Centre for Lightweight Production Technology (ZLP) Stade

About this organisation

Machine translation

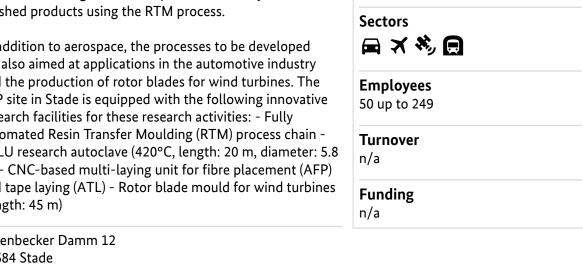
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Research at the ZLP site in Stade focuses on the production of very large and complex components in highly productive fibre placement processes and the sensor-guided, component-related control of thermally inert curing processes in autoclaves or open moulding tools. The researchers in Stade are also working on the fully automated production of large series components from dry textile semifinished products using the RTM process.

In addition to aerospace, the processes to be developed are also aimed at applications in the automotive industry and the production of rotor blades for wind turbines. The ZLP site in Stade is equipped with the following innovative research facilities for these research activities: - Fully automated Resin Transfer Moulding (RTM) process chain -BALU research autoclave (420°C, length: 20 m, diameter: 5.8 m) - CNC-based multi-laying unit for fibre placement (AFP) and tape laying (ATL) - Rotor blade mould for wind turbines (length: 45 m)

Ottenbecker Damm 12 21684 Stade Lower Saxony Germany

☑ www.dlr.de/zlp



Deutsches Zentrum

Non-university research institution

Organisation type

für Luft- und Raumfahrt

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Main areas covered	Resin Transfer Moulding (RTM), Fibre Placement (AFP), Tapelaying (ATL), Online quality assurance			
Infrastructure	(RTM) process chain, Research autoclave BALU, Storage device for AFP and ATL			
Certifications	DIN EN ISO 9001:2008			
Keywords				
Memberships				

Overview of lightweighting expertise

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		anufacturing
Research	Development	& Supply
✓	✓	~
✓	✓	✓
	Research	

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Overview of lightweighting expertise Machine translation This organisation has been machine-translated based on data provided in German.				
Manufacturing process				
Additive manufacturing				
Coating (surface engineering)				
Fibre composite technology Fibre spraying, Filament winding, Manual lamination, Resin infusion process, Resin transfer moulding, Pre-preg processing, Vacuum infusion	✓	✓	✓	
Forming Compression moulding	✓	✓	✓	
Joining				
Material property alteration				
Primary forming				
Processing and separating				
Textile technology Preforming	✓	✓	✓	

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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 Glass-fiber reinforced plastics (GFRP), Carbonfiber reinforced plastics (CFRP) **Fibres** Glass fibres, Carbon fibres Functional materials Metals **Plastics** Structural ceramics (Technical) textiles

Contacts

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