

Selective Laser Melting

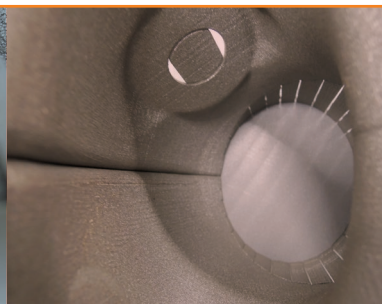
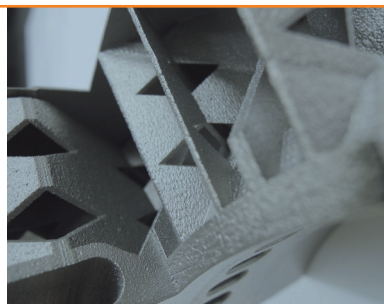
Efficient and toolless manufacturing
even of complex geometries



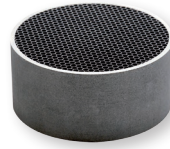


Your partner in the generative manufacturing process

- 09/2011 Founding of the company by Oliver Wagner starting with a ConceptLaser M3 machine in Weilheim/Teck, Germany
- 02/2012 Launching of the CAD software SolidWorks
- 01/2012 Launching of the Materialise software Magics
- 06/2013 Implementation of the DIN ISO 9001:2008 standards
- 04/2014 Expansion through purchasing an EOS SLM machine M280
- 07/2015 The move to new premises in Kirchheim/Teck, Germany
- 09/2015 Expansion through purchasing an Hermle 5-axis CNC machine C400 and its openMind CAM solution hyperMILL®
- 12/2016 Rise of the number of employees to 4
- 06/2017 DIN ISO 9001:2015 certification achieved
- 01/2018 Joint venture with the company BENSELER (Surface engineering) 3D Laser BW GmbH & Co. KG is being launched Mr. Peschke and Mr. Wagner become general managers
- 10/2018 Expansion through purchasing two 3D-Systems SLM machines ProX320B
- 10/2018 Launching of the 3D-Systems CAD simulation 3DXpert



Selective Laser Melting



High-performance components through customised project management!

We accompany you as a competent contact partner and service provider on all issues in the field of manufacturing, whether it is the generative, the machining or another process.

We can find the ideal solution for your needs!

We support and/or manage your project from the construction throughout the production, surface finishing, quality control up to the delivery of the components.

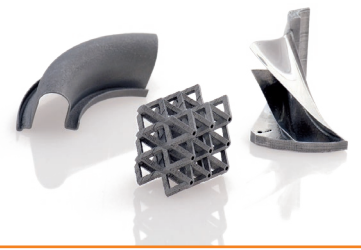
Get to know us!

We think with an innovative view and rely on transparency.

We are future and quality conscious oriented.

We actively accompany our customers from the idea to the series.





Range of services

Project management

- Consulting for the ideal production process of your components, whether it is metal laser melting, milling from a solid block, sand casting or precision casting
- Feasibility test for the respective process

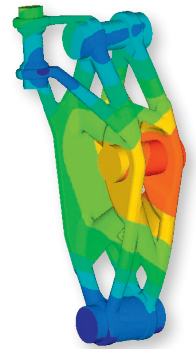
Design

- Component optimisation for metal laser melting (weight optimisation, functional integration)
- Configuration of conformal coolings for tool-making
- Prototyping tools, special machine and fixture constructions, operating materials and equipment
- Separation or joining of individual elements on components that are larger than the existing building space



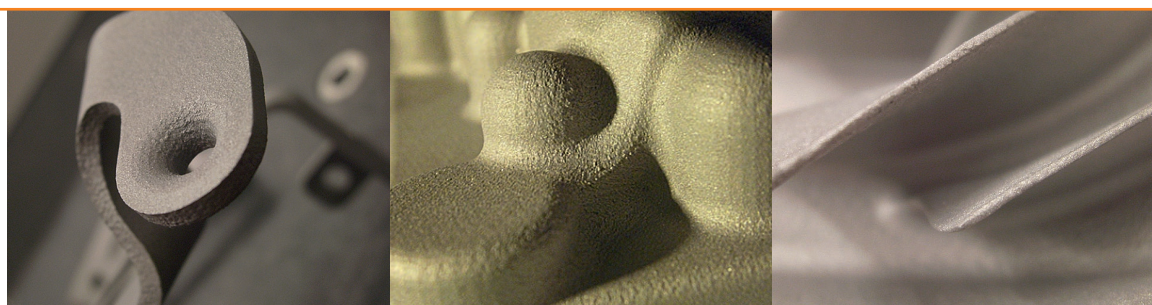
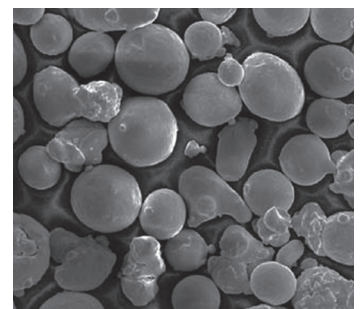
Data processing

- Preparation of the data for our SLM machines on 3DXpert software with warpage simulation
- CAM programming for our 5-axis milling machine with the OpenMind hyperMILL® solution



Metal Powder development

- Development of metal powders for the metal laser melting
- Testing of metal powders





Metal Laser Melting

Machine Pool:

1 ConceptLaser M3 Build platform 290 x 340 x 330 mm

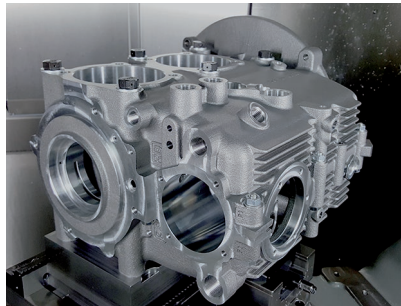
1 EOS M270 Build platform 250 x 250 x 300 mm

2 3D-Systems ProX320 Build platform 270 x 270 x 420 mm
including Powder Bed Monitoring and Meldpool

Following materials are available:

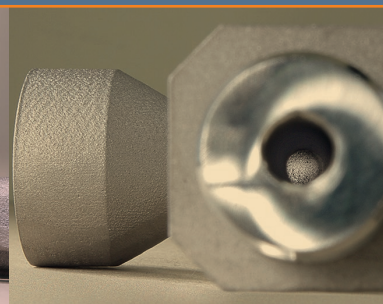
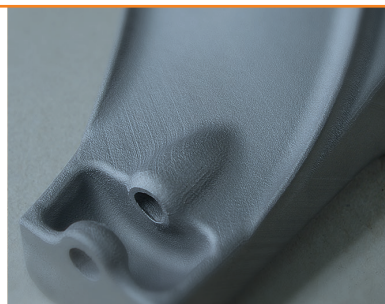
1.4404, 1.4542, Inconel 625, Inconel 718, 1.2709, AlSi10Mg, Ti64

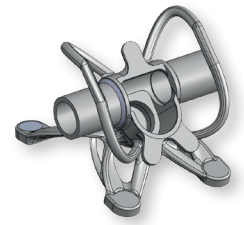
Other materials on request



Milling technology

- Hermle C400
- 3-/5-axis processing
- Machining of titanium, Inconel, steel and aluminum
- Milling from a solid block
- Mould inserts for the injection moulding, pressure die-casting, core moulding tools or boxes
- Processing of cast components
- Production of design samples

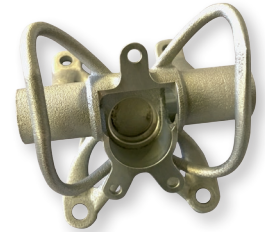




Range of services

Finishing the SLM components

- Heat treatment, depending on the material and requirements
- Any type of mechanical finishing is possible
- Grinding, polishing, coatings
- Quality control (visual inspection, measurement, hardness testing)

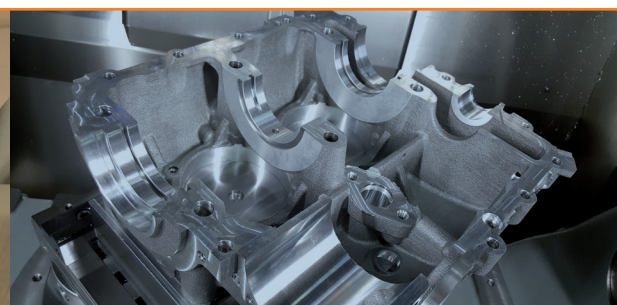
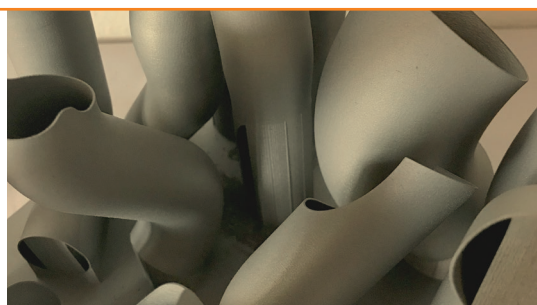


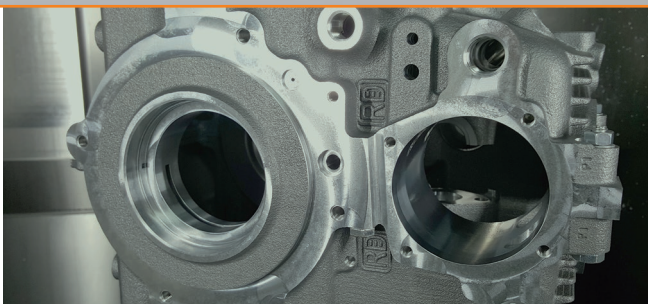
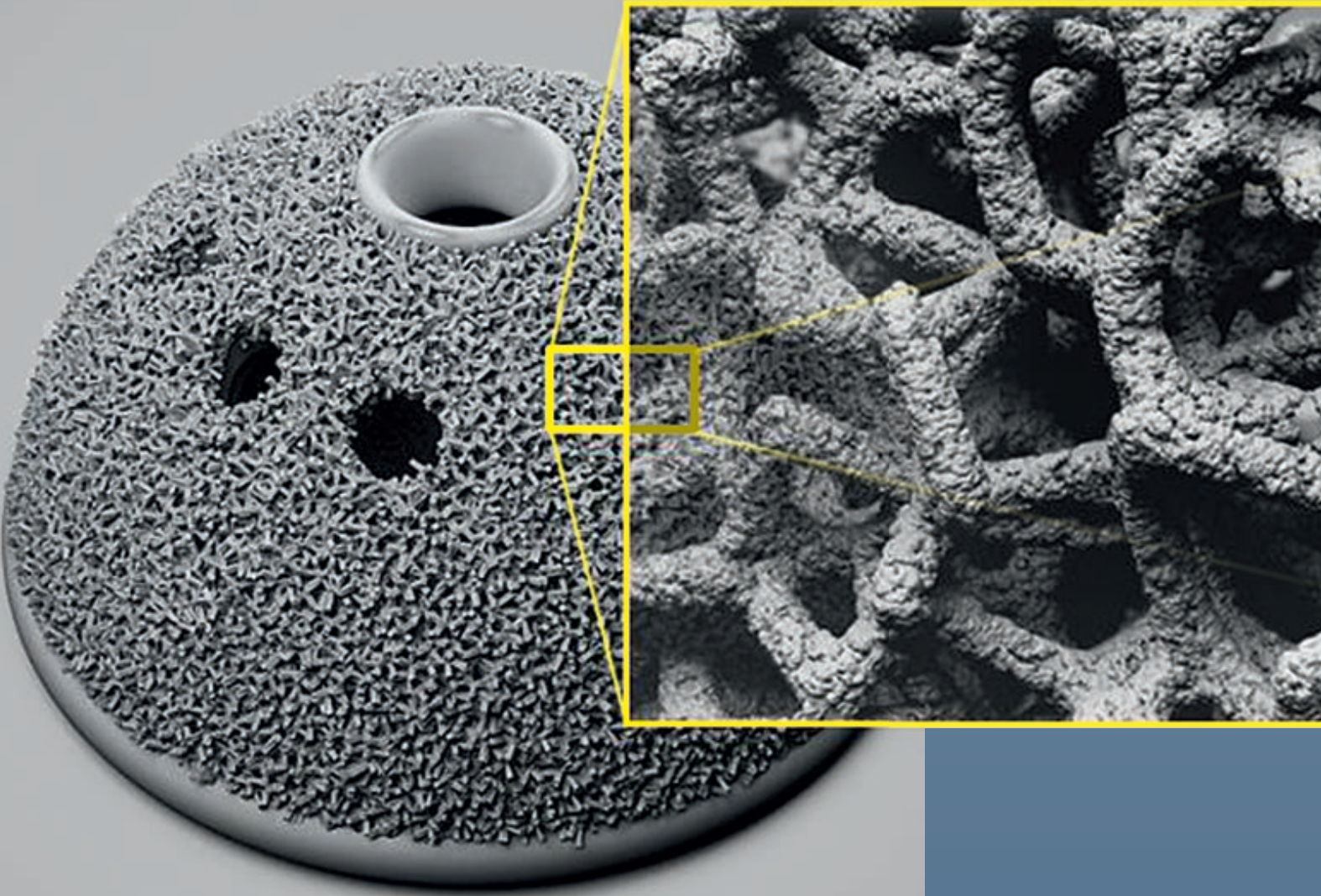
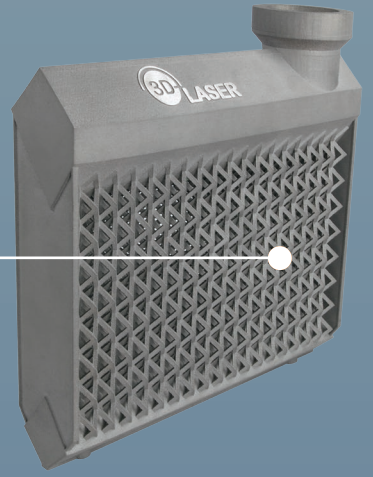
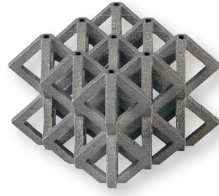
Assembly

- Assembly of component parts or groups

Quality assurance

- Tactile measurement
- Optical measurement
- Initial sample inspection report (ISIR)
- Grinding patterns/Microsection analysis
- Tensile or tension testing





3D Laser BW field

- Automotive
- Motor racing
- Aerospace technology
- Mould industry
- Special machine construction
- Medical technology



Please feel free to contact us.
We are more than happy to assist you at any time,
even in the early phase of designing your project.
We are looking forward to your call.

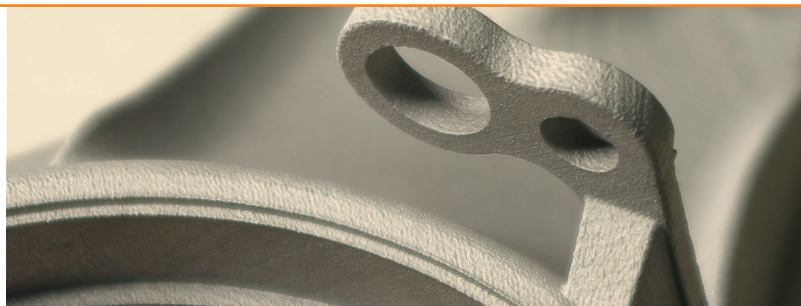
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