

# Bavarian research & innovation



Bavarian Research Cooperation for Process- and Workflow  
Support for Planning and Controlling Procedures in the  
Product Development

## FROM IDEA TO PRODUCT IN TOP TIME

**"Genius is 1 % inspiration and 99 % transpiration." Thomas A. Edison**

**T**he product development takes place in a frame of complex linkages between man, technology, organization and methods. These close and sensitive interdependencies are vulnerable to failures and may result in impasses, development loops and other unpredictable complications on the path from idea to product. The product designers are confronted with the challenge to choose the best and most effective path from a multiplicity of possibilities with intuition, experience and aptitude.

Up to now the existing tools support technical workflow at different stages of product development. They are neither arbitrarily compatible nor allow definite conclusions about the course of process. Predefined and determined sequences which are a characteristic of workflow-management-systems in business processes are neither realizable nor suitable for the creative process of product development. Nevertheless, this creative process does not purely run chaotically but also contains fixed procedures and patterns.

The aim of the FORFLOW-scientists is to describe approaches and decision criteria for



these procedures and particularly its intersections in order to develop the concept of a process navigator supporting the engineer step by step in product development and decision making.

The process navigator saves time of development, makes the process more transparent and traceable, provides knowledge and information suitable to each level, and uses existent know-how efficiently. Thus the risk of erroneous trends can be reduced and also the quality of processes and products deeply improved.

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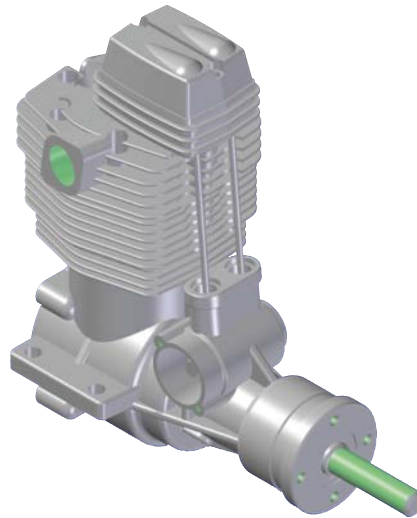
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# RESEARCH TOPICS:

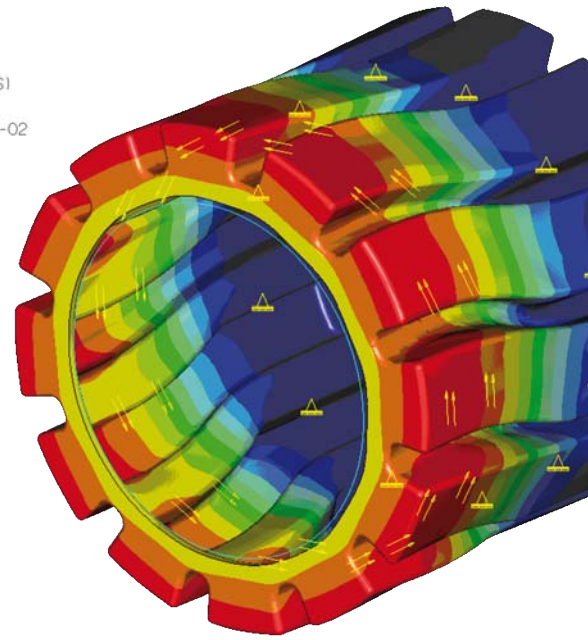
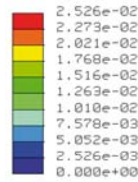
1. Process-related requirements to the product models
2. Methods of generation and controlling the process of product development
3. Configuration of a multi disciplinary knowledge base with specific retrieval services for the product development
4. Conception, prototypic implementation and evaluation of the process navigator.

## Economic Applications:

The navigator serves to accelerate the product development, to make the process more transparently and traceable, to facilitate the documentation and to transfer know-how efficiently. The risk of erroneous trends can be reduced because the designers are able to show with the process navigator at the early stages of product development, whether an idea can be transformed into a marketable product.



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(mm)  
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## Industrial Partners:

Actano GmbH, München  
ArvinMeritor GmbH, Augsburg  
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Siemens Medical Solutions, Erlangen  
Transtechnik GmbH & Co. KG, Holzkirchen  
Volkswagen AG, Wolfsburg

## Cooperation:

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