

LASERfibre LF-c

Laser Marking Station with Fibre Laser

- 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 MTBF more than 100.000 hours reduced price of ownership of laser.
- **Models LASERfibre LF** are produced as a continuous (CW) or as a Q-switched laser.
- Q-switched lasers **LF-Q** with power up to 100 W are designed for marking and engraving.
- Both types excel with beam quality and marking quality competes with more powerful diode Nd:YAG lasers. Due to fine spot (about 0.02 mm) are useful for fine and precious marking and engraving.



Q-switched fibre laser 30 W

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.



Laser marking workstation with 30 W laser

is equipped with motorized programmable Z-axis and two positional rotating carousel.

- Type **LF-c** is a standalone station with manual feeding. Sliding table or semiautomatic rotary table are designed for marking single parts as well as series of thousands.
- A lot of accessories are available, for instance aiming beam, rotary axis, universal holders, rotary table, barcode readers, foot switch, 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:	type LFXX-QC 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*, 250 x 250 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 "C":

System control		Vertical feed	
Internal:	Control system checks and sets all equipment operational parameters	Type:	DC motor, worm transition
Master control computer:	Industrial PC, Intel Core i3 @ 3.1 GHz, 4 GB RAM, USB, SSD 80 GB	Control:	Electronic with optical position readout
Monitor:	LCD display, 19"	Load capacity:	100 kg
Network:	Ethernet 1000	Max. lift:	300 mm
		Speed:	0 ÷ 50 mm/s
Software		Other parameters	
Operating system:	Windows 7	Power supply:	100–240 V, 50/60 Hz
Design software:	CorelDraw	Input:	300-600 W
Control software:	WMark 2012 - the marking control program, Windows environment, full setting of all marking parameters comprehensive set of commands and functions	Cover:	IP54
		Dimensions:	1150x1400x700 mm [wxhxd]
		Weight:	180 kg
		Operating conditions:	Temperature 15 ÷ 33 °C, non-condensing humidity

SELECTED ACCESSORIES*:

Rotary table		Exhausting system	
Diameter:	600 mm	Exhausting unit 1:	180 m3/h, power regulation 230 V, 1.3 kW
Drive:	Step motor, V-belt transmission	Exhausting unit 2:	400 m3/h, no regulation 380 V, 3.4 kW
Resolution:	10800 full steps per revolution	Other accessories	
Parts insertion:	Calibrated holes for replaceable insertion devices, sliding T-squares prism	Refer to accessory product brochures and technical data	

* Alternative or optional accessories



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