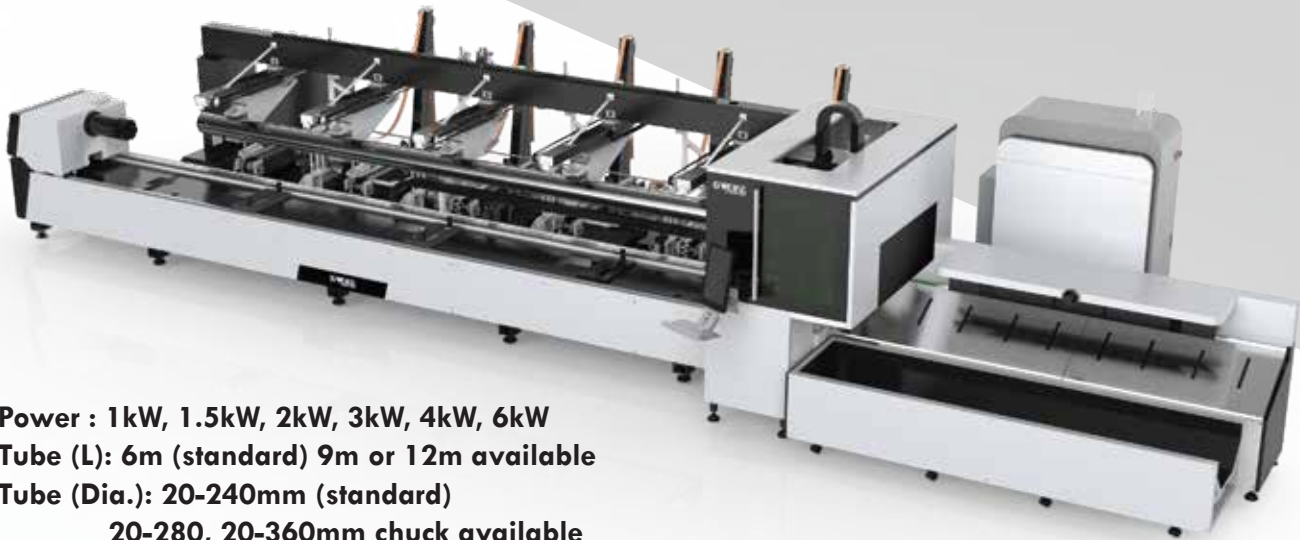


# LF60MA AUTOMATIC TUBE FIBER

Tube Fiber Laser - with Automatic Loading/Unloading

FROM \$195,500+GST



**Power :** 1kW, 1.5kW, 2kW, 3kW, 4kW, 6kW  
**Tube (L):** 6m (standard) 9m or 12m available  
**Tube (Dia.):** 20-240mm (standard)  
20-280, 20-360mm chuck available  
**Laser source :** MAX, Raycus or IPG

“The LF60MA is our automatic loading tube cutting machine with intelligent material separation, feeding and seamless docking the tube into the clamping chuck. Load full bundles of tubes into the feeding device and the machine will load 1 at a time until the pack is finished. The finished product is automatically dropped to the storage bin. This loading solution will save greatly on set-up and production time, heavily decreasing the manpower required for production.”

## FEATURES:

- Up to 7m tube stock with model LF60MA (10m stock length LF90MA, 12.5m stock length with LF120MA)
- Small end piece requirement – 100mm
- Automatic loading from a full pack -1 tube at a time, continuing to cut until required cutting schedule or pack is completed
- Automatic unloading - dropping the tube into a collection bin
- Dual electronic tube clamping- no manual chuck adjustment
- Clamping range 20-240mm standard (20-280mm Chuck or 20-360mm chuck upgrade available)
- Fractional automatic supports along the length of the machine to avoid deformation during cutting (servo-controlled option available for longer weaker profiles such as bar and angle iron)
- Cypcut controller using TubesT Pro professional tube cutting and design software - allowing for all closed and open tube profiles, custom profile design, 3D cut design, array/nesting etc.
- Cypcut 5000 control system with BCS100 Automatic material tracking system track the capacitance anomalies to predict an avoid collisions and controls the tube support height electronically to improve cutting quality and precision
- BOCI or Raytools precision automatic focussing laser head with fine 3D tip (5-axis options available)
- Large Portrait style monitor screen with wireless controller
- TBI Ball screw drive system, Panasonic Servo motors
- Hiwin guide rails and automatic lubrication system
- Electronic regulators for all gas connections O<sub>2</sub>, N<sub>2</sub> and compressed air, allowing for fully software-controlled pressure



**WHY BOCI?**  
Easy servicing  
Lens monitoring  
Gas monitoring  
Precision tracking





“Automatic loading device, designed to accurately grab 1 tube at a time and automatically load and clamp into the front and rear chuck of the machine. Load packs up to a huge 2500kg, allowing the software to control the cutting process through multiple tubes or full packs at a time.”

Technical Parameters	Specification
Laser Power	1kW, 1.5kW, 2kW, 3kW, 4kW, 6kW
Tube Length	LF60MA - 6m Standard model – up to 7m tube length (100mm min end piece) LF90MA - 9m model – up to 10mm tube length (100mm min end piece) LF120MA - 12m model – up to 12.5mm tube length (100mm min end piece)
Clamp Diameter	20-240mm diameter (20-280, 20-360 upgrade available)
Tube weight capacity	240mm chuck = 500kg, 280mm chuck = 400kg, 360mm chuck = 500kg
Maximum pack load weight	2500kg
Outfeed table	3m as standard (extendable options in 1.5 or 3m lengths)
Machine Size	LF60MA - 12694mm*5345mm*2638m LF90MA - 15694mm*5345mm*2638m LF120MA - 18694mm*5345mm*2638m
Laser source type	MAX, Raycus or IPG
Laser Head Type	Automatic focussing laser head with “3D” fine tip 1-2kW = Raytools BM111 3kW = BOCI BLT421 4-6kW = BOCI BLT441 (5 axis head options available – Raytools/BOCI or German LT)
Cooling Type	Industrial Water Cooling – S&A water chiller
Moving Speed	30m/min
Acceleration	1.5G
Laser Output Control	0-100% set by software
Drive method	TBI ball screen drive, Panasonic servo motor control with Hiwin guide rails
Positioning Accuracy	0.03 mm
Re-positioning accuracy	0.02mm
Minimum line width	0.1mm
Controlling Software	Cypcut Control System 5000 – sheet cutting, TubesT lite (standard) or TubesT Pro upgrade - tube
Graphic Format Supported	Graphics files - Ai, DXF, PLT, Gerber, G code – MaterCam, Type3, Wentai etc.
Compatible Software	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 = 415V 50Hz 20amp 1.5kW = 415V 50Hz 32amp 2kW = 415V 50Hz 50amp 3kW = 415V 50Hz 50amp 4kW = 415V 50Hz 60amp 6kW = 415V 50Hz 63amp
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 <b>Compressed air (Stainless, Aluminium, Brass and thin Mild steel cutting)</b> <b>SEE OUR 18DHY-18Bar or 20DHY-20Bar COMPRESSOR OPTIONS</b>
Working Environment	Temperature:0-45C, Humidity 5-95% (No Condensate Water)