

About this organisation

Founded in 1828, Dresden University of Technology is the largest university in Saxony, one of eleven universities of excellence in Germany and is considered one of the leading universities in Europe. With 17 faculties in five areas, it offers a broad range of 119 degree programmes and conducts cutting-edge research in a wide variety of fields.

The Professorship of Wood Technology and Fiber Materials Technology at the TU Dresden works on the development of lightweight, mostly bio-based materials and on the development of machines for their production and processing. Lightweight materials in combination with the development of efficient manufacturing processes with a focus on composite construction, in particular honeycomb construction, are a central part of the research.

Marschnerstraße 39

01307 Dresden

Saxony

Germany

www.tu-dresden.de/hft



Organisation type

University or higher education institution

Sectors

No specific sector

Employees

50 up to 249

Turnover

n/a

Funding

n/a



Main areas covered

Infrastructure

Certifications

Keywords

Memberships

Overview of lightweighting expertise

	Research	Development	Manufacturing & Supply
Offer			
Products Parts and components, Semi-finished parts, Machines and plants, Materials, Tools and moulds	✓	✓	
Services & consulting Training, Consulting, Testing and trials, Engineering, Standardisation, Prototyping, Validation	✓	✓	
Field of technology			
<i>Design & layout</i>			
Functional integration Sensor technology, Material functionalisation		✓	
Measuring and testing technology Visual analysis (e.g. microscopy, metallography), Environmental simulation, Materials analysis, Destructive analysis, Non-destructive analysis	✓	✓	
Modelling and simulation Optimisation, Processes, Materials	✓		
Plant construction & automation Handling technology, Others	✓	✓	
<i>Recycling technologies</i>			

Overview of lightweighting expertise

	Research	Development	Manufacturing & Supply
Manufacturing process			
Additive manufacturing 3D printing, Laminated object manufacturing (LOM), Selective laser sintering (SLS), Others	✓	✓	
<i>Coating (surface engineering)</i>			
Fibre composite technology Fibre spraying, Pre-preg processing	✓	✓	
Forming Others	✓	✓	
Joining Adhesive bonding, Screwing	✓	✓	
Material property alteration Mechanical treatment, Thermochemical treatment, Thermomechanical treatment, Heat treatment	✓	✓	
Primary forming Injection moulding	✓		
Processing and separating Milling, Sawing, Shearing/punching, Cutting, Others	✓	✓	
<i>Textile technology</i>			

Overview of lightweighting expertise

	Research	Development	Manufacturing & Supply
Material			
Biogenic materials Wood, Others	✓	✓	
<i>Cellular materials (foam materials)</i>			
Composites Natural fibre reinforced plastics (NFRP), Laminates	✓	✓	
Fibres Natural fibres	✓	✓	
<i>Functional materials</i>			
<i>Metals</i>			
<i>Plastics</i>			
<i>Structural ceramics</i>			
<i>(Technical) textiles</i>			

Contacts

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