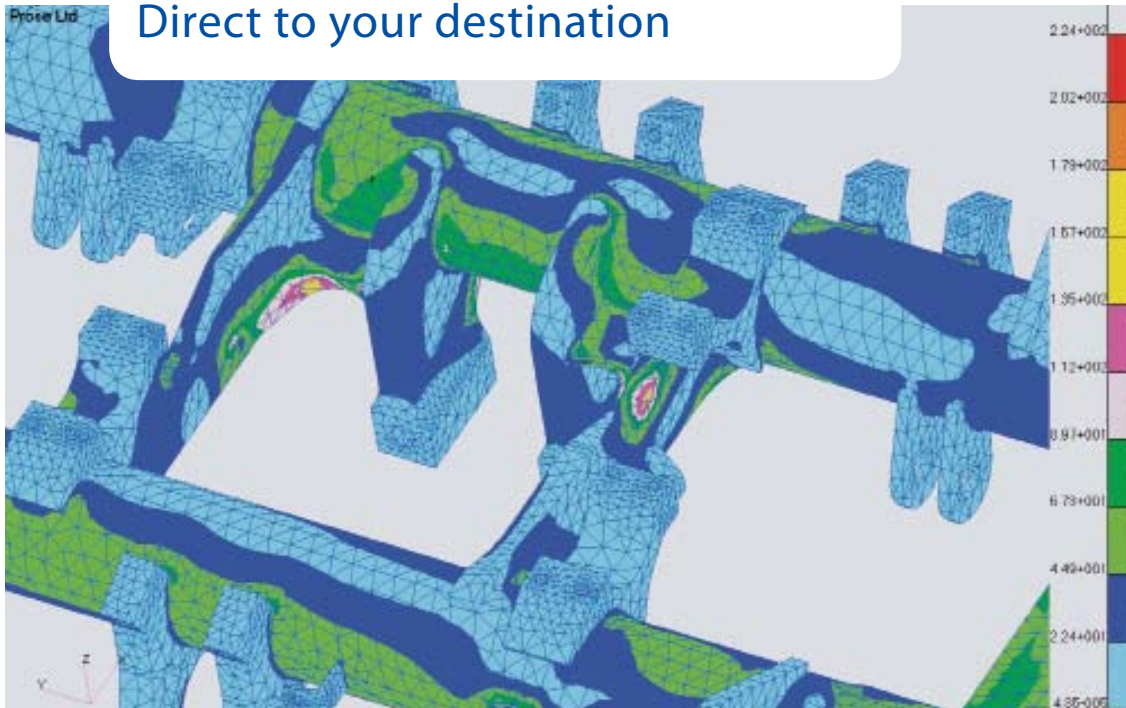


Analysis and Simulations – Direct to your destination



FE-Analysis on bogie frame (detail view).

[Factsheet 4.00047](#)

Detailed Information

- Analysis of components
- Finite-Element-Analysis (FE)
 - Structural and fatigue analysis (endurance strength)
 - Stability analysis
 - Heat transmission analysis

- Analysis of running dynamics
- Equivalent conicity analysis
 - Coefficient of flexibility analysis
 - Eigenvalue analysis
 - Linear stability analysis
 - Non-linear stability analysis
 - Derailment analysis
 - Dynamic response, ride comfort

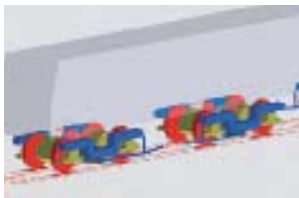
- Analysis of Systems
- FMECA-Analysis (Failure Mode Effect and Criticality Analysis)
 - RAMS-Analysis (Reliability, Availability, Maintainability and Safety)
 - Dynamic Analysis
 - Life-Cycle-Cost-Analysen (LCC)
 - Value analysis

Project Responsibility

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Development and design of bogies for the Class 3800 Bo'Bo'Bo' locomotive for Queensland Railways in Australia.



Unnecessary costs and risks can be avoided if you make the right choice: our analysis and simulation detects weak design points and can help avoid expensive test series; thus improving the quality of your products.

Requirements

Unnecessary repetition of development phases are annoying and the respective cost can be avoided. Our analysis and computer-based simulation steer the development process and optimise the quality of the product.

Realisation

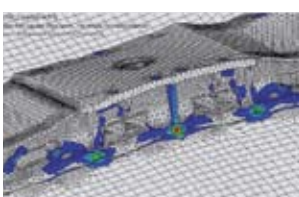
Depending on the client's brief, we perform the analysis as a design support or work directly with the design team. Our engineers have extensive know-how, even in non-railway specific areas. We are also coaching the simulation process and are supporting your team as a neutral consultant.



Concept, design, test and manufacturing of 46 new antenna supports on the bogies of the MTRC Lantau Island Airport trains.



Damage analysis and repair design of cracked aluminium carbodies of the Metro de Medellin, Colombia.



Our services are rendered in the following disciplines:

- Analysis of components
 - Analysis of running dynamics
 - Analysis of Systems
- (see detailed information)

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