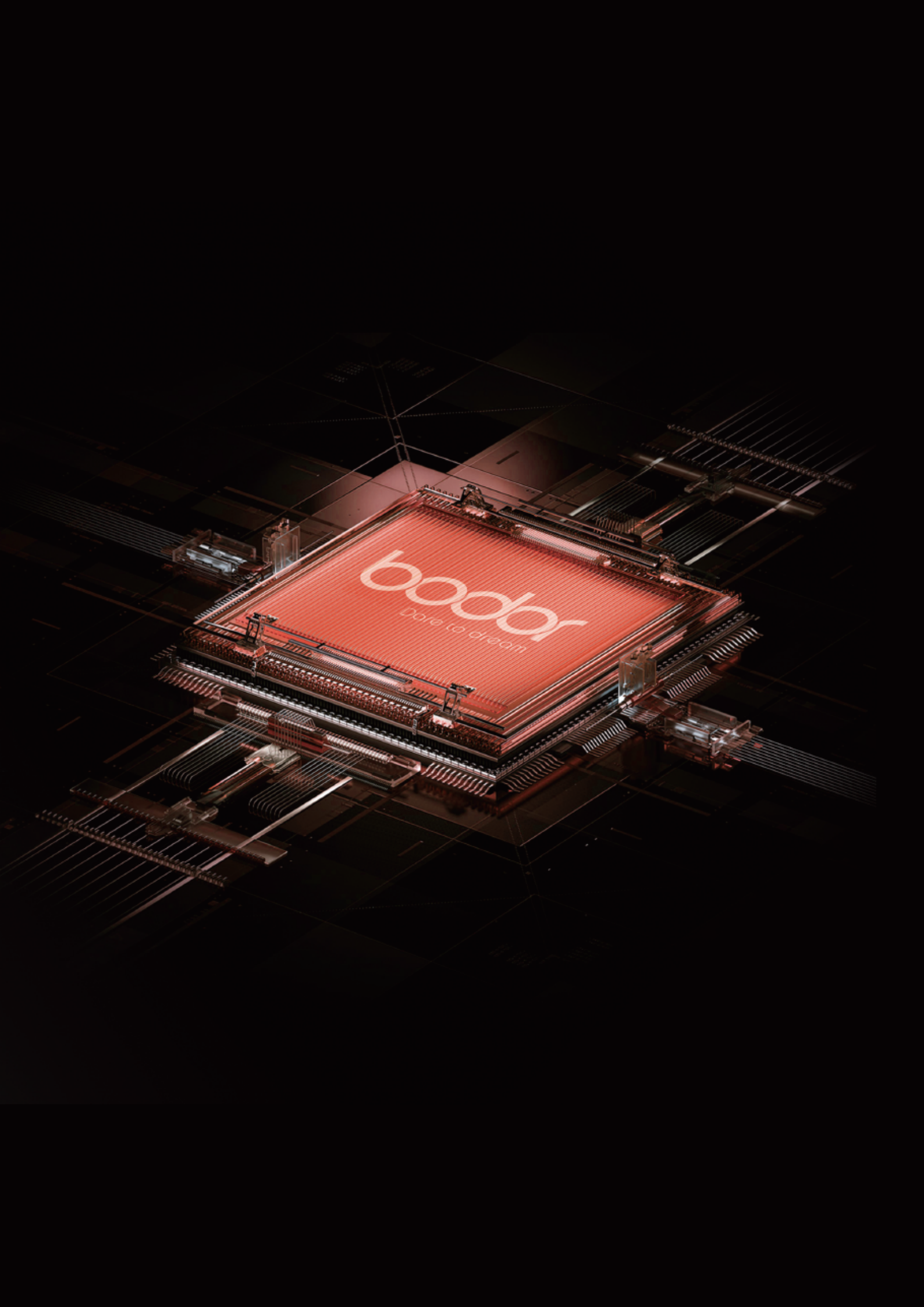
## Cutting Capacity



Above data is only for reference

Cutting Samples





boddor  
Care to dream