Fraunhofer Institute for Wood Research Wilhelm-Klauditz Institute WKI

Fraunhofer Application Centre HOFZET

About this organisation

Machine translation

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

With its HOFZET application centre, the Fraunhofer WKI stands for innovative, application-oriented research and expertise in the field of bio-based composites.

HOFZET's research focuses include the development of application-specific, optimised hybrid fibre-reinforced composites, project planning and implementation of process chains for the manufacture of innovative hybrid FRPs for small and large-scale production, and the development and testing of effective material-specific recycling concepts. HOFZET's modern technical equipment enables the comprehensive production of matrix- and fibre-dominant FRPs as well as the non-destructive and destructive analysis of material properties. Through close co-operation with the Institute for Bioplastics and Biocomposites IfBB at Hanover University of Applied Sciences and Arts, HOFZET offers its customers a broad spectrum of manufacturing processes and testing methods in the field of (bio)plastics technology.

Heisterbergallee 12
30453 Hannover
Lower Saxony
Germany
www.wki.fraunhofer.de/de/fachbereiche/hofzet/profil.html

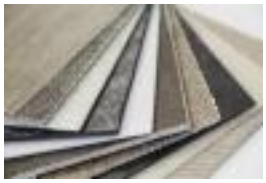
Organisation type
Non-university research institution

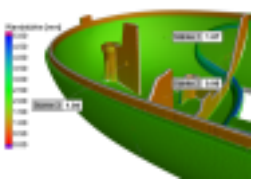
Sectors

Employees
50 up to 249

Turnover
€10m - €50m

Funding



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About this organisation

Main areas covered	Research and development, Fibre composites, Test laboratory, Technical (biobased) textiles, Fibre spraying
Infrastructure	Extrusion, injection moulding, Organic sheet extruder, Mechanical tests, Non-destructive testing, Optical and rheological measurements
Certifications	
Keywords	Hybrid lightweight construction, NFK, Biocomposite material
Memberships	

Overview of lightweighting expertise

Machine translation

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

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Overview of lightweighting expertise

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	Research	Development	Manufacturing & Supply
Field of technology			
Design & layout Lightweight manufacturing, Hybrid structures, Lightweight construction concepts	✓	✓	
Functional integration Sensor technology, Material functionalisation	✓	✓	
Measuring and testing technology Component and part analysis, Visual analysis (e.g. microscopy, metallography), System analysis, Environmental simulation, Materials analysis, Destructive analysis, Non-destructive analysis	✓	✓	
Modelling and simulation Life-cycle analysis, Optimisation, Processes, Materials	✓	✓	
Plant construction & automation			
Recycling technologies Downcycling, Material separation, Recycling	✓	✓	

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Overview of lightweighting expertise

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	Research	Development	Manufacturing & Supply
Manufacturing process			
Additive manufacturing 3D printing	✓	✓	
Coating (surface engineering) Others (Wet chemical treatment)	✓	✓	
Fibre composite technology Fibre spraying, Manual lamination, Resin infusion process, Vacuum infusion	✓	✓	
Forming			
Joining			
Material property alteration			
Primary forming Extrusion, Casting, Injection moulding	✓	✓	✓
Processing and separating Milling, Sawing	✓	✓	
Textile technology Fibre manufacturing, Preforming, Weaving	✓	✓	✓

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Overview of lightweighting expertise

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	Research	Development	Manufacturing & Supply
Material			
Biogenic materials Bioplastics, Biocomposites, Wood, Others (Bio-based hybrid fibre composites, biocomposites)	✓	✓	
Cellular materials (foam materials) Others (Wood foam)	✓	✓	
Composites Glass-fiber reinforced plastics (GFRP), Carbon-fiber reinforced plastics (CFRP), Natural fibre reinforced plastics (NFRP), Textile-reinforced concrete	✓	✓	
Fibres Aramid fibres, Glass fibres, Carbon fibres, Natural fibres	✓	✓	
Functional materials			
Metals			
Plastics Thermoset plastics, Thermoplastics	✓	✓	
Structural ceramics			
(Technical) textiles Yarns, rovings, Woven fabrics, Others (Hybrid fabric)	✓	✓	

Contacts

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Contacts

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