

CENTER OF EXPERTISE VEHICLE STYLING & DEVELOPMENT

OUR EXPERTISE

STYLING



| | |
|---|---------------------|
| Transportation design (interior & exterior) | Color & trim |
| Product design | Soft part modeling |
| Graphic design | Exhibition concepts |
| Interface design | VR & animation |

CLAY MODELING



| | |
|--------------------|-------------------------|
| Digitalization | Full-size interior |
| Scale models | Modeling in our studio |
| Full-size exterior | Modeling at client site |

SURFACE DEVELOPMENT



| | |
|------------------|---------------------|
| Concept modeling | Interior |
| Class-A modeling | Feasibility studies |
| Exterior | |

MODEL CONSTRUCTION



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|--|---------------------|
| 8,000 m ² studio and production space | Data control models |
| Project support and conceptual design | Functional models |
| Design models | Show cars |

KEY FACTS

- >170 experts
- One of the leading design studios in Europe
- 900 m² photo studio with our patented circulight system
- Concept cars and showcars
- Lighting prototyping
- VR and UX expertise

OUR ADDED VALUE

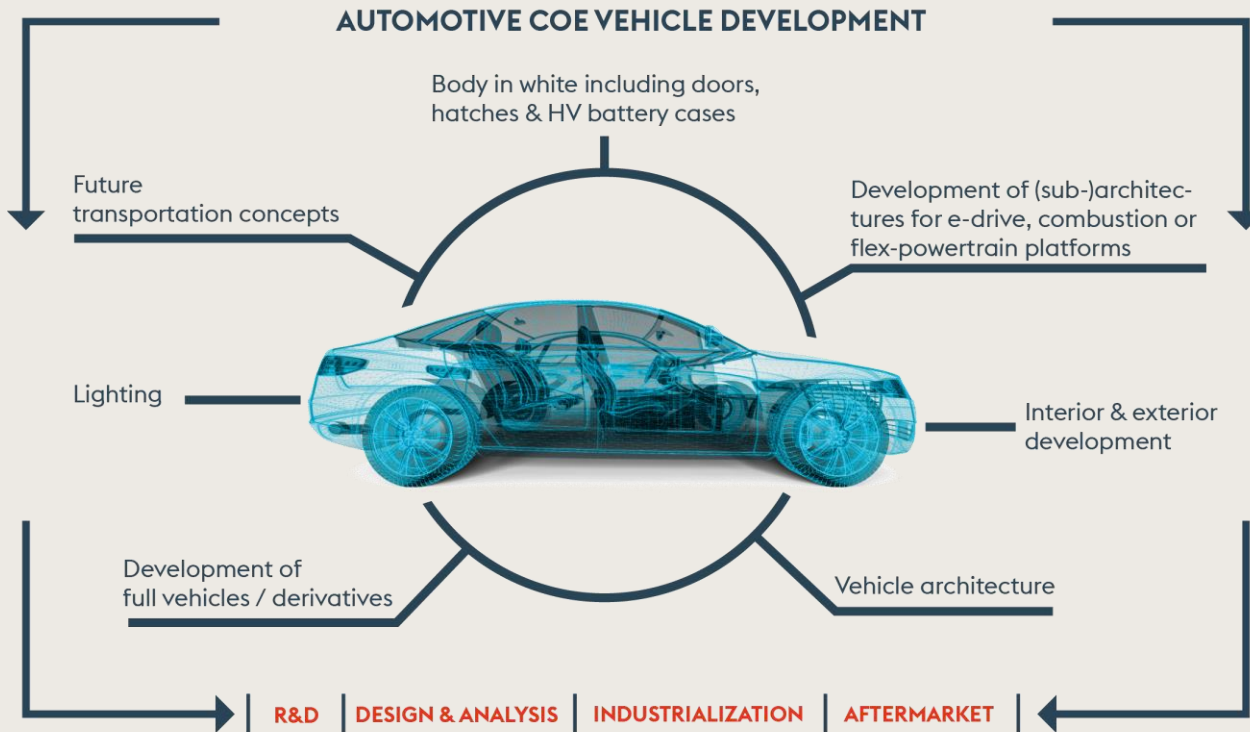
- We support our customers with creativity and powerful tools from the design phase on
- A combination of absolute precision and experienced design experts with technical knowledge
- Choose our services adapted to your needs, from rapid prototyping until fully functional 1:1 showcars



Our Expertise for your Success. We offer rapid prototyping, production of fully functional and drivable showcars, automotive and technical photography and cutting-edge user experience.

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OUR EXPERTISE



KEY FACTS

- >200 engineers
- More than 100 successfully completed projects
- 30 OEM and Tier 1 customers
- Our Workshop Facilities and Digital Manufacturing Expertise complement this offer by giving AKKA an outstanding innovation potential
- With a structured network of Centers of expertise and extended teams we provide you with the most competitive offer

OUR ADDED VALUE

- As a partner for turn-key projects we take responsibility for the complete development cycle, from pre-development to after sales

We combine our longstanding experience and expertise in automotive development with progressive topics in electrification and digitalization.

CENTER OF EXPERTISE VEHICLE STYLING & DEVELOPMENT

OUR PORTFOLIO

- Full Vehicle Development – derivate
- Module Development
- Lighting Development
- Concepts (future interior)
- Front end / Tail end
- Greenhouse – roof systems
- NVH-Concepts & Aerodynamics
- Future Body Design
- Body Technology and Development Solutions
- Climate comfort vehicle interior
- Digital Development process
- Future Digital Integration
- Multi-Powertrain-Platform Development

SELECTED LIGHTHOUSE PROJECTS

AKKA
PASSION FOR TECHNOLOGIES

LIGHTING DEVELOPMENT

EXTERIOR AND INTERIOR LIGHTING CONCEPTS

WE ARE ...
... one of the few engineering companies, who are able to guide through the complete product engineering process of lighting systems.

Styling & Design

- Evaluation of the design
- Digital mock up, assembly sequence support incl. clash check
- Development and evaluation of concepts
- Tolerance analysis

Optical development and simulation

- Selection of the light source
- Design of the optics
- Functional analysis
- Thermal simulation

Electric/Electronics

- Concept creation
- ECU development
- Circuit design
- Printed circuit board design

Testing and validation

- Vibration endurance test
- Electronic characterization test
- Thermal cycle and thermal shock test
- Splash and rain tests
- EMC testing

OUR ADDED VALUE

- Optimized design process by adding:
 - Ideation, design, alias & polygon modeling
 - Assessment of technical feasibility
 - Evaluation of the functionality
 - Maya modelling, virtual reality and generation
- Design coordination & confirmation
- Development, design, simulation and validation of the 3D data
- Cold and warm models
- Evaluation by serial development partner

Automotive | Aerospace | Railway | Energy | Life Sciences | Marine | Service | Embedded & Automation Systems | Defense | Oil and Gas | Connectivity

AKKA
PASSION FOR TECHNOLOGIES

BODY TECHNOLOGY & DEVELOPMENT SOLUTIONS

Transparency, scope, efficiency and flexibility thanks to proven methods, tools and processes:

- Body development driven by digital validation and optimization in an early phase
- Development of components and entire modules
- Application oriented lightweight design – from improvement of existing products up to complete new concepts with focus on defined product targets
- Feasibility and concept studies in a early phase and functional validation
- Development and consulting services around body structures inc:
 - lightweight methods
 - new technologies
 - feasibility
 - manufacturability

Changing market requirements and legal regulations always pose new challenges for the entire industry. In the field of body development, it is important to optimize the overall weight and performance and to increase product attractiveness. With many years of experience in a wide range of industrial sectors and as global development partner for OEMs and suppliers, we take responsibility for the development of your body system solutions.

CORE COMPETENCIES IN BODY SYSTEM SOLUTIONS

- Module Development
- Lightweight Design
- Development of special components like battery and F-cell frames, as well as non-automotive systems
- System integration into modules
- Optimization to Targets Costs, Weight, Function
- Implementation of new technologies such as additive manufacturing, sustainable materials, hybrid materials and structures
- Feasibility studies and concept development
- Technical Consulting

Component Development | Module Development | Lightweight Design

New Technologies | Feasibility Studies | Technical Consulting

Automotive | Aerospace | Railway | Energy | Life Sciences | Marine | Service | Embedded & Automation Systems | Defense | Oil and Gas | Connectivity