



## FULLY AUTOMATED LASER MARKER

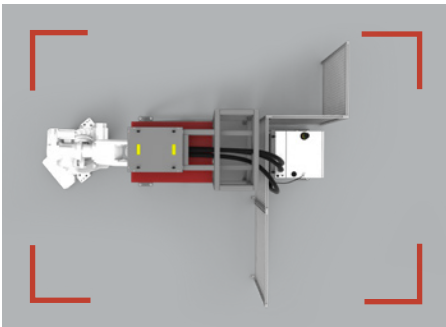
# OPEN AIR MACHINE

The Open-Air Machine is an inline laser marking solution designed to enable direct part marking to your manufacturing process. With a sturdy Class 1 enclosure, the Open-Air Machine thrive in difficult environments and is perfect to implement complete part traceability on production lines where parts are handled by robots.

Powered by an ultra-fast laser, the Open-Air Machine deliver high contrasted markings onto parts that are brought in front of laser opening by robot assistance. Part detection sensors make sure they are always optimally positioned for 100% safe laser marking process. Once the marking is completed and code quality approved, the robot moves the part to the next operation in the production cycle.

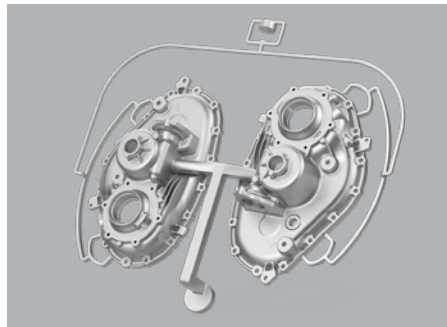


## FEATURES AND BENEFITS



### EASY INTEGRATION

Requiring a minimal floor space footprint and assisted by existing robots, the Open-Air Machine meet industrial standards and can be added seamlessly on new or existing production lines, even in the most challenging environments such as die casting, gravity casting or sand casting cells.



### MAXIMUM FLEXIBILITY

The Open-Air Machine can handle multiple cavities die castings and different part positioning tolerance using sensors. The marking process is fixture-free, using multiple standard nosels to adapt to different parts for greater versatility and faster transition.



### SHOTBLAST AND COATING RESISTANT MARKING

Enable complete traceability as parts can be marked directly out of the mold using our patent-pending laser technology that resist shot blasting, e-coating, sand blasting and powder coating.

## GENERAL SPECIFICATIONS

STANDARD OPEN-AIR MACHINE	
Laser Power	20 to 500 W
Laser Source / Wavelength	Fiber laser / 1064 nm
Laser Source MTBF	100 000 Hours
Marking Type	Standard, Engraving, Annealing
Standard Marking Window (Others Available)	35 x 25 mm, 70 x 55 mm
Typical Weight	950 kg
Cooling	Air Cooled
Power Requirements	120V, 230V, 240V / 15-30 AMP
Power Consumption	1.5 kW to 5.8 kW
Operating Temperature	10 to 45°C
Communication	Ethernet/IP, Profinet, Profibus
Multi-Parts / Multi-Cavities	Without Fixturing
Part Size	Adaptable
Part Temperature	Up to 450°C
Part Material	Aluminium, Zinc, Magnesium, Steel, Iron (All Metals)
Marking Surface Roughness (Positioning) Tolerance	Standard +/- 3 mm (Without Autofocus) Engraving +/- 1.5 mm (Without Autofocus) Up to +/- 10 mm with 3D Autofocus
Part Marking Post Process Treatment Resistance	Heat Treatment, Shot Blasting, E-coating, Powder Coating, Shot Peening
General Dimensions	3000 mm x 1500 mm x 1000 mm



## COMPLETE SOLUTION

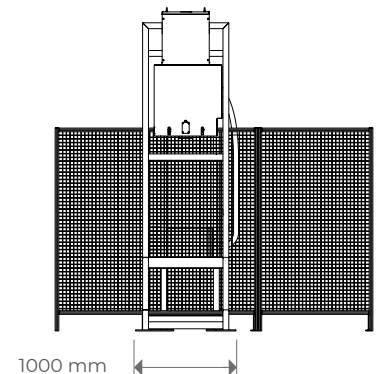
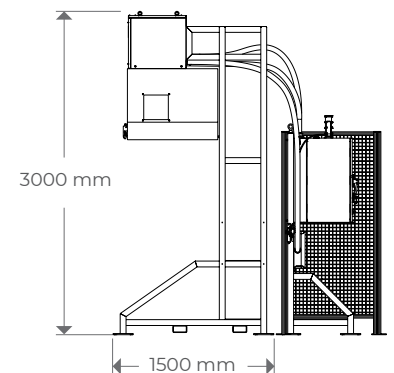
### Laser

- 20 to 500 W Laser power
- Distance sensors and 3D Laser with autofocus
- Up to 5 m fiber length

### Station

- Class 1 Laser safe station
- Harsh environment rated
- Standard nozzle design (others available)
- Rugged welded steel construction
- Integrated in IP66 control cabinet with cooling (IP54 AC or Vortex)
- Minimal footprint with remote cabinet outside the cell for easy access to controls
- PLC Controlled
- Safety PLC for part presence validation
- Air-knife unit for dust and contaminant protection (minimal maintenance)
- HMI control available
- Code reading camera with quality metrics
- Code reading interface screen available

## TYPICAL DIMENSIONS



**INDUSTRIAL LASER  
SOLUTIONS FOR THE  
AUTOMOTIVE INDUSTRY**

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