

AKKA

PASSION FOR
TECHNOLOGIES

POWERTRAIN DESIGN AND VALIDATION

FROM THE DESIGN PHASE TO THE FINISHED COMPONENT OR SYSTEM

Are you looking for a partner for your powertrain development projects? With AKKA you have a one-stop service partner for three of the most important cross-sectional tasks: structural design, simulation, and NVH. We also offer our expertise in the fields of mechanical validation and trials ranging from the component level to the complete system. Our long-standing expertise in the field of complete vehicle development can be efficiently incorporated into your powertrain developmental projects. Our teams work on your innovative future-driven solutions with full dedication.

YOUR SATISFACTION ENERGIZES OUR TEAM

Our experts advise and support you on all topics relating to powertrain design and development whether as experts on demand (EoD), for workshop sections, or turnkey projects. We realize solutions that are ready for series production jointly.

PORTFOLIO

- Powertrain Design
- Computation and Simulation
- Mechanical Testing
- Noise Vibration Harshness

OUR ADDED VALUE

- Simultaneous engineering due to a network of expert teams collaborating closely
- 3D CAD systems (Catia V5, Siemens Nx, Pro/Engineer Creo)
- Using the latest simulation tools
- High end measurement equipment and methods
- Experienced, certified project managers
- Worldwide deployment of our experts is possible

OUR CUSTOMERS

- Automotive
- Aerospace
- Industrial engineering



Automotive



Aerospace



Railway



Energy



Life Sciences



Telecoms



Space



Services and
Informations Systems



Defence



Oil and Gas



Consulting



OUR EXPERTISE

POWERTRAIN DESIGN

- Concept development
- Packaging and DMU
- 3D and 2D design
- Documentation
- Supervision of series production

COMPUTATION AND SIMULATION

- FEM calculation (TMA, fatigue, NVH)
- Conjugate heat transfer
- 3D and 1D flow simulation
- Multi-body simulation
- Optimization

MECHANICAL TESTING

- Functional development components
- Maturity level validation
- Endurance testing test bench and vehicle
- Thermal validation
- Disassembly/findings, damage analysis, wear and tear analysis
- Supervision of series production

NOISE VIBRATION HARSHNESS

- Operational vibration analysis
- Signal analysis
- Rotational vibration examination
- Sound level measurement
- Benchmark examination

