

LASERfibre LF-XL

Laser Marking Station with Fibre Laser and rotary carousel

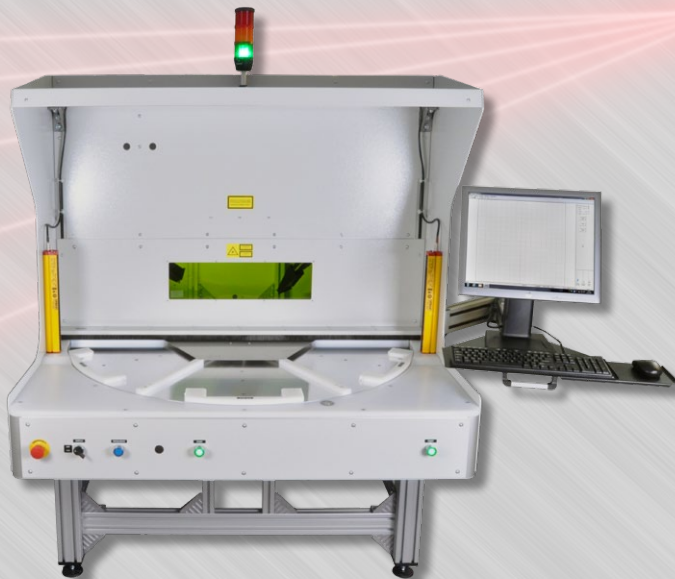
■ **Diode pumped fibre lasers MediCom LASERfibre LF** are a new generation of marking lasers with fibre as an active material and a set of reliable laser diodes as a pumping source. This new technology brings on much higher efficiency and therefore lower power consumption and lower cooling requirements. 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 semi-automatic six positional rotating carousel, fitted with calibrated holes for replaceable insertion devices.



Laser head is placed on the motorized axes Y and Z
Laser is fitted with scanning head with F-theta lens 420 mm and marking field 280x280 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 together with rotating carousel of a diameter 1250 mm allows marking of large parts with a high productivity. 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:	200mm
Network:	Ethernet 1000	Horizontal feed Y	
Software		Type:	linear shift, stepper motor
Operating system:	Windows 7	Control:	electronic
Design software:	CorelDraw	Max. lift:	400mm
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
		Diameter of carousel:	1250 mm
		Dimensions:	1400x1860x1800 mm [wxhxd]
		Weight:	520 kg
		Operating conditions:	Temperature 15 ÷ 33 °C, non-condensing humidity

SELECTED ACCESSORIES*:

Parts insertion:		Exhausting system	
	Calibrated holes for replaceable insertion devices, sliding T-squares prism	Exhausting unit 1:	180 m3/h, power regulation 230 V, 1.3 kW
		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



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