

About this organisation

Machine translation

This organisation has been machine-translated based on data provided in German.

As a wholly owned subsidiary of Airbus, Airbus APWORKS GmbH utilises proven concepts from the aviation industry for a wide range of industries. With a focus on metallic 3D printing (additive manufacturing), the company covers the entire value chain for the production of components and spare parts - from optimised component design, the selection of suitable materials and prototype construction through to qualified series production

Additive manufacturing offers a high degree of design freedom. This enables structures that were previously almost impossible to produce. Ultimately, material is only available on components where it is really needed to withstand loads. Combining the advantages of metallic 3D printing with new materials opens up further possibilities in the production of components. For this reason, APWORKS has developed its own material that combines the strength of titanium with the density of aluminium. These properties make Scalmalloy® an interesting material for robotics, automotive engineering, medical technology and aerospace engineering.

Willy-Messerschmitt-Straße 1
82024 Taufkirchen
Bavaria
Germany
www.apworks.de

APWORKS

Organisation type

Small or medium-sized enterprise

Sectors



Employees

10 up to 49

Turnover

€2m - €10m

Funding

n/a



AIRBUS APWORKS GmbH

About this organisation

Main areas covered 3D printing / additive manufacturing, Topology optimisation, Lightweight materials such as Scalmalloy, Design for 3D printing (AM)

Infrastructure 3D printing production systems, Post-processing 3D printing

Certifications EN 9100, ISO 9001

Keywords Scalmalloy, Additive manufacturing, Topology optimisation, Design for 3D printing, Simulation

Memberships

Overview of lightweighting expertise

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Research **Development** **Manufacturing & Supply**

Offer

Products

Parts and components, Software & databases, Systems and end products, Materials, Tools and moulds



Services & consulting

Training, Consulting, Engineering, Prototyping, Validation, Simulation



Overview of lightweighting expertise

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| | Research | Development | Manufacturing & Supply |
|---|----------|-------------|---------------------------|
| Field of technology | | | |
| Design & layout Lightweight manufacturing, Lightweight design, Lightweight construction concepts | | | ✓ |
| Functional integration Media conductivity, Thermal activation | | | ✓ |
| Measuring and testing technology Component and part analysis, Visual analysis (e.g. microscopy, metallography), Materials analysis, Destructive analysis, Non-destructive analysis | | | ✓ |
| Modelling and simulation Crash behaviour, Loads & stress, Multiphysics simulation, Optimisation, Structural mechanics, Materials | | | ✓ |
| <i>Plant construction & automation</i> | | | |
| <i>Recycling technologies</i> | | | |

Overview of lightweighting expertise

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| | Research | Development | Manufacturing & Supply |
|---|----------|-------------|------------------------|
| Manufacturing process | | | |
| Additive manufacturing 3D printing, Selective laser sintering (SLS) | | | ✓ |
| Coating (surface engineering) Painting, Powder coating | | | ✓ |
| <i>Fibre composite technology</i> | | | |
| <i>Forming</i> | | | |
| Joining Adhesive bonding, Welding | | | ✓ |
| Material property alteration Heat treatment | | | ✓ |
| <i>Primary forming</i> | | | |
| Processing and separating Drilling, Turning, Milling, Honing, Sawing, Grinding, Cutting | | | ✓ |
| <i>Textile technology</i> | | | |

Overview of lightweighting expertise

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| | Research | Development | Manufacturing & Supply |
|---|----------|-------------|---------------------------|
| Material | | | |
| <i>Biogenic materials</i> | | | |
| <i>Cellular materials (foam materials)</i> | | | |
| <i>Composites</i> | | | |
| <i>Fibres</i> | | | |
| <i>Functional materials</i> | | | |
| Metals | | | ✓ |
| Aluminium, Steel, Titanium, Others (Scalmalloy) | | | |
| <i>Plastics</i> | | | |
| <i>Structural ceramics</i> | | | |
| <i>(Technical) textiles</i> | | | |

Contacts

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