# Professional metal laser cutting machines



Promoter of laser cutting and welding technology.







ISO9001:2015 certification ISO9001:2015 认证

EU CE certification 欧盟 CE 认证 Export qualification 出口资质

# **PGM** 3015 - D

Single Platform Fiber Laser Cutting Solution

## 1.5Kw Solution



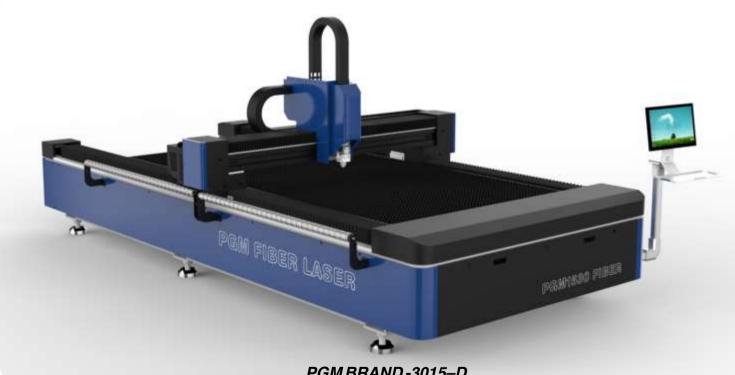


Autofocus cutting head;

The segmented rectangular welded bed.

Auto collection of smoke.

standard: GB/T 19001-2016 ISO 9001:2015



PGM BRAND -3015-D

FLC4020-EA series an economical optical fiber laser cutting machine which aiming at the actual needs of sheet metal processing industry.

This CNC laser cutter is equipped with an international mainstream transmission drive system, new generation of welding machine bed, new designed air circuit control module, new optimized control system and etc., The laser cutting machine is equipped with a new advanced fiber laser and laser cutting head, with superior comprehensive performance.

This fiber laser cutting machine is intelligent, efficient and operation friendly. The machine has the advantages of high cutting speed, good cutting effect, low operating cost, diverse processing, and stable performance.





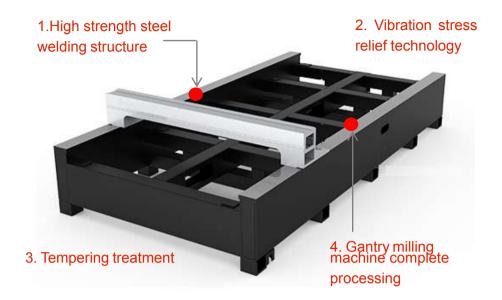
# **Technical Parameters**

| MAIN INFOMATION               |                                     |  |
|-------------------------------|-------------------------------------|--|
| Model:                        | PGM-3015-D                          |  |
| Power:                        | 1500W /2000W                        |  |
| Control system:               | FSCUT2000C                          |  |
| Motor driver:                 | HCFA servo Motor, X750w+Y750w+Z400W |  |
| Cutting head:                 | Raytool BM110 (Auto Focus)          |  |
| Guides:                       | SMG (Jap)                           |  |
| Rack and gears:               | JinTe (Taiwan)                      |  |
| Reducer:                      | SHIPMPO (JAP)                       |  |
| Electronic components:        | CHNT                                |  |
| Lubrication:                  | Automatic system                    |  |
| Chiller:                      | S&A                                 |  |
| Power:                        | 3-Phase, 380V 50/60HZ               |  |
| Power protection level:       | IP54                                |  |
| Air pressure:                 | 16Bar                               |  |
| DATA                          |                                     |  |
| Processing format             | 3000x1500mm                         |  |
| Z distance:                   | 110mm(Up table), 200mm(Down table)  |  |
| Load of worktable (Max):      | 1200kgs                             |  |
| Wavelength:                   | 1080nm                              |  |
| Beam Quality:                 | <0.373mrad                          |  |
| Position visualization:       | Red pointer                         |  |
| No-load speed (Max):          | 100m/min                            |  |
| Acceleration:                 | 1.5G                                |  |
| X/Y-axis position accuracy:   | $\pm$ 0.02mm                        |  |
| X/Y-axis reposition accuracy: | $\pm$ 0.02mm                        |  |
| Gases:                        | O2, N2, Air                         |  |
| Manual control:               | WIFI Wireless                       |  |
| G.W:                          | 2600 kgs about                      |  |





#### **Machine Features:**



# High Strength Machine Bed, Heat Treatment with 12 Hours



High-strength machine tool, adopting 600°C high temperature annealing treatment, with integrated machine rigidity.

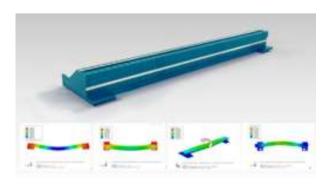
With 12 hours heating and cooling to increasing rigidness and releasing inner stress generated in the machining and welding process, ensure

long-term stable and reliable when cut thick metal plates with high power laser beam(High temperature).

The overall mechanical structure has small deformation and low vibration, ensuring cutting accuracy.

# **High Tensile Strength Beam**

Thanks to the high tensile steel, the beam features lightweight with better dynamic performance; it is formed by high-strength processing, heat-treated, and then rough processed, and then finished after secondary vibration aging treatment, which ensures the overall strength, rigidity and stability of the beam.









# MFSC-1500 High-power Fiber Laser Source

## Premium components, superior performance and longer lifetime





#### Laser Source Features



## **Up to 6KW Output From CW Single Module Series**

Better beam quality vs. multi module lasers, Greatly improved efficiency



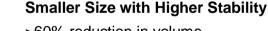
## **Excellent Material Processing Performance**

High speed in thin sheet cutting, Strong capability in thick material processing



# **Compact Design, Maintenance Free**

Highly integrated system with modular design, Easy maintenance significantly reduce TCO





>60% reduction in volume Higher flexibility when integrated in to system



#### **High Level Vertical Integration**

All key components are designed and produced in house Strict quality control, high consistency and reliability





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# **Automatic Focusing Smart Cutting Head**

Raytool BM110 smart cutting head delivers a great performance with stable cutting, simple installation and setup, available for power levels below 3.3KW.

- Dual water cooling circuits.
- Modular design with easy maintenance
- 3 cover glasses(top, middle and bottom) protect collimation & focus lens
- Auto focus to reduce human interxen-tionand improve piercing & cutting efficiency.
- IP65 class dustproof, patented cover glass cover plate, all-around dust prevention.



#### **Head Technical Parameters**

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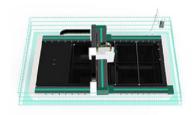
#### **Transmission System**

Equipped with high-end reducer(SHIMPO) and high-precision rack(JinTe), guide rail(SMG), and ball screw to build a complete set of high-precision transmission system, excellent internal quality achieves high standard machining dimensional accuracy, ensuring long-term stable operation of the equipment.









## **Automatic lubrication system**

Whole body layout, automatic lubrication of guide rails and racks.

#### Tiny and Useful

Single platform with open structure which can load material from two directions to achieve tiny machine



## **Control Performance**

FSCUT 2000C 系统高速响应, 抗干扰能力强, 电气维护 简单。 FSCUT2000C system high-speed response with anti-interference capability and simple electrical maintenance.

FSCUT2000C medium power laser cutting system is for 1000-3000W power laser cutting scenarios. It is easy to install and debug with excellent performance and complete solution.

Applicable to 1000W ~ 3000W medium power fiber laser cutting machine, widely used in fabricating industries of metal workpiece, kitchen utensils, lamps, cabinets and more.











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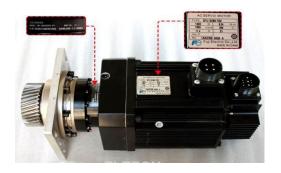
# Dust-proof Electrical Cabinet With Air Conditioner

We add the air conditioner on the control cabinets, which can keep the constant temperature automatically to prevent the high temperature damage for the components.



# Germany Aventics pneumatic proportional valve

The air flow and pressure can be adjusted continuously and proportionally according to the change of input signal.



#### Servo Motor / Leadshine servo

Leadshine servo motor, its quality decides the stability of laser cutting machine, Leadshine offers the most effective motors.

Leadshinei's customized, energy-efficient solutions could withstand high speed and high acceleration. help clients save money and reduce system losses



# Big thickness blade - 4mm thickness.

Bigger thickness blade can prevent laser from penetrating easily. It will save your replace cost.



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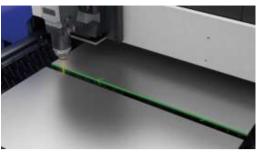
## Stock layout

More reasonable arrangement of parts to reduce sheet metal waste



Automatic edge finding

Multiple edge finding methods to accurately and quickly determine the plate and lifting during the cutting process rotation angle



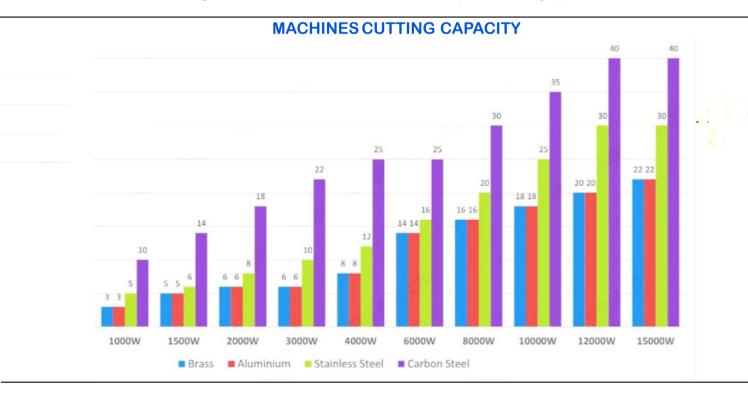
#### One click cutoff

Quickly cut the board and recycle the remaining materials



**Flycut** 

Reduce acceleration, deceleration, to improve cutting speed

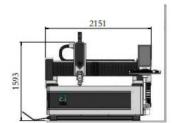


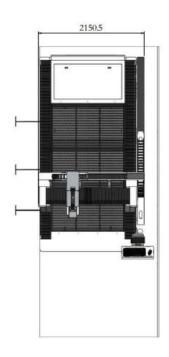


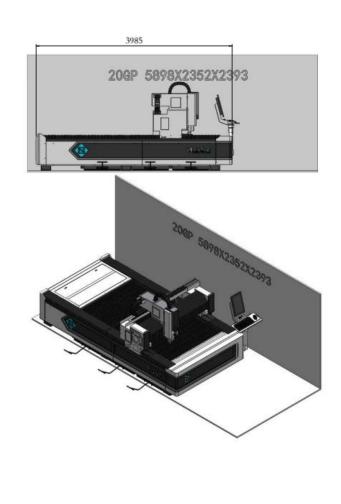


# MACHINE OCCUPATION MAP









### **AGENT**



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