



AVL Road Marking Robot

Accurate test environments for driver assistance systems

THE CHALLENGE

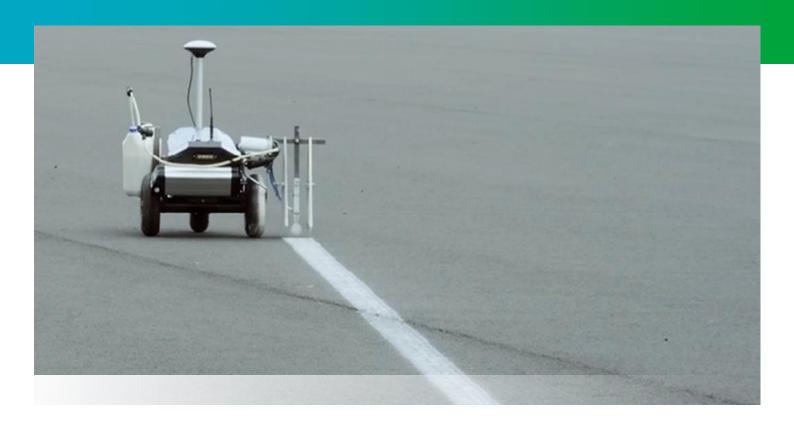
Real test environments play a decisive role in the development of autonomous vehicles. Especially road markings are becoming increasingly important.

Assisted and piloted vehicles must be able to respond precisely to these markings. Many of these functions are now of legal relevance and need to be validated in detail. Additionally, the number of scenarios is enormous. Road markings vary by road type, country, and traffic situation. They can include lane narrowing, construction markings, and faded lines.

OUR PORTFOLIO

With our AVL road marking robot, we print customized road markings on the road surface to optimize homologation and safety issues according to UNECE No.79 and Euro-NCAP.

Thanks to the customized design of the road markings on our test track, we can apply any desired, fictitious or real road marking scenarios with individual curve radii and lines (wide, solid, dashed, coloured).



TECHNICAL IMPLEMENTATION

The desired "marking" is created using a CAD System and uploaded onto the AVL robot via a cloud system. Based on D-GPS, the robot applies the line to the carriageway and reports back the coordinates of the line back with high precision. Once the testing is completed, the water-soluble lines are removed using a cleaning machine so that the area can be used again for new scenarios.

EXAMPLE SCENARIOS

- Different lane widths and line types
- Curves
- Lane narrowing
- Marking interruptions
- Parking scenarios
- Country-specific features
- Colored marking

DRIVER ASSISTANCE SYSTEMS

- Lane keeping assist
- Lane centering assist
- Parking functions

THE ADDED VALUE

- Customized road markings for your campaign
- Lines are printed with centimeter accuracy
- GPS coordinates of the customized markings are provided to you
- Efficient homologation and validation campaigns

The GPS Coordinates provided enable detailed analysis for the further development and approval of driver assistance systems.