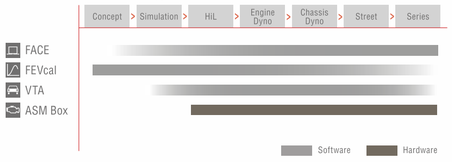
TOPEXPERT supports the entire vehicle development process



YEARS OF DEVELOPMENT EXCELLENCE

Profit from an agile yet structured and solution-oriented development philosophy.

Future-oriented TOPEXPERT products are the result of more than 20 years of experience in innovative methods, algorithms, and software development.

The dynamic collaboration of our interdisciplinary team's dedicated software engineers with FEV's calibration and engineering excellence allows us to create market-oriented solutions on the cutting edge of technology.

PROVEN MODULAR ARCHITECTURE

Our modular and reusable software architecture minimizes costs and ensures rapid project completion.

Through an unique, self-integrating modular approach, we rapidly provide reliable solutions, even for special client requirements.

The resulting increase in efficiency and outstanding quality of results, together with a thorough operating philosophy, leads to optimal project outcomes.

All TOPEXPERT products are perfectly compatible, and interact stably and reliably. This makes it possible to solve complex problems conveniently with minimal training.

Passion. Innovation. Solutions.

FEV

Are you interested in innovative and trend-setting software solutions?

Please contact us!

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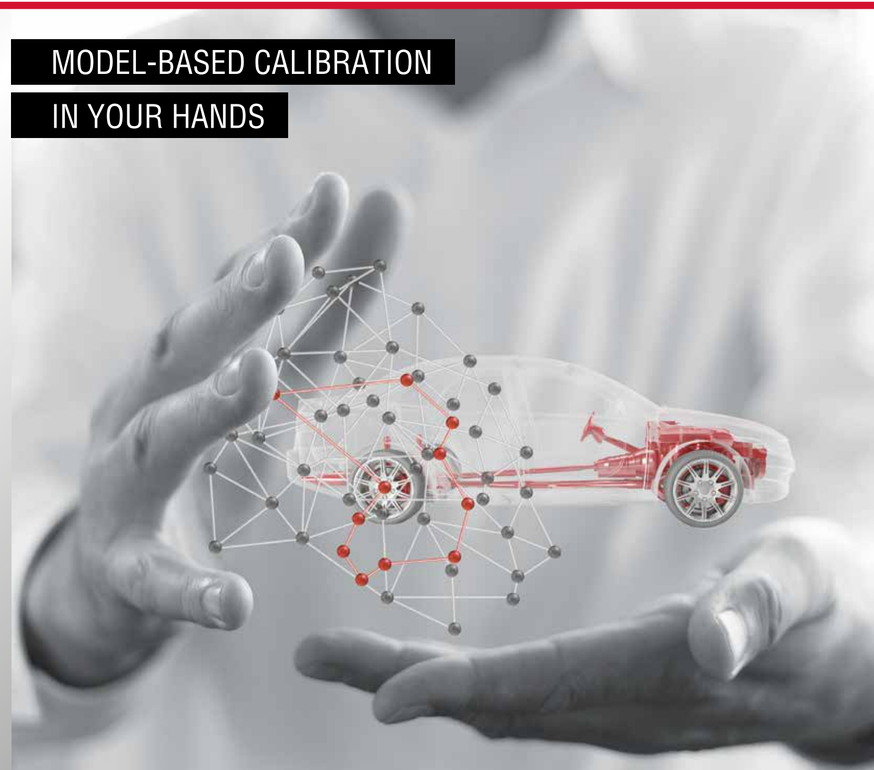
MODEL-BASED CALIBRATION IN YOUR HANDS



www.fev.com

TOPEXPERT

Enter the Future of
Virtual Powertrain Development

FEVCAL: FORWARD-LOOKING DOE METHODOLOGY

Thanks to impressive model quality and unique visualization capabilities, expenditures for tests and simulations can be drastically reduced.

FEVcal uses a high-performance DoE methodology to meet the special requirements of calibration engineers.

Special emphasis has been placed on developing fast and highly reliable modeling algorithms. Modeling techniques based on Gaussian process models have been optimized for the special characteristics of powertrain development.
This approach, combined with intuitive visualization and user guidance, makes it possible to quickly and conveniently investigate and optimize the engine's behavior.

- Cutting-edge modeling algorithms
- Powerful optimization routines
- Unique visualization options
- Workflow-based user guidance

FACE: INNOVATIVE AND GUIDED CALIBRATION

Fast and automated processing of thousands of files enables significantly shorter development times.

FACE standardizes, accelerates, and automates incidental calibration requirements.

To this end, FACE provides a comprehensive function library for data analysis – from graphical data visualization of statistical functions and fundamental post-processing routines, to extended scripting capabilities and automatic optimization of application parameters.
The unique, workflow-based tool design enables standardized and thus accelerated calibration processes.

- Workflow-based calibration
- Convenient data processing routines
- Standardized calibration processes
- Strong visualization

VTA: REPRODUCABLE TEST-AUTOMATION

Automated and high-quality test procedures increase efficiency, on the test bench as well as on the test track.

VTA enables the usage of model-based test procedures for in-vehicle calibration.

Thanks to the graphical workflow editor, VTA allows the structured planning of automated vehicle maneuvers and extensive data recordings.
Proven automation methods are carried over from the test bench to the chassis dynamometer and proving ground and thus enable enormous increases in efficiency and reproducibility.
Additionally, the workflows serve to document, preserve and transfer the knowledge of experienced engineers.

- Extensive number of interfaces
- Documentation and knowledge transfer
- High-quality, reproducible measurement results
- Model-based calibration of vehicles

ASM BOX: EFFICIENT OBD CALIBRATION

Innovative verification of PVE and OBD calibration without faulty components enables enormous cost reductions.

Hardware for verification of nearly any error pattern for homologation, robustness evaluation, and PVE.

Thanks to the prefabricated Simulink® models, the components of any engine can be manipulated quickly and easily. The standard models can be conveniently adjusted for individual requirements. The ASM Box provides interfaces to calibration tools for the usage in calibration tasks.
The intuitive user interface enables the efficient conduction of a vehicle homologation by the authority.

- Manipulation of injection signals
- Manipulation of ignition signals
- Manipulation of oxygen sensors
- Manipulation of crankshaft sensors

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