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