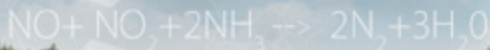


AKIA

PASSION FOR
TECHNOLOGIES



REAL DRIVING EMISSIONS (RDE)

EARLY INVOLVEMENT IN THE CUSTOMER-/ REALISTIC VEHICLE CALIBRATION

As a development service provider in the automotive industry, we implement not only current requirements but also, and above all future legal requirements when it comes to applying various vehicle concepts.

VEHICLE APPLICATION AT THE HIGHEST LEVEL

Development methodologies specifically adapted to the vehicle application enable us to optimally calibrate the position of all operating areas taking into account the large number of influencing factors.

These methodologies are based on many years of application expertise, and allow implementation in the development process at an early stage.

THE CHALLENGE OF EMISSIONS LEGISLATION

Achieving series production maturity for vehicle applications is a vital challenge we respond to for our customers and their customers, taking into account current and future statutory regulations.

Thanks to our expertise and commitment, we achieve high emissions robustness for the overall system.

OUR ADDED VALUE

- Access to expertise from benchmark studies
- Adaptation to customer-specific development and/or certification cycles (type definition)
- Efficient infrastructure: workshops, engine, exhaust roller-type and power train test benches
- Transformation from RDE cycles to modern engine/powertrain test benches to increase reproducibility and comparability
- Evaluation of measurement results and definition of appropriate RDE application strategies



Automotive



Aerospace



Railway



Energy



Life Sciences



Telecoms



Space



Services and Informations Systems



Defence



Oil and Gas



Consulting



OUR EXPERTISE

- Interpretation of legal requirements
- Many years of experience in cross-industry vehicle application projects
- Carrying out, evaluating and interpreting emissions measurements on roller and powertrain test benches (NEDC¹, WLTC² and RDE cycles)
- Definition of customer or vehicle-specific RDE reference cycles
- Evaluation of influencing factors (temperature, altitude, driver dynamics, fuel quality)
- Transformation from road measurements to powertrain test bench
- Measurement technology set-ups for individual vehicles
- Use of portable emissions measuring systems (PEMS: GAS/PN³)
- Consulting, instrumentation, training, logistics and certification
- Development of customer-specific application and evaluation tools

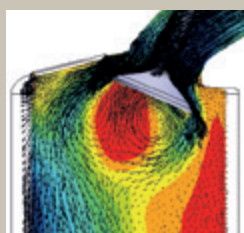
¹NEDC: New European Driving Cycle

²WLTC: Worldwide Harmonized Light-Duty Vehicles Test Cycle

³PN: Particulate Number

Our expertise lies in many years of development, application as well as certification of conventional and electrified drive concepts taking into account all related disciplines.

CONVERSION TO CUSTOMER-/REALISTIC VEHICLE CALIBRATION



RDE cycle



RDE cycle



RDE cycle



Simulation

Engine test bench

Roller test bench

Road measurement

Virtual

Real