



# TruckMaker

## Real-time simulation of heavy-duty vehicles

**Meet the challenges of today's vehicle development with virtual test driving. Our simulation solution TruckMaker is specifically tailored to the requirements of developing and testing heavy-duty vehicles such as trucks, construction vehicles, busses, semi trucks, heavy-duty big rigs and special-purpose vehicles. TruckMaker enables you to accurately model real-world test scenarios in the virtual world.**

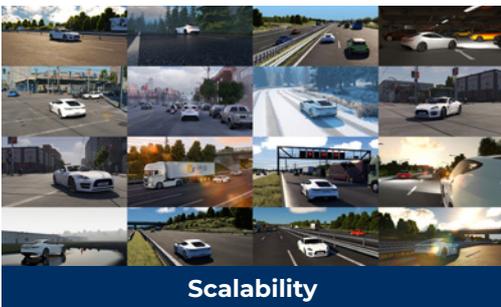
**Our software supports you in making your development processes more agile. In accordance with the automotive systems engineering approach, virtual test driving with TruckMaker enables the seamless development, calibration, test and validation of entire systems in the whole vehicle within highly realistic scenarios.**

Implement test scenarios for the application areas of ADAS and automated driving, powertrain and vehicle dynamics with our open integration and test platform. A variety of supported standards and interfaces also ensures the smooth integration into your existing tool landscapes.

TruckMaker offers you a high-performance, real-time capable vehicle model including all subcomponents, enabling you to quickly and easily build your virtual prototypes already during early stages of the development process (MIL, SIL). The combination of the virtual prototype with an adaptive driver

model, a comprehensive traffic model and a detailed road model makes automated and reproducible tests possible early on. A well-structured user interface guarantees easy parameterization. In addition, TruckMaker is ideally suited for hardware-in-the-loop (HIL) tests on component and large integration test benches as well as for use in real vehicles (VIL). All this ensures that you can use TruckMaker according to your individual test requirements in every stage of the development process.

Our virtual test driving package comes complete with the right tools for visualization, test automation and data analysis. At any time during the simulation, the 3D visualization tool MovieNX, the data analysis tool IPGControl and the virtual dashboard Instruments deliver detailed and reliable information on all essential parameters, data and models of your test scenario. This way you are always on top of your virtual test runs! The automation tool Test Manager guarantees a smooth, stable and automated test process for seamless use in the areas MIL, SIL, HIL and VIL, and enables the parallel execution of test catalogs on high-performance computing clusters and in the cloud. Complete thousands of test miles over night – with TruckMaker!



## Your benefits at a glance



### High reliability

Proven solution with countless industry references and success stories



### Efficient process integration

Open integration platform with many supported standards and interfaces



### End-to-end workflows

Merger of simulation assets and tools to create and execute end-to-end development workflows



### Superior performance

Fast C/C++-based simulation core with highly efficient simulation models



### Reduction in physical testing

Highly realistic virtual test driving environment reduced expensive and time-consuming physical testing



### Great usability

Intuitive GUI and numerous product examples to build upon



### Seamless reusability

Seamless run of reliable and repeatable simulation and reuse of scenarios across development stages from MIL, SIL, HIL to VIL



### Easy and rapid scalability

Scalable simulation environment with reference designs and working examples for HPC and cloud-based applications – ideal for CI/CD/CT



Find more information on the features of our simulation solution TruckMaker on our website.



IPG Automotive GmbH  
Bannwaldallee 60  
76185 Karlsruhe  
Tel.: +49 721 98520 0

[ipg-automotive.com](http://ipg-automotive.com)

