

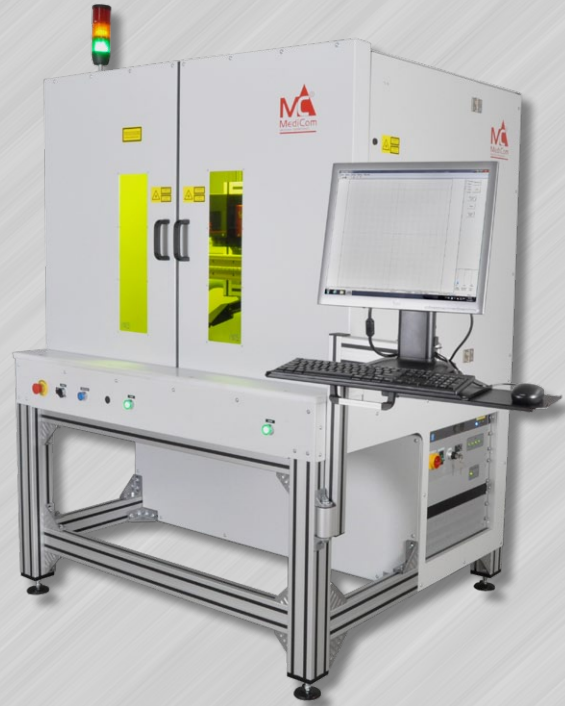
LASERfibre LF-XL

Laser Marking Station with Fibre Laser and sliding doors

- **Diode pumped fibre lasers MediCom LASERfibre LF** are a new generation of marking lasers with fibre as an active material and a set of reliable laser diodes as a pumping source. This new technology brings on much higher efficiency and therefore lower power consumption and lower cooling requirements. Lasers of type **Laserfibre LF** are cooled directly by air. There are no replacement parts and maintenance free design of the laser cuts down number and complexity of maintenance. Due to use of more pumping laser diodes, the reliability increased dramatically and reduced price of ownership of laser.

- Models **LASERfibre LF** are produced as a Q-switched lasers **LF-Q** with power up to 100 W designed for marking and engraving.

- Fibre lasers excels with beam quality and marking quality competes with more powerful diode Nd:YAG lasers. Due to fine spot (about 0.02mm) are useful for fine and precious marking and engraving.



Laser marking workstation type XL with 50 W fibre laser

Station designed with manual sliding doors, fixed insertion table fitted with calibrated holes for replaceable insertion devices.



Laser head is placed on the motorized axes X and Z

Laser is fitted with scanning head with F-theta lens 254 mm and marking field 160x160 mm. Laser power, laser type, size of marking field which affecting spot size are optional.

- Type **LF-XL** is a standalone station with manual feeding. Size and design of the station allows marking of large parts up to 1 m long. The station is suitable for marking a single parts as well as series of thousands.

- A lot of accessories are available, for instance aiming beam, rotary axis, universal holders, RFID programmers, barcode readers, etc.

- Compact design, reliability and long lifetime of this model excels in marking of final components in industry as well as marking of parts and various materials like plastic and metals. Precious and fine marking is useful in all industrial applications. ■

TECHNICAL DATA OF LASER:

Laser		Scanning head	
Type:	ytterbium fibre laser	Principle:	Galvanometric beam deflection in X and Y axis
Wavelength:	1064 nm	Type:	Fast scanners
Pumping type:	laser diodes	Marking speed:	0 - 4000 mm/s
Power:	LFXX-QXL 20, 30, 50, 100 W	Resolution:	2 µm
Laser switching:	Q-switched 100 ns pulses 1 mJ/pulse	Repetition accuracy:	25 µm
Frequency:	Q-switched 5 - 200 kHz	Focusing optics	
MTBF of laser diodes:	Q-switched > 100.000 hours	Marking field:	160 x 160 mm 100x100 mm*, 280 x 280 mm*
		Single line width:	Typically 0.06 mm (0.02-0.1 mm depending on optics configuration)*
		Cooling	
			Direct passive cooling Water free

TECHNICAL DATA LASER*fibre* STATION VERSION "XL":

System control		Vertical feed Z	
Internal:	Control system checks and sets all equipment operational parameters	Type:	linear shift, stepper motor
Master control computer:	Industrial PC, Intel Core i3 @ 3.1 GHz, 4 GB RAM, USB, SSD 80 GB	Control:	electronic
Monitor:	LCD display, 19"	Max. lift:	200 mm
Network:	Ethernet 1000	Horizontal feed X	
Software		Type:	linear shift, stepper motor
Operating system:	Windows 7	Control:	electronic
Design software:	CorelDraw	Max. lift:	400 mm
Control software:	WMark 2012 - the marking control program, Windows environment, full setting of all marking parameters comprehensive set of commands and functions	Other parameters	
		Power supply:	100–240 V, 50/60 Hz
		Input:	300–600 W
		Cover:	IP54
		Load capacity:	Depending on design max. 100 kg
		Maximum part size:	1000x370**x400 mm [wxhxd]
		Dimensions:	1400x1870x1280 mm [wxhxd]
		Weight:	450 kg
		Operating conditions:	Temperature 15 ÷ 33 °C, non-condensing humidity

SELECTED ACCESSORIES*:

Rotary axe		Exhausting system	
Drive:	Step motor, belt transmission	Exhausting unit 1:	180 m3/h, power regulation
Resolution:	6000 steps per revolution		230 V, 1.3 kW
Parts insertion:	Calibrated holes for replaceable insertion devices, sliding T-squares prism	Exhausting unit 2:	400 m3/h, no regulation
			380 V, 3.4 kW
		Other accessories	
			Refer to accessory product brochures and technical data

* Alternative or optional accessories

** According to the focal length of f-theta lens

