

## 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.

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Germany  
[www.4dconcepts.de](http://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
<b>Offer</b>			
<b>Products</b> Parts and components, Machines and plants, Software & databases, Systems and end products, Tools and moulds			✓
<b>Services &amp; consulting</b> Consulting, Testing and trials, Engineering, Prototyping, Maintenance and repair			✓
<b>Field of technology</b>			
<b>Design &amp; layout</b> Lightweight manufacturing	✓		✓
<b>Functional integration</b> Thermal activation, Material functionalisation	✓		✓
<b>Measuring and testing technology</b> Component and part analysis, Visual analysis (e.g. microscopy, metallography)			✓
<b>Modelling and simulation</b> Loads & stress, Life-cycle analysis, Optimisation, Materials			✓
<i>Plant construction &amp; automation</i>			
<b>Recycling technologies</b> Material separation, Upcycling			✓

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

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

Contacts	
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