



ALPHA E series fiber laser cutting machine has been designed for thin sheet metal cutting. 600° C heat treatment has been done on the whole machine body, which give Alpha FL series laser cutting machine a minimum 20 years life without mechanical distortion. With most updated fiber laser technology, you can cut your job faster and cheaper.

Features:

- ❖ 1500x3000mm cutting area
- ❖ Designed for thin sheet metal
- ❖ Good energy efficiency, low power consumption and environmental friendly
- ❖ With laser gas or clean dry compressed air
- ❖ Equipped with Raycus laser/IPG laser
- ❖ 750W, 1KW or 1.5KW fiber laser
- ❖ Optional 1.3x2.5mm cutting table

YAG laser 650W Vs Fiber laser 750W

	YAG 650W	Fiber 750W
Machine cost	\$60,000~\$85,000	From \$75,000 to \$85,000
Power Efficiency	2~3%	30~50%
Cutting speed	3m/min - 1mm stainless steel	9m/min - 1mm stainless steel
Power consumption	30 Kw/h	7 Kw/h
Maintenance	Periodic replacement of flash lamps, laser alignment	maintenance free
Reliability	500 – 1,000 hours (lamp-pumped) 10,000 – 20,000 hours (diode-pumped)	Above 50,000 hours



Model	1530E
Working Area	1500 x 3000mm
Weight	2000kg
Z axis travel	40mm
Laser power	750W/1000W/1500W
Feed rate	35m/min
Repetition	0.05mm
Power supply	415V/50Hz 3 phase
Power Consumption	≤15kVA
File formats	DXF,NC CODE
Suitable material	Mild steel, stainless steel, Galvanised sheet, aluminium



Performance comparison of 1000W and 750W fiber laser source

1000W fiber cutting speed				750W fiber cutting speed			
Cutting carbon steel by Oxygen				Cutting carbon steel by Oxygen			
Materials	Thickness(mm)	Gas	Cutting speed (m/min)	Steel	Thickness(mm)	Gas	Cutting speed (m/min)
Carbon steel	0.8	N ₂	14	Carbon steel	0.8	N ₂	10
	1.2	N ₂	10		1.2	N ₂	7.5
	2.0	O ₂	5.5		2.0	O ₂	4
	3.0	O ₂	3		3.0	O ₂	2.2
	5.0	O ₂	1.6		5.0	O ₂	1.0
	6.0	O ₂	1.0		6.0	O ₂	0.7
	8.0	O ₂	0.7				
Cutting stainless steel by nitrogen				Cutting stainless steel by nitrogen			
Materials	Thickness(mm)	Gas	Cutting speed (m/min)	Materials	Thickness(mm)	Gas	Cutting speed (m/min)
Stainless steel 304	0.5	N ₂	25	Stainless steel 304	0.5	N ₂	20
	1.0	N ₂	12		1.0	N ₂	9
	1.2	N ₂	10		1.2	N ₂	7
	1.5	N ₂	7.5		1.5	N ₂	5
	2.0	N ₂	4.5		2.0	N ₂	3.3
	3.0	N ₂	2.2		3.0	N ₂	1
	4.0	N ₂	1.2				