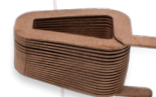
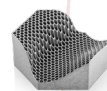
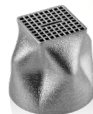
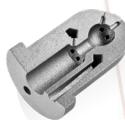


Small in size, big in detail!

3D MicroPrint GmbH manufactures high-precision micro metal parts using Micro Laser Sintering technology. We offer comprehensive services ranging from product design and prototype development to series production.

Why 3D MicroPrint GmbH?

- Micro Laser Sintering combines the advantages of additive micro manufacturing with those of micro machining
- Complex geometries with high resolution, high dimensional accuracy and low surface roughness
- Moving parts without further assembly - with our "print-as-one" solution
- Micro metal parts with entire value chain from engineering to post-processing
- DIN EN ISO 9001 certified and processing to DIN EN ISO 13485



Technical Key Figures



Building platform (LxWxH)
60 x 60 x 45 mm
120 x 120 x 100 mm **NEW!**



Layer thickness
1 - 30 μm



Minimum wall thickness
30 μm



Accuracy
5 μm



Part density
> 99,5 %

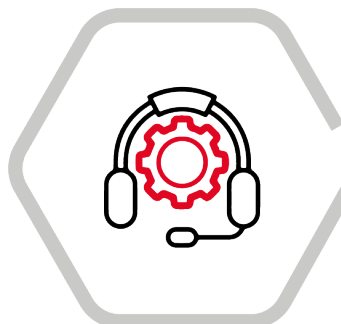


Laser spot size
< 30 μm

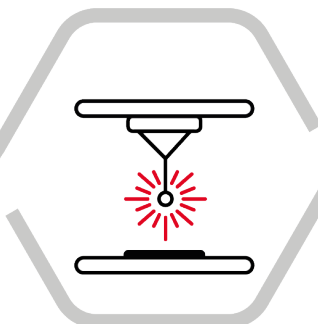


Roughness
Ra: 1 μm
Rz: 5 μm

We support you in the development, optimization, and manufacture of complex micro components.



Engineering
Services



Contract
manufacturing



Quality
assurance



R&D

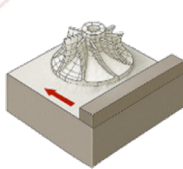


MLS process principle - layer by layer to perfection

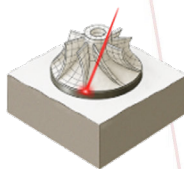
Our powder bed process, which is specially designed for the micro range, allows us to create high-precision structures with minimum wall thicknesses starting at 30 µm.



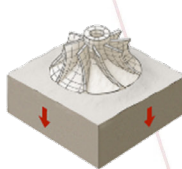
CAD model of the component



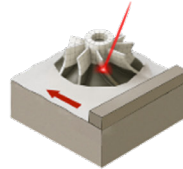
Application of the powder layer



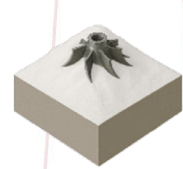
Laser melts the powder



Lowering of the build platform



Repetition of the process layer by layer until completion



Removal of excess powder



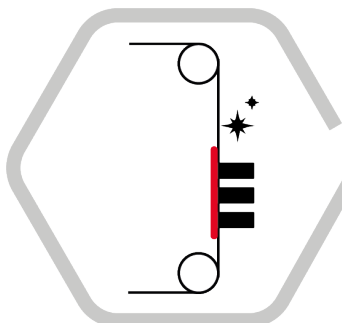
Finished component

Materials

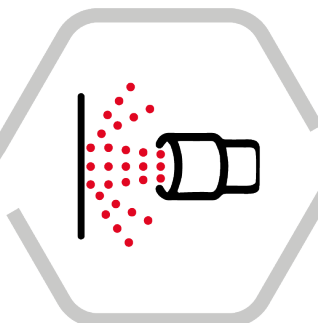
- Stainless steel
 - 316L (1.4404)
 - 17-4PH (1.4542)
- Titanium
 - Ti6Al4V (3.7164)
 - Ti (3.7035)
- Copper
 - CuCr1Zr (2.1293)
 - Cu-OF (2.0040)
- Inconel® 718
Molybdenum, Tungsten, precious metals, and other materials for individual projects



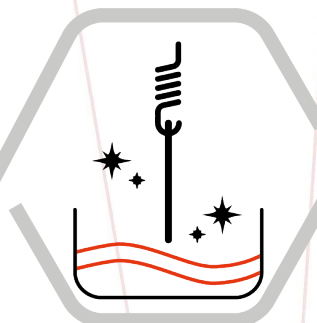
Post-processing



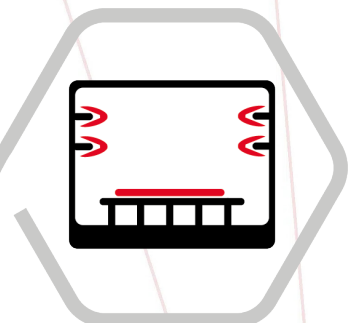
Wire EDM



Fine blasting



Plasma polishing



Heat treatments

