

About this organisation

Machine translation

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

As an innovative start-up, LIA GmbH has been active in the field of hybrid lightweight construction technologies across all industries since 2015, from technology consulting and component development to validation. One of the company's core competences lies in the research and development of innovative approaches for the production of load-adapted and therefore material-efficient components.

Since its foundation, LIA GmbH has invested in the development of scientifically sound lightweight construction solutions that show great market potential, but have a high risk in terms of technical feasibility. Many potential customers of hybrid and high-strength metallic structures see the combined use of fibre-reinforced plastics and metallic materials as challenging, as there are no corresponding validation procedures for real-life applications or not enough of them are available for metallic materials. In addition, a lack of knowledge regarding the probability of failure and long-term stability of lightweight structures is an uncertainty and therefore a considerable technical risk. In order to further develop and validate these promising approaches economically into key technologies, the expansion of a corresponding test environment in the service segment was successfully implemented in 2019.

Hohenloher Weg 16
33102 Paderborn
North Rhine-Westphalia
Germany
www.lia-group.de/



Organisation type

Small or medium-sized enterprise

Sectors



Employees

10 up to 49

Turnover

Up to €2m

Funding

About this organisation

Main areas covered	Consulting, Engineering, Production, Testing
Infrastructure	Fatigue strength test, Metallography, Internal calibration laboratory, Steering gear test benches, CAD / Simulation (FEM)
Certifications	DIN EN ISO/IEC 17025:2018
Keywords	Lightweight construction, Hybrid systems, hybrid materials, Testing, Engineering, prototyping, Consulting, e-mobility
Memberships	FAST Automotive Group BV

Overview of lightweighting expertise

Machine translation

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

	Research	Development	Manufacturing & Supply
Offer			
<i>Products</i>			
Services & consulting Consulting, Testing and trials, Funding, Prototyping, Validation, Simulation, Technology transfer	✓	✓	✓

Overview of lightweighting expertise

Machine translation

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

	Research	Development	Manufacturing & Supply
Field of technology			
Design & layout Lightweight manufacturing, Hybrid structures, Lightweight construction concepts, Lightweight material construction	✓	✓	✓
Functional integration Sensor technology, Material functionalisation	✓	✓	
Measuring and testing technology Component and part analysis, Visual analysis (e.g. microscopy, metallography), System analysis, Environmental simulation, Materials analysis, Destructive analysis	✓	✓	✓
Modelling and simulation Loads & stress, Structural mechanics, Materials	✓	✓	
<i>Plant construction & automation</i>			
<i>Recycling technologies</i>			

Overview of lightweighting expertise

Machine translation

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

	Research	Development	Manufacturing & Supply
Manufacturing process			
<i>Additive manufacturing</i>			
<i>Coating (surface engineering)</i>			
Fibre composite technology			
Others (Compression moulding)	✓	✓	✓
Forming			
Impact extrusion, Compression moulding	✓	✓	✓
<i>Joining</i>			
<i>Material property alteration</i>			
<i>Primary forming</i>			
<i>Processing and separating</i>			
<i>Textile technology</i>			

Overview of lightweighting expertise

Machine translation

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

	Research	Development	Manufacturing & Supply
Material			
<i>Biogenic materials</i>			
<i>Cellular materials (foam materials)</i>			
Composites Glass-fiber reinforced plastics (GFRP), Carbon-fiber reinforced plastics (CFRP), Metal matrix composite, Laminates	✓	✓	✓
<i>Fibres</i>			
<i>Functional materials</i>			
Metals Aluminium, Steel	✓	✓	✓
Plastics Thermoplastics	✓	✓	✓
<i>Structural ceramics</i>			
<i>(Technical) textiles</i>			

Contacts

Machine translation

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

Contacts

Mr Jan-Patrick Leimbach, M.Sc.
Engineering and simulation

jan.leimbach@lia-group.de

Mr Simon Pöhler, Dipl.-Wirt.-Ing.
Managing Director

simon.poehler@lia-group.de