AVL

Data analysis

Histogram	Visual Diff	Difference
		11
		11
		11
		3
		2
		2
		2
		2
		2
		2

	1 2 3 4 5 6 7 8 9 10 12
Cluster 1	4957364
Cluster 2	43324670
Cluster 3	73067375
Cluster 4	103759365
Cluster 5	139142230
Cluster 6	159309897
Cluster 7	185729462
Cluster 8	232436560
Cluster 9	26349

Cluster 1   Cluster 3   Cluster 4

AVL CRETA 5™
Trust your calibration power

THE ADDED VALUE

- Traceable, secure and simple administration and documentation of control unit data.
- Worldwide collaboration and data exchange between team members, partners, suppliers and customers.
- Quick pre-calibration of initial data sets and re-use of data.
- Plausibility check of data sets using data-mining algorithms.
- Easy project and quality monitoring through integrated reporting mechanisms.

THE CHALLENGE

Complexity of Calibration Tasks
With an increased number of mechatronic systems in today's vehicles, an increase in the complexity of engine, transmission and hybrid control functions is inevitable. With non-powertrain related calibration for steering, suspension and ADAS-systems, the number of labels to be calibrated for a single vehicle has increased significantly within the past 5 years. The large number of parameters and the many dependencies add a new level of complexity to modern calibration projects and generate the need for new methods to maintain a clear overview and enhance standardization where possible.

Large Number of Vehicle Variants
The need for standardized checks has become more important with a high number of vehicle variants. Data-reuse and efficient know-how management greatly eases the workload. As a result, standardized methods for storing, error-proofing and documenting calibration results are needed prior to the actual implementation of the parameters into series production.

Efficient Calibration Data Management
Today's calibration teams are rarely located at a single site. Worldwide distributed calibration teams, frequent test trips and collaborations with several partners and suppliers create the need for round-the-clock, fast and secure access to calibration data and all related information.

In mastering these challenges, the potential provided by simple and secure means of data management is huge.

AVL CRETA 5™ – Trust your calibration power

THE AVL SOLUTION

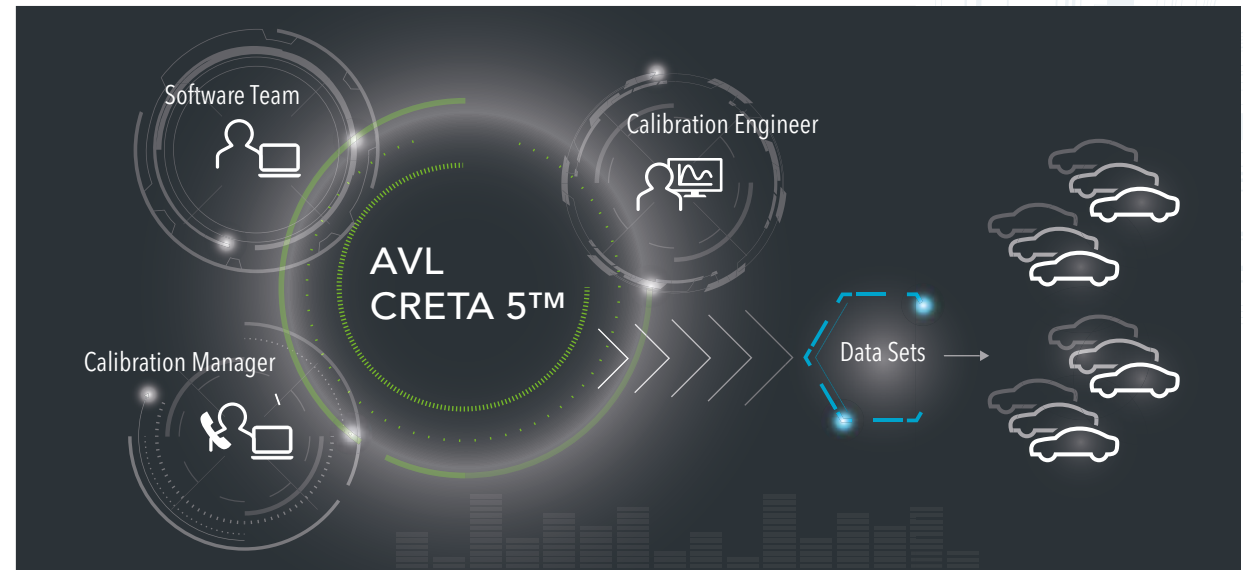### Complexity of Calibration Tasks

AVL CRETA 5™ enables the simple handling of calibration data during the entire vehicle development process and ensures conflict-free and traceable integration of xCU parameters throughout the entire calibration project. Defined parameter responsibilities and work packages provide a clear overview of labels and avoid conflict when merging calibration data from different sources, ensuring consistent results.

Large Number of Vehicle Variants

The clearly structured AVL CRETA 5™ Explorer allows users to easily navigate through manifold calibration variants, displaying only relevant information by the use of interactive filters. Delta variants help to reduce the effort for variant management to a minimum, while dropboxes and delivery templates ease and secure the delivery of calibration results to the correct variants.

Calibrations from the AVL CRETA 5™ Component Library or former projects retrieved through powerful search functions can be used for pre-calibration and guarantee high efficiency in daily calibration work. Integrated tasks for merging data, handling software changes and data exchange greatly support users in handling large calibration projects.

AVL CRETA 5™ DATA AND INFORMATION FLOW

AVL CRETA 5™ helps meeting today's challenges in calibration projects while reducing data management costs by more than 50 percent.

Efficient Calibration Data Management

A common data repository forms the backbone of AVL CRETA 5™. It helps globally distributed calibration teams to easily share project relevant information and ensures smooth collaboration with partners. Engineers deliver, document and check their results by using AVL CRETA 5™.

Metadata like score and status information as well as file-based attachments are stored in the database. Advanced data-mining algorithms improve the robustness of delivered calibrations by detecting potential errors through the AVL CRETA 5™ Delivery Guard at data import without additional user interaction.

PRODUCT FUNCTIONS

AVL CRETA 5™ features the following functionalities to support and improve the entire calibration process and calibration lifecycle management:

Process Workflow Support
Support your calibration process by reducing time for every step of your workflow.
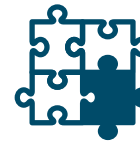
Collaboration
Work together with colleagues, partners and customers from anywhere in the world with alerts, notifications & team information.

Responsibility Management
Secure the complete process and eliminate overlapping work.

Conflict-Free Data Merging
Secure and simple creation of calibration data integration.

Traceability & Versioning
What, when and why - the complete history.

Reporting and Documentation
Simple creation and reuse of reports help to save time.

Project Status Control
Get the status of any calibration task and check if your project is on track.

Know-How
Reuse your calibration know-how efficiently.

Qualitative Metrics
Analyze the quality and process regarding the biggest potential for optimization.

Extensibility
Open and pre-defined API's enable you to connect to in-house systems and tools.

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

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 TFMS 1™
- AVL CAMEO 4™
- AVL CRETA 5™
- AVL CONCERTO 5™
- AVL-DRIVE 4™
- AVL VSM 4™
- AVL IndiCom 2™
- AVL iGEM 2™
- AVL TESTGATE 1™
- AVL ISAC 6™
- … and more joining soon

SUCCESS BASED ON INTERPLAY

Product News

AVL CRETA 5™ Compare Pro

Finding solutions in big data

AVL CRETA 5™ Compare Pro provides a powerful possibility to analyze and validate huge amounts of calibration data sets.

Using an interactive GUI, this comparison feature helps you to identify outliers in your data sets by providing simple filtering options for variants and attributes within your calibration project. The AVL CRETA 5™ Compare Pro option is based on newest technology, using a data warehouse to process the flood of data quickly in the background.

The added value of AVL CRETA 5™ Compare Pro
- Fast comparison of huge amounts of data sets
- Quick detection of calibration inconsistencies
- Simple validation of final deliveries
- Understanding calibration patterns for future use
- Re-use of calibrations for future projects

EXPERIENCE YOUR CALIBRATION POWER AND GET YOUR FREE DEMO LICENCE HERE:

www.avl.com/creta

The software tool is fit for purpose to develop safety related software according to ISO 26262.