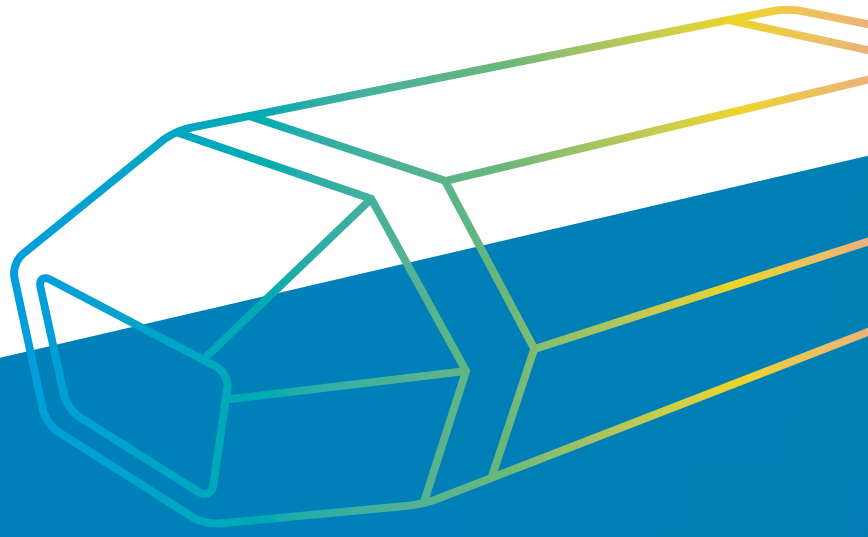




BATTERY DIAGNOSTICS



WORLD- LEADING BATTERY DIAGNOSTICS

- Manufacturer-independent
- TÜV- and CARA-certified

connect to detect.

aviloo.com

360° APPROACH

INNOVATIVE SOLUTIONS IN EV BATTERY DIAGNOSIS

A unique 360-degree approach reflects the comprehensive view on our battery testing technology. It successfully combines hardware, software and intelligence.

We don't just rely on technology, but on a holistic concept to meet market requirements and realize our clients' visions.

→ Hardware:

The AVILOO Box, a customized hardware solution, is designed to ensure a maximum performance and reliability. Equipped with a globally functioning LTE mobile radio technology, it can be used for all testing and monitoring requirements.

→ Software:

AVILOO's intelligent software is designed to interact seamlessly with our hardware and provide innovative functions. Through continuous development and adaptation, we remain at the forefront of technological developments and offer user-friendly solutions that meet individual needs.

→ Intelligence:

AVILOO technology and expertise set standards for efficiency and performance. We use advanced algorithms and artificial intelligence to optimize processes, provide precise analyses and enable well-founded decisions. At AVILOO, we understand that true intelligence is not just about collecting data, but turning it into valuable insights.



A VISION BECAME REALITY WORLD-LEADING BATTERY TESTING, MONITORING AND ANALYSIS



AVILOO at a glance

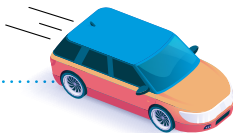
AVILOO GmbH, the developer of battery diagnostic solutions for electric and plug-in hybrid cars, is an Austria-based company operating throughout the EU market and beyond.

The team of more than 30 AVILOO experts has developed a unique technology for testing Lithium-ion batteries and thus opened a completely new market dimension within the automotive industry. AVILOO battery diagnoses are independent, accurate, and reliable. The tests we offer are simple and tailored to the needs of each user.



From the garage into the world

2017



DI Wolfgang Berger and DI Nikolaus Mayerhofer recognized the urgent need for an independent battery health check after purchasing a used electric car. A vision was born and they founded the high-tech startup AVILOO – no joke – in their own garage.

2019



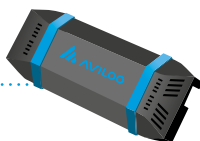
After only 2 years of intensive research, the team was able to develop an independent test procedure for Li-Ion batteries in electric and plug-in-vehicles.

2020



The team of the two founders grows rapidly. At AVILOO, 25 enthusiasts from 7 countries are already tinkering in 2020. The TOP management will also be strengthened by the addition of Dr. Marcus Berger.

2021



Company takes sufficient time to maximize the stability, reliability and model availability of the AVILOO battery test. Now the time has come – the AVILOO Boxes are ready, the analysis methods have been perfected, the customer service team is ready, and the first product AVILOO PREMIUM Test is successfully launched. The management structure is defined: DR. Marcus Berger, Partner and CEO/CFO, DI Wolfgang Berger, Founder and CSO, DI Nikolaus Mayerhofer, Founder and CTO.

2022



In its fifth year of existence, AVILOO has significantly expanded its network of business partners, extended its activities to seven European countries and launched the brand new product – AVILOO FLASH Test, the world's fastest extensive battery test.

UNTIL
TODAY

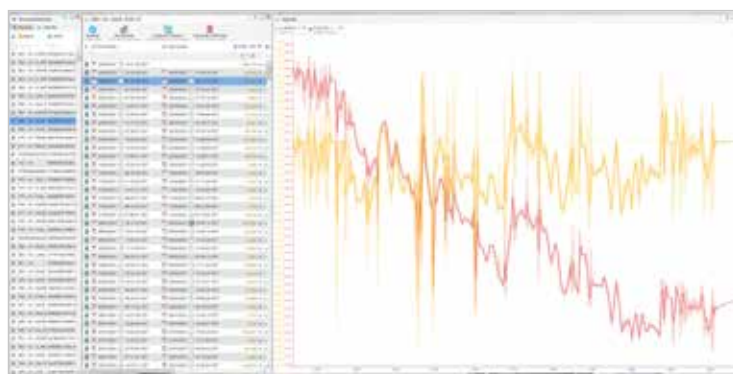
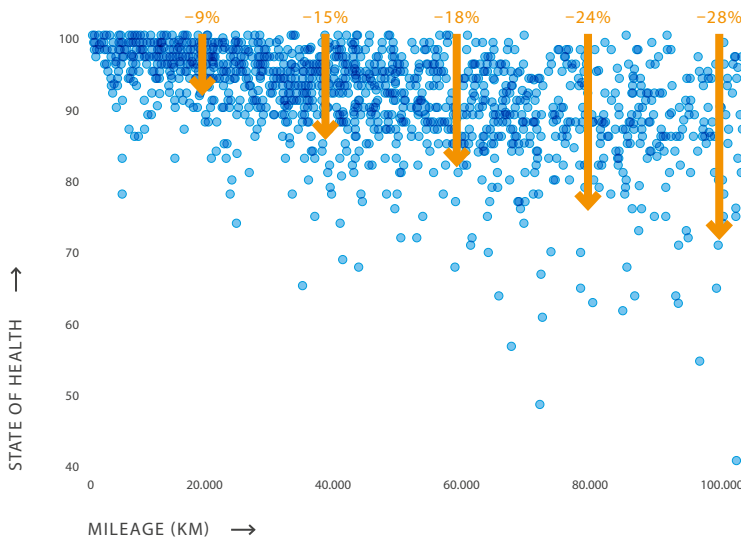
We are constantly evolving, both technologically and commercially, and remain receptive to the needs of our customers.

POWERED BY THE PASSION FOR BATTERY EXPERTISE AND TRANSPARENCY



We love batteries and we want to know what's going on inside of them. That's why we have perfected battery diagnoses.

Determining an EV-battery's condition needs the detection of its State of Health (SoH). There are different methods of analysing and calculating a battery's capacity, but just one provides the most relevant answers for users. To accurately determine an electric car's real-world range, not just its theoretical potential, the most advanced technology available will assess the State of Health (SoH) based on the actual driving range. AVILOO technology provides this by analyzing real-time data gathered through a comprehensive testing process.



AVILOO Battery Data Cloud

→ Engineering for each battery type

We decode and interpret battery data of electric cars, ships, construction machinery and stationary equipment.

→ The AVILOO Box – connectivity for every need

The AVILOO Box is a unique high-tech solution for variable measurement data generation in stationary and mobile application areas, modularly applicable and tailored to specific needs.

→ The AVILOO Battery Data Cloud – the heart of data analysis

The super-fast and user-friendly AVILOO Battery Data Cloud provides a customizable view on millions of collected data points with just a few clicks. This allows experts to quickly and efficiently collect and interpret the battery application.

→ Big Data battery analysis

The core of the battery data analysis is the AVILOO Estimator – a machine learning algorithm powered by billions of collected data points that gets more accurate with each data set. Data is processed and stored in real-time, secured to the highest standards, and redundant in the AVILOO Battery Data Cloud.

→ Objective and reliable results

Results are automatically checked to the highest quality standards. Thus, every AVILOO Battery Certificate is not only objective, transparent and accurate, but also 100% trustworthy.

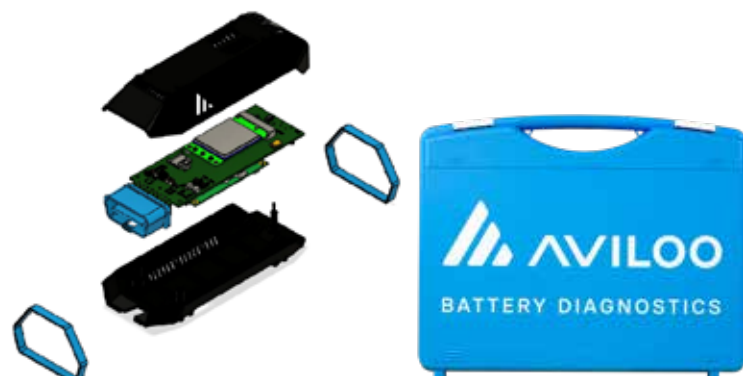
AVILOO PREMIUM TEST - THE WORLD'S MOST COMPREHENSIVE BATTERY TEST



The TÜV-certified, manufacturer-independent and objective AVILOO PREMIUM Test is an exact SoH Test which provides battery information of electric cars and plug-in hybrids.

AVILOO's Battery Certificate shows all SoH-values as percentages in a transparent, clear and simple manner.

A result of 100 indicates that the energy extracted during the test corresponds to the usable energy / capacity of the battery when it was new. The real-time result is accurate and trustworthy.



Easy steps to follow:

→ Step 1

Order the AVILOO Box via the web-shop.

→ Step 2

Plug the AVILOO Box into the OBD-2-port of your car.

→ Step 3

Charge your car to 100%.

→ Step 4

Open the webapp (link will be sent to you by email) and follow the instructions.

→ Step 5

Drive your car from 100% to 10% charge level in the course of your ordinary driving. You have up to seven days to do this.

→ Step 6

You will receive the TÜV-certified AVILOO Battery Certificate within 2 working days after finishing the test.



AVILOO FLASH TEST - THE WORLD'S FASTEST & MOST EXTENSIVE BATTERY TEST



The AVILOO FLASH Test is a quick test that determines the functionality of the traction battery in just 3 minutes - without moving the vehicle.

The AVILOO Report depicts the test results - the manufacturer-independent 'AVILOO Score' - numerically, calculated on the basis of a wide range of test data (currently measured values combined with historical data). The higher the score, the better the battery condition. For substantial risks, the FLASH Test provides a „Red Flag“ report, indicating the nature and type of fault as well as where the error is located - down to cell level.

Three minutes, three steps – that's how quick and easy the FLASH Test works:

→ Step 1

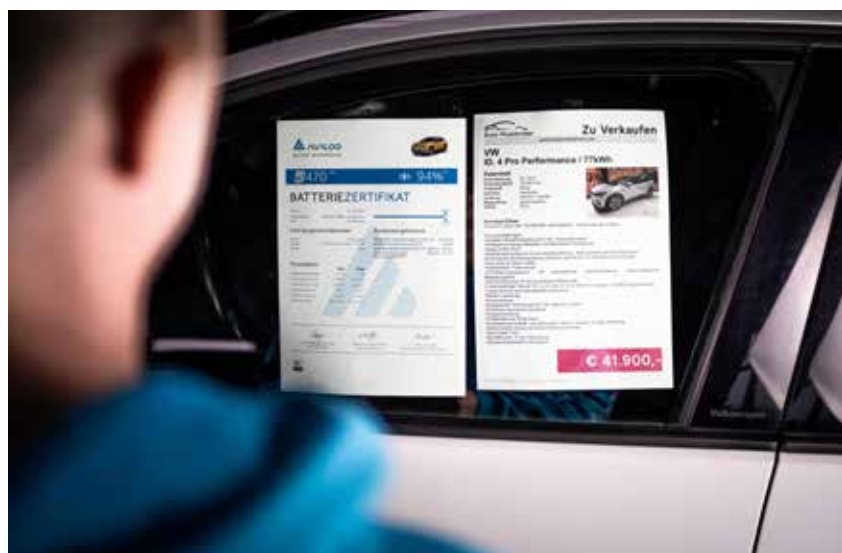
Connect the AVILOO Box to the OBD-2 interface of the vehicle.

→ Step 2

Wait until the LED of your AVILOO Box flashes yellow and the battery check begins. Fasten the driver's seat belt and start the vehicle.

→ Step 3

After about three minutes, the LED lights up green and the battery check is finished. The AVILOO Report will be generated and pop-up in your email inbox immediately.



PERMANENT REMOTE BATTERY MONITORING FOR INDUSTRIAL APPLICATIONS



Whether it is large battery storage for ships, ferries, electrified dredgers and cranes or stationary storage, permanent monitoring of the battery storage is of great importance.

The monitoring includes:

- 24/7 battery monitoring
- analysis of the collected data in relation to the client's needs
- predictive analysis and risk assessment of the battery condition
- strategy development based on the results obtained



Case Study 1 Current Direct

Sector: Shipping – transport of people and goods

Task: Monitoring and tracking of batteries on overseas transport vessels to create a predictive maintenance strategy aiming at zero emission, efficient organization, sustainability and affordability.

Work process: Providing information for each of the cells of each battery, delivered to the client in real time; alerting and warning of irregularities in cell operation, distributed to each of the named persons, the moment the irregularity occurs; expert statistics available at any time; intelligent analysis and processing of existing data; generating predictive analysis utilizing algorithms.



Case Study 2 Global Heavy Machinery Manufacturer

Sector: Production – Robotics

Task: Monitoring of robots under factory conditions, with the aim of higher operational efficiency.

The work process: Takes place in several stages - drawing up the project plan, establishing a connection to the monitoring objects (electronics), decoding the language of the electric batteries, monitoring, data collection and specific analysis.

HIGH QUALITY FIELD DATA VIA AVILOO BATTERY CLOUD



AVILOO's technology was developed out of a simple need – to determine the condition of a traction battery. A team of experts has worked for years to develop a unique formula that infallibly determines various battery factors such as functionality and health status.

Years of testing and data collection, as well as classifying vehicles according to several parameters depending on customer needs, have resulted in a unique database of high-quality battery field data from all known electric vehicles and plug-in hybrids.



Case Study 1 Battery manufacturer

Industries: Electronics, Energy

Task: Battery testing and data collection to create better versions of products and develop models for sustainable energy resource management.

Work process: Cell manufacturers and many other industry partners in the field of electromobility often have extensive laboratory data, but rarely large amounts of real field data. In this example, we are testing newly created batteries under various conditions. Customers have direct access to the real database via the AVILOO Data Battery Cloud, where they can monitor and analyse the results and determine the further course of testing.



Case Study 2 Transport company with a fleet of refrigerated vehicles

Sector: Medicine/Food/Pharmaceuticals

Task: Monitoring and data collection of the existing fleet of delivery refrigerated vehicles in order to optimize driving routes.

Work process: This project is carried out very intensively and in close cooperation with the client. A fleet of special delivery vehicles that transport goods such as medicines and food under specific temperature conditions are monitored around the clock. The client uses the data provided via the AVILOO Battery Data Cloud platform to optimize train routes, all with the aim of optimising business operations and achieving zero emission.

JOIN THE AVILOO ONLINE ACADEMY GET YOUR CERTIFICATE AND BECOME A CERTIFIED SERVICE PARTNER!

Find out how AVILOO can move your company forward - not only technologically, but also strategically.

Discover the benefits of our programs that will take your company to the next level:

- online AVILOO Academy
- AVILOO Certified Service Partner



Online AVILOO Academy:

The AVILOO Academy is an online training platform for practical knowledge on battery diagnosis and the application of AVILOO's tests.

The platform offers a wide range of multimedia content with practical tips and information. The training is flexible and can be completed in stages.

Companies whose employees have successfully completed the AVILOO Academy have the opportunity to become AVILOO Certified Service Partners.



AVILOO Certified Service Partner:

Our Certified Service Partner program holds much more than the battery diagnosis solutions. AVILOO offers its partners comprehensive support in the areas of marketing and communication, with the clear aim of optimal positioning on the market and boosting sales.

AVILOO Certified Service Partners not only benefit from first-class battery diagnostic solutions, but also actively differentiate themselves from competitors as a highly professional specialists in this field. In addition, they have access to a wide range of advertising and marketing materials as well as experienced AVILOO expertise and logistical support in the implementation of their activities. Together we will shape your path to success.



