

Aachen Centre for Integrative Lightweight Construction (AZL) | RWTH Aachen University

About this organisation

Machine translation

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

The aim of the Aachen Centre for Integrative Lightweight Construction (AZL) is to transfer lightweight construction to mass production through close interdisciplinary cooperation between materials science and production engineering. To this end, the AZL works together with established lightweight construction institutes at RWTH Aachen University. Together with AZL Aachen GmbH, AZL realises joint R&D initiatives in its industrial network of more than 80 companies.

AZL's research topics focus on the implementation of integrated process chains for the large-scale production of lightweight components and the development and production of load and cost-optimised multi-material systems. In this context, the following are considered: - Process chain development and testing - Handling and automation technology - Tool and mould making - Process and joining technologies for multi-material systems - Continuous quality and process data chains

Campus Boulevard 30
52074 Aachen
North Rhine-Westphalia
Germany
www.azl.rwth-aachen.de/

Main areas covered Process chain development/testing, Handling and automation, Tool and mould making, Multi-material systems, Consistent process chains

Infrastructure

Certifications

Keywords Automation technology, Hybrid components/multi-material system, Material qualification, Process evaluation & optimisation

Memberships



Organisation type

University or higher education institution

Sectors

No specific sector

Employees

10 up to 49

Turnover

n/a

Funding

Overview of lightweighting expertise

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	Research	Development	Manufacturing & Supply
Offer			
Products Parts and components, Semi-finished parts, Machines and plants, Software & databases, Systems and end products, Materials, Tools and moulds	✓	✓	
Services & consulting Training, Testing and trials, Engineering, Prototyping, Validation, Simulation, Technology transfer	✓	✓	
Field of technology			
Design & layout			
Functional integration			
Measuring and testing technology			
Modelling and simulation			
Plant construction & automation			
Recycling technologies			

Overview of lightweighting expertise

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	Research	Development	Manufacturing & Supply
Manufacturing process			
Additive manufacturing			
Coating (surface engineering)			
Fibre composite technology			
Forming			
Joining			
Material property alteration			
Primary forming			
Processing and separating			
Textile technology			
Material			
Biogenic materials			
Cellular materials (foam materials)			
Composites			
Fibres			
Functional materials			
Metals			
Plastics			
Structural ceramics			
(Technical) textiles			

Contacts

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Mr Dr.-Ing. Michael Emonts

Managing Director

michael.emonts@azl.rwth-aachen.de