

## CF Series Fibre Laser Cutting Machines

CF series fiber laser cutting Machines, absorbed advanced technology from Europe & USA, are high end NC machines. Product, certificated by ISO9000 Quality Management System, is presenting stable cutting performance with 90% imported brand components from overseas, such as laser source, cutting head, NC controller & auto-nesting software etc. Cutting machine is structured with gantry frame, which has excellent strength and stability, and high precision ball screw with linear slider driven.

Machine has been well calibrated to achieve fast cutting speed without compromising high precision, for sheet metal cutting less than 4mm applications. Furthermore, fiber laser, which is a new technology with best beam quality, perfect focused beam spot size, high plug efficiency, maintenance free, cost effective and compact size, no lasing gas required, is deemed to be a revolutionary manufacturing tool of machinery.



**Features:**

- A perfect combination of fiber laser with CNC technique
- Professional CNC control system with user friendly HMI
- Gantry structure
- Shuttle loading table
- AC servo motion control with fully enclosed high precision ball screw and linear slider
- Auto tracking capacitor sensor to maintain constant focus position
- High pressure of assisted gas, up to 20Bar
- Suction system to remove fume and dust
- Can be extended for pipe cutting

**Applications:**

Cutting sheet metals such as mild steel, stainless steel, titanium, zinc coated steel, etc.

**Technical specifications:**

Model	CF3015	CF1212
Laser Source	Fiber Laser	Fiber Laser
Wavelength	1070nm	1070nm
Laser Power	500W (or 1000W)	500W (or 1000W)
X travel	3000mm	1250mm
Y travel	1500mm	1250mm
Z travel	100mm	120mm
Positioning accuracy	$\leq \pm 0.03\text{mm/m}$	$\leq \pm 0.03\text{mm/m}$
Repeatability	$\leq \pm 0.02\text{mm}$	$\leq \pm 0.02\text{mm}$
Max sheet dimension	3000 x 15000mm	1250 x 1250mm
Max positioning speed	60m/min	60m/min
Power supply	380VAC/50Hz/60A/3phase	380VAC/50Hz/60A/3phase

Remark:

1. Other fiber laser power levels available upon request.
2. Other size tables available upon request.

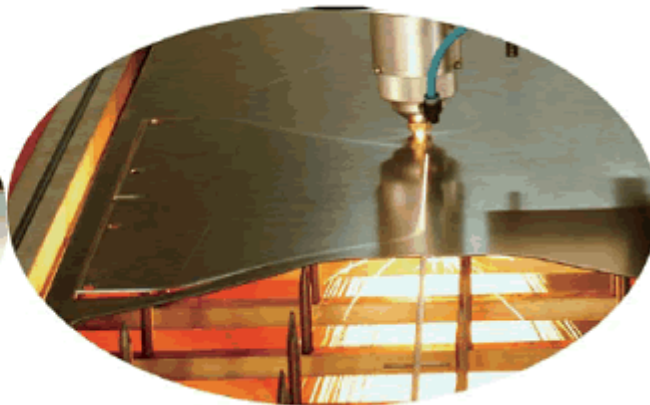
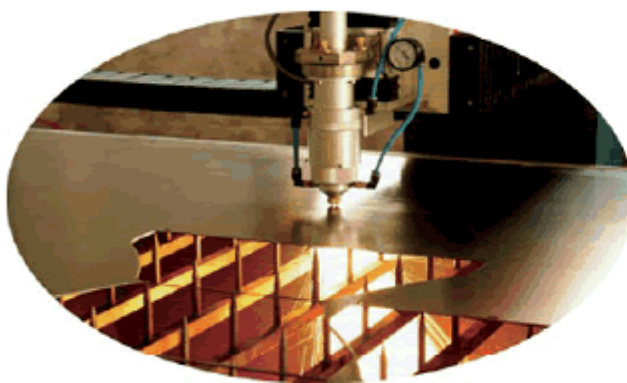
**Cutting capabilities:**

Laser power (W)	Metal	Metal thickness (mm)	Cutting speed (m/min)	Assistant gas
1000	Stainless steel	1.0	22	Nitrogen
1000	Stainless steel	2.0	6.5	Nitrogen
1000	Stainless steel	3.0	3.5	Nitrogen
1000	Stainless steel	4.0	2.0	Nitrogen
1000	Stainless steel	5.0	0.8	Nitrogen
500	Stainless steel	1.0	12	Nitrogen
500	Stainless steel	1.2	9.6	Nitrogen
500	Stainless steel	2.0	2.4	Nitrogen
500	Stainless steel	2.5	1.5	Nitrogen
500	Stainless steel	3.0	0.9	Nitrogen
1000	Mild steel	1.0	12	Oxide
1000	Mild steel	2.0	7	Oxide
1000	Mild steel	3.0	4	Oxide
1000	Mild steel	4.0	2.5	Oxide
1000	Mild steel	5.0	2	Oxide
1000	Mild steel	6.0	1.6	Oxide
1000	Mild steel	8.0	1.1	Oxide
1000	Mild steel	10	0.8	Oxide
500	Mild steel	0.5	24	Oxide
500	Mild steel	1.0	15	Oxide
500	Mild steel	1.5	4.8	Oxide
500	Mild steel	2.0	3.6	Oxide

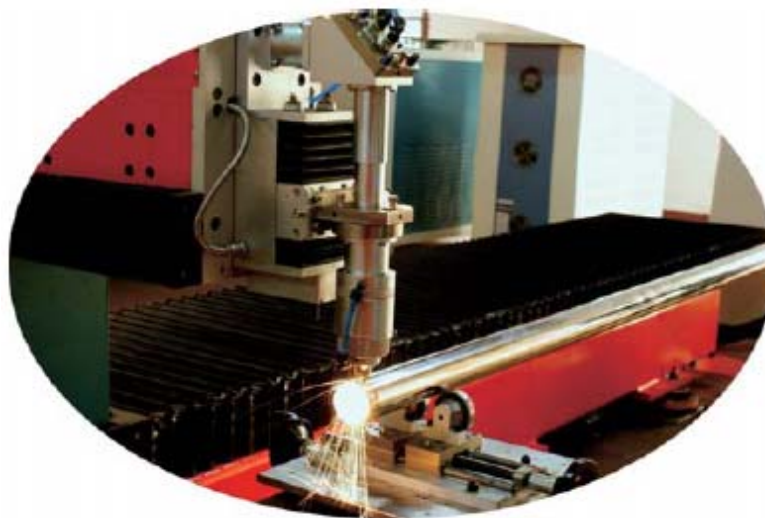
500	Mild steel	2.5	2.4	Oxide
500	Mild steel	3.0	1.8	Oxide
500	Mild steel	4.0	1.5	Oxide
500	Mild steel	5.0	1.2	Oxide
500	Mild steel	6.0	1.1	Oxide

The above data are for your reference only. The actual cutting speeds depends on gas parameters, lasers, cutting heads,

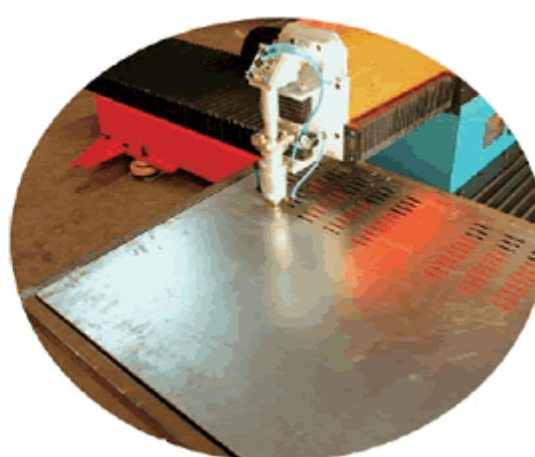
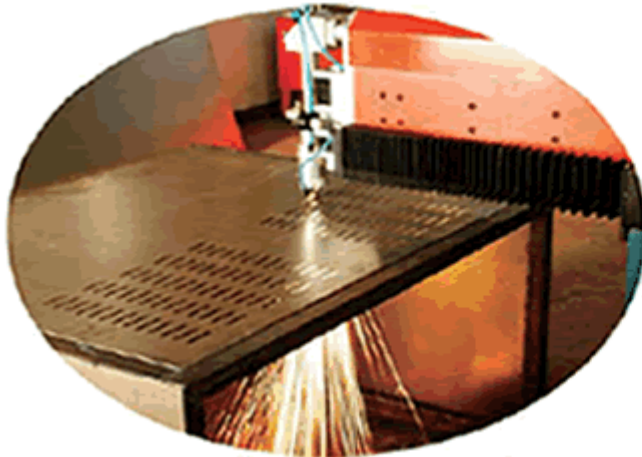
#### **Cutting Solutions-----Metal sheet being processed**



#### **Cutting solutions-----Metal tube being processed**



#### **Cutting solutions-----Metal racks and cabinets being processed**





## Cut Samples



1mm stainless steel



1mm copper



1mm aluminum



3mm carbon steel



Φ57X1.5mm steel pipe



1mm carbon steel



2mm brass

