

DMP Machine Series

3D Printing Systems with Unique Detail Resolution and Highest Process Accuracy for Industrial Production of Micro Metal Parts





DMP Machine Series

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 post-processing 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)	<ul style="list-style-type: none"> • 60 x 60 x 30 mm³
Build rate	<ul style="list-style-type: none"> • 330 mm³/h (typical)
Laser source	<ul style="list-style-type: none"> • Fiber laser 70 W
Precision optics	<ul style="list-style-type: none"> • High speed galvo scanner
Layer thickness	<ul style="list-style-type: none"> • ≤ 5 μm
Lateral resolution	<ul style="list-style-type: none"> • Down to 15 μm
Surface roughness	<ul style="list-style-type: none"> • Down to 2 μm (R_a)
Laser spot diameter	<ul style="list-style-type: none"> • < 30 μm
Process atmosphere	<ul style="list-style-type: none"> • Argon: < 1 ppm (O₂; H₂O)
Inert gas consumption	<ul style="list-style-type: none"> • < 30 l/h Argon
Machine size (L x W x H)	<ul style="list-style-type: none"> • 2,494 x 1,452 x 2,506 mm³ (W x D x H) • Weight: approx. 1,800 kg