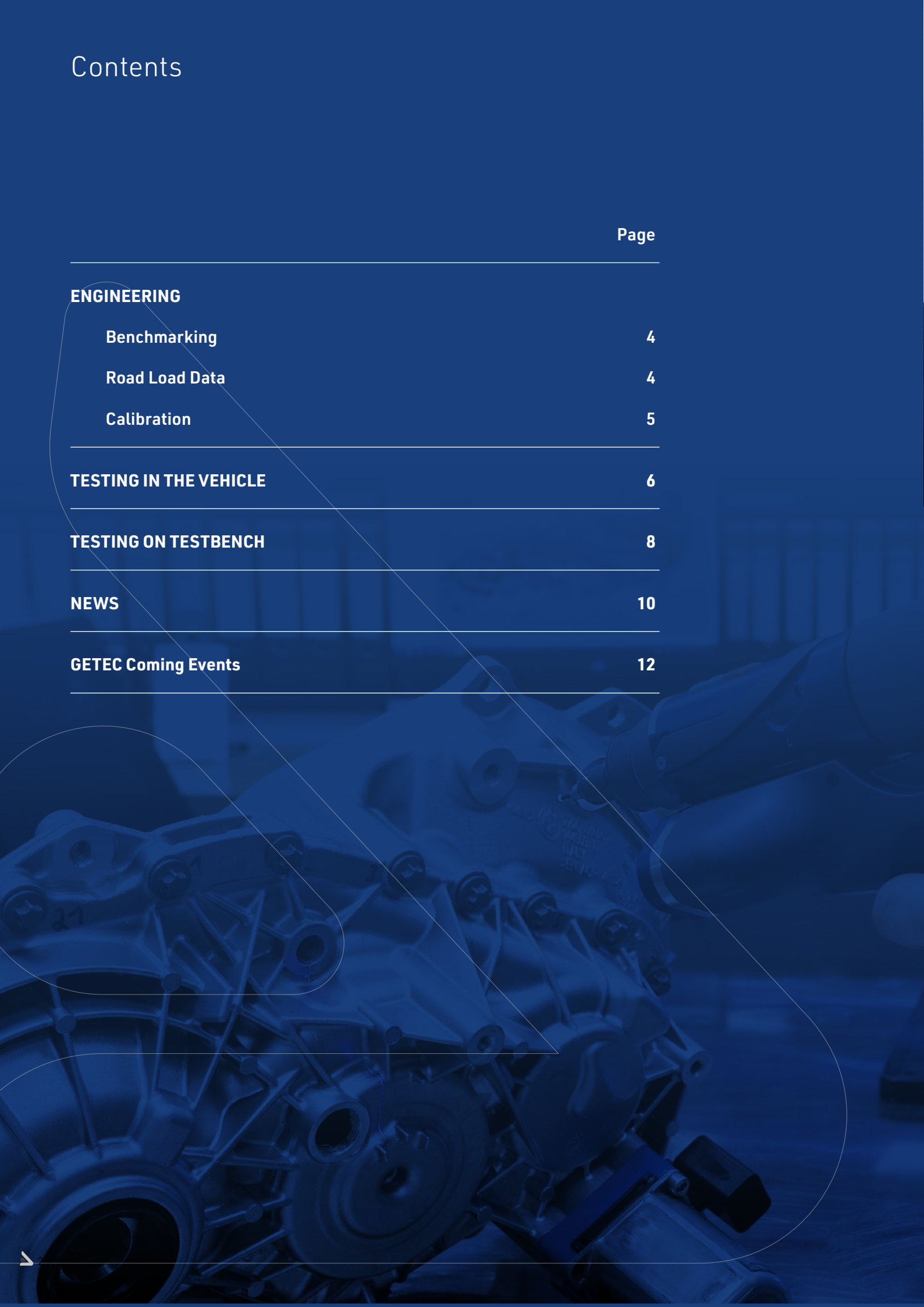
GETEC
Getriebe Technik GmbH

NEWSLETTER

English version | 05/2025

ENGINEERING AND TESTING SOLUTIONS

Contents



Greetings

Welcome to our first edition of our 2025 newsletter, where we delve into the dynamic world of automotive testing and engineering services. As the automotive industry continues to evolve at a rapid pace, the importance of rigorous testing and innovative engineering solutions cannot be overstated.

OUR COMMITMENT TO EXCELLENCE IN THESE AREAS ENSURES THAT WE REMAIN AT THE FOREFRONT OF TECHNOLOGICAL ADVANCEMENTS, HELPING OUR CLIENTS NAVIGATE THE COMPLEXITIES OF VEHICLE DEVELOPMENT.

In this issue, we will explore the latest trends in testing methodologies on test benches, highlighting how these practices are essential for ensuring vehicle safety, performance, and compliance with stringent regulations. From engine performance assessments to durability testing, our state-of-the-art facilities and expert teams are dedicated to providing comprehensive testing services that meet the highest industry standards.

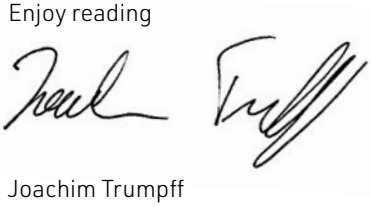
Additionally, we will showcase our engineering services that support the entire vehicle lifecycle, from concept to production. Our skilled engineers leverage cutting-edge tools and techniques to deliver tailored solutions that enhance efficiency and innovation.

WHETHER IT'S OPTIMIZING DESIGN PROCESSES OR IMPLEMENTING ADVANCED SIMULATION TECHNOLOGIES, OUR GOAL IS TO EMPOWER OUR CLIENTS TO ACHIEVE THEIR OBJECTIVES WITH CONFIDENCE.

As we move forward, we invite you to stay engaged with us. Your feedback and insights are invaluable as we strive to provide you with the most relevant information and services. Together, let's drive the future of the automotive industry, ensuring that safety, performance, and sustainability remain at the core of our endeavors.

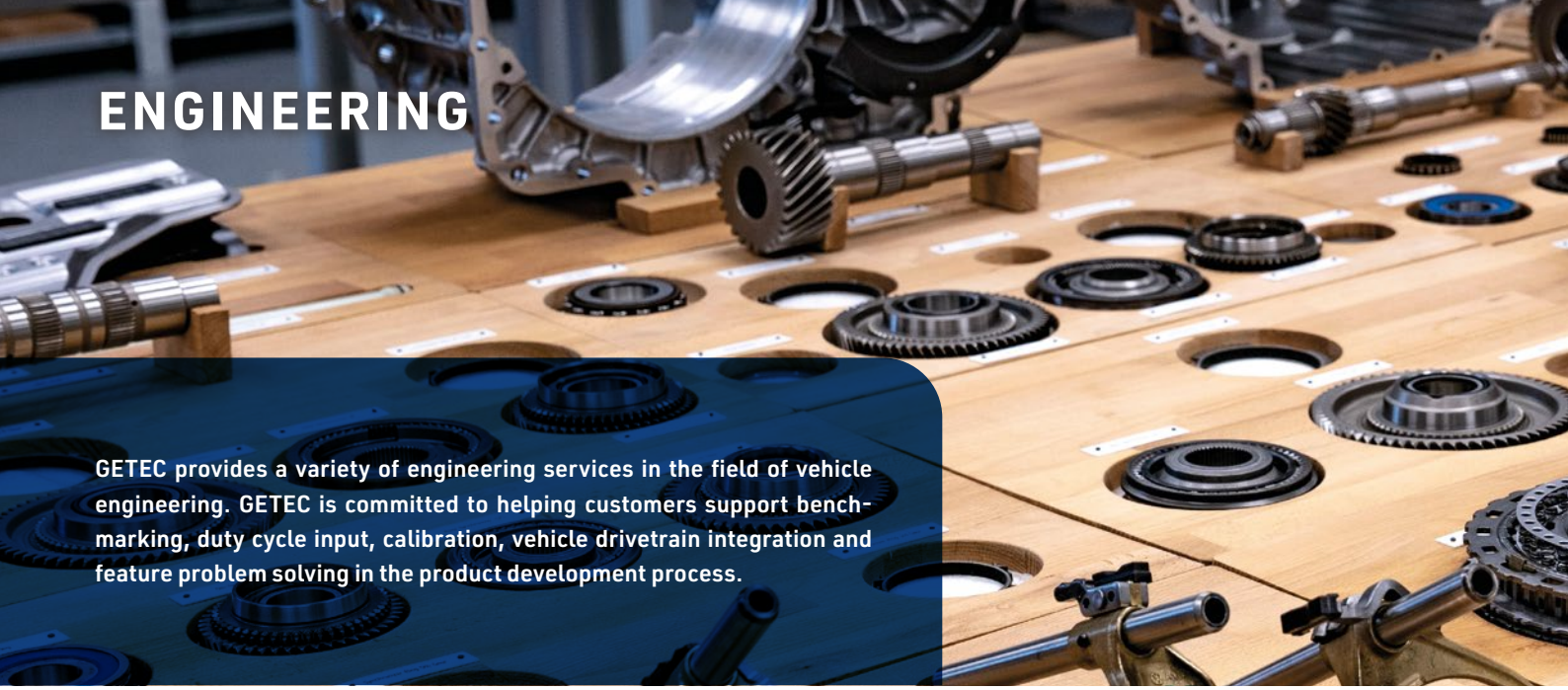
Thank you for being a part of our community. We look forward to sharing more exciting updates and insights in the coming months!

Enjoy reading



Joachim Trumpff
CEO
GETEC Getriebe Technik GmbH

ENGINEERING

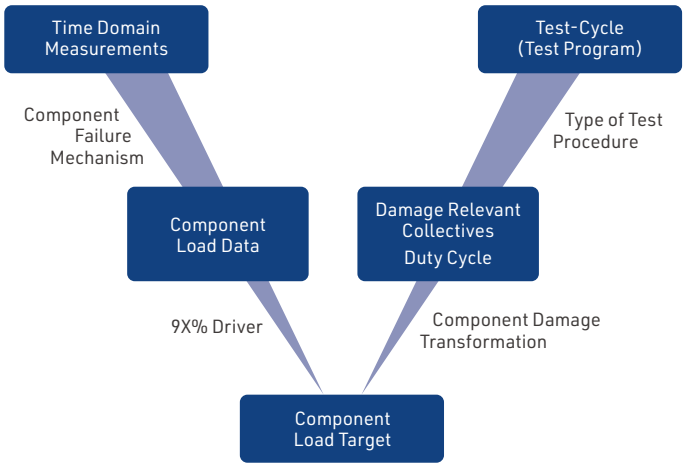


GETEC provides a variety of engineering services in the field of vehicle engineering. GETEC is committed to helping customers support benchmarking, duty cycle input, calibration, vehicle drivetrain integration and feature problem solving in the product development process.

Benchmarking

Our benchmarking services focus on the following two segments:

- **Hardware benchmarking**: GETEC is capable of analyzing the powertrain structure and its layout in the vehicle, component dimensions and materials, as well as their functionalities within shortest time;
- **Driving evaluation**: it is necessary that GETEC professionals drive the vehicle in all posible conditions. The measurement data is used and evaluated to generate for example shift maps or different accelerator paddle maps.

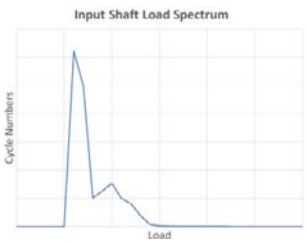


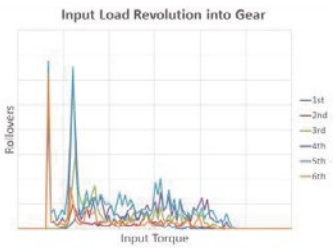
Road Load Data (RLD)

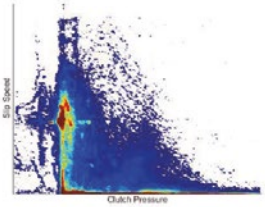
Our Road Load Data (RLD) Acquisition and Evaluation Tool enables the generation of a lifetime damage representative CAE duty cycle, test bench test cycle and vehicle test program.

The RLD service includes the following steps:

- RLD Planning (target setting, measurement location & content planning, definition of required measurement signals, driver characteristic planning)
- RLD Preparation (vehicle preparation, sensor installation / CAN decoding, vehicle approval, logistics)
- RLD Conduction (RLD measurements on real road, on test track and in special environment or locations)
- RLD Evaluation (duty cycle, test bench test cycle, vehicle test program and test specification development)





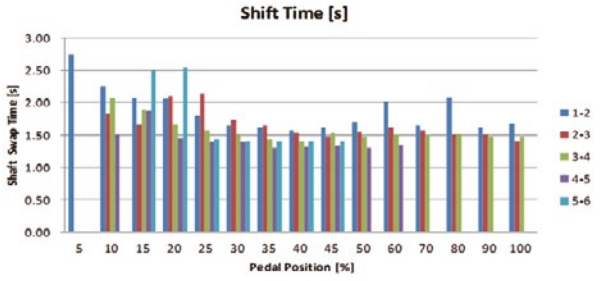


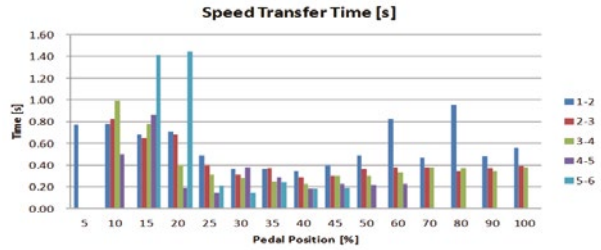
GETEC
Getriebe Technik GmbH

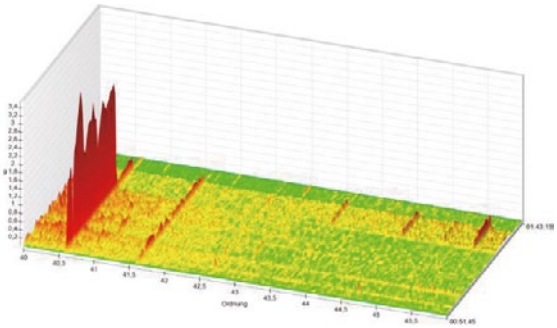
Calibration

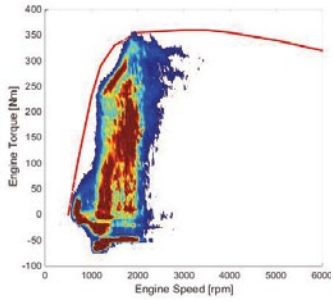
Combined with our extensive calibration experience, GETEC can provide the following calibration services.

- Shift quality and strategy benchmarks
- Diagnosis
- Calibration development and assessment
- Interface check
- Shift strategy calibration
- Single shift quality deep drivability analysis
- Shift quality calibration









CAN Decoder

Our application engineers have accumulated a wealth of experience in vehicle CAN analysis and testing. GETEC uses standardized and specific tools to quickly obtain complete vehicle information and use it for summary and analysis for customer feedback.

NVH

GETEC has many years of experience in NVH optimization and problem solving of different drivetrain systems, providing comprehensive solutions to the problems of traditional drivetrain and new energy drivetrain NVH.

TESTING IN THE VEHICLE

FOR VEHICLE TESTING
WE CAN PROVIDE YOU WITH

- Long and short-term tests in 12/5, 16/6 or 24/7 operation of your vehicles or components.
- On public roads and/or shielded test tracks depending on requirements.
- In Europe and China, including drivers in Europe and China
- Including data collection and evaluation.
- In addition, the results for vehicle development or CoP monitoring are made available or evaluated accordingly.

Many further tests are possible:

- Drivetrain systemtest
- NVH measurements
- Road load data
- Shiftability
- Lubrication
- Benchmarking
- ...and much more based on customer requirements

GETEC Getriebe Technik GmbH has achieved many successful Vehicle Testing projects, supporting our customers to develop new products and optimize or test the products. GETEC can provide customized solutions for many different requirements customers to achieve the customers' targets.

GETEC
Getriebe Technik GmbH

When facing below items, vehicle testing is necessary:

1. DEVELOP NEW PRODUCT FROM ZERO

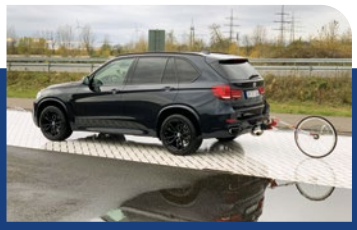
Through vehicle testing, you can take benchmarking is essential to find the targets for the initial design of product. More information from benchmarking will greatly support to define the product fitting to the market requirements from the beginning.

2. OPTIMIZATION OR TESTING OF PRODUCTS

Vehicle testing in real environment leads to faster and more reliable product fault defection. Early defection of such issues is essential before starting mass production. Based on the result from vehicle testing, the product can be optimized with suitable solution.

3. VERIFICATION BEFORE SOP OR MARKET INTRODUCION

Vehicle testing leads to a better product understanding and more confidence before going into SOP or market.



Vehicle Testing have below obvious advantages:

Quick to start
the test with real environment compared with testbench

Represent real load
VS simulated load on testbench

Complete system test
on the road

Capture the real road data
for use on testbench

TESTING ON TESTBENCH

Our testing equipment ability:

We provide multiple testing services for different types of vehicles and drivetrain products.
Whether on the PC, on the test bench or on the road, there is always an optimal solution for our customers.

OUR TESTBENCHES ARE FLEXIBLE FOR DIFFERENT SET UP/LAYOUT.

ONE DYNO ELECTRIC HIGH SPEED MOTOR TEST BENCH

For E-Motor Testing / LV123 / LV124 / ECE R85 / ...

High Speed Input Dyno

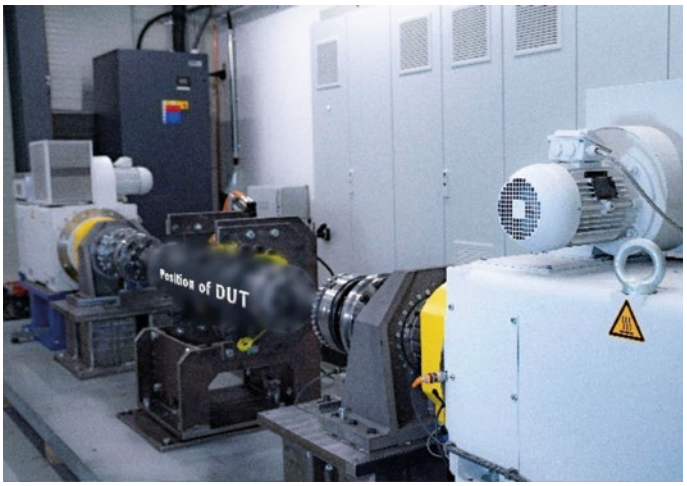
Max. Rotation Speed:	up to 20000 rpm (25000 rpm planed)
Torque:	500 Nm (630 Nm Overload)
Power:	315 kW

Vehicle Energy System (VES)

Max. Power:	250 kW (500 kW in parallel mode)
Max. Voltage:	1000 V
Max. Current:	1000 A (2000 A in parallel mode)

WE CAN PROVIDE THESE TESTING SOLUTIONS FOR YOU ON OUR ADVANCED NEW ENERGY TESTBENCHES:

GETEC
Getriebe Technik GmbH



HIGH PERFORMANCE TWO DYNO E-AXLE TEST BENCH

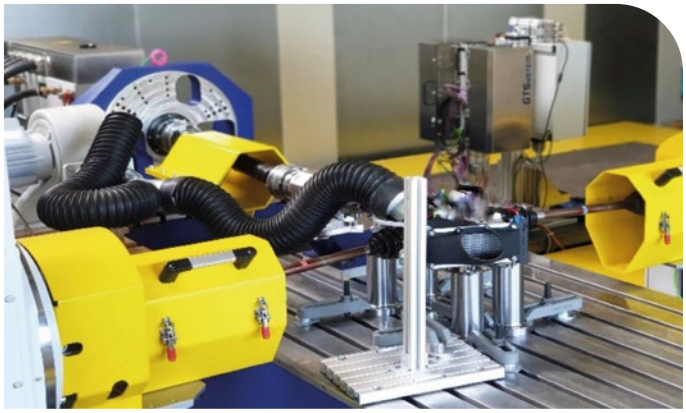
For E-Axle Testing / Brake testing / ...

Output Dynos

Max. Rotation Speed:	3000 rpm
Torque:	6000 Nm
Power:	500 kW

Vehicle Energy System (VES)

Max. Power:	750 kW
Max. Voltage:	1000 V
Max. Current:	1500 A



THREE DYNO ELECTRIC HIGH SPEED GEARBOX TEST BENCH

For Reducer transmission testing/conventional MT/AT/DCT ...

High Speed Input Dyno

Max. Rotation Speed:	up to 20000 rpm (25000 rpm planned)
Torque:	500 Nm (630 Nm Overload)
Power:	315 kW

Output Dynos

Max. Rotation Speed:	3000 rpm
Torque:	3500 Nm
Power:	220 kW

Vehicle Energy System (VES)

Max. Power:	250 kW (500 kW in parallel mode)
Max. Voltage:	1000 V
Max. Current:	1000 A (2000 A in parallel mode)

- EV testing, inverter testing
- Passenger car and Commercial vehicle powertrain testing
- Durability testing
- Functional testing
- Performance testing

Our test benches are suitable for different setups/layouts and even more.

With our Advanced testbenches and our Millions-of-km experience, our professional team can provide the satisfying TESTING SOLUTION to you.

NEWS

GETEC eD1 Mini: The smart LCV for the urban business sector

The GETEC eD1 Mini is an innovative, fully electric light commercial vehicle (LCV), specially developed for mobile sales and last-mile delivery. **It is ideal for businesses in retail, coffee, beverage and ice cream distribution and offers:**

- **Zero emissions** - Environmentally friendly and cost effective
- **Compact design** - Agile in tight urban spaces
- **Customisable cargo space** - Ideal for storage, refrigeration or vending facilities
- **Intelligent technology** - GPS tracking and fleet management
- **Low maintenance** - Reduces operating costs

Perfect for small businesses such as:

- **Coffee & Mobile Cafés** - Hot and cold drinks always available
- **Beverage distribution** - Serve fresh soft drinks and beers on the go
- **Ice cream vending** - Portable vending made easy
- **Retail & micro-commerce** - Efficient last-mile deliveries

GETEC eD1 Mini: The future of urban business mobility!
Scale your business sustainably - Contact us today.

GETEC REEV - A system without range anxiety

GETEC's range extender system offers efficient, energy-saving solutions for commercial vehicles that optimise range and optimise range and operating costs - for worry-free logistics.

Features:

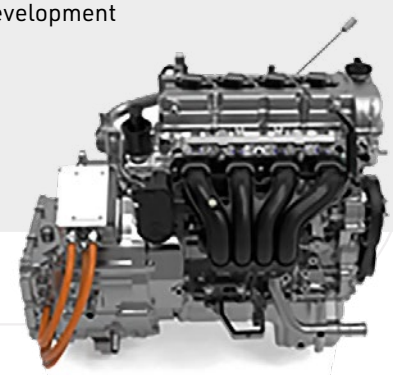
- **Low costs** - Greater economy compared to conventional vehicles
- **High efficiency** - No charging time, increased working time
- **Low weight** - Compact Japanese all-aluminium engine

Parameters

Rated Output Voltage	V	336 V
Rated Output Current	A	110 A
Rated Power	kW/rpm	30/3000 kW/rpm
Max Power	kW/rpm	45/4000 kW/rpm
Highest Efficiency		95 %
Used Environment		-40°C to +125°C
Weight	kg	125 kg
Engine Type/Emissions	L4	1.4L gasoline EF/National VI

Advantages:

- **Adaptive Control** - With self-developed vehicle control unit (VCU)
- **Tailor-made control strategies** - Optimisation of vehicle range
- **Extensive tests** - Ensure driving comfort and drive system development



Smarter Control for Smarter Mobility: The GETEC VCU

The Vehicle Control Unit (VCU) from GETEC is a powerful, flexible and scalable platform for the next generation of vehicles that adapts to various applications in electric, hybrid and intelligent vehicles.

Key highlights:

- **Multi-role flexibility** - Can be used as a standard VCU, hybrid control unit or for subsystems such as thermal management and range extenders.
- **Cross-platform integration** - Compatible with light commercial vehicles and next-generation EV platforms.
- **Modular and scalable** - OTA updates, ADAS integration and easy customisation.
- **Real-time processing** - For intelligent powertrain control and energy management.
- **ISO 26262 compliant** - High safety and reliability.
- **Future-proof** - Ready for software-defined, connected vehicle ecosystems.

The GETEC VCU supports OEMs and innovators in shaping the mobility of the future.

Development focus for lorries

- **Fully automatic high-speed swapping system**
  Battery swapping in minutes for uninterrupted fleet operation.
- **Optimisation of modular battery packs**
  Easy integration into different truck platforms for maximum flexibility and scalability
- **Robust swapping infrastructure**
  Minimise downtime and eliminate range anxiety in the commercial vehicle sector.
- **Validation of performance and durability**
  Comprehensive field testing to ensure reliability under real-world conditions.

Our approach decouples vehicle operation and energy supply, maximises vehicle availability, reduces operating costs and enables fleet operators a seamless transition to sustainable mobility.

Sustainable energy for the future: Our PV system with intelligent AI technology

GETEC IS DELIGHTED TO PRESENT AN OUTSTANDING PHOTOVOLTAIC SYSTEM!

With an impressive output of 130 kWp, based on 288 modules combined with a battery storage system of 230 kWh, we are setting new standards in terms of sustainability and energy efficiency.

What makes this PV system special?

- **Optimum Orientation:** The system is perfectly aligned to the east/west orientation to deliver maximum energy throughout the day.
- **Artificial Intelligence for Efficiency:** Our innovative AI technology optimises electricity costs by matching electricity purchases to market lows. This not only saves costs but also protects the environment.
- **Green Electricity for everyone:** As a leading automotive supplier, we also offer our surplus green electricity to other companies. This means that not only we, but also third parties, benefit from feeding into the green electricity tariff.

With over 5 kilometres of cable connecting both flat roofs and the building technology, our PV system is a real highlight of the green energy revolution. **A step towards a more sustainable and future-orientated energy supply.**

COMING EVENTS

GETEC TECH DAY

GETEC Getriebe Technik GmbH

DEVELOP THE DRIVING WORLD

Date: 07.05.2025
Time: 9:30-16:00
Registration: Free attend. 1st booked 1st get.

More information you can get from our LinkedIn or website:
www.getec-gmbh.com

TESTING EXPO STUTTGART

Date: 20.-22.05.2025
Booth No.: Hall 10 / 1586

www.testing-expo.com/europe/en

AACHENER KOLLOQUIUM 2025

34. AACHEN COLLOQUIUM SUSTAINABLE MOBILITY

Date: 06.-08.10.2025
Speach: Next Battery Swapping:
Accelerating Electrification in Medium-Duty Transport
with Dual Battery Swapping for 12-18t Truck
Speaker: GETEC Getriebe Technik GmbH | Mr. Sven Steinwascher

www.aachen-colloquium.com

Headquarters
Aldenhoven, Germany

R&D and Testing Center
Wujiang, China

Sales Office
Seoul, South Korea

Sales Office
Nagoya, Japan

HEADQUARTERS

GETEC Getriebe Technik GmbH

GETEC Getriebe Technik GmbH
Galileo-Allee 2
52457 Aldenhoven
GERMANY

0049 2464 90266 00
0049 2464 90266 29
info@getec-gmbh.com

GETECGetriebeTechnik

getec-getriebe-technik-gmbh