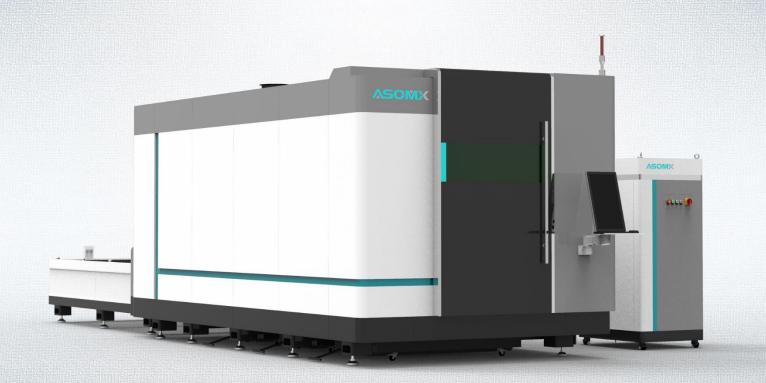
# DATASHEET





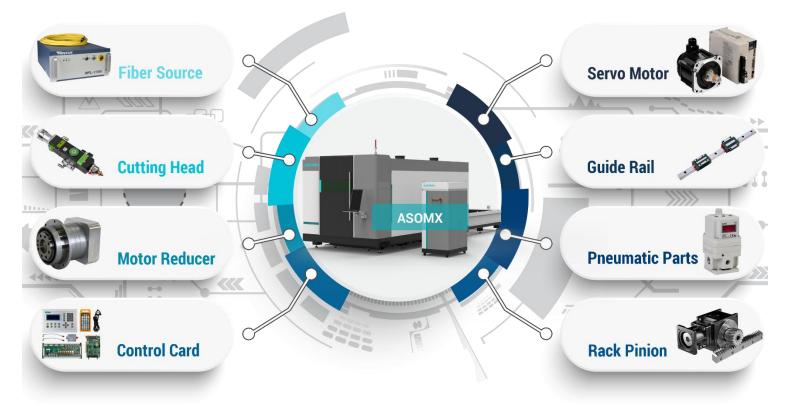
#### **High Power Fiber Laser Cutting Machine**

#### **AF-P Series**



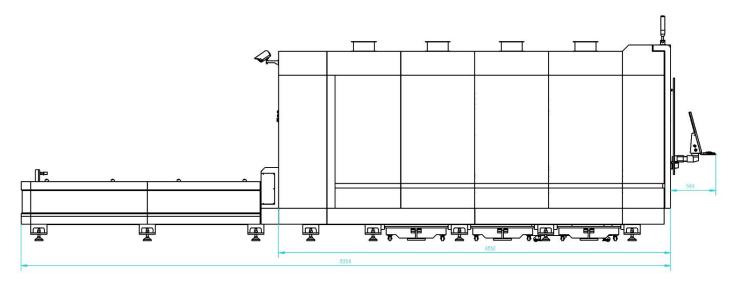
- Stable and rigid bed adopts carbon structure steel plate welding, stagger casing construction, avoids welding stress deformation.
- High-low switching platform, the switching cycle is only 15 seconds, two work tables move independently and do not interfere with each other.
- Yaskawa motor and drive systems offer customers faster revs and better stability.
- Automatically adjust the focal length according to the thickness of the plate, which can read system storage parameters automatically and save time and manpower.
- Independent electric cabinet design, enables the equipment to operate more stably.
- The rack-and-pinion transmission system has better ink viscosity and higher precision, which can shorten feeding time and improve operating efficiency.
- A high-resolution camera is installed inside the machine to monitor the operation inside the protective cover in real-time and to capture any possible problems.
- Cast aluminum beam made of 10 tons of steel die is more rigid and weighs 1/2 less than conventional welded gantry frames.
- Fully enclosed protection design, equipped with optical fiber protection glass, improve the safety level of operators.

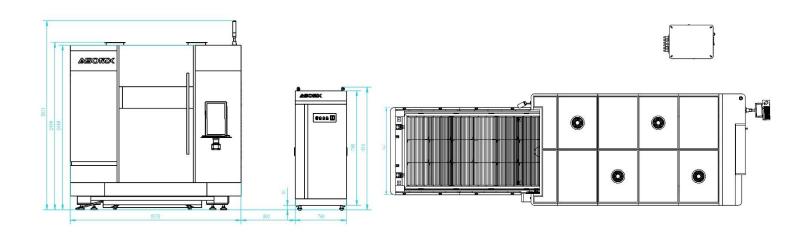
### Components



# Specifications

| Model No.  | AF-P Series  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| Laser Power  | 1000W - 12000W   |  |  |  |  |  |
| Laser Wavelength   | 1080±10nm  |  |  |  |  |  |
| Laser Type   | Single-Core Junction Semiconductor Module  |  |  |  |  |  |
| Cutting Head   | Swiss Raytools / German Precitec   |  |  |  |  |  |
| Working Range  | 1500mm*3000mm  |  |  |  |  |  |
| Optional Range   | 2000mm*4000mm / 2000mm*6000mm / 2500mm*6000mm  |  |  |  |  |  |
| Min. Line Width  | ≤0.1mm   |  |  |  |  |  |
| Worktable Max. Load  | 1000kg   |  |  |  |  |  |
| Max. Acceleration  | 1.5G   |  |  |  |  |  |
| Max. Moving Speed  | 150m/min   |  |  |  |  |  |
| Control System   | Cypcut System  |  |  |  |  |  |
| Positioning Accuracy   | ±0.01mm  |  |  |  |  |  |
| Repeatability Accuracy   | ±0.02mm  |  |  |  |  |  |
| Cooling Type   | Industrial Circulating Water Cooling   |  |  |  |  |  |
| Graphic Format Supported   | DST, PLT, BMP, DXF, DWG, AI, JPG, DXP, PGN, TIF, LAS, etc.   |  |  |  |  |  |
| Compatible Software  | CORELDRAW, PHOTOSHOP, AUTOCAD, ARTCUT, etc.  |  |  |  |  |  |
| Electricity Supply   | 220V/380V±10% 50/60Hz  |  |  |  |  |  |
| Unit Power   | 15.6kw/18.1kw/22.8kw/25.8kw/29.1kw/37kw/45kw/61kw  |  |  |  |  |  |
| Auxiliary Gas  | Compressed Air / Nitrogen / Oxygen   |  |  |  |  |  |
| Operating Temperature  | 0°C-45°C   |  |  |  |  |  |
| Working Humidity   | 45%-95% no condensed water   |  |  |  |  |  |
| Laser Module Life  | 100000hours  |  |  |  |  |  |
| Gross Weight   | 8600kg   |  |  |  |  |  |
| Compatible Software<br>Electricity Supply<br>Unit Power<br>Auxiliary Gas<br>Operating Temperature<br>Working Humidity<br>Laser Module Life | CORELDRAW, PHOTOSHOP, AUTOCAD, ARTCUT, etc.<br>220V/380V±10% 50/60Hz<br>15.6kw/18.1kw/22.8kw/25.8kw/29.1kw/37kw/45kw/61kw<br>Compressed Air / Nitrogen / Oxygen<br>0°C-45°C<br>45%-95% no condensed water<br>100000hours |  |  |  |  |  |





# Configurations



Cast Aluminum Beam



Hiwin Guide Rail



Plate Welding Bed



Yaskawa Servo Motor



Precitec Cutting Head



IPG/Raycus Resonator



MotoReducer

YYC Rack Pinion

it in

#### Parameters

Material thickness

| Laser Power    |                    | 3mm | 6mm | 9mm | 12mm | 15mm | 18mm | 21mm | 24mm | 27mm | 30mm |
|----------------|--------------------|-----|-----|-----|------|------|------|------|------|------|------|
|                | Carbon steel       |     |     |     |      |      |      |      |      |      |      |
| 1000W          | Stainless Steel    |     |     |     |      | -    |      |      |      |      |      |
|                | Aluminum           |     |     |     |      |      |      |      |      |      |      |
|                | Non-ferrous Metals |     |     |     |      |      |      |      |      |      |      |
|                | Carbon steel       |     |     |     |      |      |      |      |      |      |      |
| 1500W          | Stainless Steel    |     |     |     |      |      |      |      |      |      |      |
|                | Aluminum           |     |     |     |      |      |      |      |      |      |      |
|                | Non-ferrous Metals |     |     |     |      |      |      |      |      |      |      |
|                | Carbon steel       |     |     |     |      |      |      |      |      |      |      |
| 2000W<br>3000W | Stainless Steel    |     |     |     |      |      |      |      |      |      |      |
|                | Aluminum           |     |     |     |      |      |      |      |      |      |      |
|                | Non-ferrous Metals |     |     |     |      |      |      |      |      |      |      |
|                | Carbon steel       |     |     |     |      |      |      |      |      |      |      |
|                | Stainless Steel    |     |     |     |      |      |      |      |      |      |      |
|                | Aluminum           |     |     |     |      |      |      |      |      |      |      |
|                | Non-ferrous Metals |     |     |     |      |      |      |      |      |      |      |
|                | Carbon steel       | I   |     | I   |      |      |      |      |      |      |      |
| 4000W          | Stainless Steel    |     |     |     |      |      |      |      |      |      |      |
|                | Aluminum           |     |     |     |      |      |      |      |      |      |      |
|                | Non-ferrous Metals |     |     |     |      |      |      |      |      |      |      |
|                | Carbon steel       |     |     |     |      |      |      |      |      |      |      |
| 6000W          | Stainless Steel    |     |     |     |      |      |      |      |      |      |      |
|                | Aluminum           |     |     |     |      |      |      |      |      |      |      |
|                | Non-ferrous Metals |     |     |     |      |      |      |      |      |      |      |
|                | Carbon steel       |     |     |     |      |      |      |      |      |      |      |
| 8000W          | Stainless Steel    |     |     |     |      |      |      |      |      |      |      |
|                | Aluminum           |     |     |     |      |      |      |      |      |      |      |
|                | Non-ferrous Metals |     |     |     |      |      |      |      |      |      |      |
|                | Carbon steel       | 1   |     | 1   |      |      |      | 1    |      |      |      |
| 12000W         | Stainless Steel    |     |     |     |      |      |      |      |      |      |      |
|                | Aluminum           |     |     |     |      |      |      |      |      |      |      |
|                | Non-ferrous Metals |     |     |     |      |      |      |      |      |      |      |

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Max. cutting thickness ( do not suggest to cut for a long time)

# Samples

