

KM1309FC/KMLF1313FC FIBER LASER

ENCLOSED COMPACT FIBER/CO2 COMBINATION MACHINE

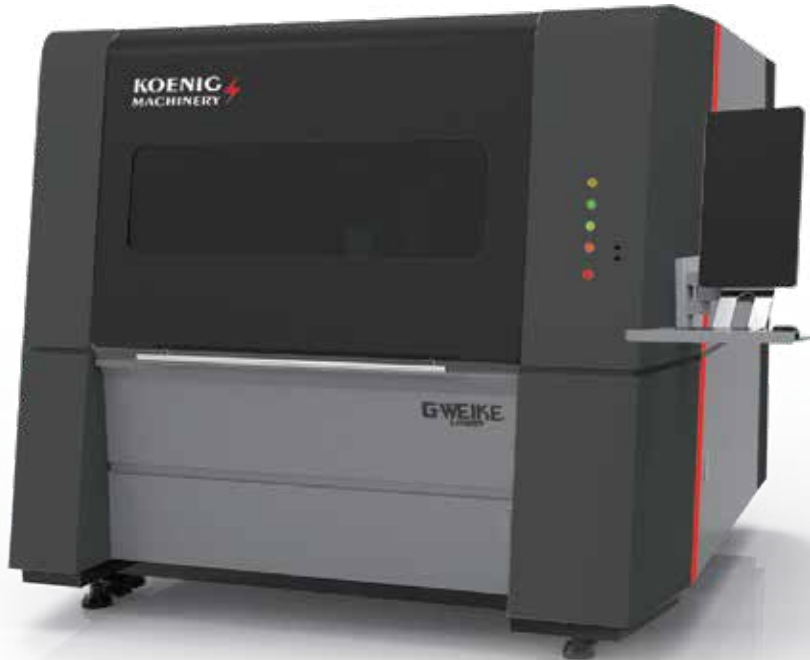
Bed Size: 1300x900mm / 1300x1300mm

Fiber Laser source : MAX, Raycus or IPG

Power : 1kW, 1.5kW, 2kW

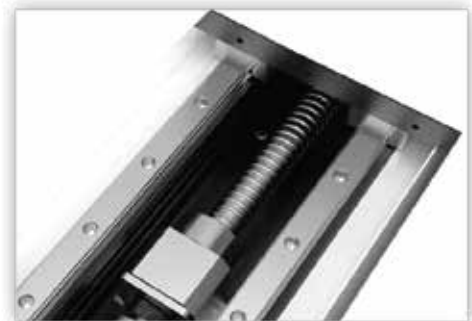
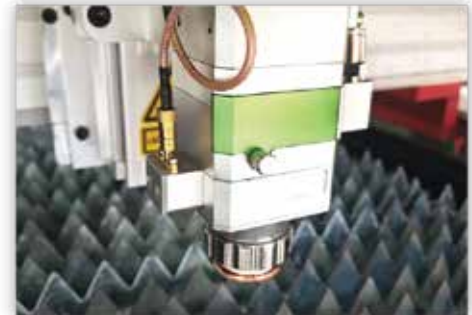
CO2 Laser source : 280W Joy Laser

“The KM1390FC is a fully enclosed combination fiber and CO2 laser machine, designed for the best cutting quality for both metal and non-metal materials. Perfect for education and business use, it is suitable for cutting thin sheet metals such as carbon, stainless steel etc., while also allowing for cutting of plastics, woods, foam, fabric etc. The 1300x1300mm bed size (half sheet), will allow for an even larger cut, while still providing a small overall footprint. Designed for precision cutting this machine has a full enclosure with CE certified protection safety glass.”



FEATURES:

- Combination metal/non-metal cutting with huge 280W CO2
- 1300x900mm or 1300x1300mm bed with full enclosure
- Removable access door at the rear for loading full sized sheets (Use the machine to cut down larger stock before processing)
- Large Viewing window with bright internal lighting• Cypcut software - Easy to use and compatible with most files
- Automatic edge seeking
- BCS100 Automatic material tracking - Follows material surface allowing cutting of materials with slight bending or warping
- Raytools precision automatic focussing laser head -metal cutting
- Positioning and re-positioning accuracy 0.03mm
- Large Portrait monitor, built-in computer, and wireless controller
- Aviation 3rd generation aluminium gantry - Lightweight/strong
- Delta servo motor drive
- Dual TBI ground ball screw drive - Extremely high precision and supported on 2 both sides
- HIWIN guide rails
- BCS100 Automatic material tracking - Follows material surface allowing cutting of materials with slight bending or warping
- Ball bearing rollers for loading on the front and right side
- Protective cover for drive system
- Industrial S&A water cooling unit
- Under table exhaust system, high pressure exhaust fan included
- Electronic regulators for all gas connections O2, N2 and compressed air, allowing for fully software controlled pressure



CAPACITY:**CO2:**

With 280W - Cut up to 25mm Wood/Ply/Bamboo/MDF, 30mm Acrylics, Perspex, laminates etc.
 Also cutting leather, paper, cardboard, rubber (stamps), foam, felt, fabric, etc.

FIBER:

1kW - Up to 10mm Mild Steel, 5mm Stainless Steel, 3mm Aluminium, 2mm Brass

1.5kW - Up to 14mm Mild Steel, 7mm Stainless Steel, 5mm Aluminium, 3mm Brass

2kW - Up to 18mm Mild Steel, 9mm Stainless Steel, 8mm Aluminium, 5mm Brass

NOTE: IPG laser source required for aluminium, Brass and other non-ferrous metal cutting.



Technical Parameters	Specification
Fiber Laser Power	1kW / 1.5kW / 2kW
CO2 Laser Power	280W
Bed size	LF1309 – 1300* 900mm LF1313 – 1300* 1300mm
Machine Size	LF1309 – 2110(W)*2360(D)*1630(H)mm LF1313 - 2110(W)*2660(D)*1630(H)mm
Laser source type	MAX, Raycus or IPG Fiber + JOY CO2 laser tube
Laser Head Type	Raytools Automatic focussing laser head BM110 for fiber cutting, standard manual laser head for non-metal
Cooling Type	Industrial Water Cooling – S&A water chiller
Moving Speed	40m/min
Acceleration	0.5G
Laser Output Control	0-100% set by software
Drive method	Japanese Panasonic servo motor and ball screw drive system
Positioning Accuracy	0.008 mm
Re-positioning accuracy	0.02 mm
Minimum line width	0.1mm
Controlling Software	Cycut Control System 2000E, including nesting, edge seeking and automatic crash protection
Graphic Format Supported	Graphics files - Ai, DXF, PLT, Gerber, G code – MaterCam, Type3, Wentai etc.
Compatible Software <i>(for outputting supported formats)</i>	Illustrator, photoshop, CorelDraw, Autocad, Solidworks, MaterCam, Type3, Wentai etc.
Colour Separation	Yes (imports colours to control cutting layers)
Auxiliary Equipment	Exhaust Fan, Industrial water cooling unit
Power Supply	Machine: 1kW = 380V 50Hz 20amp (415V filter supplied) 1.5kW = 380V 50Hz 32amp (415V filter supplied) 2kW = 380V 50Hz 40amp (415V filter supplied) Water chiller = 230V 50Hz 20amp Exhaust fans = 230V 50Hz 10amp
Gas Regulation	Software controlled electronic low- pressure O2 regulator (for fine adjustment at low pressure) And high pressure N2 and Compressed air electronic regulator (high pressure cutting)
Gas connection	O2 (mild steel and copper cutting) – 4 pack min Min 99.7% purity – 10m3/h maximum flow rate – 10bar max pressure N2 (Stainless, Aluminium, Brass and thin Mild steel cutting) – 9 pack min Min 99.9% purity – 40m3/h maximum flow rate – 24bar max pressure Compressed air (Stainless, Aluminium, Brass and thin Mild steel cutting) SEE OUR 18DHY-18Bar or 20DHY-20Bar COMPRESSOR OPTIONS
Working Environment	Temperature:0-45C, Humidity 5-95% (No Condensate Water)