



# AVL DRIVINGCUBE™ from Road to Rig for Efficient and Safe ADAS/AD Testing

### The Road Doesn't End Here

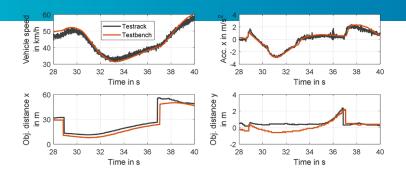
A modular toolbox to master all challenges for testing automated vehicles on a testbed — customizable to your needs.

Perform efficient V&V for scenariobased testing of ADAS/AD functions, cybersecurity, or failure injection testing — everything within a safe test environment to test potentially dangerous traffic situations.

## UPGRADE YOUR TESTBED TO TEST AUTOMATED VEHICLES

For reliable and efficient validation and optimization of ADAS/AD systems at the vehicle integration level, we offer a new testing environment for various use cases. The AVL DRIVINGCUBE™ leverages the AVL Integration Core to merge a chassis dynamometer or powertrain testbed with a virtual environment, enabling the testing of a fully integrated vehicle.

Physical or behavioral sensor models link the control units under test with the simulated environment. This setup enhances efficiency during validation and optimization of ADAS/AD systems, as testbed scenarios are far more reproducible than in the real world. Additionally, vehicle access during operation is straightforward, and critical situations can be safely validated, unlike on real roads.



#### **Excellent Correlation and Repeatability**

Longitudinal and lateral ADAS/AD control functions show similar behavior on AVL DRIVINGCUBE™ and on Proving Ground.

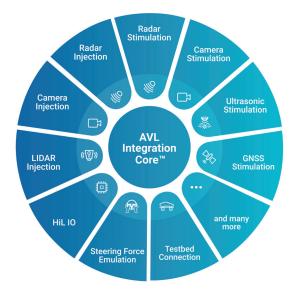
#### Time Saving

Coupling a virtual environment with a ready-to-drive vehicle allows scenarios to be executed faster compared to Proving Ground testing.



Thanks to the AVL DRIVINGCUBE™ we are able to test ADAS/AD functions more efficiently and reliably in a safe environment.

## THE DRIVINGCUBE TOOL BOX – POWERED BY AVL INTEGRATION CORE



#### **YOUR VALUE**

- All tests can be conducted at the vehicle level under highly reproducible lab conditions.
- Repetitions and variations of different maneuvers and scenarios can be performed with high efficiency.
- The **operational conditions**, particularly for critical maneuvers, are **safe**.
- The AVL DRIVINGCUBE<sup>™</sup> package for ADAS/AD validation and optimization can be easily integrated into existing testbeds as an upgrade.





