

# SWMS Systemtechnik Ingenieurgesellschaft mbH

## COMPOSITES

### About this organisation

SWMS Systemtechnik Ingenieurgesellschaft mbH is a consulting and technology company in the field of software conception and development and virtual product development. Since 1996, SWMS has been helping companies to make complex business and engineering processes more professional, efficient and resource-saving.

SWMS's "PLM" division offers vendor-independent solutions for optimizing product development and manufacturing processes. SWMS relies on CAx and PDM standards in the areas of design and planning. Automated Fiber Placement (AFP) and Automated Tape Laying (ATL) are used in the automated production of fiber-reinforced components. Portal systems and robots process a wide variety of materials. With the "TapeStation" software, SWMS offers a solution in this complex environment, from the design of composite components to the programming of production systems.

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Germany

[www.swms.de](http://www.swms.de)



**Main areas covered** machine simulation, offline programming, Manufacturing simulation, post-processor integration, Composites web occupancy analysis

**Infrastructure** CAESA® Software 3D TapeStation, integration Siemens NX, integration CATIA V5, integration Fibersim, integration 840D, KUKA CNC, etc.

### Certifications

**Keywords** 3D Printing, Filament Winding, Fiber Placement, tape laying, software

**Memberships** Composites United e.V., AVIASPACE Bremen e.V., MAI Carbon, Automotive Nordwest e.V., Nordwest.Digital



#### Organisation type

Small or medium-sized enterprise

#### Sectors



#### Employees

10 up to 49

#### Turnover

Up to €2m

#### Funding

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Offer	Manufacturing		
	Research	Development	& Supply
<b>Products</b> Software & databases	✓	✓	✓
<b>Services &amp; consulting</b> Engineering, Simulation	✓	✓	✓
Field of technology			
<b>Design &amp; layout</b> Lightweight manufacturing, Lightweight design, Lightweight construction concepts	✓	✓	
<b>Functional integration</b> Actuator technology, Sensor technology	✓	✓	✓
<b>Measuring and testing technology</b> Non-destructive analysis	✓	✓	
<b>Modelling and simulation</b> Optimisation, Processes	✓	✓	✓
<b>Plant construction &amp; automation</b> Plant construction, Automation technology, Robotics	✓	✓	✓
Recycling technologies			

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Overview of lightweighting expertise			
	Research	Development	Manufacturing & Supply
<b>Manufacturing process</b>			
<b>Additive manufacturing</b> 3D printing, Deposition welding	✓	✓	✓
<i>Coating (surface engineering)</i>			
<b>Fibre composite technology</b> Filament winding, Others (Fiber Placement, Tapelegen)	✓	✓	✓
<i>Forming</i>			
<i>Joining</i>			
<i>Material property alteration</i>			
<i>Primary forming</i>			
<i>Processing and separating</i>			
<i>Textile technology</i>			
<b>Material</b>			
<i>Biogenic materials</i>			
<i>Cellular materials (foam materials)</i>			
<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>			
<i>Plastics</i>			
<i>Structural ceramics</i>			
<i>(Technical) textiles</i>			

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