

# Powertrain - development from concept phase to series production

We develop your powertrain system and your powertrain components from concept to series production, in full consideration of function and cost targets.

Our engineers have exceptional expertise in virtual design, simulation and optimization.

## **Product development**

- Powertrain systems
- Electric motors
- Transmissions
- Parking lock
- Gear design
- Integration of components

### **CAD Design**

- Conceptual and functional design
- Component design
- Deep knowledge in manufacturing
- Full development up to industrialization
- Project and supplier management

#### **CAE and Simulation**

- Structural mechanics
- Fatigue strength and service life
- Dynamics, acoustics, NVH
- Multi-body simulation
- 1-D system simulation
- Electrics and electromagnetics
- Flow calculation and thermal design
- Method development

## **Prototyping and Testing**

- Production and assembly of prototypes
- Test bench development

## **YOUR ADDED BENEFIT**

"End-to-End powertrain development based on German engineering of the highest quality"