

Desktop Laser Marking Machine

IM-FL300

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The Desktop Laser Marking Machine by REDT Inc. – where advanced technology meets affordability. Our FL series machines are engineered from years of expertise, ensuring top-notch performance across various industries. Elevate your marking efficiency while cutting costs.



Product Features

- Built-in 240mm stroke Z-axis.
- Large working area of 110 x 110 x 220 mm.
- Capable of high-speed marking on various metals.
- Supports different types of marking such as standard, black, deep, and color marking.
- Built-in guide laser pointer for easy engraving position checking.
- Built-in automatic and semi-automatic Z-axis control system.
- Two focus pointers built-in for easy checking and setting of focus height depending on material height.
- Supports marking on cylindrical or pipe-shaped materials with a rotary clamp for external or internal curved surfaces.
- High-precision scan heads can mark small characters which is hard to identify with the bare eye.
- Compact size suitable for installation in tight spaces.
- Comes with dedicated software.
- Designed with switches for external device control.
- I/O ports support integration with external devices.
- Easy control with a direct control switch for the dust collector and built-in AC outlet.
- Automatic correction and setting information.

Product Specifications

Dimensions	378(W) x 598(D) x 664(H) (mm)	Focus Distance	Approximately 163.1mm	Max. Material Height	220mm
Working Area	110(X) x 110(Y) (mm)	Z-axis Travel	220mm	Max. Speed	4000mm/s
Laser Power	20W	Z-axis Operation	Semi-automatic	Z-axis Motor Type	DC motor
Power Supply	AC 100~240V 50/60Hz	Z-axis Control Method	Switch	Laser	Fiber
External Power Device	AC 220V/2A	Z-axis Extension	200mm	Weight	42kg
Power Consumption	<400W	Temperature	15~35°C	Humidity	10-85%

Applications Suitable for marking serial numbers, barcodes, logos, and various graphic images on materials in automotive, electrical, electronics, mobile, medical equipment, tools, and other industries. Marks on hard metals, aluminum, brass, stainless steel, titanium, and various other metals.



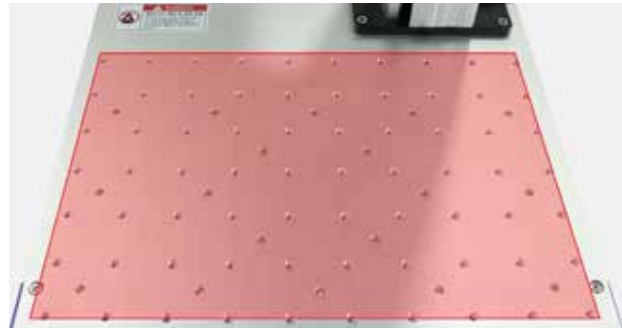
Ease of Use and Versatility

- Compact size allows effective placement even in small workspaces.
- User-friendly design, easy installation, and operation.
- A Sufficiently large workspace accommodates materials of various sizes and shapes.



Advanced Marking Capabilities

- High-quality marking on various metal surfaces, nameplates, and diverse parts.
- Supports different types of marking such as standard, black, deep, and color marking.
- Power levels adjustable according to application needs.



Fast and Easy Focus Pointer Settings

- Built-in dual focus pointers make it easy to check and set focus height according to material height
- Manual focusing capability allows precise marking on protruded materials



High-Speed Marking on Various Metals

- Accurately marks high-quality markings on various metal materials, including nameplates and parts
- Supports different types of marking such as standard, black, deep, and color marking.



Engraving Small Characters as Tiny as 0.5mm

- High-precision scan heads can mark small characters as tiny as 0.5mm, which is difficult to see with the bare eye.



Supports Rotary Marking

- Connects to a rotary marking device to mark both the outer and inner diameters of cylindrical materials
- Designed with a detachable modular structure for easy and quick disassembly



Efficient Serial Number Marking

- Serial number marking automated to minimize user intervention.
- Start command automatically changes serial numbers during marking.



I/O Port Support

- Direct control of the dust collector's power from the device eliminates the inconvenience of manually turning the dust collector on and off.



IM-FL Series Feature Comparison Chart

Marking Types	IM-FL300	IM-FL500	IM-FL1000
Black Marking/White Marking	★	★★★	★★★
Photo Marking	○	○	○
Color Marking	★	★★★	★★★
Deep Marking	★	★	★
Cutting	★	★	★
V-Carving	★	★	★
Cleaning	○	○	○

★ : Good ★★ : Better ★★★ : Best ○ : Supported