

Single Table Plate and Tube Laser Cutting Machine

AF-R Series

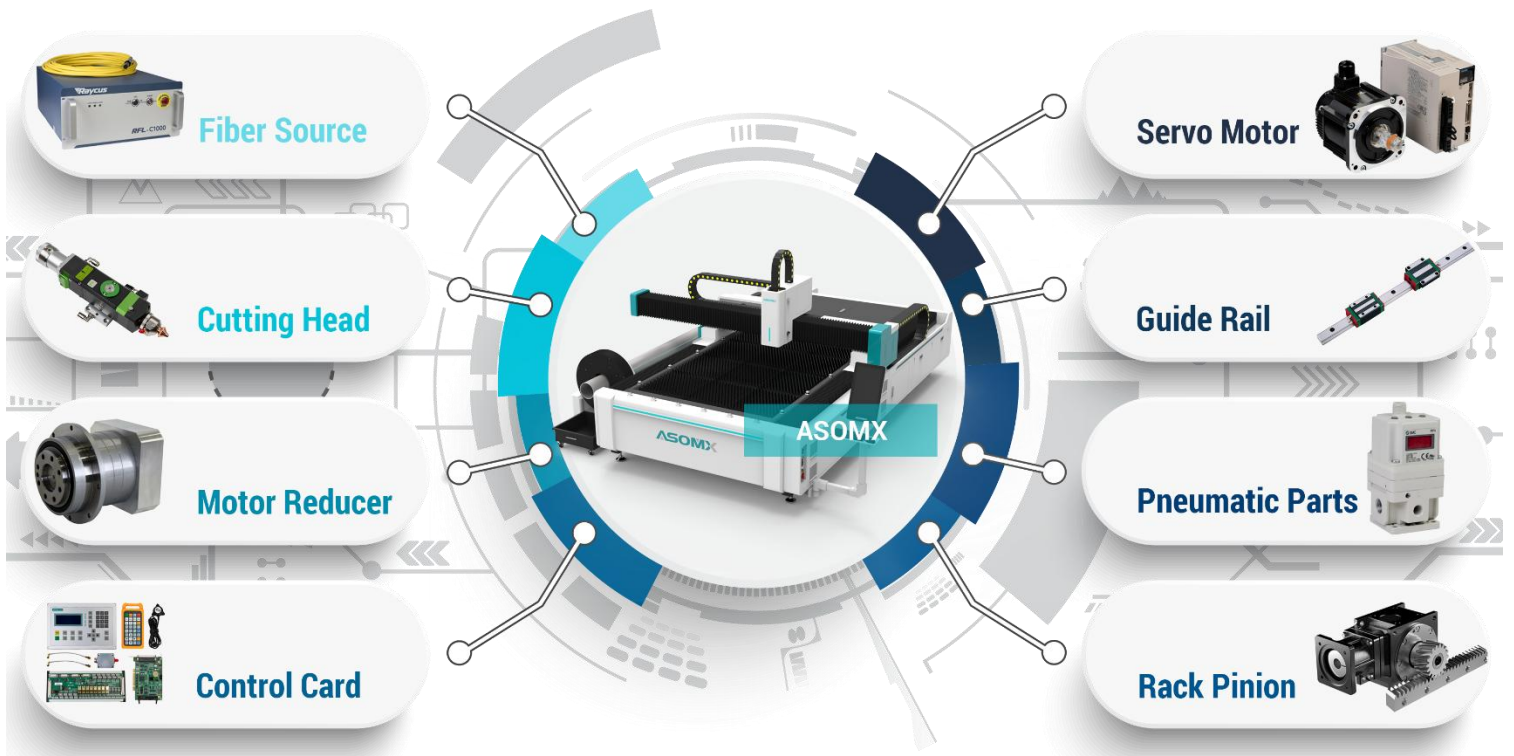
SAFETY
LEVEL

AESTHETICS

COSTING

- ◆ Heavy-duty gantry structure to ensure the stability of machine operation, with good impact resistance and wear resistance.
- ◆ The machine operation interface has the affinity, close to the user, pays attention to the user experience, optimizes the function and the algorithm to make the system more stable and efficient.
- ◆ 360-degree radar system will predict and detect any obstacles, making the Z-axis high-speed to immediately avoid colliding obstacles.
- ◆ The rack and pinion drive system has better rigidity and higher precision saves feeding time and makes the operation more efficient.
- ◆ The electric motor in the rotary device can freely adjust the rotational speed, which is convenient to work, low noise, high rotational speed and high precision.
- ◆ Aluminum alloy beam can improve the running speed of the equipment, improve the processing efficiency and ensure the processing quality.
- ◆ Intelligent layout of graphics cutting, support multi-graphics input, automatically optimize the cutting order, intelligent edge search, automatic positioning.
- ◆ The self-designed combination of rotary and plate processing technology saves high cost and space.
- ◆ Automatic drift correction function, automatic center finding function, very intelligent, convenient and practical.

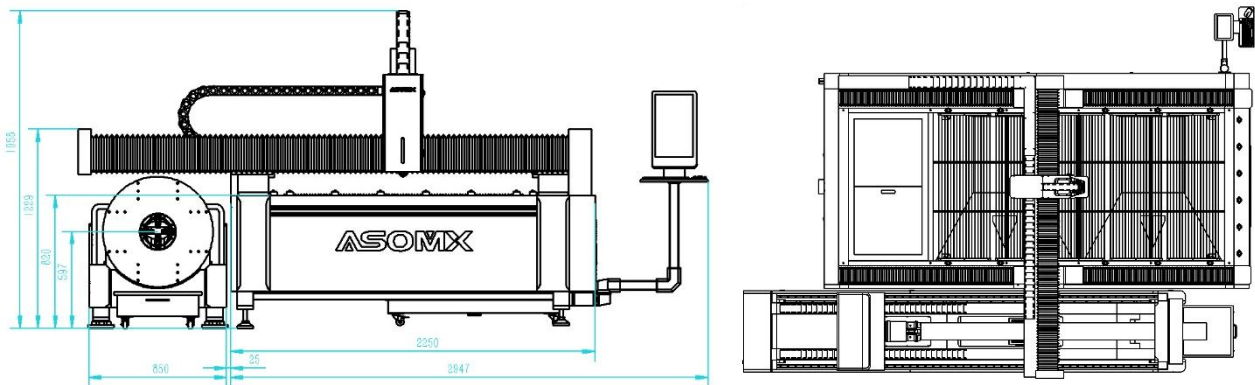
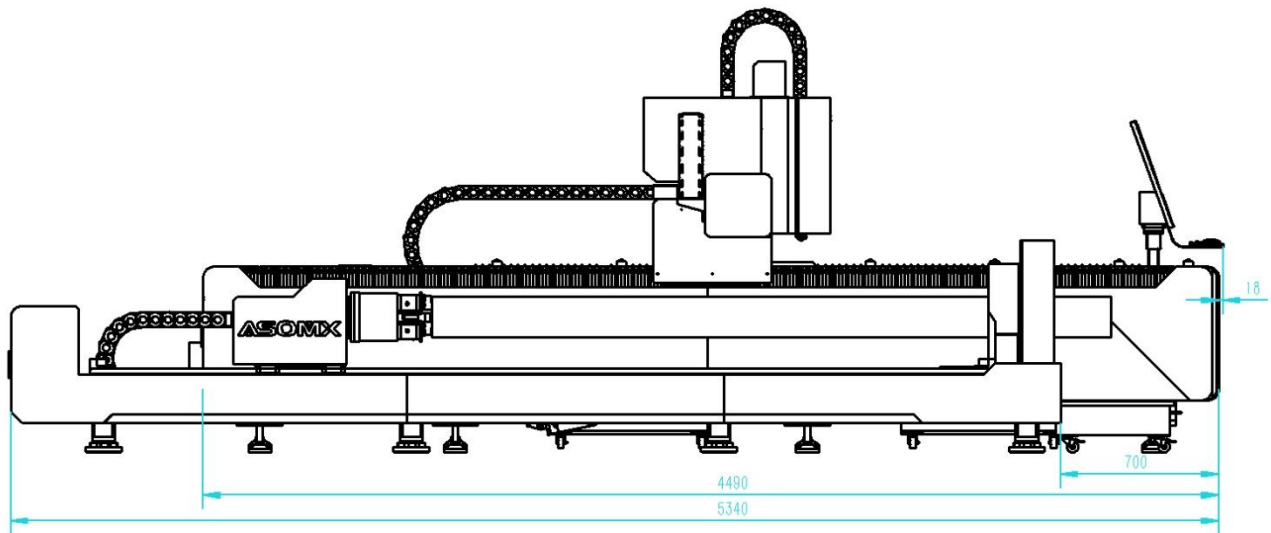
Components



Specifications

Model No.	AF-R Series
Laser Power	1000W/1500W/2000W/3000W/4000W
Laser Wavelength	1080±10nm
Laser Type	Single-Core Junction Semiconductor Module
Cutting Head	Swiss Raytools / German Precitec
Working Range	1500mm*3000mm
Optional Range	1500mm*4500mm
Min. Line Width	≤0.1mm
Worktable Max. Load	1000kg
Max. Acceleration	1.5G
Max. Moving Speed	120m/min
Control System	Cypcut & Cypcube 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	18.6kw/21.1kw/25.8kw/28.8kw/32.1kw
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	5650kg

Layout



Configurations



Cast Aluminum Beam



Plate Welding Bed



Yaskawa Servo Motor



IPG/Raycus Resonator



Hiwin Guide Rail



YYC Rack Pinion



Precitec Cutting Head




MotoReducer

Parameters

Material thickness

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

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

Samples

