Designed by nature. Produced by us.
Take advantage of 3D printing and realize your own industrial bionic revolution!

As an innovative company do you want to tap into the benefits of 3D printing for your added value, as well as prepare your company for the future through bionic engineering and manufacturing, and significantly increase the profitability of your company?

Increasing your profitability is our goal. With Bionic Production AG you have a competent and experienced partner at your side.

- We prepare you and your staff for the profitable use of 3D printing.
- We help you with our professional services to build your own Bionic Smart Factory.
- We use the new bionic design to increase functional and resource efficiency.
- With our bionic production we guarantee certified quality with maximum time and cost efficiency.
- We accompany you on the path of the new digital revolution through 3D printing.
From the first idea to the finished business model. We help you to open up the new technology for your company. Together with us you can develop your economic potential, your introduction strategy and the training of your employees.

Component search and construction

3D printing of metal and plastic parts is a new technology with great potential to produce more efficient components, tools and spare parts. Our systematic "Part Screening" helps to find your hidden "diamonds".

Consulting and Training

How do you analyze your own product portfolio?
We help you to analyze your products to quickly find, evaluate and further develop 3D printing potentials with the new technology optimization options.

How do you find "diamonds"?
With our many years of experience, we support you through our field-tested and goal-oriented search criteria and procedures.

How does future engineering look like?
Use our know-how in 3D printing to adapt your engineering to the new requirements and benefit from the new designs.

1. How do you use and think in “3D printing”?
We will show you how to build up the necessary know-how in your company and how to anchor it effectively in your processes.

2. Which kind of applications are useful and profitable for you?
With our know-how and experience, we can help you make the right decisions to get the most out of your investments.

3. Which resources do you need for your 3D printing?
Together we develop the roadmap into 3D printing to enable you an economical and efficient entry.
Production as internal and external Service

We develop and optimize the entire value chain of 3D printing and the upstream and downstream process steps. From design to component generation to rework and quality assurance (QA).

1. How do you ensure the qualification of your suppliers?
   We develop the 3D printing processes of your quality assurance system for you and help you to introduce the necessary adjustments in a practical way.

2. How fast do you need your parts? (Parts on Demand)
   We provide a customized ordering and retrieval system for your 3D printed parts.

3. What does a future production with 3D printing look like? (Bionic Smart Factory)
   We help you to plan and build efficiently your own 3D printing production.

Our offers

- Manufacturing on Demand
- AM-Factory Planning
- Supplier & Factory Qualification
- Consulting, Business Modelling

Order processing in our PartsOnDemand portal

Your benefits:
- Direct order submission via simple file upload
- Quick quoting and order processing
- Your own parts catalog for the management of components and reorders
- Status overview of current and past orders
AEROSPACE: FUEL CONNECTOR

- "Time to Market" is significantly shortened
- Production costs reduced by up to 50%
- Weight reduced by up to 80%
- Lower energy consumption reduces CO₂ emissions
- Number of manufacturing steps has been reduced from 18 to 3
- 14 parts to 1 part
- High integration depth is possible

MECHANICAL ENGINEERING: COOLING WATER NOZZLE

- Increased accessibility for the internal grinding process
- Reduced consumption of lubricant by injection close to the process
- Reduced production times
- Less tool wear
- Optimal guidance of the liquid

AUTOMOTIVE: 8-PISTON MONOBLOC CALIPERS

- The world's largest made of titanium, generatively manufactured functional component and at the same time the largest brake caliper in the automotive industry
- New bionic architecture ensures minimal caliper weight with maximum component rigidity
- Weight saving with even higher load capacity
- Much more powerful than aluminum

MEGICAL: INDIVIDUALIZED HIP JOINT PAN

- Production of individual implants
- Fast availability for patients
- Biocompatible structures
- Improved ingrowth of the bone substance

100% individuality

90% fewer components

41% more lightweight

45% more cost-effective

Design by Airbus Emerging Technologies & Concepts and LZN

Design by Bugatti

Design by Grindaix

Design by AQ Implants

Design by Strandex
What are your benefits of bionic 3D printing?

- **Integration**: Highest component integration with fewer parts and installation costs
- **Time savings**: Fast availability of components, e.g. for a more efficient spare parts supply for your customers
- **Weight loss**: Maximum lightweight construction and stress-relieved material efficiency
- **Quality**: Guaranteed and certified quality through 3D printing series production
- **Cost efficiency**: Highest functional efficiency of your components and systems (e.g. mechanical, thermodynamic, pneumatic, hydraulic)
- **Environment**: Minimal use of resources for added value of sustainably reduced emissions
- **Individualization**: Individual components without additional costs
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