AVL CONCERTO 5™

Experience the harmony

AVL

AVL Team SUITE

DATA CHECK

RESPONSIBLE
TEAM 2

CHECKPOINTS

THE CHALLENGE

STANDARDIZATION

In the automotive industry, the number of measuring instruments, data types, applications and evaluation routines is ever growing. This demands for a generic tool providing simple assessment possibilities for all requirements, while also offering a basis for decision-making premised on standardized evaluations.

HARMONIZATION

As the number of measuring instruments and sensors increases steadily, so do the data types and standard channel names and, particularly in globally operating companies, the measurement units. These differences need to be harmonized with simple means so valuable time is saved and can be used for comparisons and evaluations to keep up-to-date and to stay competitive.

VARIABILITY AND FLEXIBILITY

The broad range of application-specific tasks requires a high level of application know-how and various tools, which are nowadays not only used on the testbed but also in the office or in the vehicle. As a result, there is an increasing demand for flexible license management and solutions for specific applications.

EFFICIENCY

The management needs informative reports in an instant to speed up their decision-making process and, above all, to make the right decisions, regardless of time and location. Hence, it is essential to fill pre-defined reports and calculations with current data and provide these to the management.

THE ADDED VALUE

- One platform for harmonization, standardization and applications
- Highest data performance, intuitive data search and interactive calculations
- Consistent pre- and post-processing
- What-You-See-Is-What-You-Get reporting
- Fully automated evaluations and integration of third-party algorithms

AVL CONCERTO 5™
Experience the harmony

AVL CONCERTO 5™ is the generic data processing platform for visualizing, analyzing and reporting many measured and simulated data types. Moreover, it is used for application packages that address specific tasks. This makes AVL CONCERTO 5™ the smartest way to turn data into decision-relevant information. Thanks to AVL CONCERTO 5™, globally operating companies can use their evaluations in all their test and simulation areas. Once distributed via shared libraries, the evaluations are automatically standardized, thus simulation and measurement data can be compared directly and errors resulting from manual data conversions are avoided.

A wide range of functions for data analysis, visualization and fully automated evaluation enables you to generate sophisticated reports and to share them with colleagues and superiors. Even reusing existing know-how is now easy thanks to the flexible integration of third-party models. With its open interfaces and integrated comparison mechanisms, the platform is a central data correlation tool for automation, simulation and measurement systems.

THE AVL SOLUTION

STANDARDIZATION
Reusing created report windows and calculations is just one of the features of the unique data and layout structure of AVL CONCERTO 5™. The software makes it easy to save display objects with supplied calculations as "object presets" that can then be integrated into new layouts. Proven templates can be accessed flexibly through globally shared libraries, which enables you to quickly create reports even with newly obtained data, saving valuable time in the development process.

HARMONIZATION
With its exceptional channel name translation and unit-conversion function, AVL CONCERTO 5™ makes it possible to harmonize multiple channel names and units, even before opening the data. Several additional functions ensure that data are also harmonized within layouts. Seamless integration into AVL SANTORIN MX 2™ further facilitates storing already harmonized data on a data type and uploading them to AVL SANTORIN MX 2™.

VARIABILITY AND FLEXIBILITY
The data processing platform AVL CONCERTO 5™ provides numerous toolboxes and Pro Apps for specific applications. Accordingly, the platform can be extended for several requirements, giving you the advantage of using the same software throughout the entire development process. By means of flexible license mechanisms, the specific applications can be used and shared individually in the office, on the testbed or in the vehicle.

EFFICIENCY
AVL CONCERTO 5™ provides maximum performance, not only in data handling but also in data search, as it only takes milliseconds to search the entire database. Moreover, you can rely on powerful functionalities, like interactive calculation, visualization and evaluation. With seamless integration into AVL SANTORIN MX 2™, reports can now be generated directly while uploading data, regardless of time and location.

AVL CONCERTO 5™ as platform
Next level data processing

AVL

PRO APPS

Pro Apps are complete solutions for various data pre- and post-processing tasks, containing e.g. a complete set of ready-to-use certificates for certifiers or ready-to-use reports for all kinds of required pre- and post-processing evaluations.

Thanks to AVL's outstanding development knowledge, a wide range of required industry reports can be used off-the-shelf. For specific needs, our application engineers will also develop custom Pro Apps.

TOOLBOXES

The toolboxes determine AVL CONCERTO 5™ for a particular application area and extend the platform with application specific functionalities. They can contain several formula libraries, calculations, scripts, dialogs, menus and integrated third-party libraries. Toolboxes can be easily shared via the network, helping to standardize procedures and data evaluations.

With the Application Development Kit (ADK) integrated in AVL CONCERTO 5™, it is possible to extend existing toolboxes and Pro Apps or create tailor-made ones.

PLATFORM

AVL CONCERTO 5™ as software platform meets today's and future challenges for toolboxes and Pro Apps. Within the platform, all standard file types are available, as well as a broad range of graphical diagrams for different visualization needs and styles. What is more, this powerful platform supports any calculations, formulas, macros and scripts provided by toolboxes, Pro Apps and even self-defined calculations, and is downward compatible to existing AVL CONCERTO 4™ layouts, formulas, macros and scripts.

POWERTRAIN DEVELOPMENT IS A TEAM SPORT

Today's requirements in powertrain development move forward every second. Complex systems, shorter times to market and a global world of opportunities challenge you to be better, more flexible and faster than your competitors.

Development tasks aren't stand-alone. And it's not (just) about how good single individuals or tools are…

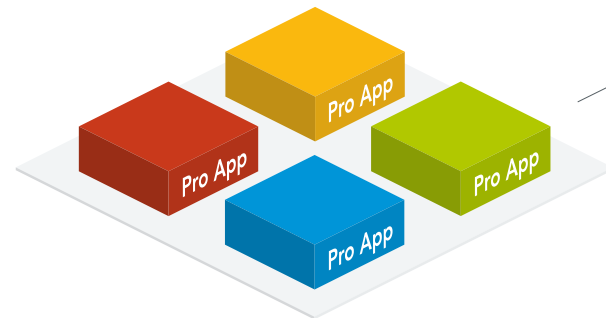… it's about how well they work together.

AVL Team SUITE™
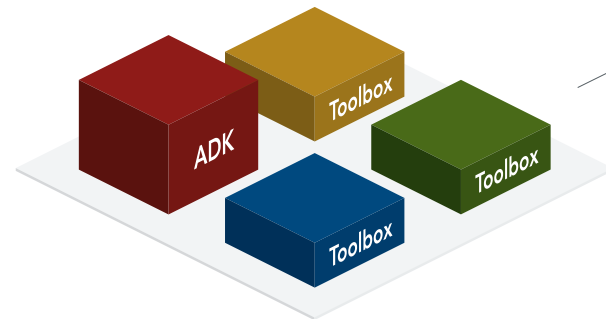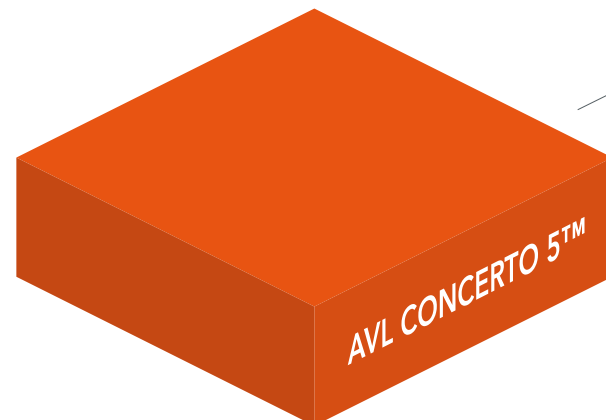
SUCCESS BASED ON INTERPLAY

www.avl.com/meet-the-team

AVL Team SUITE™

COMBINE YOUR STRONG TEAM FLEXIBLY OUT OF COMPATIBLE, COMPLEMENTARY PLAYERS TO MEET YOUR NEEDS.

- AVL PUMA Open 2™
- AVL EMCON 6™
- AVL LYNX 2™
- AVL SANTORIN MX 2™
- AVL TESTLIFE 1™
- AVL CAMEO 3™
- AVL CRETA 4™
- AVL CONCERTO 5™
- AVL-DRIVE 4™
- AVL VSM 4™
- AVL ARTE.Lab 4™
- AVL InMotion 4™
- AVL IndiCom 2™
- AVL iGEM 2™
- AVL TESTGATE 1™
- AVL ISAC 6™
- … and more joining soon

SUCCESS BASED ON INTERPLAY

APPLICATION CAPABILITIES

APPLICATION DEVELOPMENT KIT (ADK)

Create complete Pro Apps, toolboxes, dialogs, etc. with the ADK of AVL CONCERTO 5™. Use the Formula/Script Editor to create macros as well as complex calculation formula, and CalcGraf, the graphical formula editor, for simple and complex calculations just by connecting calculation and function blocks.

INDICATING TOOLBOX

Combustion analysis and post-processing of indicating files (AVL IFile) are made easy with the INDICATING TOOLBOX, which includes the powerful CalcGraf and the formula library for all kinds of crank angle based calculations and specific evaluations (e.g. for injection analysis). You can even reuse layouts directly from AVL IndiCom™ and data from AVL X-ion™.

AVL M.O.V.E DATA POST-PROCESSING

AVL CONCERTO M.O.V.E is a workflow-oriented tool designed for real-world testing (RDE, ISC and IUC). Evaluate, correlate and validate the measured in-use test data for in-vehicle applications with this powerful post-processing tool. Predefined layouts for HD-, LD- and NRMM-PEMS evaluations, among others, make it possible even for non-expert users to carry out complete test validations and to generate reports in just a few clicks.

DISCOVER AVL CONCERTO 5™
www.avl.com/concerto

EMISSIONS TOOLBOX

The EMISSIONS TOOLBOX is AVL's innovative solution for efficient data analysis of exhaust emission tests according to legislative provisions. It allows you to create all reports and certificates required by law automatically out-of-the-box.

AVL CONCERTO 5™ ROAD CONVERTER

Process and analyze data recorded during real driving cycles on the road with AVL CONCERTO 5™ ROAD CONVERTER, the toolbox for testbed engineers. Easily convert the collected data into suitable formats for performing reproducible test runs at the testbed (from-road-to-rig).

AVL CONCERTO 5™ MAP EXPERT

In one click from measured, calculated or simulated data to calibrated ECU labels: AVL CONCERTO 5™ MAP EXPERT combines the power of data processing and visualization with outstanding ECU label handling and calculation.