

## **3D Printing Systems for Industrial Production of Micro Metal Parts**

Unique detail resolution and highest process accuracy



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The DMP machine solutions are designed for flexible series production of complex metal components using micro laser sintering.

The DMP systems are the perfect solution to achieve:

- Superior detail resolution
- Highest surface quality
- Unrivalled accuracy
- Very high part density

It offers high flexibility, low operating costs and user-friendliness. The system includes a zero-point clamping system for easy postprocessing at the highest accuracy-level and inert gas atmosphere including gas purifying based on industry standards.

The DMP systems are able to process nonreactive and reactive materials, e.g. stainless steel, molybdenum, tungsten, titanium, gold, and other materials.

## **System Configuration**

| Build volume (L x W x H) | • 60 x 60 x 40 mm  |  |
|--------------------------|--|--|
| Laser source             | • IR Fiber laser 50 W / 200 W  |  |
| Precision optics         | High speed galvo scanner   |  |
| Layer thickness          | • ≤ 5 μm   |  |
| Optical resolution       | • 5 µm   |  |
| Surface roughness        | • Down to 2 μm (R <sub>a</sub> )   |  |
| Laser spot diameter      | • ≤ 30 μm / ≤ 20 μm  |  |
| Process atmosphere       | • Argon: < 20 ppm (O <sub>2;</sub> H <sub>2</sub> O)                                       |  |
| Inert gas consumption    | <ul> <li>≤ 3 l/h Argon</li> </ul>  |  |
| Machine size (L x W x H) | <ul> <li>2,494 x 1,452 x 2,506 mm (W x D x H)</li> <li>Weight: approx. 1,800 kg</li> </ul> |  |
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