

/ Legal notice

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Internet: www.kba.de

Special information and advice:

Phone: +49 461 316-1293, -1283 Fax: +49 461 316-272907 E-mail: pressestelle@kba.de

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/ Test Center Leck (TeCeL)

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KBA-President Richard Damm

"Development in the field of vehicle technology is rapid. This applies to the development of alternative drive systems in particular, but also to the development that is taking place in the field of automated and, ultimately, autonomous driving. The KBA is keeping pace with this development. With the Test Centre in Leck and our own laboratory, we have created excellent conditions to test the new technologies in accordance with the legal requirements and, moreover with a view to product safety and environmental protection, because: in order for new, safe and environmentally friendly concepts to become established, there must be confidence in the technology. Promoting this acceptance as a basis for future developments is part of our mission."

/ The Test Centre Leck (TeCeL) – 3.0 kilometers for road safety and environmental protection

Since January 2, 2020, the German Kraftfahrt-Bundesamt (KBA) has its own test site – called TeCeL – in the North Frisian municipality of Leck with, among other things, an approximately 3.0 km long, straight test track. The track previously served as a military runway. The TeCeL gives KBA engineers the opportunity to carry out special tests on their own test track, independent of traffic and at any time. At present, mainly emission tests are carried out. The expansion and upgrading for the area of driver assistance, automation and automation and networking is taking place step by step.

/ Vehicle-specific driving resistance and coasting tests

On the test track, roll-out tests are carried out, among other things, to check the vehicle-specific driving resistances. During the coasting test, the vehicle is accelerated on the test track in accordance with legal requirements and rolled out until it comes to a standstill. The driving resistances form the basis for the corresponding adjustment of the roller chassis dynamometer in the laboratory.

Exhaust gas measurements – Portable Emission Measurement Systems (PEMS) in use



On the test track, the legally prescribed driving cycles new European Driving Cycle (NEDC) and Worldwide Harmonised Light Duty Test Cycle (WLTC up to phase 3) are trailed with portable emission measurement systems (PEMS). In this way the emission behaviour of the vehicles in comparison compared to measurements on the chassis dynamometer. can be analysed. Within the scope of market monitoring modified cycles can also be run through without any problems.

Noise measurements – Noise emissions on the test bench



The KBA's investigations include not only emissions, the KBA also carries out tests on the noise emissions of vehicles and attachments. The KBA observes vehicles and and tests them on a random basis for their noise behaviour using the respective legal test procedures. TeCeL provides ideal test conditions for testing noise emissions.

/ Measurements on highly automated and autonomously driving vehicles



The test centre is being expanded and upgraded for more tests. For the performance of tests on safety systems within the scope of market surveillance on the basis of EU Regulation 2018/858 and, in particular, measurements on highly automated and autonomous vehicles on the basis of international and national legal acts in the 5G-TELK-NF project, the KBA is working with other project partners to build a 5G campus network in TeCeL. The 5G network creates the prerequisites for a wide range of

research projects on the technical implementation of autonomous driving systems. The KBA is relying on cooperation with the scientific community.