

Airbus Defence and Space

About this organisation

Machine translation

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

Airbus Defence and Space, a division of the Airbus Group, is the leading defence and space company in Europe. The main German sites are Ottobrunn: Research, development, space equipment, satellite products Manching: aircraft development/integration/final assembly/maintenance/ maintenance Bremen: Aircraft assemblies, launch vehicles, space research/development Friedrichshafen: satellite construction, space travel, target drones

Due to the complex product portfolio, the lightweight construction competences are diverse and tailored to the needs of the aerospace industry. Areas of expertise include Materials, construction methods, simulation, structural optimisation, innovative technologies and manufacturing processes.

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82024 Taufkirchen
Bavaria
Germany
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Organisation type
Large enterprises

Sectors
Icons representing an aircraft and a satellite, indicating the company's focus on aerospace.

Employees
500 and more

Turnover
More than €50m

Funding
n/a



Main areas covered Aircraft and aerospace structures, Innovative materials, Modern surface protection processes, Production & maintenance/setting, Technology development

Infrastructure Final assembly aircraft construction, Simulation and test systems, Satellite construction, High-tech laboratories, Flight testing

Certifications LufABw-LTB-005-16, LufABw-21-J-001-16, LBA21J.0100, EASA21J.026, EN9100, etc.

Keywords Aerospace technology

Memberships

Airbus Defence and Space

Overview of lightweighting expertise

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	Research	Development	Manufacturing & Supply
Offer			
Products Parts and components, Software & databases, Systems and end products, Materials	✓	✓	✓
Services & consulting Training, Testing and trials, Engineering, Standardisation, Prototyping, Simulation, Maintenance and repair, Approval		✓	✓
Field of technology			
Design & layout Lightweight manufacturing, Lightweight design, Hybrid structures, Lightweight construction concepts, Lightweight material construction		✓	✓
Functional integration Actuator technology, Media conductivity, Sensor technology, Thermal activation, Material functionalisation		✓	✓
Measuring and testing technology Component and part analysis, Visual analysis (e.g. microscopy, metallography), System analysis, Environmental simulation, Materials analysis, Destructive analysis, Non-destructive analysis		✓	✓
Modelling and simulation Loads & stress, Life-cycle analysis, Multiphysics simulation, Optimisation, Processes, Structural mechanics, Materials, Reliability validation		✓	✓
<i>Plant construction & factory automation</i>			
<i>Recycling technologies</i>			

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Overview of lightweighting expertise

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	Research	Development	Manufacturing & Supply
Manufacturing process			
Additive manufacturing 3D printing, Deposition welding, Selective laser melting (SLM, LPBF, ...), Stereolithography		✓	✓
Coating (surface engineering) Galvanising, Painting, Plasma process, Sputtering		✓	✓
Fibre composite technology Filament winding, Manual lamination, Resin infusion process, Resin transfer moulding, Pre-preg processing, Vacuum infusion	✓	✓	✓
Forming Bending, Thermal converting			✓
Joining Hybrid joining, Adhesive bonding, Soldering, Sewing, Riveting, Screwing, Welding	✓	✓	✓
Material property alteration Mechanical treatment, Thermochemical treatment, Thermomechanical treatment, Heat treatment		✓	✓
<i>Primary forming</i>			
Processing and separating Drilling, Turning, Milling, Sawing, Shearing/punching, Grinding, Cutting			✓
Textile technology Braiding, Preforming, Knitting	✓		

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	Research	Development	Manufacturing & Supply
Material			
<i>Biogenic materials</i>			
<i>Cellular materials (foam materials)</i>			
Composites Glass-fiber reinforced plastics (GFRP), Ceramic matrix composite (CMC), Carbon-fiber reinforced plastics (CFRP), Nanocomposites, Laminates	✓	✓	✓
Fibres Aramid fibres, Glass fibres, Ceramic fibres, Carbon fibres		✓	✓
Functional materials Electrostrictive / magnetostrictive materials, Shape memory materials, Piezoelectric materials	✓		✓
Metals Aluminium, Magnesium, Steel, Titanium		✓	✓
Plastics Thermoset plastics, Elastomers, Thermoplastics		✓	✓
Structural ceramics Non-oxidic ceramics, Oxidic ceramics, Ultra-high-temperature ceramics		✓	✓
(Technical) textiles Meshes, Laid webs, Woven fabrics, Knitted fabrics, Nonwovens, mats			✓

Contacts

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