



FIBRETECH

Premium Compact Fibre Lasers

FIBRE LASER CUTTING SYSTEM

Machine Overview



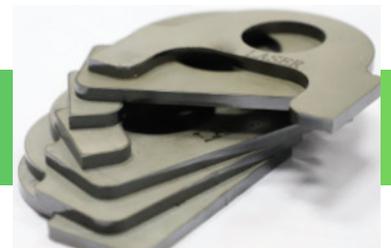
Common Materials

Mild Steel
Carbon Steel
Stainless Steel
Copper
Brass
Aluminium

Our FibreTech Compact Fibre Laser is an industrial solution for sheet metal workshops that have space restrictions or only require shorter run production than our larger Titan systems.

Perfectly suited to engineering and fabrication applications our compact yet highly capable system comes with a generous table size of 1300 x 900 mm.

Can be configured upto 2kW giving even the smallest of workshops impressive capabilities. With it's impressive feature set and competitive pricing the FibreTech is a high speed, ultra accurate metal cutting solution for your business.



Aerospace | Automotive | Sign Making | Fabrication | Prototyping

A compact yet extremely capable metal cutting system. High-speed Operation, with ultra accuracy. Perfect for smaller space concious Workshops.

Standard Features & Equipment

High Performance Laser Source	500W/750W/1kW/1.5kW/2kW (nLight and IPG options available).
Cutting Head	Raytools
Servo Motor & Drive System	Japanese YASAWA, Double Y axis ball screw transmission
Guide Rail System	HIWIN (Taiwan)
Ball Screw	TBI (Taiwan)
Water Chiller System	S & A CWFL500/CWFL800
CNC Control	Cyrcut
Software	Cyrcut laser cutting and control system
Worktable Type	Blade Saw 1300 x 900 mm
Power Requirments	3 Phase AC 380V 50HZ
Delivery	UK mainland included (Offloading and siting of the machine is the end user's responsibility; additional cost option if required). HIAB delivery also available, ask for details.
Installation	Our professional installation team will fully commission your new machine - customer must have the correct electrical/air outputs available (we will advise you on what is required).
Training	Full operational training included, combined with basic software use.
Warranty	12 months standard parts and labour warranty with extended warranty periods available.

Cutting Capacity & Technical Features

Cutting Capacity Chart

Material	500W	750W	1kW	1.5kW	2kW
Carbon Steel	5mm	8mm	10mm	14mm	18mm
Stainless Steel	3mm	4mm	5mm	6mm	8mm
Aluminium	2mm	3mm	3mm	4mm	5mm
Brass	1.5mm	2mm	2mm	1.5mm	2mm
Copper	0.5mm	1.2mm	2mm	2.5mm	2.5mm

*Please note maximum values may differ due to material variation and local environment

Laser Source

Fibre laser light energy is created by banks of diodes. The light is transferred through special fibre optic cable, an efficient energy transfer compared to conventional methods. The light, upon exiting the fibre cable, is then collimated (straightened) as it approaches the focus lens – which intensifies the beam enabling it to cut through the material with astonishing speed and accuracy

Raytools Laser Head - BT240s

Raytools cutting head with high-performance non-contact capacitive height sensor is used and is designed to withstand high 'gas assist' pressures. The proven lens cartridge change system makes switching lenses for different materials or applications fast & simple.

- A.** High cutting speed with the best cutting quality
- B.** Dust proof design
- C.** Protective window (lens) can be replaced as a consumable part, to extend the life of the focusing lens and reduce lens contamination greatly.

Standard High Performance Laser Source

High electro-optical conversion efficiency.

Customised output fibre length.

QBH output connector.

Maintenance free operation.

Wide modulation frequency range (Max. of up-to 50kHz)

Dynamic work range of 10-100% of the rated output

nLIGHT

nLight Laser Source

High Power Options - Delivers excellent productivity for more parts per day and increased profits.

Back-reflection Protection - Hardware based back-reflection protection allows for uninterrupted processing of even the most reflective metals with no damage to the laser.

Unparalleled Serviceability - Modular design simplifies repairs and maximises uptime.

Designed For Rugged Durability - Ensures continuous operation in harsh manufacturing environments.

Multiple Fibre Options - Choice of feed Fibre sizes from 50-200µm



IPG Laser Source

Inherently higher brightness (high and small spot size).

Superior reliability/hot redundancy.

Wall-plug efficiency exceeding that of high brightness direct diode systems.

Modularity and scalability allowing for easy maintenance and low down time.

Fibre optic delivery with a wide choice of output fibre core diameters, optimised for the application.

Compact rugged design.

Ease of integration with scanners and optical heads with the availability of beam switches and sharers, providing unique versatility.

***Speak with your** Technical Sales Engineer who will be able to guide you on the correct source choice.

S & A CWFL Chiller System

- A.** Dual function intelligent cooling system, specifically designed for fibre laser machines, ensuring the efficient operation of laser cutting head and laser source
- B.** $\pm 0.3^{\circ}\text{C}$ Precise temperature control.
- C.** Multiple alarm functions: compressor time-delay protection, compressor over current protection, water flow alarm and high/low temperature alarm.
- D.** Full CE approval, RoHS approval, REACH approval.

Transmission System

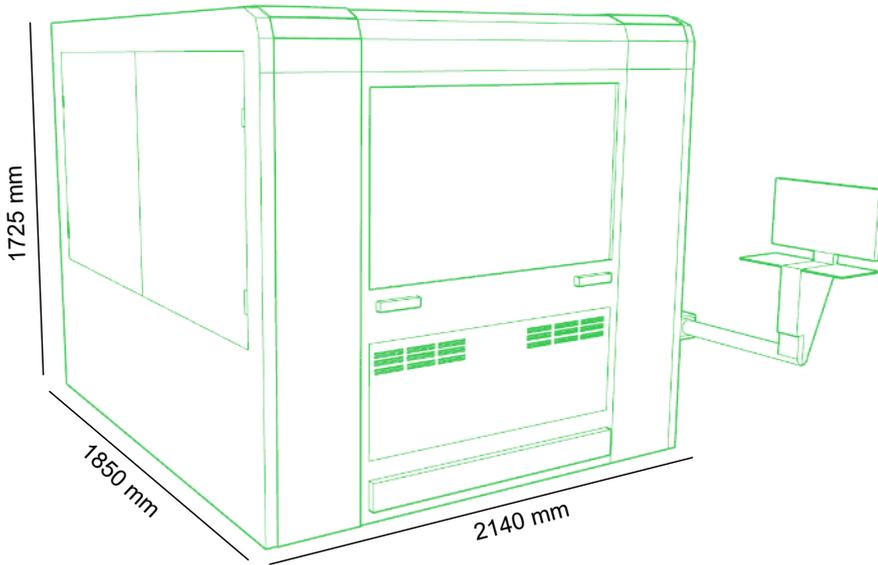
Precise positioning & repeat-ability with 'Double Y Axis' Taiwanese TBI Ball screw system.

Driving System

Closed loop AC servo drive system and servomotors to ensure high dynamics, vibration-free operation and maximum precision

Control Software

- A.** Power Automation CNC Control with integrated I/O
- B.** Each system is equipped with the HMI (Human Machine Interface). With this open, browser based allimportant control functions are clearly represented to the operator, so it will work within shortest training time efficiently and safely with the CNC system.
- C.** The CNC Systems are equipped with high-speed processors to accomplish an extremely fast 'Block Throughput". Highly accurate contours with very small NC blocks can be processed without any loss of speed. Therefore, the machine always reaches its highest productivity.
- D.** Cypcut laser cutting control system Support AI, DXF, PLT and other graphic data formats CAD module/nesting + processing function.



FIBRETECH

**Aerospace
Automotive
Sign Making
Fabrication
Prototyping
Marine Engineering
Mechanical Fabrication
Construction
Electrical Components**

Weight & dimensions

Model	Length (mm)	Height (mm)	Width (mm)	Weight (Approx) (kg)
FibreTech 1390	2140	1850	1725	950

Call us today to discuss your needs
ask to speak with one of our Fibre Laser Industry Experts.

Tel: 0121 541 1444