# LASER MARKING MACHINE FIBER START











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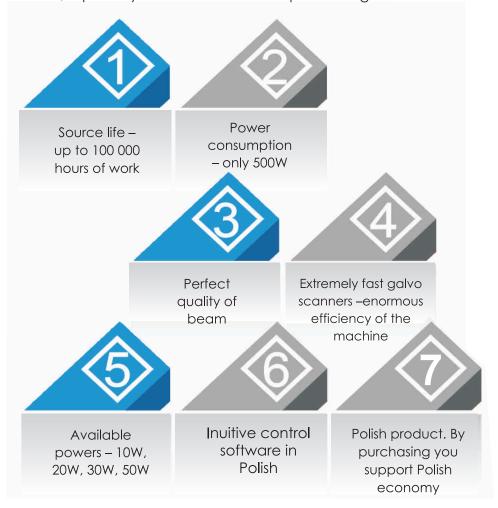
### **APPLICATION**



**Fiber START** is a high-technology device for laser-marking and labeling, equipped in professional source of optical fiber laser. The implemented laser technology guarantees even more precise and faster operations, comparing to other machines available on the market.

The laser eliminates necessity of labeling items with using stickers – it fits ideally for marking barcodes, serial numbers, batches, or other marks codes. Combined with rotary table, the machine is suitable for marking cylindrical items like pens, cups, rollers etc. It is commonly used by advertising agencies, engraving labs, and other industrial companies.

Thanks to the "Fiber" marking technology, shapes of workpieces are clearer and more accurate, in comparison to the older YAG technology. The laser beam can be focused to smaller diameter, thanks to which we obtain higher power density that results in more efficient operations, especially when it comes to deeper carving.



## A

#### THE LIST OF TOOLS APPLICABLE FOR MARKING



Metals (burnished, raw, anodized, coated, brushed)
Noble metals (gold, silver, bronze), nickel, titanium, chrome, polycarbonate,
polypropylene, rubber, leather and leather-like materials, coated wood,
ceramics, coated paper.



#### **TECHNICAL PARAMETERS**



**Fiber START** marking machine is equipped in 1064 nm wavelength laser (similar to machines Nd:YAG), which enables processing of materials that are not available for popular CO2 technology.

No need for constant service of cleaning optical parts – this is what makes the difference with fiber marking machine, easing exploitation and lowering costs (hermetic case eliminates access of any contamination or exhaust gases inside the equipment).

The machine electronics is based on advanced and reliable microprocessor systems, combined with professional utensil of laser ray lead (precise sets of galvanometers), which results in producing even thinner and harder, and what is most important, more effective beam. The whole electronic system is closed in a tight cast (of standard PC size), that makes it easier to put the machine on the workstation, thanks to overall minor dimensions.

BASIC TECHNICAL PARAMETERS FOR FIBER LASER START SERIES MARKING MACHINES	
MACHINE TYPE	MARKING MACHINE GALVO FIBER LASER START
AVAILABLE LASER POWERS	10W, 20W, 30W, 50W
WORK FREQUENCY	20kHz - 80 kHz
LASER TYPE	YTTERBIUM-FIBER LASER
TECHNOLOGY	Q-SWITCH FIBER OPTIC
SCOPE OF WORK	DEPENDING ON THE LENS USED
SUPPLY VOLTAGE	230V 50HZ WITH OPTION 110V
ENHANCED RAY SYSTEM	BEAMEXPANDER
LASER COOLING SYSTEM	AIR (FANS MOUNTED)



## **AVAILABLE F-THETA LENSES**



SCOPE OF WORK	
45 mm x 45 mm	
112 mm x 112 mm	
175 mm x 175 mm	
330 mm x 330 mm	
other upon request	



#### SYSTEM STRENGTHS



- compact marking head
- increased power, allowing faster and deeper engraving
- waterproof marking head
- resistant to high temperatures
- high quality and precision of marking
- prolonged lifespan of the laser beam source up to 100 000 hours
- maintenance-free lasers, no need for periodic inspections
- easy mounting on production lines

## **EXAMPLES OF MARKINGS**



