

i SERIES

COMPACT LASER CUTTING MACHINE

1.5kW-12kW



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+

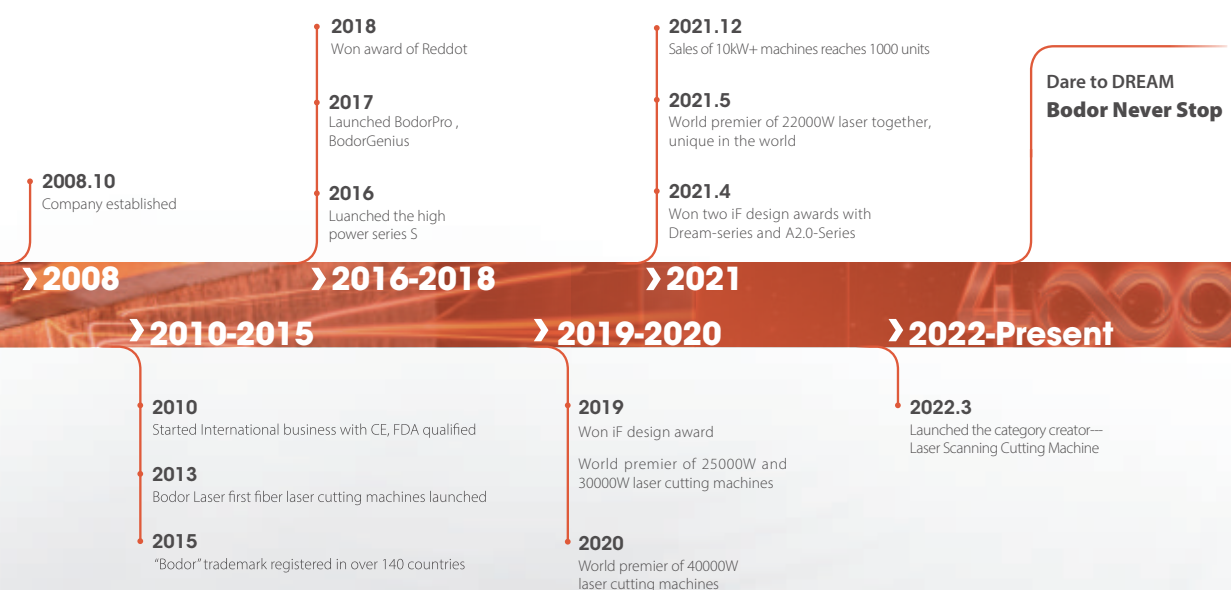
Delivery Capability

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



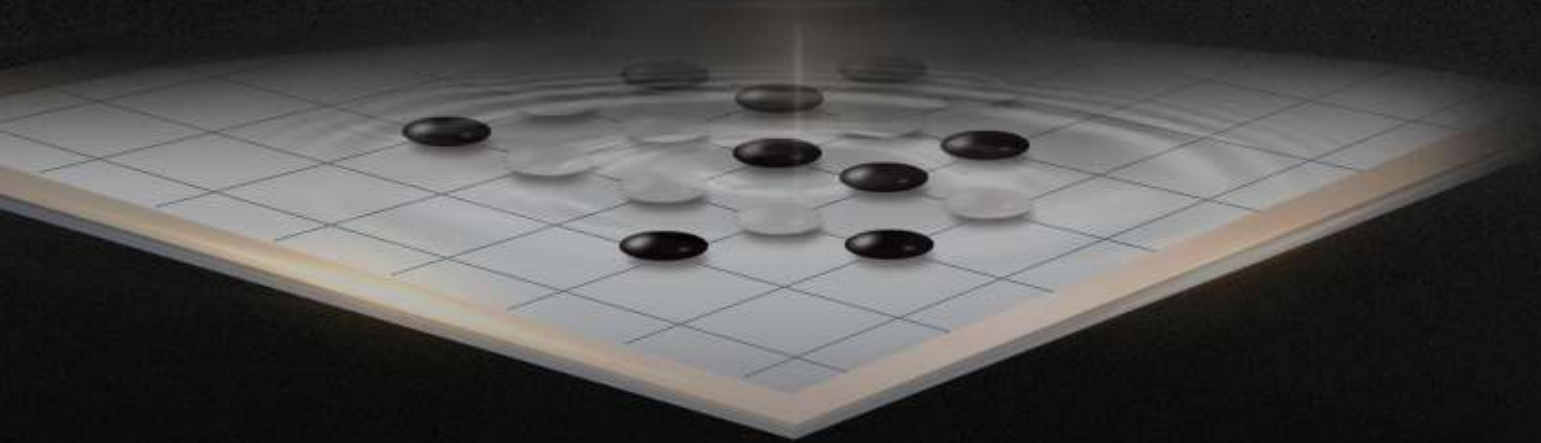
- Strong R&D team lead by the drafter of National Standards for CNC laser cutting machines
- Over 200 R&D Technicians, the R&D level is in line with international standards
- 10 subdivision platforms, including plate cutting, pipe cutting, application engineering, etc.
- 2 core R&D Centers in China and 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 IN SIZE, MORE IN FLEXIBILITY



Advantages

- The compact design with small space occupation
- Full enclosed protection and isolated work area completely isolate smoke and laser radiation.
- Single-phase power supply can ensure the normal operation of equipment, which makes it more convenient to connect, it could work in various places.

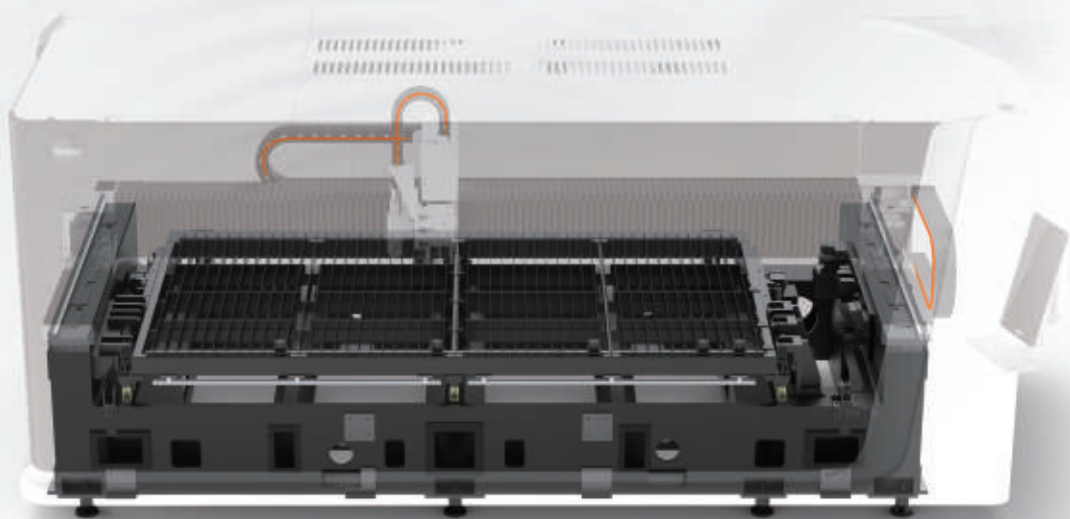
SELF-DEVELOPED CONTROL SYSTEM



Advantages

- Bodor Laser independent research and development system, perfect combination with BodorGenius laser head, brings to customers upgraded cutting technology and efficiency.
- BodorThinker
 - Integration of CAD and CAM can directly identify drawings and nest
 - Good adaptability, support G code(NC)、DXF、PLT、ENG and other file formats
 - The newly added batch processin function, in conjunction with the processing data-base, makes it more convenient in batch cutting.
 - The updated CAM logic and more open CAM function make it more convenient to change drawings, use more comprehensively, and easier to cut.

INTELLIGENT FUNCTIONS



Automatic lubrication system

- Automatic lubrication system provides timing and ration lubricating oil for equipment to ensure its normal and high speed operation, and owns functions of abnormal alarm and liquid level alarm. The system greatly enhances cutting accuracy and effectively extends service life of transmission mechanism.

Intelligent travel protection

- Automatically monitor operation range of crossbeam and cutting parts, keeping operation within machining range. Double guarantees of fixed limitation greatly improve equipment and personal safety, minimizing the using risks.

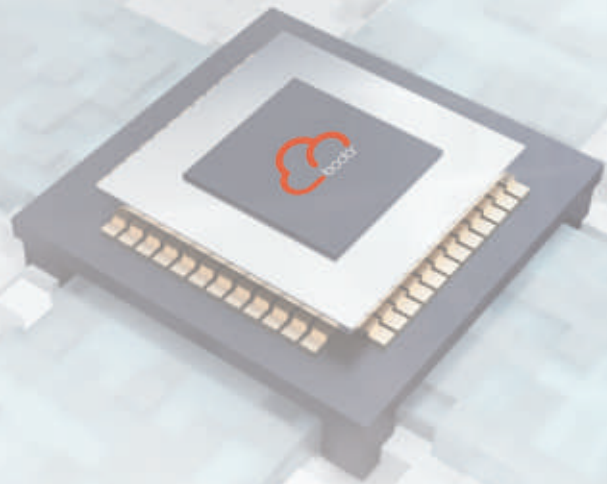
INTELLIGENT FUNCTIONS



A new generation of safety following module

- Laser head keeping distance with work piece in cutting process can reduce collision risks. It will stop cutting when colliding plate. The safety following module reduces accident rate and improves cutting performance.

INTELLIGENT FUNCTIONS



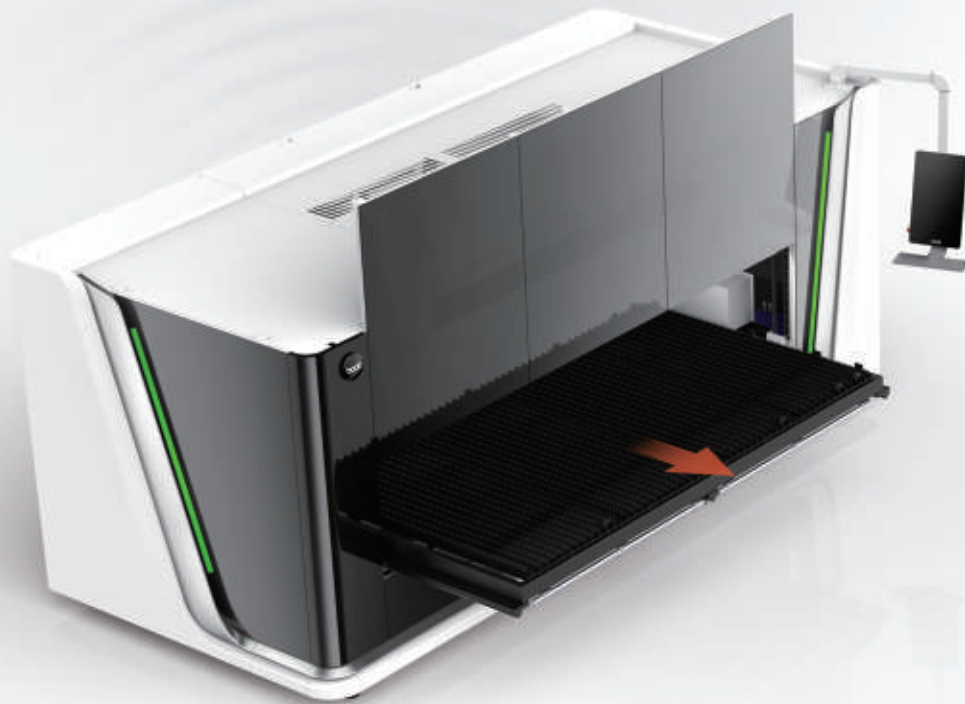
Intelligent alarm system

- The system will start full abnormal alarm and push it to the interface through control center when equipment is abnormal.
 - Finding equipment abnormal in advance and reducing hidden dangers can multiply improve the equipment troubleshooting efficiency.
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Various intelligent sensor modules

- Various intelligent sensor modules to improve safety and device protection

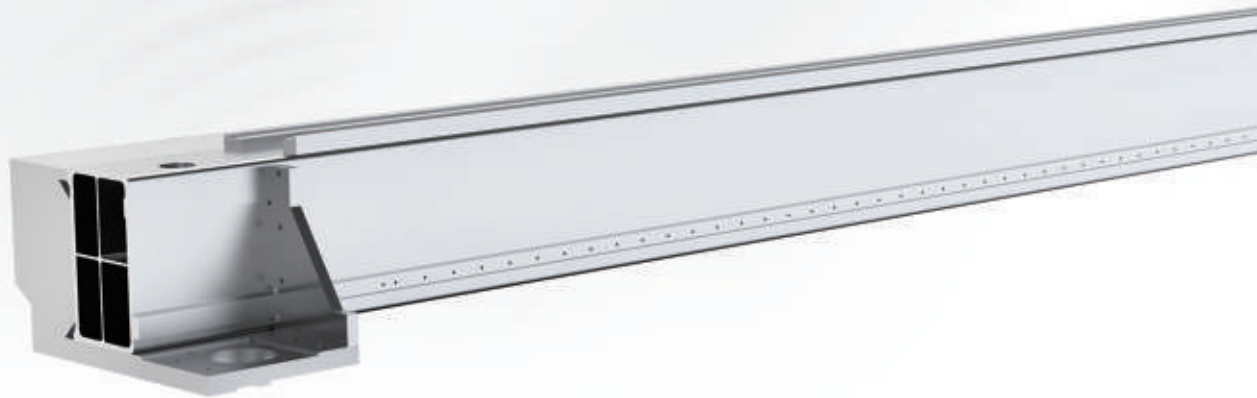
ELECTRIC VERTICAL DOOR & PULL-OUT TABLE



Advantages

- Side door design; Easy, fast opening and closing with just one finger's press
- The new manual pull-out table design and optional electric table make operation experience fresh and satisfying. (Available only for i7)

STRETCHED ALUMINUM GANTRY(i5)



Advantages

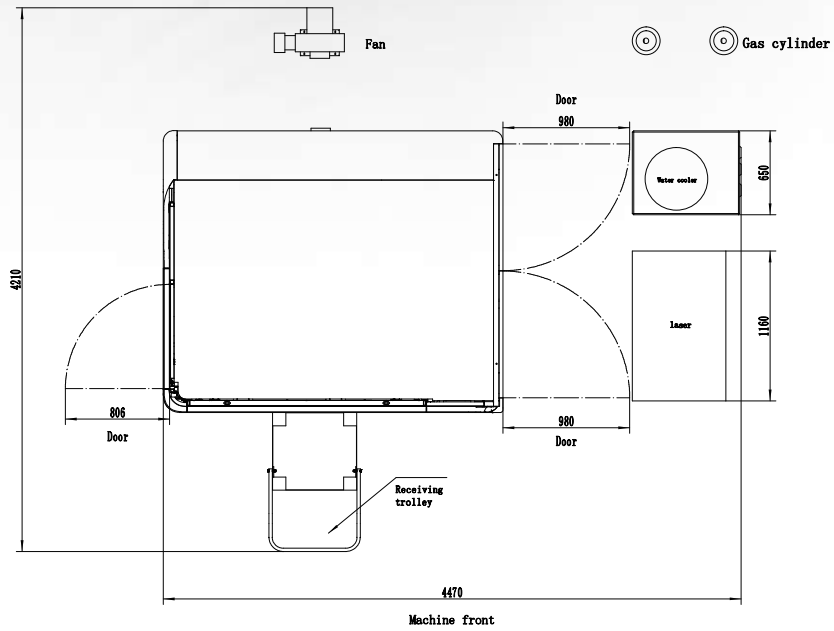
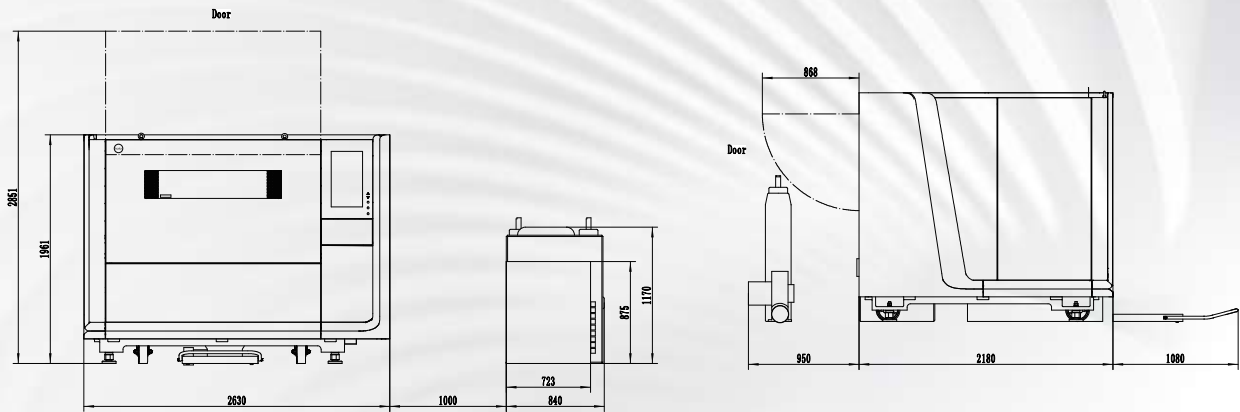
- Integral pressure casting by steel mold makes it light, flexible and efficient
- The light weight and strong rigidity of aluminum alloy are suitable for high speed movement during processing, and the high flexibility is beneficial to high-speed cutting of various graphics.
- Light crossbeam offers high operation speed, improving efficiency and ensuring quality.

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.



i7
3048mm*1524mm

i5
1000mm*1500mm

Technical Data

| ITEM | i7 | i5 |
|--|----------------|---|
| Working area | 3048*1524mm | 1000*1500mm |
| Max. linkage speed | 100m/min | 100m/min |
| Max. acceleration | 1.5G | 1.5G |
| Table load bearing | 900kg | 250kg |
| Machine overall dimensions | 4955×2320×2200 | 2820×2180×1995 |
| Overall weight | 4980kg | 2000kg |
| Z axis travel | 120mm | 100mm |
| Positioning accuracy | ±0.05mm | ±0.05mm |
| Repositioning accuracy | ±0.03mm | ±0.03mm |
| Total power capacity/current with 12kW source | 96.1kVA 146.1A | × |
| Total power capacity/current with 6kW source | 57.5kVA 87.3A | 49.3KVA/75A |
| Total power capacity/current with 3kW source | 51.1KVA/77.7A | 43KVA/65.3A |
| Total power capacity/current with 2kW source | 50.1KVA/76.2A | 42KVA/63.8A |
| Total power capacity/current with 1.5kW source | 39.8KVA/60.4A | single-phase: 31.6KVA/143.8A three-phase: 30.8KVA/48.1A |

Configuration And Components

| | | |
|---|---|--|
| laser head | Bodor Genius | |
| Laser source | Bodor Thinker | |
| Machine bed | Mortise-and-tenon type plate welded segmented bed | |
| Bed functions | Easy-access sliding bed | Stationary bed (optional pneumatic sheet-clamping) |
| X-axis、Y-axis、Z-axis Servo motor and driver | Bodor | |
| Linear Rails | Bodor | |
| Rack | Bodor | |
| Protective Enclosure | ● | |
| Control system | Bodor Thinker | |
| Display size | 21.5 inches | |
| Water Chiller | ● | |
| Dust removal | Centrifugal fan | |

Additional options

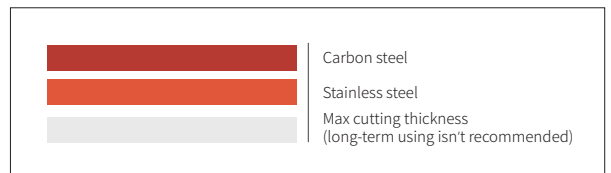
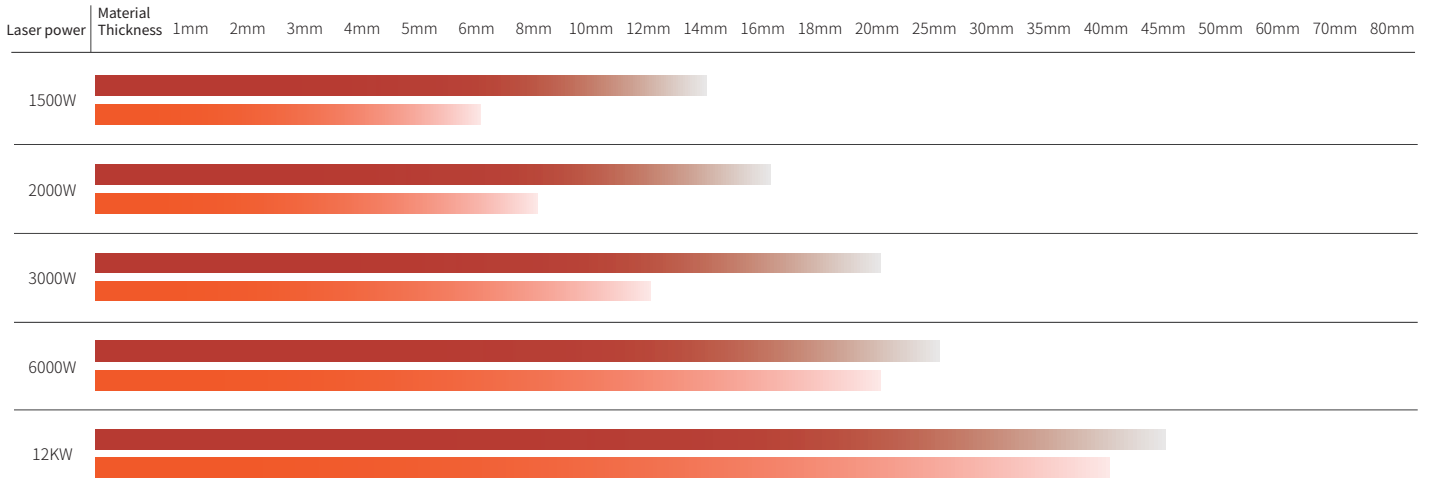
| | | | |
|---|-----------------------|--|-----------------------|
| Laser protective glasses | <input type="radio"/> | Voltage regulator (Including 10m power line) | <input type="radio"/> |
| Integrated compressed air system | <input type="radio"/> | laser fume filter (Made in China) | <input type="radio"/> |
| 125mm focus distance laser head (3-4kw) | <input type="radio"/> | Nitrogen proportional valve | <input type="radio"/> |
| Electric countertop | <input type="radio"/> | BodorNest | <input type="radio"/> |
| Bodor MES | <input type="radio"/> | Mixed gas cutting function | <input type="radio"/> |
| security light curtains | <input type="radio"/> | Double pneumatic clamping table | <input type="radio"/> |

Cutting Parameters

| | | 1000W | 1500W | 2000W | 3000W | 6000W | 12kW | 15kW | 22kW | 30kW |
|----------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 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 |
| "Carbon steel (Q235A) O2" | 1 | 8.0-10 | 8.0-10 | 8.0-10 | 8.0-10 | 8-10 | 9-11 | 9-11 | 9-11 | 9-11 |
| | 2 | 4.5-5.5 | 4.5-5.5 | 4.0-6.0 | 5.5-7.5 | 5-7.5 | 5-7.5 | 5-7.5 | 5-7.5 | 5-7.5 |
| | 3 | 2.4-3.0 | 2.5-3.4 | 3.0-4.0 | 3.0-4.0 | 3.5-5 | 3.5-5.5 | 3.5-5.5 | 3.5-5.5 | 3.5-5.5 |
| | 4 | 1.8-2.2 | 2.1-2.4 | 2.8-3.3 | 2.8-3.5 | 3.0-4.5 | 3.5-5 | 3.5-5 | 3.5-5 | 3.5-5 |
| | 5 | 1.6-1.8 | 2.0-2.5 | 2.2-2.8 | 2.6-3.2 | 3.0-4.2 | 3.3-4.8 | 3.3-4.8 | 3.3-4.8 | 3.3-4.8 |
| | 6 | 1.2-1.3 | 1.6-1.8 | 1.8-2.3 | 2.5-2.6 | 2.5-3.5 | 3.0-4.2 | 3.0-4.2 | 3.0-4.2 | 3.0-4.5 |
| | 8 | 0.6-0.8 | 1.0-1.2 | 1.2-1.7 | 1.6-1.8 | 2.2-3.2 | 2.5-3.8 | 2.5-3.8 | 2.5-3.9 | 2.5-3.9 |
| | 10 | | 0.7-0.9 | 1.0-1.2 | 1.4-1.6 | 1.8-2.5 | 2.2-3.6 | 2.2-3.6 | 2.0-3.8 | 2.2-3.8 |
| | 12 | | 0.7-0.8 | 0.8-1.0 | 1.0-1.4 | 1.2-2.1 | 1.2-3.5 | 1.2-3.6 | 1.6-3.8 | 1.6-3.8 |
| | 14 | | 0.5-0.7 | 0.6-0.85 | 0.8-0.9 | 1.2-1.8 | 1.7-3.3 | 1.5-3.5 | 1.5-3.8 | 1.6-3.8 |
| | 16 | | | 0.6-0.75 | 0.7-0.8 | 0.8-1.5 | 1.2-3.1 | 1.2-3.5 | 1.4-3.7 | 1.5-3.7 |
| | 18 | | | | 0.6-0.7 | 0.6-1.2 | 1.0-2.7 | 1.2-3.0 | 1.4-3.6 | 1.4-3.6 |
| | 20 | | | | 0.5-0.6 | 0.5-0.8 | 0.6-2.4 | 1.2-2.7 | 1.5-3.5 | 1.5-3.5 |
| | 25 | | | | | 0.3-0.55 | 0.5-1.6 | 0.8-1.8 | 1.0-3.0 | 1.0-3.1 |
| | 30 | | | | | | 0.3-1.0 | 0.6-1.4 | 0.8-2.2 | 1.2-2.6 |
| | 35 | | | | | | 0.3-0.7 | 0.4-0.7 | 0.6-1.0 | 0.9-2.2 |
| | 40 | | | | | | 0.2-0.4 | 0.3-0.5 | 0.5-1.1 | 0.8-1.7 |
| 45 | | | | | | 0.2-0.3 | 0.2-0.5 | 0.3-0.6 | 0.5-0.8 | |
| 50 | | | | | | | | 0.2-0.6 | 0.4-0.6 | |
| 60 | | | | | | | | 0.2-0.5 | 0.2-0.4 | |
| "Stainless steel (201) N2" | 1 | 18-20 | 20-30 | 24-50 | 30-55 | 42-52 | 70-85 | 72-100 | 72-100 | 72-100 |
| | 2 | 5.0-7.0 | 8.0-16 | 9.0-17 | 12-30 | 20-33 | 40-66 | 45-70 | 50-75 | 50-75 |
| | 3 | 2.2-4.0 | 3.0-5.5 | 4.0-7.0 | 6.0-10.0 | 15-22 | 35-45 | 38-50 | 38-55 | 38-55 |
| | 4 | 1.2-2.3 | 1.5-3.2 | 3.2-4.0 | 4.0-6.0 | 10-15 | 20-32 | 25-35 | 25-33 | 30-35 |
| | 5 | | 0.7-1.5 | 2.0-2.7 | 3.0-5.0 | 7.0-12 | 18-25 | 20-30 | 22-30 | 25-32 |
| | 6 | | 0.7-1.3 | 1.2-1.8 | 2.0-3.2 | 4.8-9.0 | 12-15 | 15.0-25.0 | 17-25 | 18-26 |
| | 8 | | | 0.7-1.2 | 1.0-1.8 | 3.0-4.0 | 8-12 | 8.0-12.0 | 12-18 | 15-20 |
| | 10 | | | | 0.5-0.85 | 1.6-2.5 | 6.0-8.0 | 6.0-10.0 | 8.0-12.0 | 12-15 |
| | 12 | | | | 0.4-0.5 | 0.8-1.5 | 4.0-5.5 | 4.0-6.0 | 6.0-9 | 8-12 |
| | 14 | | | | | 0.6-1.2 | 3.0-5.0 | 3.5-5.5 | 5.0-7.0 | 6-10.5 |
| | 16 | | | | | 0.5-1.0 | 2.2-2.8 | 2.5-3.0 | 3.0-5.0 | 5-9 |
| | 18 | | | | | 0.4-0.8 | 1.2-2.0 | 1.2-2.2 | 1.8-4.2 | 3-6.5 |
| | 20 | | | | | 0.3-0.6 | 1.0-1.6 | 1.3-1.8 | 1.5-3.3 | 2-4.7 |
| | 25 | | | | | | 0.5-0.8 | 0.6-1.2 | 1.5-2.0 | 1.8-2.5 |
| | 30 | | | | | | 0.3-0.6 | 0.5-1.0 | 1.0-1.5 | 1.5-1.8 |
| | 35 | | | | | | 0.3-0.5 | 0.4-0.8 | 0.4-0.8 | 1.0-1.5 |
| | 40 | | | | | | 0.3-0.5 | 0.3-0.6 | 0.3-0.6 | 0.6-1.3 |
| 45 | | | | | | | 0.2-0.5 | 0.2-0.6 | 0.8-1.0 | |
| 50 | | | | | | | 0.1-0.5 | 0.2-0.5 | 0.25-0.5 | |
| 60 | | | | | | | 0.1-0.2 | 0.1-0.3 | 0.2-0.3 | |
| 70 | | | | | | | | | 0.17-0.3 | |
| 80 | | | | | | | | | 0.15-0.3 | |
| "Aluminum N2" | 1 | 8-10 | 10-15 | 15-25 | 25-30 | 42-55 | 60-85 | 70-100 | 70-100 | 70-100 |
| | 2 | 2.8-3.6 | 5.0-7.0 | 7-10 | 13-20 | 20-40 | 38-50 | 40-55 | 40-70 | 40-70 |
| | 3 | 0.7-1.1 | 2.0-2.6 | 4.0-8.0 | 6.5-7.5 | 15-25 | 30-40 | 35-45 | 35-60 | 35-60 |
| | 4 | | 1.0-1.4 | 2.5-3.0 | 3.5-5.0 | 9.5-12 | 20-30 | 30-40 | 30-43 | 30-45 |
| | 5 | | 0.5-0.7 | 1.2-2.5 | 2.5-3.5 | 5.0-8.0 | 15-25 | 20-30 | 22-35 | 22-34.0 |
| | 6 | | | 0.6-0.9 | 1.5-2.5 | 3.8-5.0 | 10-15 | 15-24 | 18-28 | 18-32 |
| | 8 | | | | 0.7-1.0 | 2.0-2.5 | 7.0-12 | 8.0-12.0 | 12-20 | 12-23 |
| | 10 | | | | | 1.0-1.5 | 4.5-8.0 | 5.0-9.0 | 7.0-12.0 | 7.0-16 |
| | 12 | | | | | 0.8-1.3 | 4.0-5.0 | 4.0-6.0 | 4.5-6.5 | 4.5-12 |
| | 14 | | | | | 0.9-1.2 | 1.8-2.7 | 2.5-3.2 | 3.0-4.0 | 3.0-8.0 |
| | 16 | | | | | 0.5-0.8 | 1.5-2.5 | 2.0-3.0 | 2.5-3.5 | 2.5-6 |
| | 18 | | | | | 0.5-0.7 | 1.0-1.8 | 1.5-1.9 | 1.8-2.2 | 1.8-2.2 |
| | 20 | | | | | 0.5-0.7 | 0.9-1.5 | 1.3-1.8 | 1.5-2.0 | 1.5-2.0 |
| | 25 | | | | | | 0.6-0.9 | 0.6-1.2 | 0.8-1.5 | 0.8-1.5 |
| 30 | | | | | | 0.3-0.8 | 0.5-1.0 | 0.6-1.2 | 0.6-1.2 | |
| 35 | | | | | | 0.3-0.6 | 0.3-0.8 | 0.4-0.9 | 0.4-0.9 | |
| 40 | | | | | | 0.3-0.4 | 0.3-0.5 | 0.3-0.5 | 0.4-0.6 | |
| "Brass N2" | 1 | 6.0-10 | 8.0-13 | 10-16 | 20-30 | 35-45 | 55-65 | 60-70 | 65-75 | 65-75 |
| | 2 | 2.8-3.2 | 3.0-4.5 | 5.0-6.0 | 6.0-10 | 20-30 | 38-42 | 40-45 | 40-60 | 40-60 |
| | 3 | | 1.5-2.5 | 2.5-7.0 | 3.0-8.0 | 12-18 | 18-30 | 20-35 | 25-40 | 25-40 |
| | 4 | | 0.8-1.2 | 1.8-3.0 | 2.5-4.0 | 8.0-12.0 | 15-20 | 18-30 | 20-35 | 20-35 |
| | 5 | | | | 1.5-2.0 | 6.0-8.0 | 10-15 | 15-20 | 20-28 | 20-30 |
| | 6 | | | | 1.0-1.8 | 3.0-6.5 | 6.0-8.0 | 8-15 | 12-20 | 12-22 |
| | 8 | | | | | 1.6-2.2 | 5.0-7.0 | 8.0-10.0 | 9.0-12 | 9.0-15 |
| | 10 | | | | | 0.8-1.2 | 4.5-6.0 | 5.0-6.5 | 6.0-10 | 6.0-13 |
| | 12 | | | | | 0.3-0.5 | 2.4-4.0 | 2.8-4.2 | 3.0-4.5 | 5.0-10 |
| | 14 | | | | | | 0.8-1.5 | 1.0-1.8 | 1.8-4.0 | 3.0-7.0 |
| | 16 | | | | | | 0.6-1.2 | 0.8-1.5 | 1.5-3.0 | 1.5-3.0 |
| | 18 | | | | | | 0.4-0.6 | 0.6-0.8 | 1.0-2.5 | 1.2-2.5 |
| | 20 | | | | | | | 0.4-0.6 | 0.4-2.0 | 1.2-2.0 |
| | 25 | | | | | | | | 0.3-0.5 | 0.5-0.8 |
| 30 | | | | | | | | | 0.4-0.6 | |

Note: This parameter is for reference only. Various conditions on site (sheet quality, gas quality, etc.) have a lot of influence, so it cannot be used as the basis for acceptance or quality traceability. The final interpretation right belongs to Bodor Laser!

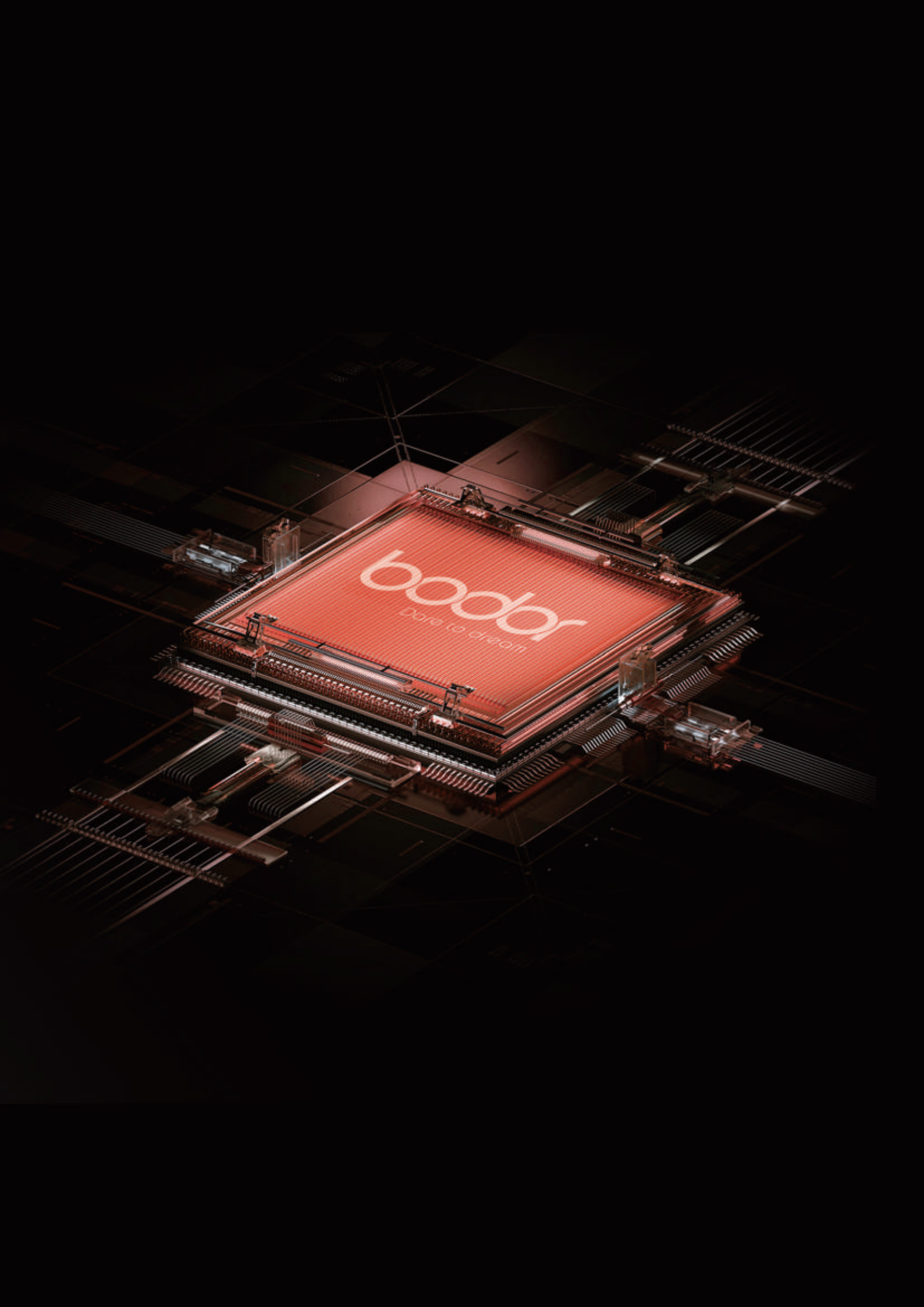
Cutting Capacity



Above data is only for reference

Cutting Samples





boodyr
care to dream