

**Your single source for
products and services**

Drivetrain testing

**Related equipment and
engineering services**





As an accredited, independent drivetrain testing specialist, we produce fast, reliable, and verified results in a customer-oriented and efficient manner.

Drivetrain testing with the number one: expertise, safety, innovation

We strive to meet your requirements, your wishes, and your goals. Whether combustion, electric or hybrid drives, we support you in the development and realisation of new low-emission transmissions and drive concepts. As the leading drivetrain testing specialist, we offer you drivetrain and transmission testing combined with additional engineering services and testing services. At more than 150 of our own test benches, we test your entire drivetrain or individual components. NVH measurements and brake tests are just as much of our offering of services as the full vehicle testing on the roller dynamometer test bench.

Your measuring tests are in the best hands at ATESTEO. In addition to testing on the test bench, we also offer you products for the measurement, testing, and analysis of complete drivetrains. And when it comes to the development of your transmission or entire drivetrain, we are at your side with supporting engineering services.

This brochure provides you with an overview of our services and everything that we can do for you. If you would like to learn more about us or wish to schedule a personal consultation to discuss your custom requirements, simply send us an email to: info@atesteo.com.

We look forward to hearing from you!

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Excellence in drivetrain testing

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Our core competency at ATESTEO is testing drivetrains on our dedicated test benches. All of our actions and decisions serve one principal purpose: to provide you with the best service. As an accredited, independent drivetrain testing specialist, we produce fast, reliable, and verified results through custom applications. We complement our services with supporting equipment, such as high-precision torque measurement technology, and with engineering services.

Drivetrain testing – expertise and services

Growth, quality and enhanced efficiency are the challenges that the automotive and supplier industries must meet with innovative solutions. The increase in efficiency has a great deal to do with the drivetrain. An effective reduction in CO₂ can be achieved through improved transmission efficiency. As the leading specialist in drivetrain testing, ATESTEO is your strong testing partner. With tests individually tailored to meet your needs, we create the foundation for you to optimise the consumption and therefore the CO₂ emissions of your existing drivetrain technology. This service is embedded in an extensive portfolio, which also includes the requirement for the complete vehicle and individual components of the drivetrain.

Drivetrain testing at ATESTEO: **High capacities.** **Low costs.** **Extensive level of expertise.**

- Reliable, independent partner
- Considerable transmission and drivetrain expertise
- Verification of processes and results
- Expertise in testing and in pre- and post-processing
- Low operating costs
- Utilisation management excellence
- High testing capacities
- Flexibility in application
- Test bench set-up according to the demand

Test benches

Your requirement:

Optimisation of the consumption and CO₂ emissions of your existing drivetrain technology and development of new drive concepts.

Our solution:

Our over 150 drivetrain test benches in Germany and China and our agency in Japan place ATESTEO right at the centre of drivetrain development for the automotive industry. The customisable facilities at the ATESTEO test benches help us provide fast, made-to-order solutions for your measurement and testing challenges. We are at your side even when it comes to carrying out the highly complex tests for the electrification and hybridisation of the drivetrain.

Component testing

Your requirement:

Individual components are to be subjected to various development or release tests.

Our solution:

Using our methodology and the broad portfolio, we can perform the entire validation process, from environmental simulation to functional testing to vibration behaviour testing. Our employees test components for you – from tyres to brakes, the chassis and the steering to the particulate filter. ATESTEO offers everything from a single source, whether test bench or driving tests, strength tests, or environmental simulation.

Vehicle testing

Your requirement:

Full vehicle testing or component tests under actual driving conditions as well as determining real emissions while driving.

Our solution:

Because of the increasing complexity of the drivetrain, full vehicle testing is becoming ever more important. Whether simple endurance testing, functional testing, or a complex vehicle application, whether for the development of new types of drivetrain technologies or operating fluids, ATESTEO offers extensive testing facilities for this purpose. Ultra-modern roller test benches as well as a roller dynamometer test bench for emission and fuel consumption measurements, outfitted with the latest measurement technology, allow for a variety of different testing scenarios.



Test benches: testing drivetrains

The ATESTEO drivetrain test benches are designed for testing transmissions either as an assembly part of the drivetrain, or part of the full vehicle. Depending on customer specifications, ATESTEO carries out functional and endurance tests on transmissions and drivetrains on drivetrain test benches. Internal combustion engines or electric machines are used as the drives; battery systems may be simulated. All test benches are suitable for testing passenger and commercial vehicles. The testing laboratory is accredited by the German Accreditation Body (DAKKS) according to DIN EN ISO/IEC 17025:2005. This also officially certifies ATESTEO's professional expertise in drivetrain and transmission testing.

Drivetrain test benches with combustion engines

Time is money and both should be saved during drivetrain development. Testing at an early stage so that the transmission can be optimised with respect to consumption and CO₂ emissions is the key factor when engineering efficient technologies. To test the entire system, even without a prototype, ATESTEO provides you with modern multifunctional test benches that can be used to test different drivetrain configurations with just one test bench set-up. Your manual, automatic, and dual-clutch transmissions as well as variable transmissions and hybrid drivetrain concepts are tested here.

Drivetrain test benches with an electric engine drive

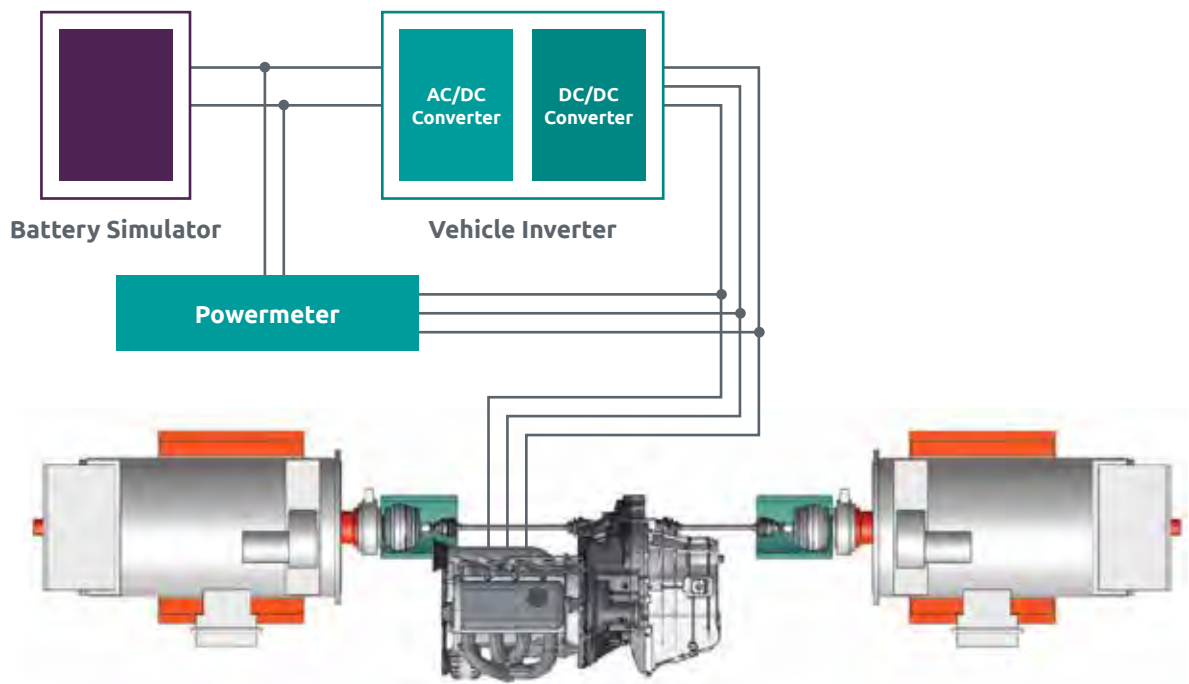
If combustion engines have to be implemented in parallel with the transmission due to ever-shorter development times, our test benches help you test the transmission at an early stage, even without a finished engine. This ensures you have the performance data and reduces your costs for prototypes.

Test individual components or your entire drivetrain without a combustion engine in ATESTEO's electric motor test benches. With an installed machine capacity ranging from 440 kW to 2,700 kW, transmission tests are possible for smaller cars to heavy construction vehicles and high-speed trains. As the leading specialist for drivetrain testing, we strive to perform the testing of all types of transmissions. That is why our test benches are designed to be flexible enough to perform any testing task. Whether the fatigue resistance of a newly developed PTU in combination with a manual transmission or the degree of efficiency of axle transmissions should be measured, ATESTEO can perform any of your testing tasks.



Drivetrain test benches for hybrid drives

For testing hybrid drives, ATESTEO also offers state-of-the-art test benches which represent the use of the drivetrain in real terms. According to the same principle as with the test benches for drivetrain concepts with electric and combustion engines, complex tests are performed here to analyse the properties of transmissions and hybrid systems. To enable you to develop all of drivetrain components of an electric or hybrid vehicle in parallel, ATESTEO offers you timely, selective, and realistic testing of your auxiliary electric components. This ensures that your products work perfectly even before installation and gives you the opportunity to optimise components during the development phase.



Equipment:

- Operation 24 h/day, 365 days/year
- Automation and control system developed in-house
- System for the early detection of damage
- Dynamic simulation of rolling resistance
- Block programme tests
- Retracing of vehicle measurement data in real time
- Entry of data on a road or a stretch of road
- Residual bus simulation

Range of tests offered:

- Transmission and drivetrain
- FWD, RWD, AWD, transaxle systems
- M/T, A/T, AMT, DCT, CVT
- PTU, transfer drive, front/rear axle differential
- Transmission with ancillary units
- Hybrid systems
- Hot/cold endurance tests
- Efficiency measurements
- NVH analysis
- Long-term service life and shifting quality of synchronisation, shifting quality analysis
- Deformation analysis

Test bench requirements for electric motors

To test electric motors and inverters, ATESTEO takes over all testing services at the test bench with respect to mechanical, electrical, and thermal properties of the drivetrain components. In addition, we collect technical data for you on component cooling, overload capacity of the torque characteristic curve, and noise, and axial/radial vibrations.

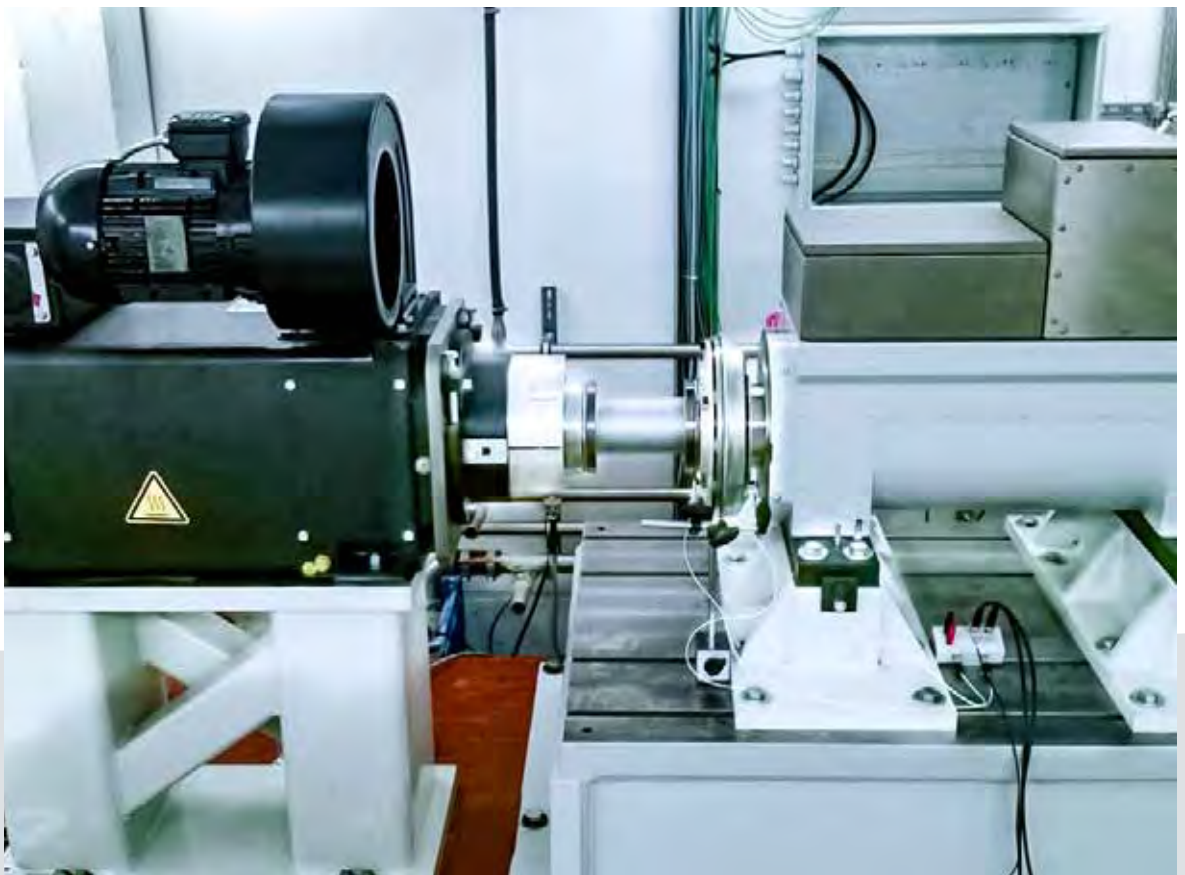


ATESTEO test benches take on the following tasks:

- High-voltage DC voltage supply
- Electric load motor
- Measurement of temperature, volume flow, and pressure
- Axle coupling
- Axle blocking mechanism
- High-frequency measurement of DC voltage, DC current, AC phase voltages, and AC phase currents
- Measurement of speed, torque, and rotor angle
- Speed control
- Coolant conditioning
- Vibration-free fixture (clamping device)
- Temperature test chamber

Testing hardware in the loop (HiL) test benches

With the rapid rise in the use of electronic components and increasing functional scope, especially in drive electronics, as well as the continuously shortening development cycles, the test procedure with hardware in the loop test benches is suitable for improving the testing capabilities. In the process, individual components of the drivetrain can already be tested in a very early stage of the development process on the test bench with specifications related to subsequent use without other drivetrain components being necessarily required.



Our services at a glance:

- Verification and validation of embedded systems and components
- Support for verification methods
- Pre-calibration for selected functions
- Databases to other experiments with similar components – “Big Data”

Acoustic test benches for the drivetrain

The shorter the development times, the more important the simultaneous testing of components. The development and optimisation of vehicle subsystems on special test benches results in a significant amount of time being saved. Previously, the targeted calibration of these systems could first be started once the vehicle prototypes were available.

The extensive optimisation of the vibration of the entire drivetrain already occurs much sooner on the ATESTEO acoustic drivetrain test benches. We thus also achieve a significant cost reduction for you by enabling you to reduce the number of your vehicle prototypes.



Key data of ATESTEO acoustic drivetrain test benches:

- Certification according to ISO 3745 class 1
- Measurement of all drivetrain versions
- Key figures on the drive: $n_{\max} = 16,000 \text{ rpm}$,
 $T_{\max} = 575 \text{ Nm}$, $J_{\text{Rot}} = 0.064 \text{ kg/m}^2$
- Key figures on the two drives: $n_{\max} = 8,000 \text{ rpm}$,
 $T_{\max} = 3000 \text{ Nm}$, $J_{\text{Rot}} = 0.064 \text{ kg/m}^2$

Transmission rattle test bench

The transmission rattle test bench at ATESTEO, which is certified in accordance with ISO 3745 class 1, offers you a means of examining a wide range of transmission noises in isolation from the rest of the drivetrain. Up to 6,000 rpm and 490 Nm on the primary shaft can be measured for transmission whine. To detect transmission rattles, the drive unit is able to simulate the torsional vibrations of an internal combustion engine. With a high level of expertise and specially adapted measuring and testing technology, we also support you in the development of torsional vibration dampers, such as friction disc dampers, dual mass flywheels, and converter clutches with torsional dampers for passenger car drivetrains.

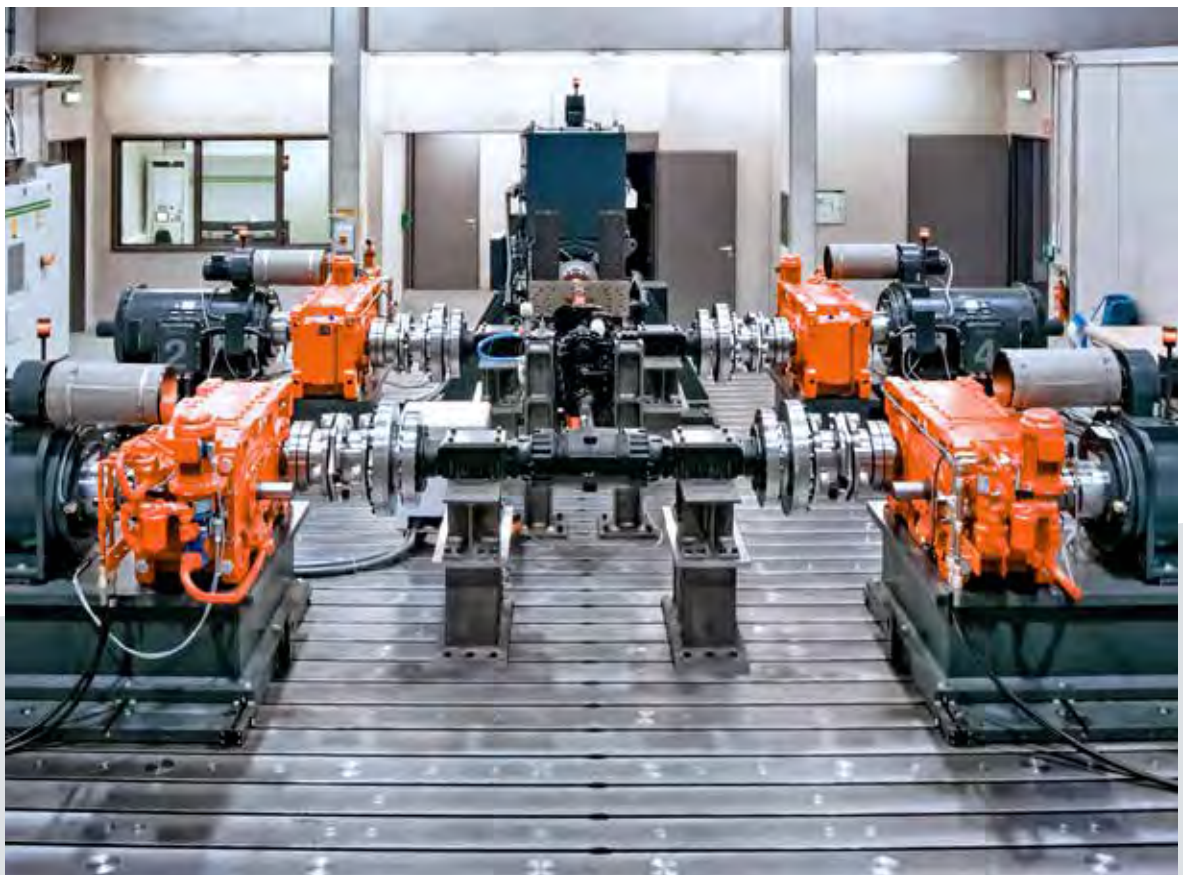


Key data of the transmission rattle test bench:

- Certification according to ISO 3745 class 1
- Cut-off frequency = 250 Hz
- Disturbing noise level inside test cell = 45 dB(A)
- Disturbing noise level outside test cell = 80 dB(A)

Rail, commercial vehicle, and off-road applications

Commercial vehicles are an important part of the modern transport system and pose unique challenges for vehicles, engines, transmissions, and drive technology. With its dedicated team of commercial vehicle specialists, and our deep technical knowledge, ATESTEO is a powerful partner to support you with special tests for the following areas.



Applications beyond cars:

- Rail vehicles
- Commercial vehicles
- Off-road applications

Component testing: testing vehicle components

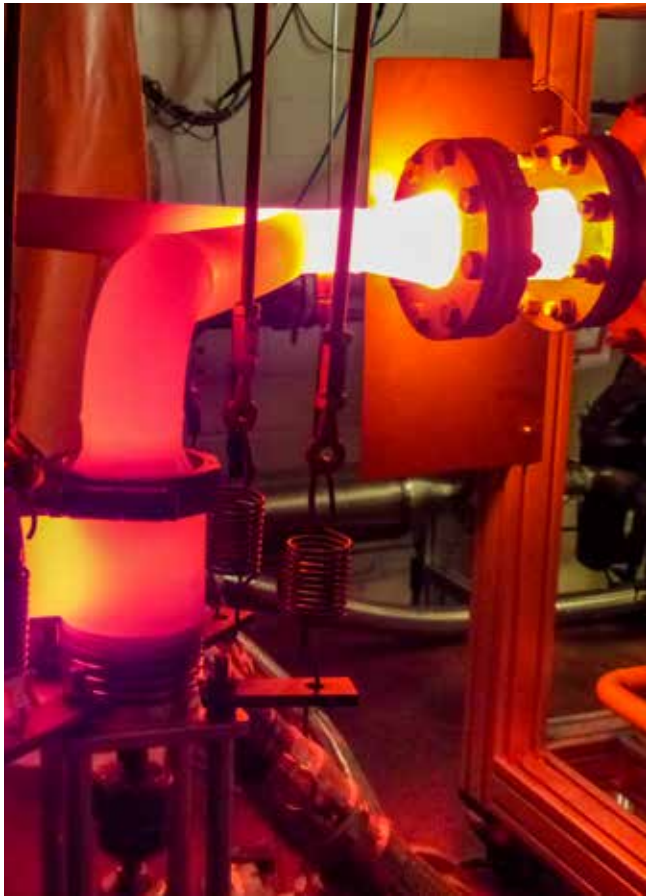
Through custom scaling and adjustment of test benches to your specific testing requirements, ATESTEO can quickly and flexibly respond to new challenges. Retarder, synchronisation, and dual clutch mechatronics test benches, shifting devices, and clutch tests round off our range of services for you.

Testing brakes

When it comes to brake testing, we perform all of the relevant test programmes for you, such as crack, performance, and wear tests as well as NVH tests pursuant to international/national guidelines and company standards. We also take care of the necessary homologation. In addition to these standards for commercial vehicles, cars and motorcycles, special tasks can also be done for special applications in racing, industry, or shipbuilding. For your specific requirements, ATESTEO has the following test benches, in addition to custom arrangements:

- Commercial vehicle, car, and motorcycle inertia brake dynamometer
- Running-in test bench, drag torque test bench
- Semi-dynamic strength test for disc and drum brakes
- Characteristics test bench for pneumatic brake cylinder
- Devices for hysteresis measurements and adjustment efficiency measurement





Hot gas testing

For the thermal testing of components or complete exhaust systems, seven fully automated hot gas test benches are available. The modular set-up enables the configuration of arrangements for durability tests as well as for complex test requirements. For the testing of EGR coolers controlled cooling circuits are installed. Furthermore a Rankine cycle for testing of WHR components can be added. Demineralized water, ethanol, or special fluids are used as work fluid. All test benches are designed to cover the range from passenger cars to commercial vehicles, up to 800 kW heating power, up to 1,300°C hot gas temperature, up to 4,000 kg/h hot gas mass flow, and up to 6 bar hot gas pressure. The following tests are offered:

- Thermo cycle test
- Thermal shock test
- Increased thermal shock test
- Production control
- Overtemperature loading
- Thermal fatigue test
- Time-lapse function (accelerated testing)

Mechanical production for customised testing jobs

With our powerful mechanical manufacturing and machining shop, we can quickly, flexibly, and independently implement your specific testing tasks. We manufacture measuring equipment, components for the test bench setup, and prototypes for your needs in a timely manner.

Overview of our services:

- Milling on 3- to 5-axis CNC machining centres
- Turning on CNC machining centres
- Flat and cylindrical grinding on CNC machining centres
- Extensive experience in the field of measurement technology and prototype construction
- Comprehensive advice for design and material selection



Vehicle testing: testing the entire vehicle

In the field of vehicle testing, we develop and implement tests for your entire vehicles. Our range of services includes noise and vibration measurements, determination of the fuel consumption, continuous load tests to determine durability as well as vehicle tests to determine the longitudinal dynamic behaviour.

ATESTEO has the roller dynamometer test bench and an in-house screened measuring track to study the entire vehicle. We perform driving dynamic tests and fuel consumption measurements for you here. Testing individual assemblies such as transmissions or axle drives is thus possible without removing them from the vehicle.

Vehicle tests on the roller

In addition to a large number of drivetrain test benches, ATESTEO also operates roller dynamometer test benches to test the entire vehicle. Through the dynamic mass simulation, we are able to create real driving conditions quickly and accurately for you in a test bench room. The installed one-axle test bench rollers are suitable for your fuel consumption and exhaust gas measurements as well as functional and endurance tests.

Through the installed capacity of 300 kW, cars and light lorries can be operated with a continuous tractive force of 8,000 N and, for short periods, up to 12,000 N. Vehicle weights can be simulated in the range of 500 to 3,500 kg. The maximum driving speed is 250 km/h. The gross tonnage dimensions are 24 m x 14 m x 6.5 m.



Road load data (RLD) acquisition

Accurate knowledge regarding the loads that the products are exposed to during their expected service life is indispensable for successful durability engineering. The availability and accuracy of realistic load data are essential for the virtual and physical validation and optimisation of products. ATESTEO offers you a comprehensive service for the recording of street load data:

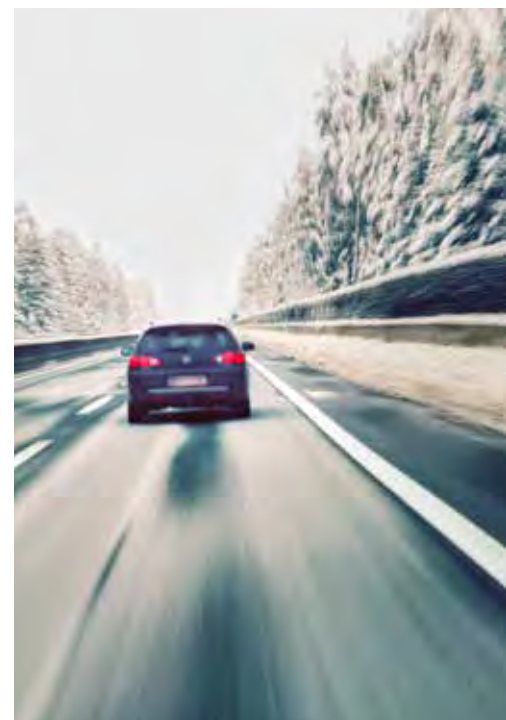
- Detailed planning and execution of tests
- Consultation regarding the load cycles based on our many years of experience
- Equipping the vehicles with measurement technology
- Evaluation of data and creation of corresponding reports



Vehicle tests in summer and winter

We perform endurance and functional tests in all climatic conditions for you on test tracks around the world. Depending on your requirements, we test the service life and functions of individual components of the entire vehicle:

- Continuous operation tests
- Strength measurement
- Functional tests
- Stiffness tests
- Environmental simulation tests
- Endurance tests on testing grounds
- Validation tests performed on public roads (mileage accumulation)
- Functional testing in hot climates
- Functional testing in cold climates
- Functional testing at high altitude





Acoustic measurements on the vehicle

An important criterion in assessing your vehicle is its vibration and noise behaviour. The effects of the vibrational behaviour of individual drivetrain components on interior noise can only be assessed in the entire vehicle. ATESTEO performs various airborne sound measurements for you in the cabin. In addition, using comparative airborne and structure-borne sound measurements between the passenger and engine compartments, we determine how sound is transferred so as to investigate the torsional behaviour of your drivetrain. A test track and an acoustic roller dynamometer test bench, certified according to DIN 45635 class 1, are available for investigating the longitudinal dynamics of vehicles.

Testing on the vehicle acoustic roller

To determine significant values concerning the drive, brakes, driving resistance, and fuel consumption, we test the longitudinal dynamics of your vehicle on a roller dynamometer test bench. Your test programmes are exactly reproduced in the process. The vehicle is operated via a gearshifting unit (GSE) developed by ATESTEO.

The ATESTEO roller dynamometer test benches are available so that you can test the driving noise already during the development phase. Every application case for motorcycles, passenger cars, and light commercial vehicles can be tested. The sound measuring room with integrated vehicle roller dynamometer test bench is designed as a semi-anechoic chamber corresponding to open field conditions in its design. The low cut-off frequency for the acoustics cladding is 100 Hz. It is therefore suitable for acoustics measurements of accuracy class 1 in accordance with DIN 45635.



	Acoustic test bench	Multi-purpose test bench
1-axle test bench roller Ø	1,909 m	1,219 m
Direct current machine	300 kW	150 kW
Tractive force/overload	8 kN/12 kN	5.4 kN/6.12 kN
Simulatable vehicle mass	500–3,500 kg	450–3,000 kg
V_{\max}	250 km/h	200 km/h
Operation	24 h/day, 365 days/year	

Vehicle tests on the test stretch

Complementary to its test benches, ATESTEO operates a test track for passenger and commercial vehicle testing. The track is protected from view and certified for PBN (pass-by noise) measurements. The test track offers you possibilities for conducting vehicle longitudinal dynamics testing, uphill driving tests, and creep tests. As a circuit with a length of approximately 825 m and a width of 3.6 m, the test track can be driven in a continuous loop. The straight middle stretch leads to curves with a curve banking of 30 degrees, which can be driven through at a speed of up to approximately 70 km/h.



Testing on our in-house test track


The ATESTEO private test track may be reserved and used for conducting measurements such as the following on passenger and commercial vehicles:

- PBN measurements according to DIN ISO 362 and ECE-R 51
- Vehicle interior noise measurements and sound engineering
- Vibration and oscillation behaviour of assemblies and subassemblies
- Longitudinal studies of vehicle dynamics

The measuring track is protected by a 5.5 m high and overgrown visual protection wall. The entire ATESTEO area is video surveilled 24 hours a day. It is therefore also possible to test prototypes.

ATESTEO in-house test track	
PBN measurements according to	DIN ISO 362 and ECE-R 51
Track length (continuous loop)	825 m
Roadway width	3.6 m
Radius of noise measuring zone	50 m
Roadway surface	According to DIN 10844
Gradients of	2%, 4%, 8%, 12%, 20%

Equipment for drivetrain testing



In addition to drivetrain testing on the test bench, ATESTEO also offers you the necessary equipment for measuring, testing, and analyzing. With decades of experience and extensive expertise, we develop custom-made solutions for your measuring needs. We offer a wide selection of products, solutions, and services related to torque sensors, vehicle equipment, and actuators to support your development efforts.

Custom-made measuring solutions

In a holistic approach, the ATESTEO Equipment division develops torque measuring systems, vehicle equipment, and actuators that are used both on ATESTEO test benches and directly at OEMs and automotive suppliers. All test and measurement systems are developed at the highest technological level and can be coupled with the latest automation technology.

ATESTEO testing equipment

Torque sensors

Our customised solutions enable flexible test bench installations, the implementation of test programmes, and detailed investigations for pre-engineering projects. Additional objectives which are required because of changing ambient and component temperatures and which are in favour of reliable handling can be achieved by enhancing and improving products. Other newly developed products round off our vehicle measurement technology range of products.

Vehicle equipment

Our services for metrology equipment for your cars and commercial vehicles range from vehicle instrumentation to the implementation and evaluation of measurements. Precise measuring equipment is used to record specific data from production or prototype vehicles and provide this data for the development of new vehicle concepts. Depending on the scope of the metrology installed in the vehicle, simple components can be characterised more closely and complex relationships can be assessed in detail by using the recorded data sets. To determine the mechanical performance of rotating components, ATESTEO also offers highly specified telemetry systems, which can be optimally adapted to the conditions of new drive concepts in terms of form and range of function.

GSA transmission shift analysis

The gear shift analysis system GSA was developed by ATESTEO to objectively analyse the shifting mechanism of manual transmissions. The system is used in the vehicle and on the test bench and provides support for the following tasks:

- Vehicle comparison
- Concept comparison (benchmarking, design, supplier products)
- Comparison of development phases (design iterations)
- Comparison of production variances
- Comparison of service life or temperature-dependent influences
- Comparison of subjective evaluations with objective characteristics
- Analysis of inner and outer shifting
- Improvement of the shifting quality

Gear shift robot and actuators

With GSE 4.0 Function and GSE 4.0 Highline, ATESTEO offers you shifting units for use on drivetrain and transmission test benches. By retaining the vehicle's specific shifting gate, they can quickly and easily be adapted to different types of transmissions. A realistic representation of shifting is achieved through the separate parametrisation of shifting force and shifting speed and the release of the shifting lever after completing the process.

Innovative measurement technology from ATESTEO:

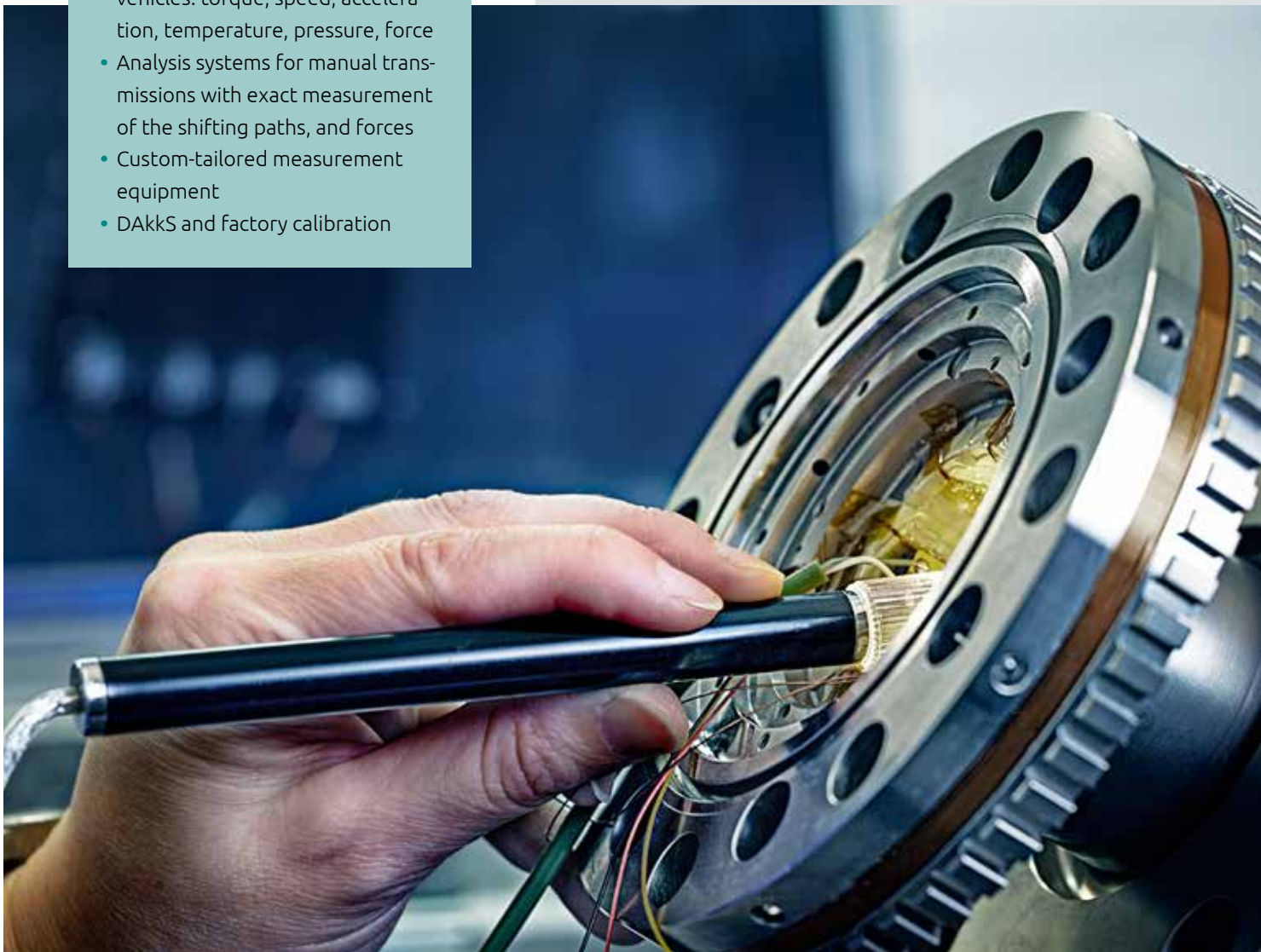
- Machines for gear selection, clutch actuation, and other functions
- Torque measuring shafts from 1 Nm to 500 kNm
- Measurement equipment for transmissions, drivetrains, and vehicles: torque, speed, acceleration, temperature, pressure, force
- Analysis systems for manual transmissions with exact measurement of the shifting paths, and forces
- Custom-tailored measurement equipment
- DAkkS and factory calibration

Implementation of highly dynamic tests

With powerful technology, ATESTEO allows for highly dynamic, realistic testing on the test bench, thus reducing the number of test vehicle trips necessary. A wide range of actuators and robots is available for implementation.


Telemetry systems for contact-free energy and data transmission

The telemetry technology developed by ATESTEO can be used in a variety of ways because of its unique design. Therefore we can also offer you very complex solutions, especially in the field of vehicle instrumentation.



Engineering



A wireframe model of a car is shown in the foreground, rendered in a teal color. In the background, there is a faint, semi-transparent image of a server rack with multiple vertical units. Overlaid on the server rack are various data visualizations, including a bar chart on the left with the text 'Estimated Time: 231 sec' above it, and several circular gauges or progress indicators. The overall background is a gradient of orange and teal.

We offer you comprehensive engineering services from a single source. Our know-how and many years of experience, combined with a complete in-house testing infrastructure, enable us to support you in making the development of new transmissions and entire drive-trains more effective, qualitative, efficient, and economical.

Engineering – competence in developing transmissions and drivetrains

In addition to drivetrain testing, measurement services, testing equipment, and the sale of relevant test benches, actuators, and measurement systems, ATESTEO also offers engineering services for optimally developing transmissions and entire drivetrains.

Our testing related engineering services provide you with vehicle drive benchmarking in the development and creation of new drive systems, especially electric and hybrid drive systems. In our prototype construction department, we optimise, assemble, or design the prototypes of your new components. ATESTEO thus offers you everything from testing to development from a single source – from the leading specialist for drivetrain testing.

Benchmarking for vehicle development and optimisation

Drivetrain benchmarking at ATESTEO opens you a world of possibilities for optimising your products, processes, and technologies and honing your competitive edge. Through tests on the entire vehicle and drivetrain, we examine the driveability, performance, efficiency, and economy of vehicles of other manufacturers. So that you can work highly accurately, we support you during the early stages of specifying tests of the drivetrain or powertrain. Our own



dynamometer and in-house test track, along with a number of drivetrain test benches and various equipment at test benches, support testing all types of transmissions and all varieties of propulsion systems at ATESTEO. All vehicle and test bench tests are conducted in-house with our own measurement technology. As the leading specialist for drivetrain testing, we offer our customers a high degree of expertise and the latest technologies for benchmarking vehicle drive systems.

Services:

- Procure vehicle and components
- Decode CAN and equip the drivetrain with our own measurement technology (feasibility study)
- Take measurements in the vehicle and on the test bench
- Analyse the data
- Analyse various control strategies

Prototype construction during transmission development

Prototype construction concerns designing, constructing, and testing prototypes. Even in today's digital age, constructing prototypes while developing transmission and vehicle is indispensable in order to investigate and optimise components at an early stage. ATESTEO offers automobile manufacturers and automotive suppliers the complete range of services for prototype construction, from testing, optimisation, and installation to the development and construction of new prototypes. The prototype-related services of ATESTEO also include reverse engineering with benchmarking.



Services:

- Failure analysis of the component, with photographic documentation
- Further development and improvement of the prototype
- Prototype workshop and installation
- Reverse engineering
- Benchmarking

Excellence in drivetrain testing





ATESTEO is the leading specialist for independent drivetrain testing. The corporate group specialises in drivetrain and transmission testing and, with the associated equipment such as torque sensors and engineering services, is one of the internationally leading partners in the automotive industry.

Always there for you

We ensure competence and geographical proximity to our customers by employing excellently trained staff globally at our many locations in Germany, China, and Japan. For our customers, this means: quick routes, direct communication and local expertise. In the German headquarters in Alsdorf, our employees work on developing and optimising our products, systems, and processes in the field of drivetrain testing. Their permanent goal is to generate sustainable value creation and to offer you the maximum level of safety and quality through innovation, knowledge, and effective and transparent business activity.



ATESTEO GmbH & Co. KG

We operate more than 130 drivetrain test benches at our sites in Aachen, Alsdorf, Wolfsburg, Kassel, and Garching (near Munich).

ATESTEO Gear Research Center (China) Co. Ltd.

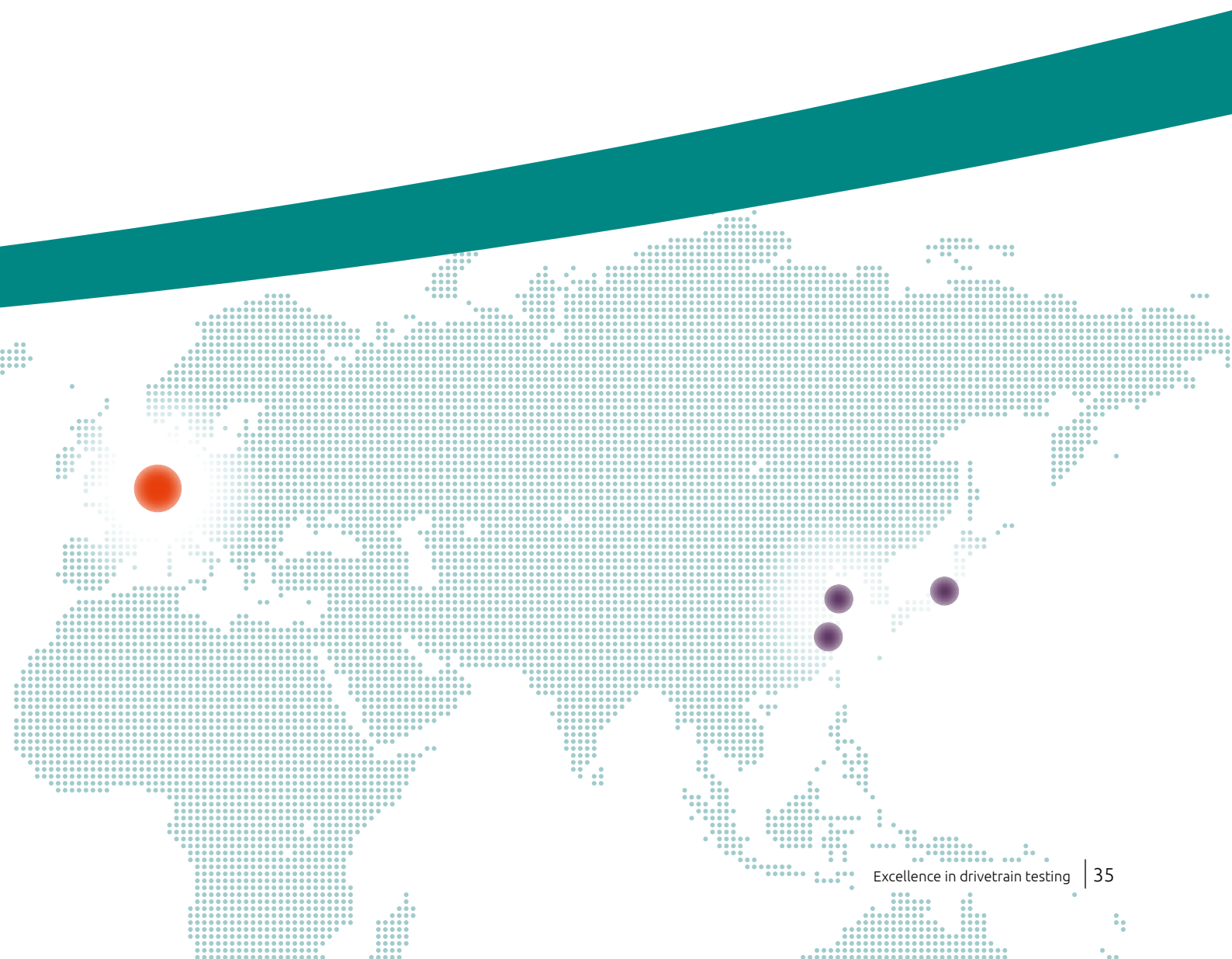
Research and development centre in Suzhou near Shanghai with 30 test benches. Distribution of all services of the ATESTEO group in China. Location in Tianjin with focus on e-mobility testing.

straesser automotive testing GmbH

The offering in the field of road trials and vehicle testing includes pre-production and production vehicle testing, vehicle endurance tests, testing of vehicles in 24/7 operation, road tests on public streets or test tracks, and garage and repair service for test vehicles.

ATESTEO Japan K.K.

Headquartered in Tokyo as a distribution location for all products and services offered by the ATESTEO group in Japan.



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