

# MT-F

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## FIBER LASER MARKER



**MT-F series** fiber laser marking machine is with high quality and high performance. Based on market demand, the machine is equipped with core optical devices, including fiber laser and scanning galvanometer imported from world famous brands. They enhance the performance and stability, and greatly lower the failure rate. Marking has non-touched process, permanent effect, humanized operation, and stable running, lifetime up to 100,000 hours. The machine series is armed with our self-developed high-speed marking control card and powerful software, compatible software output of AutoCAD, CorelDRAW, AI, etc. It can realize automatic edition and correction of characters, signs, graphs images, bar codes, two-dimensional codes, automatically increased serial numbers.

### 1 Precision

Industrial grade rigid cabinet design. Equipped with dual red light positioning system to accurately find the focus. It can also be equipped with integrated vision alignment and inspection to improve accuracy and quality.(optional)

### 2 Reliability

Using built-in DSP chip set, equipped with Siemens electrical system and industrial embedded operating system, running Macmark laser marking software, while ensuring superior performance, the machine complies with EU safety regulations (performance level D), stable and reliable!

### 3 Flexibility

Integration into customer processes (interfaces, additional axes), available various laser systems, accessories and options for optimal customization.

### 4 Ergonomic

Standing/seated work(optional); Set up workbench and material placement area to facilitate the operator to work. Equipped with humanized anti-skid foot arc design treadle switch and drawer-type operating table, easy to operate.

### 5 Productivity

Equipped with CCD vision system, PLC automatic loading system, automatic focus system, assembly line intelligent processing system,etc. which can freely form any intelligent automated production line.

MODEL	MT-F20	MT-F30	MT-F50	MT-F60	MT-F80	MT-F100
Laser Type	Q-Switched Pulse Fiber Laser / MOPA Pulse Fiber Laser					
Wavelength (nm)	1064					
Laser Power (W)	20	30	50	60	80	100
Pulse Energy (mJ)	0.66 / 0.8	1 / 0.8	1 / 1.25	1.5		
Repetition Rate (kHz)	30-60 / 1-600 or 1-4000		50-100 / 1-600	1-4000		
Pulse Duration (ns)	120-150 / 200 or 2-350		120-150 / 200	2-500		
Beam Quality (M2)	<1.5 / 1.4	<1.6 / 1.5 or 1.4	<1.6 / 1.8	<1.4 or 1.5		
Output Power (%)	10 - 100					
Marking Specifications	<ul style="list-style-type: none"> <li>■ Font formats: TTF, JSF, DMF, SHX fonts etc.</li> <li>■ Vector formats: PLT, DST, AI, DXF, SVG, GBR, NC, CAD, CDR, DWG, BOT, etc.</li> <li>■ Barcode formats: Code39, EAN, PDF417, DATAMATRIX, QR, 2D codes etc.</li> <li>■ Bitmap formats: JPC, BMP, JPG, JPEG, PNG, etc.</li> </ul>					
Speed	Up to 8000 mm/s (314.96 in/s)					
Minimum Line	0.01 mm (0.0004 in)					
Minimum Character	0.2 mm (0.008 in)					
Z axis type	Manual / Motorized & Programmable (optional)					
Software	MacMark / PC software EzCAD (on separate, external, optional Windows OS PC)					
Communication interfaces	USB; Terminal block I/O; (standard) Laser Safety Dedicated I/O; RS232; Ethernet TCP/IP (optional)					
Marking Area - Available lenses	<ul style="list-style-type: none"> <li>■ Standard: F160: 110 mm (4.33 in) x 110 mm (4.33in)</li> <li>■ Optional: F100: 70 mm (2.76 in) x 70 mm (2.76 in), F254: 160 mm (6.29 in) x 160 mm (6.29 in)</li> <li>F330: 200 mm (7.87 in) x 200 mm (7.87 in), F450: 300 mm (11.8 in) x 300 mm (11.8 in)</li> </ul>					
Cooling	Air-cooled, auto overheat protection					
Laser safety classification	Class 4					
Operating Temperature	10°C to 40°C (50F to 104F)					
Humidity	10%- 90%, non-condensing					
Electrical requirements	L/N/PE 100 - 240 VAC 50/60Hz ( According to local electricity supply )					
Power consumption rate	400 W (800 W Max)			600 W (1000W Max)		
Machine weight	98 Kg (216.053 lbs)				105 Kg (231.485 lbs)	

The fiber laser marking machine is suitable for all kinds of metal and partial non-metallic materials. It is widely used in electronic components, hardware, daily consumer goods, sensors, auto parts, 3C electronics, crafts, precision apparatuses, gifts and ornaments, medical equipments, bathroom accessories, battery industry, etc.



Auto Parts



Hardware Tool



Medical Tool



Gold / Silver Jewelry



Light Transmission Button Industry



Plastics Electronic Components



Microphone Speaker Industry



Stainless Color Marking