

The AKKA logo is displayed in a large, white, sans-serif font. The letters 'A', 'K', and 'A' are significantly larger than the 'K' in the middle, creating a distinctive, stylized appearance. The logo is positioned in the upper right quadrant of the page, partially overlapping a portrait of a man and a background image of a complex mechanical assembly.

PASSION FOR
TECHNOLOGIES

POWERTRAIN INTEGRATION & CALIBRATION

YOUR SYSTEM PARTNER FOR YOUR SERIES PROJECTS

We are your system partner. We work together with you to successfully resolve your challenges in the field of powertrain integration along with engine and transmission calibration.

WHAT YOU CAN EXPECT FROM US

- Engine and transmission integration and calibration
- Engine and transmission control integration including Electrical/Electronic
- Packaging
- Noise vibration harshness (NVH)
- Design and calculation
- Function development
- Testing and validation

DECISIVE ADVANTAGES WITH US AS YOUR SYSTEM PARTNER

- Full system expertise
- Drive systems competence for longitudinal dynamics (drivability, energy management and operating strategy)
- Shorter development cycles through extensive expertise
- Interdisciplinary knowledge transfer
- Turnkey project completion thanks to in-house development and testing facilities
- Development competence up to and including your products' production/launch readiness

OUR ADDED VALUE

WE SUPPORT YOU THROUGHOUT EVERY PHASE OF THE DEVELOPMENT PROCESS

- Concept phase
- Prototype phase
- Series development
- Production maturity

OUR CUSTOMERS

- Passenger Vehicles
- Commercial Vehicles

THE GOAL IS TO DEVELOP

- Engine and transmission variants
- Transmissions, 1 and 2-speed for hybrid and e-drive systems
- Engine and transmission components and systems including actuators



Automotive



Aerospace



Railway



Energy



Life Sciences



Telecoms



Space



Services and
Informations Systems



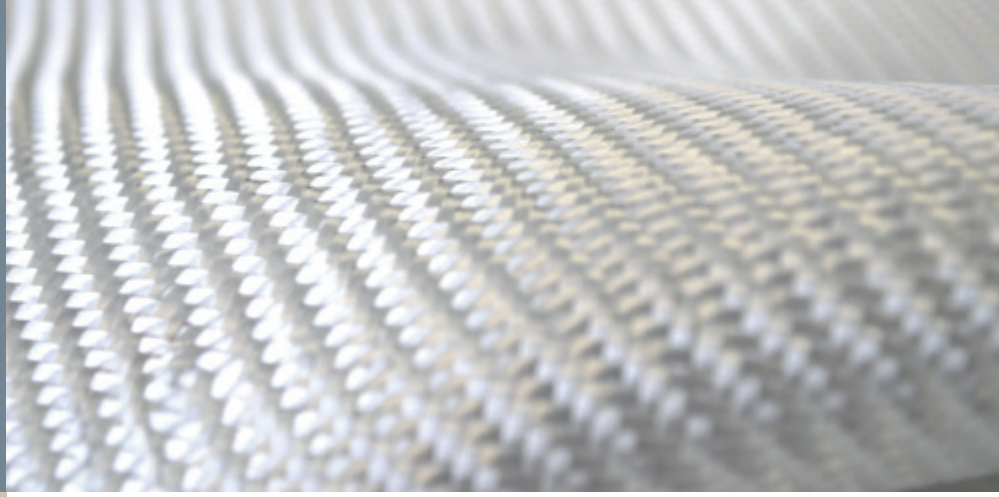
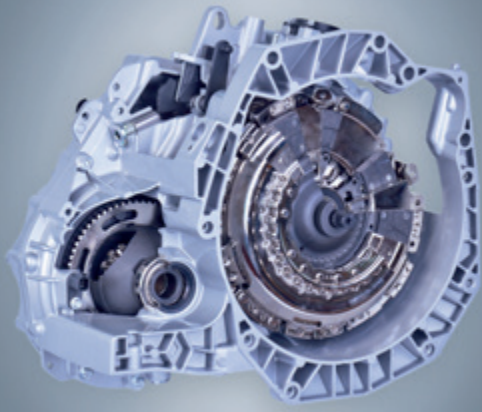
Defence



Oil and Gas



Consulting

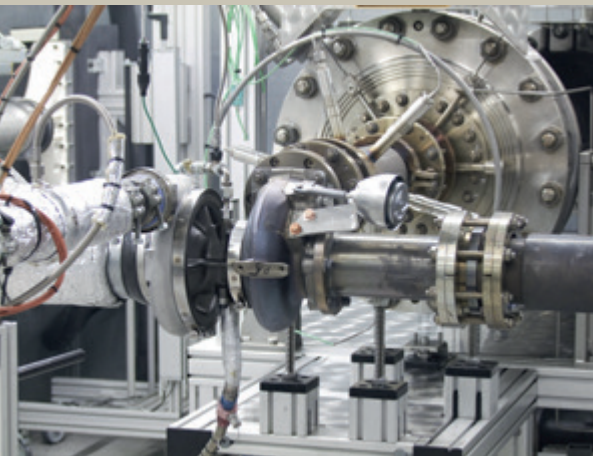


DEVELOPMENT AND CALCULATION DESIGN

- Engine component and systems development
- DMU installation investigation (Diesel Multiple Unit)
- Engine integration
- Documentation

CALCULATION AND SIMULATION

- FEM Simulation (Finite Element Analysis)
- Multi-body simulation
- Exhaust gas after-treatment simulation
- CFD (Computational Fluid Dynamics)



MECHANICAL SYSTEMS

- Component function validation
- Planning, execution and monitoring of test bench trials and vehicle endurance tests
- Engine and component maturity validation
- Thermal validation in the vehicle

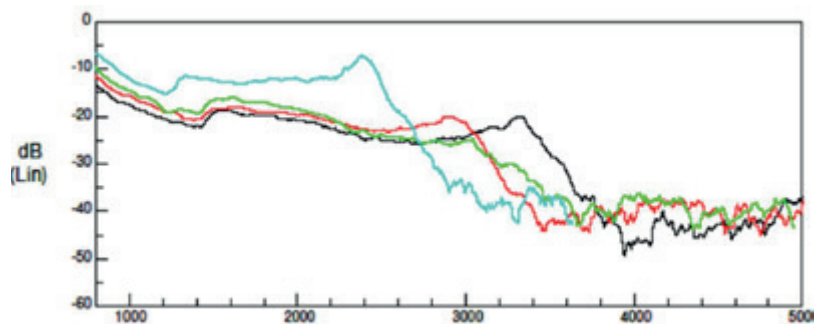
OUR EXPERTISE

ENGINE AND TRANSMISSION CALIBRATION AND INTEGRATION

- Gasoline and diesel engine calibration on the test bench and in the vehicle
- Engine calibration for alternative fuels
- Software function development
- Thermodynamic development and calibration
- Combustion process noise optimization
- Controller applications
- Drivability evaluation & calibration
- Exhaust gas after-treatment and turbocharging design and calibration
- Industrialization
- Compliance with worldwide standards

NOISE VIBRATION HARSHNESS

- Powertrain testing
- Exhaust gas system testing
- Test bench trials
- Operational stability



TESTING AND VALIDATION

- Simulations
- Test bench trials
- System ageing
- Mechatronic and mechanical validation and development (testing)
- Endurance testing and series support for summer and winter trials