



3DEXPERIENCE®

# SIMPACT: MULTIBODY SIMULATION

Create high quality products quickly and efficiently to reduce overall costs in design, production and maintenance.



Simpack is a general purpose multibody simulation (MBS) software used for the dynamic analysis of any mechanical or mechatronic system. Engineers are able to generate and solve virtual 3D models in order to predict and visualize motion, coupling forces and stresses.

From initial concept designs, through to production and redesigns, Simpack is used to help engineers fully comprehend and optimize systems, vastly reduce the need for physical prototyping, reduce time-to-market and to improve product quality and lifespan.

## PRODUCT PORTFOLIO:

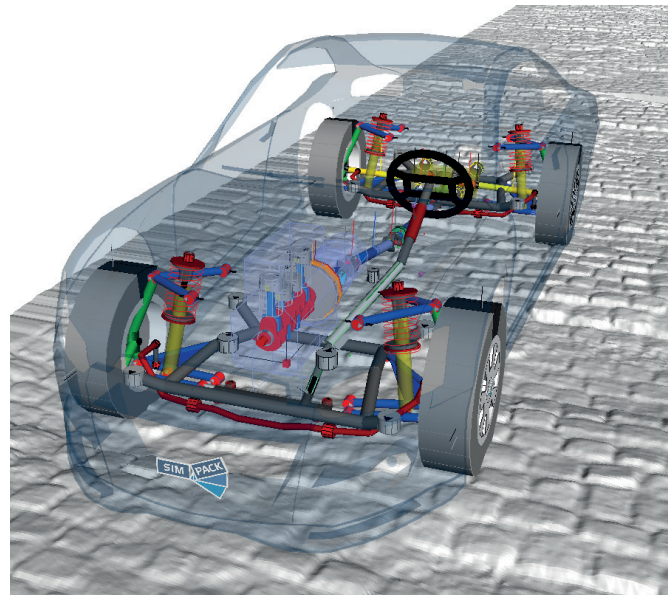
- Simpack Pre
- Simpack Post
- Simpack Solve
- Simpack Wizard
- Simpack Realtime
- Over 70 Industry specific add-on modules

**Simpack Pre** enables users to build models from the ground up. Using the large variety of included modeling elements (e.g. bodies, joints, forces and excitations), basic models can be generated for investigating general dynamic phenomena. The pre-processor is required for most other Simpack modules.

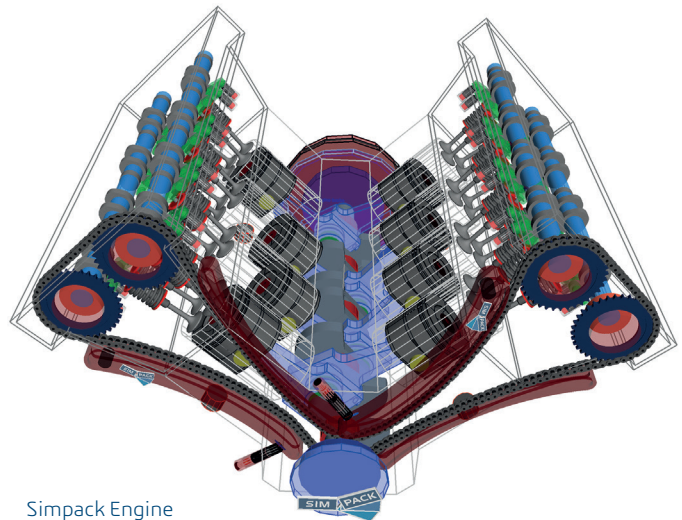
**Simpack Post** is required for the visualization of results. 2D plots, 3D plots, and 3D animations can be easily generated. An extensive library of filters enables easy data processing. User defined templates allow quick report generation and comparison of results.

**Simpack Wizard** enables easy setup of standardized models and analysis processes for “deployment mode” of Simpack. Non-expert users can carry out company-specific standard analyses and review the results without difficulty. Simpack Wizard is based on standard Simpack model databases which can be adapted using Simpack Pre.

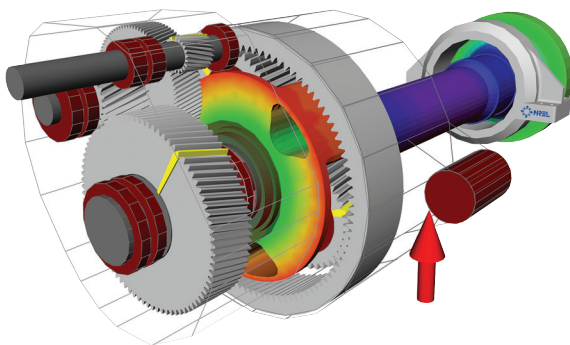
**Simpack Realtime** enables Hardware-in-the-Loop (HiL) and Man-in-the-Loop (MiL) Simulations with Simpack models. Most Simpack modeling elements are supported and even complex models can be used in realtime simulations.



Simpack Automotive



Simpack Engine



Simpack Drivetrain

## Our 3DEXPERIENCE® platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the 3DEXPERIENCE® Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 190,000 customers of all sizes in all industries in more than 140 countries. For more information, visit [www.3ds.com](http://www.3ds.com).



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