MOPA Laser Enclosed Desktop
MDFE series marker

Laser Marking | Laser Engraving | Laser Cleaning

Color Metal Plastic Marking
MHA minimal heat affected

The MDFE series offers a 20% smaller footprint compared to many competitors, making it an ideal choice for desktop or workbench placement where space is limited. Despite its compact design, the MDFE series delivers exceptional functionality and reliability, typically found in high-end industrial lasers. The advanced technological coating further enhances the durability and performance of these units, ensuring they meet the demands of various industries while maintaining a small, efficient form factor. This combination of compactness and performance makes the MDFE series a standout in its category.

Pay for What you get // Durable service life // Germany quality

Benefit from MRodin's unmatched performance while optimizing your investment in metal parts traceability with the MDFE series. Designed to fit seamlessly on most work surfaces, it is ideal for marking metals in workshops and various industrial environments. Engineered for longevity, the laser source offers an impressive 100,000 hours of typical Mean Time Before Failure (MTBF), ensuring reliable performance over time. The manual sliding door is built to withstand tens of thousands of cycles, providing durability in high-demand settings.
The MDFE series enhances traceability throughout the product life cycle, preventing mix-ups of work pieces within the production process. It allows for flexible and permanent customization, even for small items, ensuring clear and accurate markings

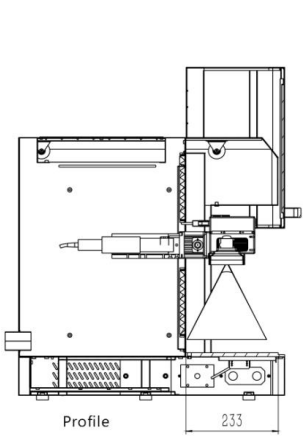
Traceability, Personality, and Branding for industrial application

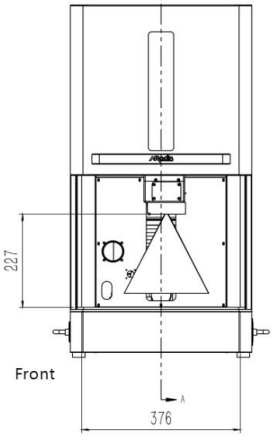
Metals	Non-metals
√ Stainless Steel	√ Ceramics
√ Steel	√ Glass
√ Copper	√ Rubber
√ Brass	√ Wood
√ Gold and Silver	√ Leather
√ Titanium	√ Plastics
√ Aluminum (anodized aluminum)	√ ABS, PVC, Polycarbonate etc

Special Features

√Color marking on stainless steel and titanium.

√Engraving intricate details on coated materials (e.g., painted metals, anodized layers).





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Laser Class 1 -Your safety Our Mession

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. The MDFE series incorporates advanced safety features, including safety switches, interlocks, and light curtains, designed to prevent unauthorized access to laser areas and protect operators from laser exposure. These systems are equipped with emergency stop devices and safety relays to ensure an immediate shutdown in case of malfunction, prioritizing user safety.

MRodin's systems are fully compliant with EU safety standards, such as ISO 13849-1 and IEC 61508, and integrate seamlessly with laser machines to guarantee precise and reliable safety control. Features like non-contact operation and fault diagnostics further enhance safety while maintaining high productivity levels.

These safety solutions are widely used across industries that require stringent safety compliance, offering a reliable and secure solution for environments where laser equipment is used. The integration of these features into the MDFE series ensures that both performance and safety are optimized for the most demanding applications.

EUCHNER More than safety. KEYENCE Schneider Electric SIEMENS

Technical Specification

MRodin model	MDFE20030	MDFE20060
Laser Source Wattage	30W	6 0W
Machine power	200W	450W
Laser wavelength	1064 nM	1064 nM
Beam quality	$M^2 < 1.4$	$M^2 < 1.5$
Frequency	1-4000 kHz	1-4000 kHz
Marking depth	0.01-0.7 mm	0.01-1 mm
Pulse energy	0.8 mJ	1.5 mJ
Pulse width	2-500 ns	2-500 ns
Marking speed	6000-8000 mm/s	7000-9000 mm/s
Manufacture by	VON JAN German	
Protection	Anti-reflection protection & Build-in Red beam	
Cooling mode	Built-in air-cooling /Air filter is optional	
Focusing method	Double red-light manual operation (electric is optional)	
Software	RodinCAD 16 multilingual Spanish/ English	
Electrical parameters	110V/220V Single-phase 50Hz	
Package N/Gweight	Wooden case 1730*1100*970 mm 270/310 kgs	

This equipment is classified as a Class 1 laser by the CDRH and does not fully meet the requirements of a stand-alone laser system as outlined in 21 CFR 1040.10 under the Radiation Control for Health and Safety Act of 1968. Users are responsible for utilizing all integrated safety features of the system to ensure compliance with 21 CFR 1040.10..

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