

# INVENT GmbH

*Innovative composite materials Realisation and marketing of new technologies*

## About this organisation

### Machine translation

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

Since 1996, INVENT GmbH has grown into a recognised engineering and manufacturing specialist for fibre composite technologies, developing structural components from the initial idea through the fields of structural analysis and design development to series production. Another important area of expertise is research and development with a wide range of composite activities in the field of fibre composite structures.

The realisation and marketing of innovative composite material technologies as well as the planning, organisation, coordination and control as a service to achieve an efficient transfer of innovative technologies between basic research and industry is the object of the company's activities. As a service provider and consultant, INVENT GmbH works together with industrial and basic research-oriented partners and also successfully networks them into an overall system with a high level of market expertise. INVENT GmbH spans the entire spectrum from series production, e.g. for Airbus (Tier 1 supplier), through design and prototype construction to the development of future industrial technologies in subsidised projects. To this end, we offer complete concepts for product development from these future-orientated material systems, from calculation, dimensioning, design and the conception of production technology (prototyping) through to series production.

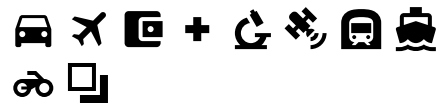
Christian-Pommer-Straße 47  
38112 Braunschweig  
Lower Saxony  
Germany  
[www.invent-gmbh.de](http://www.invent-gmbh.de)



### Organisation type

Small or medium-sized enterprise

### Sectors



Others: Messtechnik

### Employees

50 up to 249

### Turnover

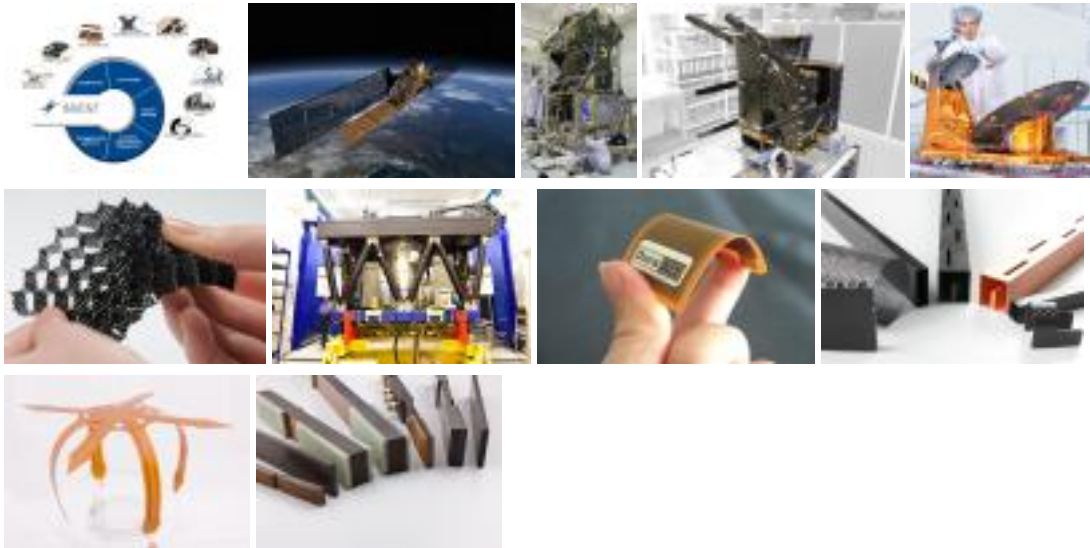
€2m - €10m

### Funding

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## About this organisation



**Main areas covered** Space components, Aerospace components, Function integration, Series production, Customised lightweight construction

**Infrastructure** Autoclave and prepreg technology, Winding and pressing technology, Destructive and ultrasonic testing, Clean room and thermal cycling, Mechanical processing, painting

**Certifications** DIN EN ISO 9001 : 2008, DIN EN 9100 : 2009, Nadcap Composites

**Keywords** Satellite structures, Optical bench, Satellite antennas, Piezoceramic modules, DuraAct, R&D joint projects

**Memberships** Composites United e.V.

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## Overview of lightweighting expertise

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	Research	Development	Manufacturing & Supply
<b>Offer</b>			
<b>Products</b> Parts and components, Semi-finished parts, Machines and plants, Materials, Tools and moulds	✓	✓	✓
<b>Services &amp; consulting</b> Training, Consulting, Testing and trials, Engineering, Prototyping, Validation, Simulation, Technology transfer	✓	✓	✓
<b>Field of technology</b>			
<b>Design &amp; layout</b> Lightweight manufacturing, Hybrid structures, Lightweight construction concepts, Lightweight material construction	✓	✓	✓
<b>Functional integration</b> Actuator technology, Sensor technology, Material functionalisation	✓	✓	✓
<b>Measuring and testing technology</b> Visual analysis (e.g. microscopy, metallography), Destructive analysis, Non-destructive analysis	✓	✓	✓
<b>Modelling and simulation</b> Loads & stress, Structural mechanics, Materials, Reliability validation	✓	✓	✓
<b>Plant construction &amp; automation</b> Plant construction	✓	✓	✓
<b>Recycling technologies</b> Upcycling	✓	✓	

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	Research	Development	Manufacturing & Supply
<b>Manufacturing process</b>			
<i>Additive manufacturing</i>			
<b>Coating (surface engineering)</b> Painting	✓	✓	✓
<b>Fibre composite technology</b> Filament winding, Manual lamination, Resin infusion process, Resin transfer moulding, Pre-preg processing, Vacuum infusion	✓	✓	✓
<b>Forming</b> Compression moulding			✓
<b>Joining</b> Adhesive bonding, Riveting, Screwing	✓	✓	✓
<b>Material property alteration</b> Heat treatment	✓	✓	✓
<b>Primary forming</b> Others (Laminating CFRP moulding tools)	✓	✓	✓
<b>Processing and separating</b> Drilling, Turning, Milling, Sawing, Grinding, Cutting	✓	✓	✓
<b>Textile technology</b> Preforming	✓	✓	✓

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	Research	Development	Manufacturing & Supply
<b>Material</b>			
<b>Biogenic materials</b> Biocomposites	✓	✓	✓
<i>Cellular materials (foam materials)</i>			
<b>Composites</b> Aramid fibre composites, Basalt fibre-reinforced plastic, Glass-fiber reinforced plastics (GFRP), Carbon-fiber reinforced plastics (CFRP), Nanocomposites, Natural fibre reinforced plastics (NFRP), Laminates	✓	✓	✓
<b>Fibres</b> Natural fibres	✓	✓	
<b>Functional materials</b> Piezoelectric materials, Others (Piezoceramic function modules)	✓	✓	✓
<b>Metals</b> Aluminium, Steel, Titanium			✓
<b>Plastics</b> Thermoset plastics, Elastomers, Thermoplastics	✓	✓	✓
<i>Structural ceramics</i>			
<i>(Technical) textiles</i>			

## Contacts

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