



## Product Sheet

### LaserEvo Diamond Line 3D MOPA fibre laser

#### Category: Fiber MOPA

#### Diamond Line 3D – Maximum freedom, millimetre precision

Diamond Line 3D MOPA is designed to handle advanced 3D marking on curved and complex surfaces with up to 40 mm height variation – without compromising on sharpness or speed. With powerful MOPA technology, flexible power levels and a customisable system, this is a fibre laser for those who demand uncompromising accuracy and high performance in every detail.

- World-class 3D marking
- Unmatched precision
- High speed & performance

## Product description

### Diamond Line 3D MOPA Fiber Laser – Groundbreaking precision for advanced marking

The Diamond Line 3D MOPA fibre laser is an innovative system for 3D laser marking, designed to handle complex and varied surfaces with extreme precision. Thanks to advanced focus control, the machine can adapt to the shape of the object and mark on curved, sloping and irregular surfaces without losing sharpness.

This groundbreaking technology makes it possible to mark standard geometric shapes such as spheres, cylinders, cones and inclined planes, as well as more complex and irregular profiles with a height variation of up to 40 mm. Equipped with the best fibre sources on the market, Diamond Line delivers unrivalled marking speed, high performance and accurate detail reproduction.

Available in 30W and 50W in MOPA design, providing full flexibility depending on application requirements. All systems can be customised to customer requirements in terms of laser source and workstation.

#### Description:

- World-class 3D marking – Marks curved, sloping and irregular surfaces with a height difference of up to 40 mm.
- Unmatched precision – Handles both standard geometries and complex profiles with sharp detail reproduction.
- High speed & performance – The market's best fibre sources for fast, accurate and durable marking.
- Versatile power adaptation – Available in 30W and 50W to meet all production requirements.
- Full customisation – Can be tailored to your laser source and workstation needs.

#### Marking materials:

- Metals (steel, aluminium, brass, copper)
- Plastics
- Ceramics
- Coated materials

#### Supported file formats:

- Vector: .ai, .dxf, .plt, .svg
- Raster: .jpg, .bmp, .png

## Technical Specification

| Machine Specifications |                                                                                               |
|------------------------|-----------------------------------------------------------------------------------------------|
| • Laser source         | Ytterbium Pulsed fibre laser                                                                  |
| • Wave length          | 1064 nm                                                                                       |
| • Laser power          | 30W & 50W                                                                                     |
| • Pulse length         | 16 pulse length options (2, 4, 6, 8, 12, 20, 30, 45, 60, 80, 100, 150, 200, 250, 350, 500 ns) |
| • Marking area Lenses  | FL180 lens (150x150 mm) or FL 254 lens (175x175 mm)                                           |
| • Cooling system       | Air-cooled                                                                                    |
| • Power supply         | 230 V, 50/60 Hz                                                                               |