

AVL



AVL ELECTRIFICATION SOFTWARE TOOLS

All you want for your electrified powertrain calibration



AVL CAMEO 4™

Makes complexity easy



AVL Smart Mobile Solutions™

Smart. Portable. Interactive.



AVL CONCERTO 5™

Experience the harmony



AVL CRETA 5™

Trust your calibration power

THE CHALLENGE

Battery, Hybrid, Fuel Cell – The electrified powertrain calibration tasks are challenging in all constellations due to the high complexity and level of interactions. The testing and optimization activities are distributed between virtual environments, physical testbeds and the vehicle. All require support in automation, result interpretation and optimization as well as data management.

To deliver competitive vehicles, it is essential to have the engineers focus on what they are best at – judging/ weighing evidence, thinking through (analyzing) problems and making decisions.

DO IT THE OLD WAY:

Manual
Repetitive
Simple
Inconsequent
Confusing
Subjective
Suboptimal
Conflicting
Disorder

DO IT THE NEW WAY:

Automated
Once
Intelligent
Consequent
Clear
Objective
Optimal
Concordant
Order

THE AVL SOLUTION

AVL offers a comprehensive solution to the challenge by combining the proven calibration tools:



AVL CAMEO 4™ – Calibration Software

- Intelligent DoE based test automation, modeling and optimization
- E-Drive, Hybrid and Fuel Cell applications in the testbed
- Virtual powertrain layout testing and optimization in office
- Test standardization and sequencing for 24/7 test field utilization



AVL Smart Mobile Solutions™ – In-Vehicle Applications

- Intelligent support of the engineer for in vehicle testing
- Planning of vehicle testing tasks in the office
- Smart assistance in driving maneuvers in the vehicle for development, calibration and validation tasks
- Easy automation of your calibration or variation in the vehicle



AVL CONCERTO 5™ – Data Processing Platform

- Seamless analysis of measurement and simulation data from electrical, mechanical and chemical systems
- One platform for harmonization and standardization
- Powerful functions for intuitive and interactive analysis of high frequent and long time measurements



AVL CRETA 5™ – Calibration data lifecycle management system

- Calibration parameter management
- Simple and fast generation of frequent dataset releases
- Transparent and traceable development results
- Functional safety compliant up to ASIL D

THE ADDED VALUE

The future is today with AVL's electrification tools:

From users for users!

DO IT THE OLD WAY:	DO IT THE NEW WAY:
Manually performing measurement after measurement in a testbed	Analyzing test data from overnight test runs optimized with machine learning algorithms
Executing time consuming trial and error test on the testbed	Evaluate and visualize the results of the different settings and finding the best matching parameters
Driving on the test track manually trying to repetitively executing the maneuvers	Verify the best parameter settings in the vehicle by guided maneuver assistance
Evaluate the results afterwards in the office and discovering the criteria were not met	Use online evaluation and visualization of test criteria which exactly fit the task
Create sub datasets which are shared through email, usb sticks and shared folders	Collaborate with colleagues from all over the world sharing parameter updates for the different sub-systems

FIND OUT MORE:

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