TITK - Thuringian Institute for Textile and Plastics Research

Department of Textile and Materials Research

About this organisation

Machine translation

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

The Thuringian Institute for Textile and Plastics Research (TITK) is an industry-oriented research facility that offers customer-oriented development services in the field of fibre composites for lightweight construction applications on the market. Extensive testing technology from the fibre to the component rounds off the range of services.

The Thuringian Institute for Textile and Plastics Research (TITK) develops semi-finished reinforcing fibre products and fibre composite structures with thermoplastic and thermoset matrix materials. A wide variety of processes are used, adapted to long or short fibre reinforcement. TITK has extensive experience in the use of carbon and natural fibres for automotive applications.

Breitscheidstraße 97
07407 Rudolstadt
Thuringia
Germany
www.titk.de

Organisation type
Non-university research institution

Sectors

Employees
50 up to 249

Turnover
€10m - €50m

Funding
n/a

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About this organisation

Main areas covered	Fibre composites, Reinforcing fibre semi-finished products, Fibre to component testing
Infrastructure	Preforming process chain, Nonwoven production, fibre blowing, Thermoforming presses, wet presses, Injection moulding, filament winding, Fibre, semi-finished product and composite testing
Certifications	Laboratories accred. DIN EN ISO/IEC17025
Keywords	Fibre reinforcement; fibre composite, Carbon fibre; CFRP; Natural fibre; NFRP, Nonwovens; fibre bladders; semi-finished products, Pressing; injection moulding; winding;, Fibre, textile and composite testing
Memberships	Carbon Composites e.V. ; AVK

Overview of lightweighting expertise

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	Research	Development	Manufacturing & Supply
Offer			
Products Parts and components, Semi-finished parts, Materials		✓	
Services & consulting Testing and trials, Prototyping, Validation		✓	

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Overview of lightweighting expertise

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	Research	Development	Manufacturing & Supply
Field of technology			
Design & layout Hybrid structures, Lightweight material construction		✓	
Functional integration Material functionalisation		✓	
Measuring and testing technology Component and part analysis, Visual analysis (e.g. microscopy, metallography), Materials analysis, Destructive analysis		✓	✓
Modelling and simulation			
Plant construction & factory automation			
Recycling technologies Recycling		✓	

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	Research	Development	Manufacturing & Supply
Manufacturing process			
Additive manufacturing			
Coating (surface engineering)			
Fibre composite technology Filament winding, Manual lamination, Resin transfer moulding, Pre-preg processing		✓	
Forming Impact extrusion, Compression moulding, Thermal converting, Deep-drawing		✓	
Joining Sewing		✓	
Material property alteration			
Primary forming			
Processing and separating			
Textile technology Fibre manufacturing, Preforming, Textile surface treatment and finishing, Nonwoven & mats production		✓	

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	Research	Development	Manufacturing & Supply
Material			
Biogenic materials Bioplastics, Biocomposites, Wood		✓	
Cellular materials (foam materials)			
Composites Aramid fibre composites, Basalt fibre-reinforced plastic, Glass-fiber reinforced plastics (GFRP), Carbon-fiber reinforced plastics (CFRP), Natural fibre reinforced plastics (NFRP), Laminates		✓	
Fibres Aramid fibres, Basalt fibres, Glass fibres, Carbon fibres, Natural fibres		✓	
Functional materials			
Metals			
Plastics Thermoset plastics, Elastomers, Thermoplastics		✓	
Structural ceramics			
(Technical) textiles Yarns, rovings, Laid webs, Woven fabrics, Nonwovens, mats		✓	

Contacts

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Contacts

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