# Enclosed Desktop Fiber Laser
## MDFE series marker

Laser Marking | Laser Cutting | Laser Engraving | Laser Cleaning

MDFE series with a 20% smaller footprint and advanced technological coating, these units surpass most competitors in compactness, making them ideal for desktop or workbench placement. Despite their compact size, they deliver unparalleled functionality and reliability typically associated with high-end industrial lasers.

**Pay for What you get**

**Durable service**

**Safety Class 1**

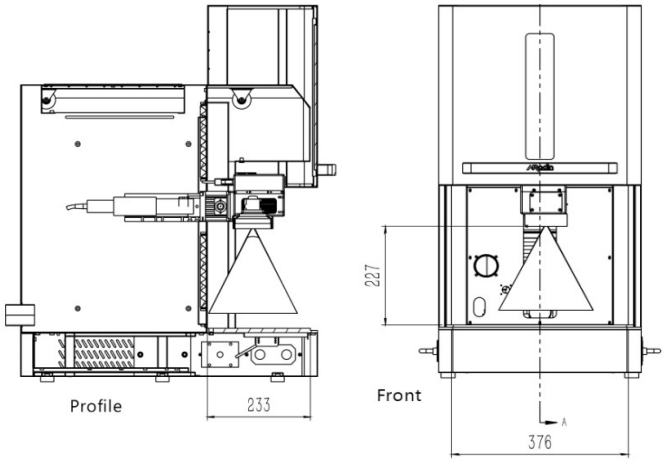
Benefit from MRodin's unmatched performance while optimizing your investment for metal parts traceability with the MDFE series. Designed to fit seamlessly on most work surfaces, it's perfect for marking metals in workshops and various industrial environments. Engineered with longevity in mind, the laser source boasts an impressive 100,000 hours typical Mean Time Before Failure (MTBF), while the manual sliding door is built to handle tens of thousands of cycles with ease.

Different materials, precision and effect requirements can be adjusted through parameter settings. Please consult MRodin professional team for more information.

## MARKING MATERIAL

- Steel
- Iron
- Ceramic
- Aluminum
- Brass
- Titanium
- Copper
- Concrete
- CFRP
- Some plastic
- Silicon
- Metal Alloys
- Cast Iron
- Carbide
- Chrome
- Galvanized Metals

***The most efficient way to achieve Traceability Personality Branding for industrial application***




**See MDFA working**

Donostia Ibilibidea, 68 P.I. 26, Parcela 30,
20115 Astigarraga Spain
+34 943 38 68 69
www.MRodin.es

# MRodin MDEF series Class 1 Safety Features

**OEM** ORIGINAL EQUIPMENT MANUFACTURER

All safety parts of MRodin MDFE series adapted high -quality parts supplied by the world's leading safety equipment manufacturer like Schneider, SIEMENS and KEYENCE. These include safety switches, interlocks, and light curtains designed to prevent unauthorized access to laser areas and protect operators from laser exposure. Their emergency stop devices and safety relays ensure immediate shutdown in case of malfunction. MRodin's systems comply with EU safety standards (ISO 13849-1, IEC 61508), integrating seamlessly with laser machines to guarantee precise and reliable safety control. With features like non-contact operation and fault diagnostics, MDFE series enhances protection while ensuring machine productivity. These solutions are widely used across industries demanding stringent safety compliance.

EUCHNER More than safety.

KEYENCE

Schneider Electric

SIEMENS





## *SYSTEM SPECIFICATIONS*

| MRodin model | MDFE10030 | MDFE10050 |
|---|---|---|
| **Laser source wattage** | 30W | 5 0W |
| **Machine power** | 200W | 350W |
| **Laser wavelength** | 1064 nM | 1064 nM |
| **Frequency** | 40 KHZ | 45 KHZ |
| **Scan area (standard)** | 110*110 mm | 170*170 mm |
| **Marking depth** | 0.1-0.3 mm | 0.1-0.5mm |
| **Pulse energy** | 0.75 mJ | 1.1 mJ |
| **Pulse width** | 100±20 ns | 100±10 ns |
| **Marking line width** | 0.01-0.3 mm | 0.01-0.5 mm |
| **Marking speed** | 7000 mm/s | 9000 mm/s |
| **Cooling mode** | Built-in air-cooling | |
| **Focusing method** | Double red-light manual operation (electric is optional) | |
| **Software** | RodinCAD 16 multilingual Spanish/ English | |
| **Electrical parameters** | 110V/220V Single-phase 50Hz | |

This equipment is a Class IV laser as designated by the CDRH and does not meet the full requirements as a stand-alone laser system as defined by 21 CFR 1040.10 under the Radiation Control for Health and Safety Act of 1968. It is the user's responsibility to utilize all integrated safety features of the system to exploit as compliant with 21 CFR 1040.10.



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