

# 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

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52074 Aachen  
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Germany  
[www.azl.rwth-aachen.de/](http://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

n/a

**Overview of lightweighting expertise**

**Machine translation**

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

## 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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