

4D Concepts GmbH

About this organisation

4D Concepts GmbH has seen itself as a reliable, flexible and creative partner in product and process development since 1995. In addition to design and construction, the business areas include conventional model making as well as services in all plastic-based additive manufacturing processes. In addition, two 3D printing technologies from 3D Systems are sold and service and consumables are provided.

Development of multifunctional lightweight structures using stereolithographically produced shell components and subsequent injection of filled thermosets; sub-project: Development of an injection and curing process for short fiber-reinforced resins for novel components.

Frankfurter Straße 74
64521 Groß-Gerau
Hesse
Germany
www.4dconcepts.de



Organisation type

Small or medium-sized enterprise

Sectors

No specific sector

Employees

10 up to 49

Turnover

€2m - €10m

Funding

n/a

Main areas covered

Infrastructure

Certifications

Keywords

Memberships

Overview of lightweighting expertise			
	Research	Development	Manufacturing & Supply
Offer			
Products Parts and components, Machines and plants, Software & databases, Systems and end products, Tools and moulds			✓
Services & consulting Consulting, Testing and trials, Engineering, Prototyping, Maintenance and repair			✓
Field of technology			
Design & layout Lightweight manufacturing	✓		✓
Functional integration Thermal activation, Material functionalisation	✓		✓
Measuring and testing technology Component and part analysis, Visual analysis (e.g. microscopy, metallography)			✓
Modelling and simulation Loads & stress, Life-cycle analysis, Optimisation, Materials			✓
<i>Plant construction & automation</i>			
Recycling technologies Material separation, Upcycling			✓

Overview of lightweighting expertise

	Research	Development	Manufacturing & Supply
Manufacturing process			
Additive manufacturing 3D printing, Selective laser sintering (SLS), Stereolithography, Others	✓		✓
Coating (surface engineering) Painting, Others			✓
Fibre composite technology Resin transfer moulding	✓	✓	
Forming Deep-drawing			✓
Joining Adhesive bonding, Soldering, Screwing			✓
<i>Material property alteration</i>			
Primary forming Casting			✓
Processing and separating Drilling, Turning, Milling, Sawing, Grinding, Cutting			✓
<i>Textile technology</i>			

Overview of lightweighting expertise			
	Research	Development	Manufacturing & Supply
Material			
<i>Biogenic materials</i>			
Cellular materials (foam materials) Closed-pore			✓
Composites Glass-fiber reinforced plastics (GFRP), Carbon-fiber reinforced plastics (CFRP)	✓	✓	✓
Fibres Glass fibres, Carbon fibres			✓
<i>Functional materials</i>			
<i>Metals</i>			
Plastics Thermoset plastics, Elastomers, Thermoplastics			✓
<i>Structural ceramics</i>			
<i>(Technical) textiles</i>			

Contacts	
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