



# AVL CONCERTO 4™

Experience the harmony







## THE ADDED VALUE

### AVL CONCERTO 4™

- is a generic data processing tool that focuses on quick and intuitive signal analysis, validation, correlation and reporting – for any kind of acquired data
- is a specially developed tool to meet the demands for data evaluation of the automotive industry
- provides a maximum degree of compatibility and flexibility thanks to open interfaces to 3<sup>rd</sup> party tools
- simplifies global data comparison by supporting common standards and automatic conversion methods
- as an application platform, allows to fulfill multiple application specific tasks, and is ready for batch processes



# AVL CONCERTO 4™

## THE AVL SOLUTION

The most efficient possible management of a constantly growing amount of data that arise and, furthermore, must be processed during these processes brings decisive competitive advantages.

With AVL CONCERTO 4™, AVL has combined the know-how acquired jointly with customers throughout the automotive industry. The software tool for highly efficient management, processing and reporting of data is impressive in many respects:

### CONSISTENCY

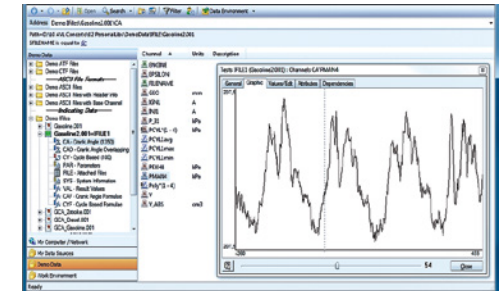
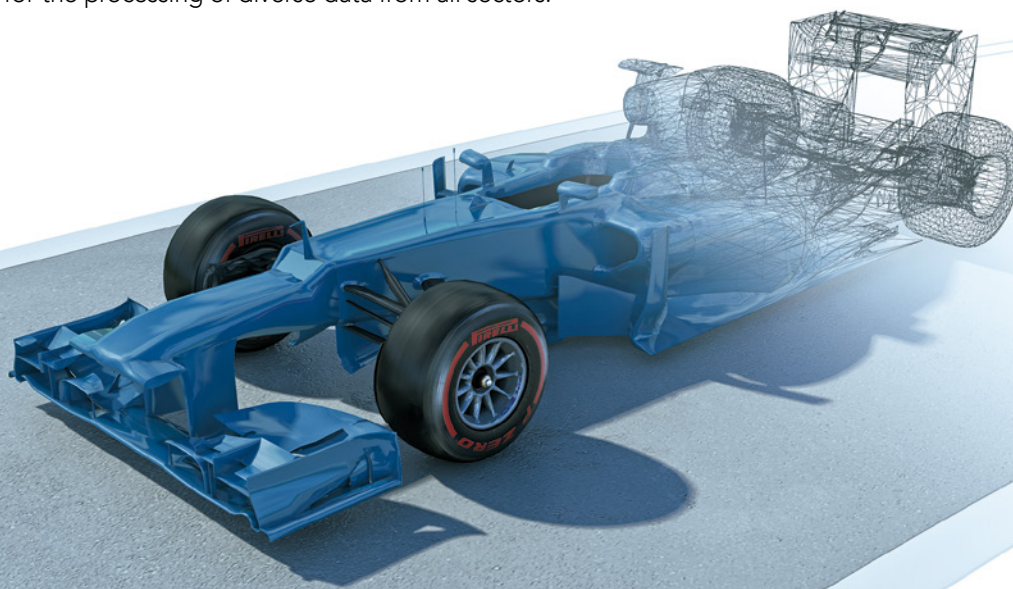
AVL CONCERTO 4™ is conceived for applications throughout the whole development process, from simulation to measured data and thus can be used for the processing of diverse data from all sectors.

### FLEXIBILITY

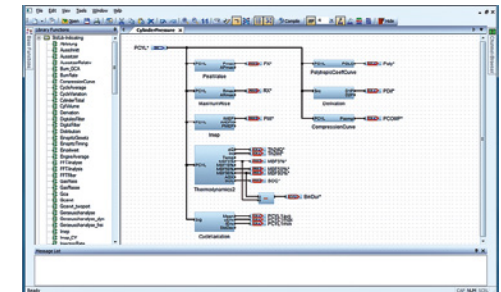
AVL CONCERTO 4™ offers solutions for simple and complex analyses in equal measure – standard evaluations are automated and thus easier to compare and reproduce. At the same time AVL CONCERTO 4™ is ideal for the implementation of customer-specific calculation methods.

### EFFICIENCY

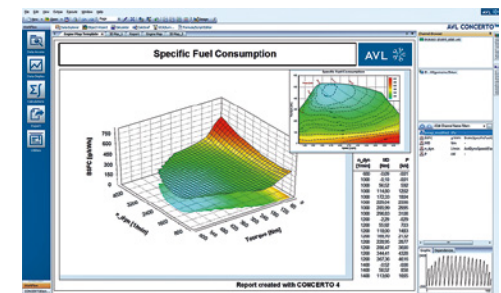
Due to its clear workflow oriented user interface, AVL CONCERTO 4™ offers fast and easy access to all typical processing tasks.



Optimized Workflow: From data management...



... including the processing and analysis of data ...



... to complete reports and documentation.



## TECHNICAL DATA

### USER INTERFACE

- Total flexibility in display and visualization tasks, full drag & drop functionality
- Adaptable user interface and support of various user levels

### OPTIMIZED OPERATING WORKFLOW

- Automatic correlation of various types of measurement records such as log-point data, time-base data and cycle-based data as well as handling of various record lengths and resolutions
- Intelligent and easy-to-use data comparison logic for multiple series of measurements
- Common processing of measured, simulated and calculated data

### DATA MANAGEMENT

DataExplorer as a tool for navigation, selection and preview of data offers an optimized logical structuring of data, independent of different formats and storage locations. Fast and easy data mining by means of previews, filter functions and powerful data search through index-based search mechanism help saving tremendous time.

Support more than thirty standard data formats and sources:

- ASAM standards (ATF, MDF, etc.), ASCII and binary data, indicating data (e.g. AVL IFile), testbed data
- Commonly available data formats already implemented (e.g. MATLAB, FAMOS, DIADEM, etc.)
- Unlimited optional extension to customer-specific data formats
- Data from local or network drives as well as from databases (e.g. ASAM ODS, ODBC, etc.)
- Generically used data formats (e.g. XLS, CSV, etc.)

### DATA PRE-PROCESSING, CALCULATION

AVL CONCERTO 4™ offers several integrated tools for the definition of calculation algorithms and for efficient data processing. Vector-oriented processing ensures optimum performance.

- Calculator
- CalcGraf – graphical formula editor (extensive library with pre-defined application-oriented function modules)
- Formula/Script Editor is a comfortable programming environment for performing expert tasks up to complete applications

### DATA PRESENTATION, VISUALIZATION AND EXPORT

- Complete compilation of informative graphs for detailed evaluation as well as documentation purposes
- Simultaneous display of simulated measured and calculated data of as many tests as required
- Multiple graphs and protocols, also within one display window with freely definable templates
- Wide range of display and presentation objects (incl. special diagrams, legends, statistic objects, text objects, graphs, tables, etc.), optimized for screen and paper presentations
- Integration of COM and CLI interface controls and freely-definable dialog windows
- Combined displays of log-point, time-, cycle or crank angle based data
- Data and graphic export as ASCII and enhanced metafile as well as HTML export and other formats
- Interactive graphic processing (zooming, relocating, copying, editing, cursor functions, etc.) and much more ...

## 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

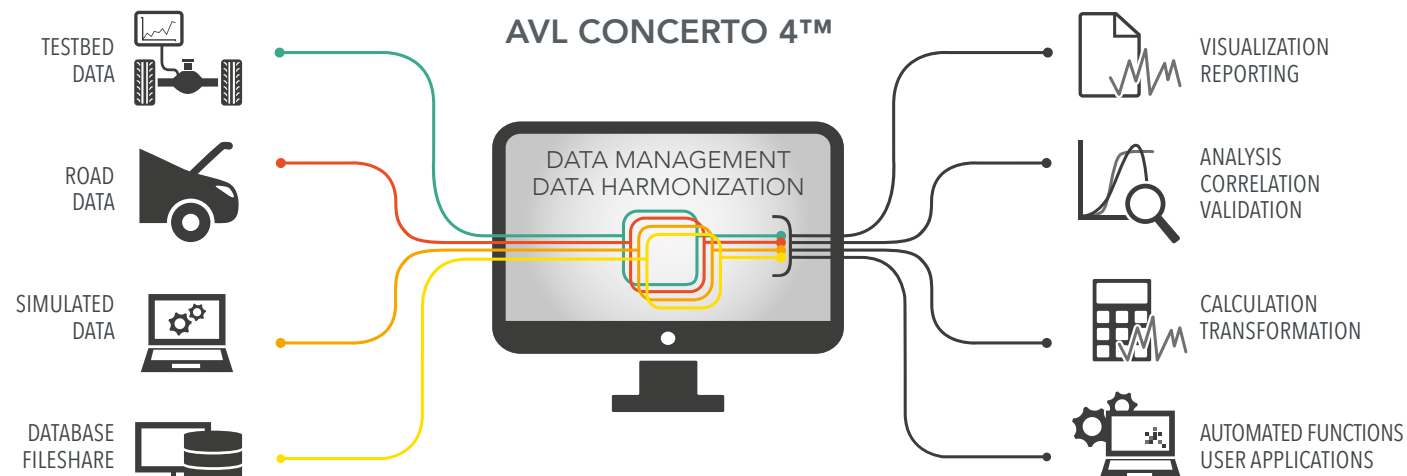


**COMBINE YOUR STRONG TEAM  
FLEXIBLY OUT OF COMPATIBLE,  
COMPLEMENTARY PLAYERS TO  
MEET YOUR NEEDS.**

-  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 4™
-  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**



## PRODUCT FUNCTIONS

AVL CONCERTO 4™ is a platform for data processing for the complete automotive industry, from vehicle manufacturer to component developer.

Its range of applications extends from power unit developers and automobiles to non-road vehicles and Formula One. Application fields:

- Evaluation of testbed data
- Combustion analysis/indicating data
- Exhaust gas analysis
- Evaluation of vehicle measurement data
- And much more ...

Due to its open interfaces, AVL CONCERTO 4™ is the ideal central tool to correlate data coming from automation, simulation and measurement systems. Because of the modular configuration as well as periodic extensions triggered by new requirements, AVL CONCERTO 4™ is an investment for the future.

In practice, AVL CONCERTO 4™ can be used at workplaces for data acquisition and data analysis as well as in the office for presentation, reporting or documentation.

## YOUR BENEFITS

In the modeling/simulation phase and during the research phase: AVL CONCERTO 4™ demonstrates impressive possibilities for fast and easy adaptability and flexibility. Furthermore, a powerful data search mechanism leads to the necessary data.

During the development phase: AVL CONCERTO 4™ offers special capabilities for comprehensive data comparison, thus minimizing time commitment.

In pre-series and in production: statistical analyses are carried out easily and intuitively with AVL CONCERTO 4™.

AVL CONCERTO 4™ offers optimum data reliability thanks to an ISO-compliant data management system, from acquisition to archiving. Minimization of risks and possibilities of error boosts the efficiency and ultimately leads to savings in time and cost.

The easiest and fastest way to turn your data into meaningful information.

**FOR FURTHER INFORMATION PLEASE CONTACT:**

AVL List GmbH, Hans-List-Platz 1, 8020 Graz, Austria  
Phone: +43 316 787-0, fax: +43 316 787-400, [www.avl.com/concerto](http://www.avl.com/concerto)