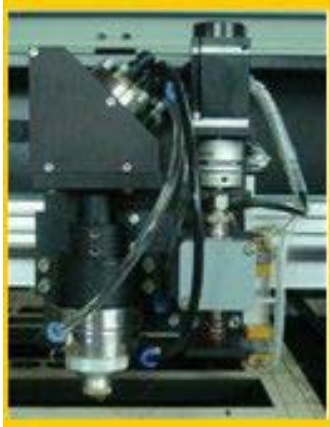


Alpha
systems

FR Series Laser Cutter





Auto Focus head



Industrial Modular
Aluminium Structure



Aluminium saw tooth platform - prevents reflection



Linear Guide &
precision ball screw drive



Hybrid AC
servo motors

FIBER LASER GENERATOR

Fiber Laser Module, Low Energy Consumption. Saves energy and protects environment. Photoelectric conversion rate is up to 25-30%. Low electric power consumption, it is only about 20%-30% of traditional CO2 laser cutting machine. Lifetime is more than 100,000 hours, almost free maintenance.

CONTROL ALGORITHM

The acceleration / deceleration control algorithm allows for rapid and smooth operations without affecting cutting quality. Gives sharp corners even at rapid speed.

OPTICAL PATH

Fiber transmission. No need of reflect mirrors, no need to adjust optical path, laser source, no need of complicated laser beam transmission system, the laser beam is fixed.

USER FRIENDLY CONTROL

Digital Numerical control system provides simplicity of operation, with complete powerful functions, maintenance friendly, and gives material and time saving.

AUTO FOCUS HEAD

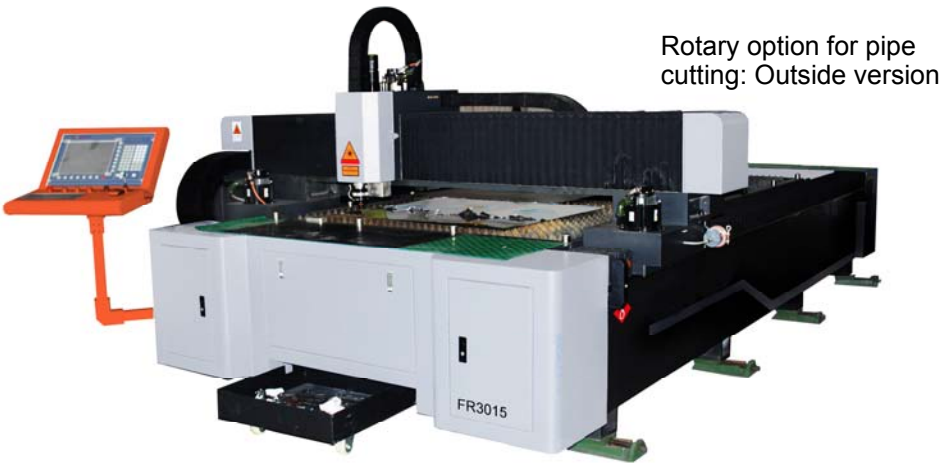
An automatic sensor senses the capacitance from the tip of the isolated cutting nozzle to the metal being cut. This data is then fed into the Height Follower Controller. If the metal sheet have wavy surfaces, the focus height follower can ensure constant distance between the nozzle and the plane of the metal sheets to be cut, so that consistent cutting quality can be achieved. It can avoid defects caused by wavy metal surfaces and also avoid collusion between the nozzle and sheet metal.

OPTIMIZED WORK BED

Work bed is made of saw tooth steel strips to give better cutting effect and easy removal of scrap materials.

GAS SUPPLY

Air, Oxygen, Nitrogen, Argon gas, Xenon gas and other inert gases can be used to cut. Oxygen cuts thicker than Nitrogen, but Nitrogen cuts smoother than Oxygen on the edge. User can choose different gas to cut metals according to the metal thickness and requirement.



Rotary option for pipe cutting: Outside version



Rotary option for pipe cutting: Inside version

Specifications		
Model	FR2513	FR3015
Work area X x Y x Z	1300 x 2500 x 100 mm	1500 x 3000 x 100 mm
Laser Power	500 W, 1000 W	
Laser Type	Fiber Cable	
Laser Power Stability	+/- 1.25%	
Max. moving speed	500 mm/sec	
Precision	+/- 0.1 mm	
Drive system	Linear Rail with ball screw	
Motors	Servo motors	
Power Supply	220V/50Hz +/-10%	
Machine Noise	<75dB	