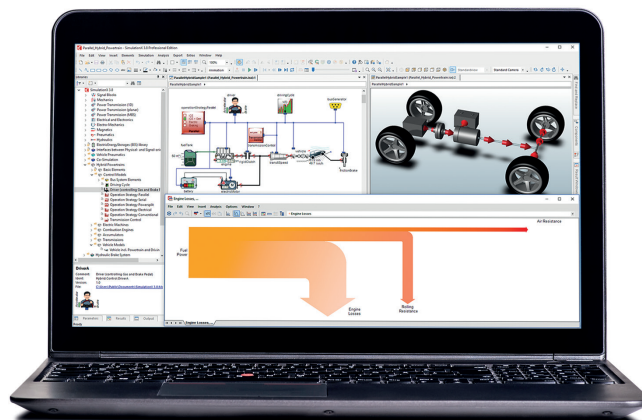




Your partner in drive, and **chassis systems development**

The standard development tool SimulationX meets the demands of OEMs and suppliers dreaming of a holistic simulation tool that perfectly combines different physical fields such as mechanics, hydraulics and controls in the design of complex vehicle systems.

Thanks to multi-domain simulation models, it is already possible to virtually driving a vehicle on the screen in the same way as driving it in reality on the streets. In the future, the focus will be on a comprehensive, powerful toolchain that facilitates, for instance, the early simulation and application of new powertrains in such a way that testing at the test rig or in the vehicle is only necessary for verification purposes.



Design of the entire system behavior

Engineers and scientists rely on ESI ITI simulation products for the vehicle development starting from concept through to testing. SimulationX is an intuitive 1D to 3D software platform for physical modeling, simulation and analysis of mechatronics automotive systems.

Early in the design phase, OEMs and suppliers model and analyze components, validate design choices and quickly exchange system models. SimulationX has long proven its excellent performance in combining engine, clutch, transmission, brakes and has become a »sine qua non« in modern vehicle development. SimulationX models can be applied either in single development phases or throughout the whole process – starting from development, pre-design and development along the series production process over troubleshooting through to analysis of components and units on test benches.

Shifting & Comfort | physical 1D and 3D simulation of drive and chassis systems on one platform.

Efficiency & Emission | scalable concepts for engines, drive, controls, and chassis.

Performance, Stability & Control | simulationbased design of experiments and testing.

Noise-Vibration-Harshness (NVH) | numeric calculation with validated, adjustable and integral model components, such as engine, clutch, gear, suspension, drive and controls.

Dynamics | model-based development of functions and system integration including results about dynamics and comfort.

“We achieve continuous optimization of our internal development processes and timeframes by effectively using SimulationX.”

Dr. Bernd Findeisen,
**Manager Calculation/
Simulation**
IAV



Learn More:

esi-group.com/products/system-simulation