

# Automotive Centre Südwestfalen GmbH

Research and development centre for lightweight automotive construction

## About this organisation

### Machine translation

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

Automotive Center Südwestfalen GmbH (acs) is a platform for research and development work as well as knowledge transfer between automotive manufacturers, suppliers and university institutes in South Westphalia. The company provides modern infrastructure, equipment, software and specialised personnel for projects and tasks in the field of research and development.

Its expertise covers the fields of bodywork and chassis as well as rational manufacturing processes for metal, plastic and hybrid material combinations. The acs specialises in working on R&D projects for suppliers and car manufacturers. In these projects, acs mostly deals with the challenges of functional and economical lightweight construction. The following six specialised departments have been set up at acs: Computer Aided Engineering Department 1: Technology and Innovation Management Department 2: Forming Technology and Materials Department 3: Plastics Technology and Materials Department 4: Joining and Assembly Technology Department 5: Testing, Metrology and Materials Laboratory

Kölner Straße 125  
57439 Attendorn  
North Rhine-Westphalia  
Germany  
[www.acs-innovations.de](http://www.acs-innovations.de)



### Organisation type

Small or medium-sized enterprise

### Sector



### Employees

10 up to 49

### Turnover

€2m - €10m

### Funding

n/a

# Automotive Centre Südwestfalen GmbH

Research and development centre for lightweight automotive construction

## About this organisation

<b>Main areas covered</b>	Component and assembly development
<b>Infrastructure</b>	Forming technology and materials, Plastics technology and materials, Joining and assembly technology, Testing and materials laboratory, Development and CAE
<b>Certifications</b>	ISO 9001:2008
<b>Keywords</b>	Lightweight automotive construction, Plastics technology, forming technology, Joining technology, testing, Injection moulding technology, development, CAE, structural components, crash
<b>Memberships</b>	

## Overview of lightweighting expertise

### Machine translation

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

	Research	Development	Manufacturing & Supply
<b>Offer</b>			
<b>Products</b> Parts and components	✓	✓	
<b>Services &amp; consulting</b> Consulting, Testing and trials, Engineering, Validation, Simulation	✓	✓	

# Automotive Centre Südwestfalen GmbH

Research and development centre for lightweight automotive construction

## Overview of lightweighting expertise

### Machine translation

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

	Research	Development	Manufacturing & Supply
<b>Field of technology</b>			
<b>Design &amp; layout</b> Lightweight manufacturing, Lightweight design, Hybrid structures, Lightweight construction concepts, Lightweight material construction	✓	✓	✓
<b>Functional integration</b> Material functionalisation		✓	
<b>Measuring and testing technology</b> Component and part analysis, Visual analysis (e.g. microscopy, metallography), System analysis, Materials analysis, Destructive analysis, Non-destructive analysis		✓	
<b>Modelling and simulation</b> Crash behaviour, Loads & stress, Life-cycle analysis, Optimisation, Processes, Structural mechanics, Materials, Reliability validation		✓	
<i>Plant construction &amp; automation</i>			
<i>Recycling technologies</i>			

# Automotive Centre Südwestfalen GmbH

Research and development centre for lightweight automotive construction

## Overview of lightweighting expertise

### Machine translation

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

	Research	Development	Manufacturing & Supply
<b>Manufacturing process</b>			
<b>Additive manufacturing</b> 3D printing, Deposition welding, Selective laser melting (SLM, LPBF, ...), Selective laser sintering (SLS)	✓	✓	
<i>Coating (surface engineering)</i>			
<b>Fibre composite technology</b> Fibre spraying, Pre-preg processing	✓	✓	✓
<b>Forming</b> Bending, Compression moulding, Thermal converting, Deep-drawing	✓	✓	✓
<b>Joining</b> Clinching, Hybrid joining, Adhesive bonding, Soldering, Riveting, Screwing, Welding	✓	✓	✓
<b>Material property alteration</b> Heat treatment	✓	✓	✓
<b>Primary forming</b> Injection moulding	✓	✓	✓
<b>Processing and separating</b> Drilling, Turning, Milling, Sawing, Grinding, Cutting			✓
<i>Textile technology</i>			

# Automotive Centre Südwestfalen GmbH

Research and development centre for lightweight automotive construction

## Overview of lightweighting expertise

### Machine translation

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

	Research	Development	Manufacturing & Supply
<b>Material</b>			
<b>Biogenic materials</b> Bioplastics, Biocomposites, Wood	✓	✓	✓
<i>Cellular materials (foam materials)</i>			
<b>Composites</b> Aramid fibre composites, Basalt fibre-reinforced plastic, Glass-fibre reinforced plastics (GFRP), Carbon-fibre reinforced plastics (CFRP), Natural fibre reinforced plastics (NFRP)	✓	✓	✓
<b>Fibres</b> Aramid fibres, Basalt fibres, Glass fibres, Ceramic fibres, Carbon fibres, Metal fibres, Natural fibres	✓	✓	✓
<i>Functional materials</i>			
<b>Metals</b> Aluminium, Intermetallic alloys, Magnesium, Steel, Titanium	✓	✓	✓
<b>Plastics</b> Thermoset plastics, Elastomers, Thermoplastics	✓	✓	✓
<i>Structural ceramics</i>			
<b>(Technical) textiles</b> Yarns, rovings, Meshes, Laid webs, Crocheted fabrics, Woven fabrics, Knitted fabrics, Nonwovens, mats	✓	✓	✓

## Automotive Centre Südwestfalen GmbH

*Research and development centre for lightweight automotive construction*

### Contacts

#### Machine translation

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

Mr M. Sc. Patrick Giurgiu

*Project Engineer Automotive Centre  
Südwestfalen GmbH*

[p.giurgiu@acs-innovations.de](mailto:p.giurgiu@acs-innovations.de)