### **Aalen University**

## GTA Foundry Technology Aalen

### About this organisation

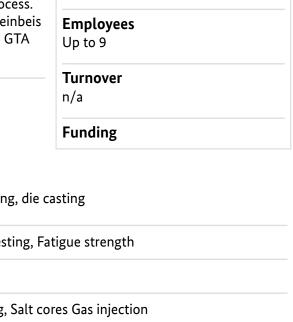
#### Machine translation

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Aalen University - Foundry Technology in the Faculty of Mechanical and Materials Engineering

The core competencies of the foundry laboratory at Aalen University lie in the die casting of aluminium and magnesium light metal alloys This includes the development of new process variants for lightweight construction, such as the production of thin-walled, hollow die-cast parts using salt cores or gas injection. Extremely rigid parts can be produced in this way. In addition, the development of composite materials made from carbon fibre and die casting for car body structures is an area in which research is being carried out as part of the federal government's SmartPro project. Thanks to the use of 4 production-related die casting machines, the results can be quickly applied in near-series processes. In addition, prototypes can be produced using sand or permanent mould casting or the lost foam process. The production of small series is also possible. The Steinbeis Transfer Centre GTA - Foundry Technology Aalen and GTA GmbH are connected to the university laboratory.

Beethovenstraße 1 73430 Aalen



Gießerei Technologie Aalen

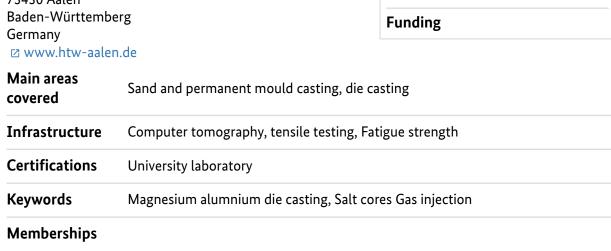
University or higher education

Organisation type

**□ □ ←** 

institution

Sectors



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Machine translation  This organisation has been machine-translated based on data provided in German.				
	Research	N Development	Manufacturii & Supply	
Offer				
Products Parts and components, Semi-finished parts	<b>✓</b>			
Services & consulting Training, Consulting	<b>✓</b>			
Field of technology				
Design & layout Lightweight manufacturing, Lightweight design, Hybrid structures, Lightweight construction concepts, Lightweight material construction	<b>✓</b>	<b>✓</b>		
Functional integration				
Measuring and testing technology Materials analysis, Destructive analysis, Non- destructive analysis	<b>✓</b>	<b>✓</b>	<b>✓</b>	
Modelling and simulation				
Modelling and simulation  Plant construction & automation				

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Overview of lightweighting expertise				
Machine translation				
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	Research	N Development	/Janufacturin & Supply	
Manufacturing process				
Additive manufacturing				
Coating (surface engineering)				
Fibre composite technology Others (CFRP cast hybrid)	<b>✓</b>			
Forming				
Joining				
Material property alteration				
Primary forming Casting	<b>✓</b>	<b>✓</b>	<b>✓</b>	
Processing and separating				
Textile technology				

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# Overview of lightweighting expertise **Machine translation** This organisation has been machine-translated based on data provided in German. Manufacturing **Development** & Supply Research Material Biogenic materials Cellular materials (foam materials) Composites **Fibres** Carbon fibres Functional materials Metals Aluminium, Magnesium **Plastics** Structural ceramics (Technical) textiles

### **Contacts**

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