# MZF-B series

#### Intelligent fiber laser marking machine

#### Average output power:

20W / 30W



Metal engraving, efficient marking



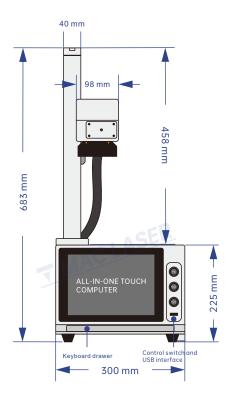


#### PRODUCT DESCRIPTION

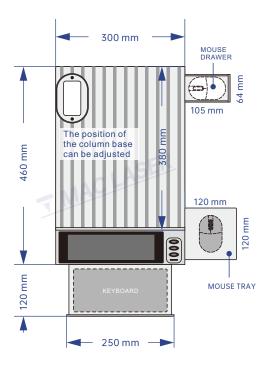
The MZF-B series intelligent laser marking machine belongs to the desktop fiber laser marking equipment. It is a special model specially developed by Mac Laser for the needs of simple, compact, flexible and convenient equipment. The equipment is extremely cost-effective, It adopts high-quality fiber laser source, high-stability galvanometer system, hidden keyboard and mouse design, it can easily meet most common laser marking applications.

The MZF-B series products use a 1064nm wavelength fiber laser source, which is suitable for various metal materials such as iron, copper and aluminum, gold, silver, and some non-metal materials such as PC, ABS, PVC, and PC+ABS.

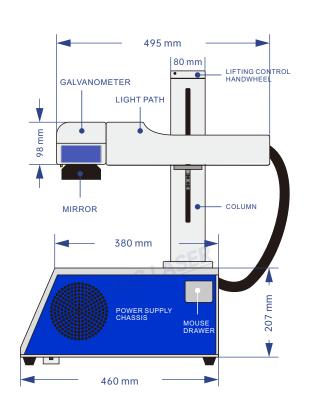
## PRODUCT SIZE



**FRONT VIEW** 



**VERTICAL VIEW** 

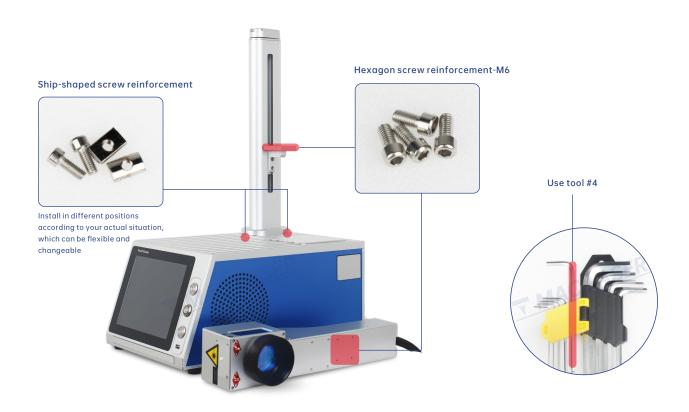


**END VIEW** 



**EQUIPMENT REAL SHOTS** 

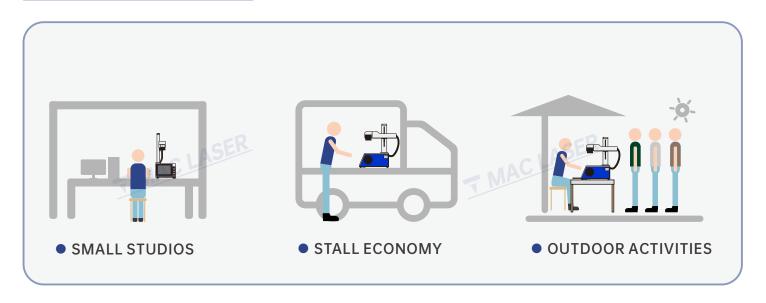
## PRODUCT SIZE



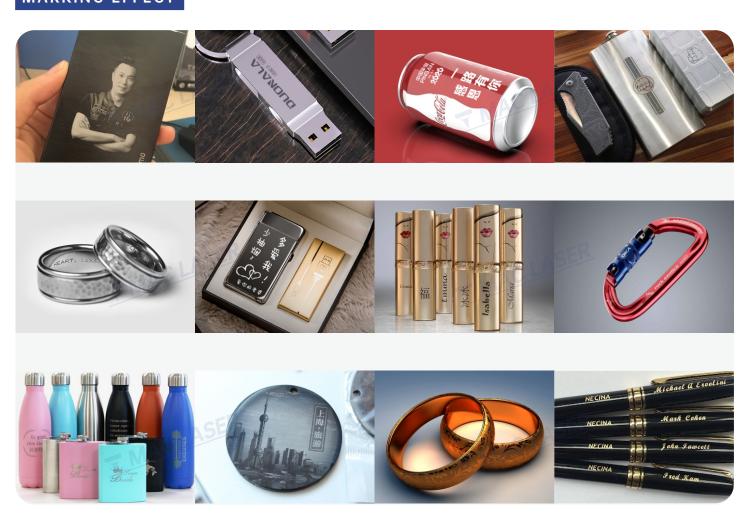




## SCOPE OF APPLICATION



## MARKING EFFECT

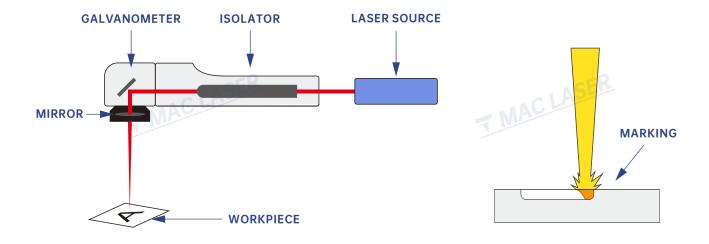


## PRODUCT PARAMETER

Model		MZF-20B	MZF-30B
Laser parameters	Laser source model	MFP-20X/20QS	MFP-30X/30QS
	Output power	18.5W	30W
	Beam quality M <sup>2</sup>	≤1.4	≤1.4
	Pulse repetition frequency	27-60 kHz	30-60 kHz
	Laser wavelength	1064±5	
	Output power stability	< 3%	
	Design life	About 100,000 working hours (non-service life)	
Optical properties	Marking range	100~150mm (range optional)	
	Engraving depth	≤1mm (depending on power and time)	
	Engraving speed	≤10000mm/s	
	Repeat accuracy	±0.002	
	Mininum line width	0. 1mm	
	Minimum character height	0.15mm	
Use environment	Cooling method	Built-in air cooling	
	System power supply	500W / 220V / 50Hz (110V can be connected)	
	Temperature, humidity	0~40°, 30%≤RH≤85%, air conditioner should be installed when used outside the range	
	Oil mist, condensation	Not allowed	
Other parameters	Operating system	Windows operating system	
	File format	All fonts/types of WINDOWS operating system font library (standard USB input)	
	Dimensions	460X300X683 mm	
	Packing size	550X440X690 mm	
	Total Weight	About 25kg	

## LASER PRINCIPLE

The marking is directly hit on the surface with the help of a strong pulsed laser beam to produce extremely deep, high-contrast markings on the surface, achieving permanent markings with uniform viewing angles, and corrosion resistance.



## PRODUCT ADVANTAGES



#### 1. 100% portable

- Compact design, the whole machine is small and portable, and the column light path can be disassembled and assembled at will
- Hidden mouse and keyboard design, one-click pop-up, flexible use and space saving;
- Optional transport box, thick shockproof, hand lever design, more convenient transportation

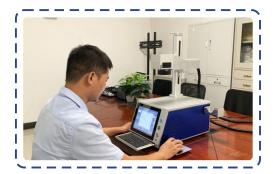
## 2. Cost-effective

- The whole machine is small, flexible, convenient, powerful and not limited by space
- It can run efficiently for 24 hours continuously to improve production efficiency and save cost;
- Stable performance, long service life, one-year warranty and lifetime maintenance.

## 3. High-quality light source

- Using advanced fiber laser, the output beam quality is good, the reliability is high;
- No consumables and maintenance-free, working life is about 100,000 hours.
- It can be flexibly applied to metallic materials and some non-metallic materials.

#### PRODUCT CHARACTERISTICS



#### SMALL AND FLEXIBLE, DIVERSIFIED APPLICATIONS

Desktop optical fiber marking equipment, a special product specially developed for the needs of simple, compact, flexible and convenient equipment.

#### COMPACT AND STURDY STRUCTURE, ONE YEAR WARRANTY

The overall integrated cabinet design, novel style, compact and firm structure, stable performance and guaranteed, we promise that the whole machine is guaranteed for one year.





#### HIDDEN MOUSE AND KEYBOARD

Hidden mouse and keyboard designed for easy portability, one-click pop-up, saving space, wireless mouse, no cable constraints, more flexible use .

## COLUMN BEAM PATH CAN BE FLEXIBLY DISASSEMBLED

The beam path and the column can be flexibly disassembled, the marking position can be arranged as you want, the storage is more convenient; the disassembly and assembly are simple, only need to loosen the screws to disassemble and assemble.



#### PRODUCT CHARACTERISTICS

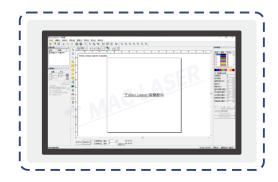


#### ADVANCED FIBER LASER SOURCE

Using high-quality light source, the spot quality is good, the optical power density is uniform, the output optical power is stable, it has the characteristics of no light leakage, anti-high reflection, etc., which meets the mainstream market application requirements .

#### **POWERFUL MARKING SOFTWARE**

The control system is powerful, it can optimize a variety of data according to different processes and support multi-language one-key switching, it meets the application process requirements of most industries in the market .





#### **DOUBLE RED LIGHT METAL GALVANOMETER**

Metal body structure, built-in dual red light marking instructions, with the advantages of adjustment-free, maintenance-free, and high stability, it can be upgraded with high-speed digital scanning galvanometer.

#### THICKENED TRANSPORT BOX-OPTIONAL

250X340X215mm thickened transport box is optional, with advantages of pull lever design, lock switch, built-in shockproof safety cotton, easy to carry,it can be transported easily by air.

