

## About this organisation

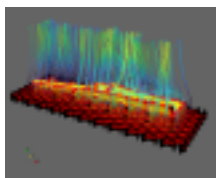
### Machine translation

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

DHCAE Tools offers services and software tools for simulations, in particular flow and structural analyses. CFD focusses on heat transport (heat treatment), multiphase systems and coupled issues (fluid-structure, thermal-mechanical interactions). Both open-source solvers with high adaptability to the individual process and proprietary special solvers are used and optimised for on-site use.

Projects carried out to simulate the heat treatment of light metals (titanium components): Here, an automated flow simulation tool was developed that can predict the cooling of titanium components in still air and in a rapid cooling chamber in interaction with the environment. Very good agreement was achieved with experimentally measured cooling curves during heat treatment. The CFD calculation tool is used in-house by the end user to reduce component distortion due to creep during cooling.

Friedrich-Ebert-Str. 368  
47800 Krefeld  
North Rhine-Westphalia  
Germany  
[www.dhcae-tools.de](http://www.dhcae-tools.de)



### Organisation type

Small or medium-sized enterprise

### Sectors

No specific sector

### Employees

Up to 9

### Turnover

Up to €2m

### Funding

## About this organisation

**Main areas covered** CFD FEA CAE CSM

**Infrastructure**

**Certifications**

**Keywords** CFD flow simulation, Heat analyses, Fluid-structure interaction, Thermal-mechanical calculation

**Memberships**

## Overview of lightweighting expertise

### Machine translation

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	Research	Development	Manufacturing & Supply
<b>Offer</b>			
<i>Products</i>			
<b>Services &amp; consulting</b>			
Simulation	✓	✓	✓
<b>Field of technology</b>			
<i>Design &amp; layout</i>			
<i>Functional integration</i>			
<i>Measuring and testing technology</i>			
<b>Modelling and simulation</b>			
Multiphysics simulation, Structural mechanics, Materials	✓	✓	✓
<i>Plant construction &amp; automation</i>			
<i>Recycling technologies</i>			

## Overview of lightweighting expertise

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	Research	Development	Manufacturing & Supply
<b>Manufacturing process</b>			
<i>Additive manufacturing</i>			
<i>Coating (surface engineering)</i>			
<i>Fibre composite technology</i>			
<i>Forming</i>			
<i>Joining</i>			
<b>Material property alteration</b>			
Mechanical treatment, Thermomechanical treatment, Heat treatment		✓	✓
<i>Primary forming</i>			
<i>Processing and separating</i>			
<i>Textile technology</i>			

## Overview of lightweighting expertise

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Research   Development   **Manufacturing  
& Supply**

#### Material

*Biogenic materials*

*Cellular materials (foam materials)*

*Composites*

*Fibres*

*Functional materials*

*Metals*

*Plastics*

*Structural ceramics*

*(Technical) textiles*

## Contacts

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

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