



Leading MBS Technology  
for Technology Leaders

# SIMPACK Rail

## APPLICATION

**SIMPACK Rail** is an add-on module tailored to the specific requirements of the rail sector and is the world-wide market leader for rail vehicles multi-body simulation. SIMPACK Rail is used to simulate the dynamics of all rail vehicles or complete trains.

## Applications

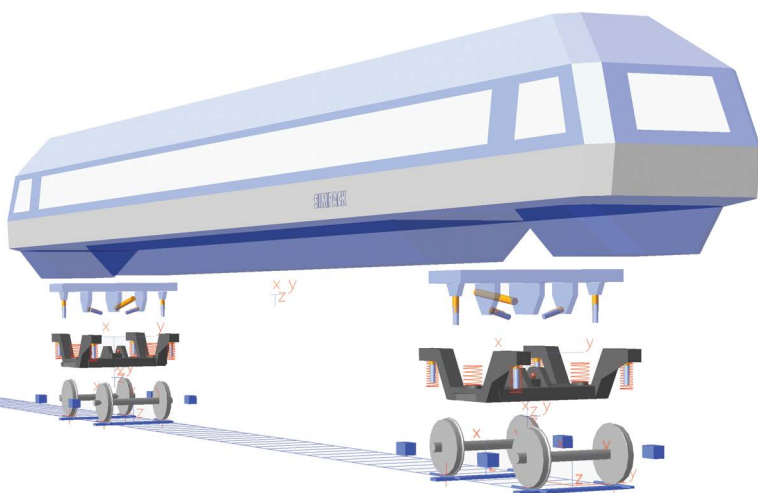
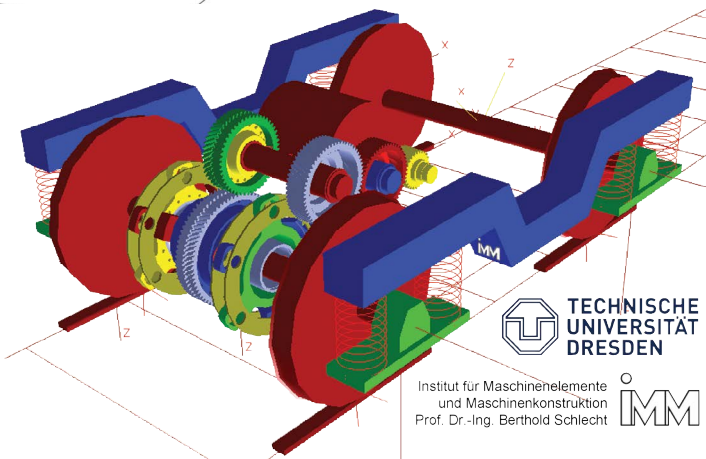
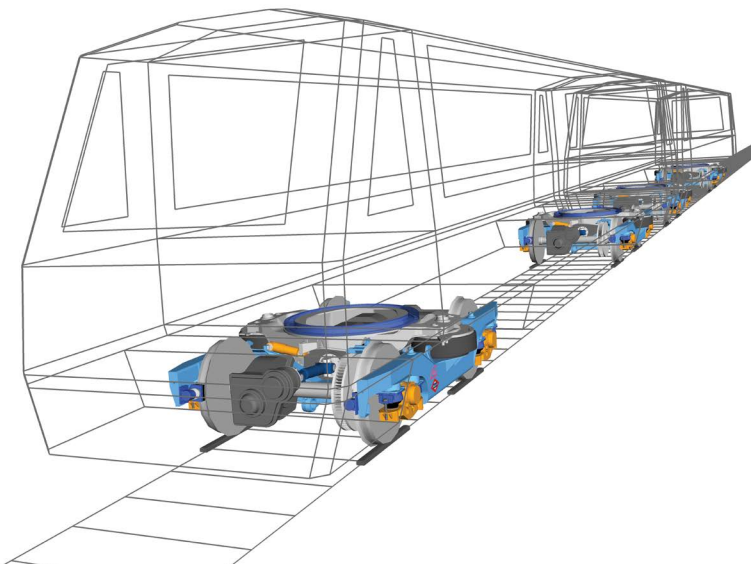
- Derailment safety
- Critical speed
- Passenger comfort
- Profile and track optimization, wear and RCF
- Gauging
- Driveline and braking
- Switches and crossings

## Highlights

- Unlimited flexibility
- Easy assembly of multi-car trains from submodels
- Powerful track editor
- Each wheel treated independently
- Scalable detail and complexity
- Batch jobs
- Automatic analysis reports

## Features

- Detailed and accurate (online) rail-to-wheel contact model, non-elliptic contact
- Multiple contact patches per wheel
- Fast and robust solver
- Linear and non-linear analyses
- Importation of Flexible Bodies from FEM codes
- Powerful control systems software interfaces
- Easy implementation of user specific code

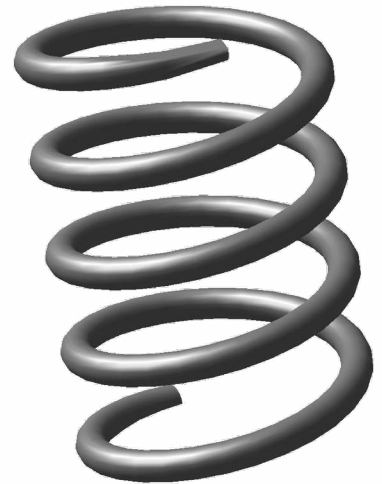
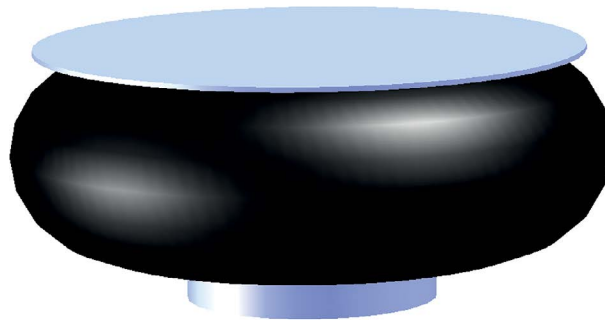
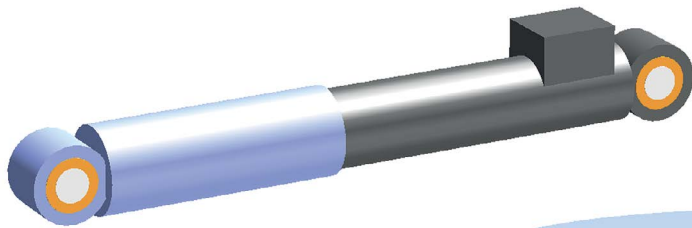
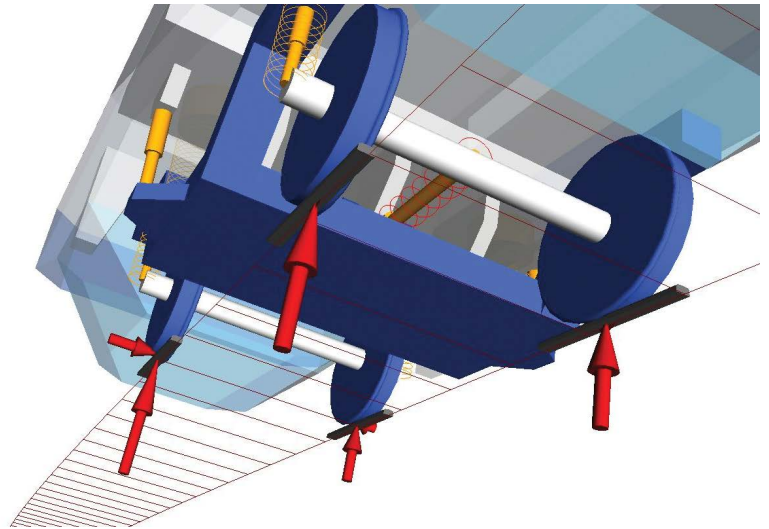


### Interfaces to

- FEM software
- Control software
- Fatigue analysis software
- CAD software
- In-house software
- Optimization tools
- Fluid dynamic simulation tools

### Operating Systems

- Windows and Linux.
- See: [www.simpack.com/platforms.html](http://www.simpack.com/platforms.html)



#### SIMPACK CUSTOMER SOLUTION CENTERS:

##### GERMANY HEADQUARTERS

**SIMPACK GmbH**  
 Friedrichshafener Strasse 1  
 82205 Gilching  
 Germany  
 Phone: +49 8105 77266-0  
 Fax: +49 8105 77266-11  
 info@SIMPACK.de  
 www.SIMPACK.com

**USA**  
**SIMPACK US Inc.**  
**Dassault Systèmes SIMULIA Corp**  
 900 North Squirrel Road, Suite 100  
 Auburn Hills, Michigan 48326  
 USA  
 Phone: +1 313 827-5500  
 Fax: +1 313 323-0149  
 Mobile: +1 251 923 9566  
 Robert.SOLOMON@3ds.com  
 www.SIMPACK.com

**GREAT BRITAIN**  
**SIMPACK UK Ltd.**  
 The Whittle Estate  
 Cambridge Road  
 Whetstone  
 Leicester LE8 6LH  
 UK  
 Phone: +44 116 275 1313  
 Mobile: +44 7767 416 656  
 info@SIMPACK.co.uk  
 www.SIMPACK.com

**JAPAN**  
**SIMPACK Japan K.K.**  
 21F ThinkPark Tower  
 2-1-1 Osaki  
 Shinagawa-ku  
 Tokyo 141-6020  
 Japan  
 Phone: +81 3 4321-3522  
 Fax: +81 3 4321-3543  
 info@SIMPACK.jp  
 www.SIMPACK.jp

**FRANCE**  
**SIMPACK France S.A.S. /**  
**Dassault Systèmes**  
 20 Boulevard Eugène Deruelle  
 Immeuble Le Britannia  
 69003 Lyon  
 France  
 Phone: +33 4 7214 1683  
 Mobile: +33 673 881 965  
 info@SIMPACK.fr  
 www.SIMPACK.fr



For SIMPACK Distributors please go to  
[www.simpack.com/contact.html](http://www.simpack.com/contact.html)