

Road tests and vehicle testing



Road tests and vehicle testing are part of the automotive development and launch process.

Optimizing the entire vehicle.

Road tests and vehicle testing are indispensable steps within the complex development process and continuous improvement of any vehicle. They provide significant input for the entire process, ranging from prototype testing to endurance proving of serial production vehicles, frequently covering multi million mileage.

Vehicle testing...

- Is part of comprehensive test plans during the development and manufacture of vehicles.
- Provides input parameters for simulations and further calculations.
- Validates theoretical and results from simulation through testing of the entire vehicle or its component systems in real traffic situations.
- Demonstrates whether a vehicle actually possesses the planned properties.

Vehicle testing and road tests carried out by the leading drivetrain testing expert.

With more than 30 years of experience, broad expertise and outstanding commitment, ATESTEO deploys its comprehensive testing know-how for road tests and vehicle testing. As the global leader in drivetrain testing, we have gained significant competence in the field of drivetrain testing. ATESTEO has carried out vehicle testing as a complementary service for years: on our in-house test track, in public traffic or on ATESTEO chassis roller benches. You now can take advantage of this comprehensive know-how by using our newly formed services for vehicle testing and road tests.



Competence and experience you can rely on.

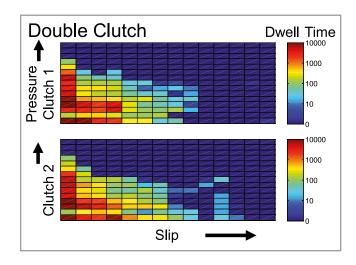
Carmakers and automotive suppliers worldwide have the highest confidence in our testing capabilities. Leveraging our expertise and experience, we are able to provide our customers with efficient and dependable results from state-of-the-art testing. This holds true for all types of vehicles,

with conventional or alternative drive systems, with or without ADAS innovations or any other specific feature. Our top priority is to provide our customers with the efficient testing data needed at the right time and scope as specified.

Successful ATESTEO projects in the field of road tests and vehicle testing:

RLD acquisition

Workload profiles of vehicle components on the basis of actual road load data improve the understanding of the impact that different styles of driving and road conditions have on the wear and tear of entire vehicles and their components. We collect the relevant data from road tests on defined test routes or our in-house proving ground. Data is used for validation in design and development work.



In-vehicle NVH measurements

Vibration and noise properties of the entire vehicle are increasingly becoming validation criteria. ATESTEO performs airborne NVH measurements inside the vehicle and comparative airborne and structure-borne NVH measurements between the cabin and engine compartment in order to identify unwanted NVH sources from the transmission or from torsional properties of the drivetrain. Specialised proving ground and acoustic chassis rollers in accordance with DIN-ISO 45635 class 1 are available to support dynamic testing.



Your advantages with ATESTEO:

- Global market leader in drivetrain testing
- · Comprehensive competence in drivetrain testing, full vehicle testing and road tests
- · Complete range of services for full-vehicle and/or component testing
- High-end measurement technology developed in house for ultimate data quality and efficiency
- Full services for vehicle testing
- Coverage of all technical, commercial and administrative services
- Experienced drivers and a well-coordinated team for reliable results
- Global availability of services

GSA measurements

The gearshift performance of passenger cars and commercial vehicles is becoming an increasingly important attribute in the development process. ATESTEO's inhouse developed Gearshift Analysis tool (GSA), obtains objective key gearshift measurements, assisting to detect shifting anomalies, which can then be remedied immediately during the development process.



Cold and hot climate testing

For various international automotive OEMs, ATESTEO has performed vehicle testing in cold and hot climate zones, proving properties under extreme conditions such as shiftability in cold temperatures, cold start-up rattling, clutch properties and cooling performance. The data generated is processed for use in the vehicle development process. ATESTEO arranges required test routes, proving ground tracks, drivers, garage services, telemetric technology and other required resources and services.



Performance and driveability benchmarking of AT/DCT/CVT transmissions

The entire vehicle and/or its systems such as the drivetrain, are equipped with high-end measurement technology in order to capture and analyse relevant parameters of operation, enabling benchmarking of performance and driveability. Testing and measurements are carried out on public roadways, the ATESTEO in-house proving ground or the ATESTEO chassis roller dynamometer.



Your vehicle testing services from ATESTEO

Testing over short distances

- Road Load Data Acquisition (rig test cycle development)
- Test runs; measuring equipment
- Functional testing, e.g. shifting behaviour, NVH, vehicle properties under alternating temperatures
- Testing in hot and cold climate regions
- Benchmarking

Endurance testing (multi-shift 24/7 operation)

- Validation
- Quality monitoring
- Support for the launch of entire vehicles, vehicle systems or components
- Real-world endurance testing of the full vehicle
- Mileage Accumulation

Bench testing

- All testing types on one of 130 ATESTEO test benches (24/7 operation)
- Coupling rig testing; full vehicle testing

Our services

- Selection of defined route profiles and driving styles
- ATESTEO in-house proving ground and access to other track locations
- Road endurance testing according to customer specifications
- Procurement of vehicles including all administrative permits
- Procurement of parts, handling and customs clearance
- Fitting of high-quality telemetric sensor systems
- Tailor-made solutions using specialized measurement technology manufactured by ATESTEO
- Evaluation of vehicle properties during test runs by experienced ATESTEO test engineers
- Full garage service in compliance with manufacturer/customer specifications
- Regular progress reports
- Effective project documentation
- ATESTEO vehicle testing and road test services are available worldwide

ATESTEO is the global leader for drivetrain testing, automotive product validation and engineering and equipment related to drivetrain testing. We are a key partner of leading automotive manufacturers and suppliers around the globe. Outstanding expertise of our specialists in all dimensions of testing allow for reliable verification of drivetrain,

transmissions and automotive product. ATESTEO is everywhere where automotive development takes place. More than 150 test benches in Germany and China, along with sales offices in the US and Japan, facilitate our global presence for the automotive industry.



Excellence in drivetrain testing

Would you like to know more about the services and advantages we offer in the field of road tests and vehicle testing? Simply give us a call or send us an e-mail! Your ATESTEO expert, Jan Winkler, can be reached on +49 2404 9870-245 or his mobile number +49 171 7826-380. Alternatively, e-mail him at Jan.Winkler@atesteo.com – he will be happy to assist you.

