

# **BUSINESS PRESENTATION**

EVO GMBH // 2022











# CONTENT



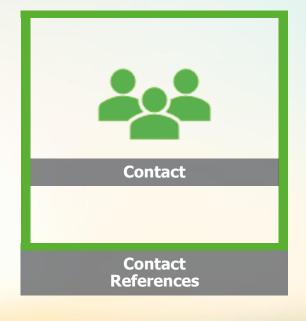


Facts & Figures

**Company Organization** 







HV Battery Modules
Consulting
EVO Campus
EVO Think Tank

# **COMPANY EVO**

# EVO Mobilität entsteht im Kopf

# FACTS & FIGURES

A reliable partner to the automotive industry for 20 years. Certified according to ISO 9001:2015, CSR 26001:2018, ISO 27001 and Tisax Level 3.0.



# **COMPANY EVO**

# EVO Mobilität entsteht im Kopf

# WHERE TO FIND US

- Headquarter Oberschleissheim
- Project Office Munich



### **COMPANY EVO**

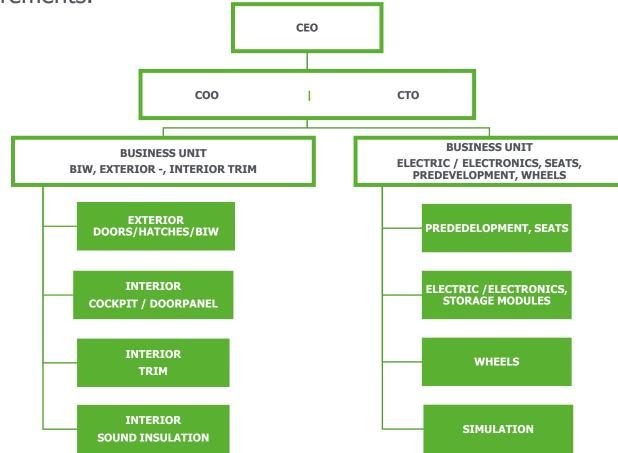
SALES



# **OUR COMPANY ORGANIZATION**

Flat hierarchies and short decision-making paths enable us to react quickly and

flexibly to customer requirements.





# EVÔ

# OVERALL APPROACH TO DEVELOPMENT

# **Modular system**

Standardization e.g. adapter model

Reduction of variants

# Process knowhow

High level of qualification in our teams

Leadership of interdisciplinary teams (worldwide)

# **Assumption of responsibility**

Interface reduction

Cost optimization

Time reduction

# **Development network**

Prototypes

Small series

Series

Test and Validation

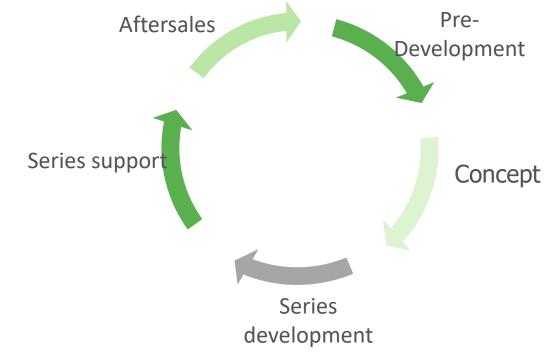




# RANGE OF SERVICES

# 360° product development

We rely on a holistic concept. We are experts in all phases of product development. In all areas of mobility. Vehicle development is our benchmark.



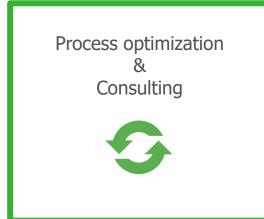
# EVO Mobilität entsteht im Kopf

# RANGE OF SERVICES

# **Our expertise**









# Your profits

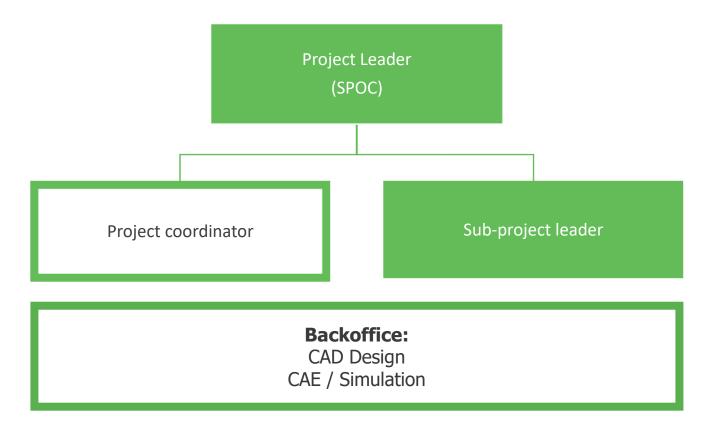
- Innovative and flexible solutions through agile working methods.
- Shorter development times due to smooth processes and integrated teams.
- Flat hierarchies and direct contact persons.
- Cost-optimized solutions thanks to many years of know-how.





# RANGE OF SERVICES

We coordinate our teams so that they can work as efficiently as possible and thus bring innovative ideas to your project.



# **CORE COMPETENCES**





















# **INTERIORS**

# Mobilität entsteht im Kopf

# INTERIOR TRIM / ACOUSTICS

- Greenhouse (headlining and trim panel)
- Sound insulations
- Luggage compartment/-trims
- Floor panel
- Head Protection System
- Exhaust Duct
- Airbag integration
- Side trim panels







# **EXTERIORS**

# Mobilität entsteht im Kopf

# DOORS / HATCHES / BIW

- Sealing systems
- Sound insulation
- Light weight carrier / Acoustic Cover
- BIW body in white
- Door mechanics
- Tailgate/panels
- Front flap
- Fuel filler flap





# **INTERIORS**

# EVO Mobilität entsteht im Kopf

# **SEATINGS**

- Package and component design
- Seat structure and kinematics design
- Foam and cover
- Headrests
- Centre armrest
- Seat panels
- Airbag- and safety systems
- Integrated heating and air-conditioning systems
- Comfort and wellness systems





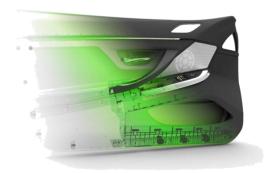
# **INTERIORS**

# EVO Mobilität entsteht im Kopf

# COCKPIT / DOOR PANEL

- Instrument panel
- Center stack
- Glove box
- Airbag- and dashboard frame integration
- Centre arm rest
- Door and side panel







# **EXTERIORS**

# EVO Mobilität entsteht im Kopf

# **WHEELS**

- Aluminium cast wheels
- Forged wheels
- Wheels with separate inlays
- Wheels accessories (z.B. snow chains, spare wheels)
- Data Management "Pass-By-Noise"



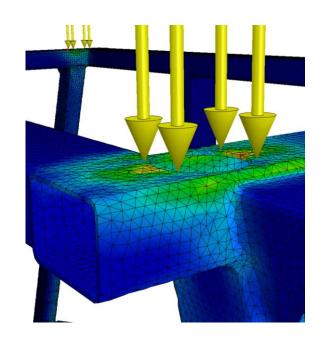


# **SIMULATION**

# Mobilität entsteht im Kopf

# CAE PRODUCT DEVELOPMENT

- Methods development
- Stiffness, strength and miss-use
- NVH (Noise, Vibration, Harshness)
- Crash analysis
- Vehicle Safety
- Pedestrian Safety
- CFD (numerical fluid mechanics)
- Topology optimization





## **SIMULATION**

# EVO Mobilität entsteht im Kopf

# CAE SOFTWARE

Locality	Preprocessor	Solver	Postprocessor
1. Locally at EVO	ANSA	EPILYSIS (Nastran based)	META (compatible with all current formats)
2. Locally with partners in DE, HU, PL, IND	ANSA, Hypermesh, Generator	Abaqus, PAM-CRASH, LS- Dyna, Nastran, Optistruct, CFD, EPILYSIS	Animator, META (compatible with all current formats), HyperView, HyperGraph
3. BMW- connection - only for BMW Projects (Linux & Windows)			

### Software:

Adams, autodesk, catopo, cfx, cothem, cruise, CVAnalytics, digimat, dymola, femfat, Fluent, FTire, gtsuite, hyperworks, IPG, Maxon, medina, Mentat, optimus, PMSF, radtherm, simpack, ster-ccm+, tecware, Tomahaq, tosca



### PRE-DEVELOPMENT



# WE BRING YOUR IDEAS TO LIFE

A great relief for man or process, a fascinating function, a comfort improvement or simply the solution of a recognized problem. As far as ideas are concerned, the EVO pre-development team is systematically encouraged to break out of the system. Research, brainstorming, selection of the best technology, development of complex motion sequences, constructive design. Our creative team is open to all topics and helps with the implementation. From the visionary idea to the functional sample and of course always with series option.

- Concept development complete seat and components
- •Concept development for filing systems (table, compartment,...)
- Concept development for flap systems (for storage areas)
- Concept development Robotics in the interior of the future



### **HIGH-VOLTAGE BATTERY MODULE**



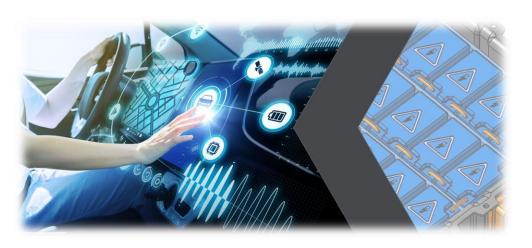
# SYSTEMS ENGINEERING

Sustainably change the mobility of the future with a spirit of innovation! Our system experts develop the necessary technologies and ensure that the tailor-made storage module with all its components is provided for each vehicle.

In the development of high-voltage storage systems, we are responsible for the completeness and consistency of the electrical-functional components in the overall system.

- System architecture
- Geometric design and integration on component and system level
- Construction and simulation
- On-board network development and integration in the entire vehicle





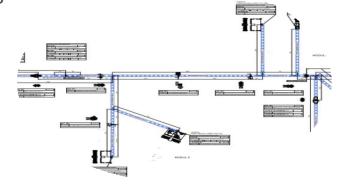
## **ELECTRICS & ELECTRONICS**

# EVO Mobilität entsteht im Kopf

# PRODUCT DEVELOPMENT E/E

- High-voltage battery module
- Consistent E/E configurations for the complete car System Design E/E Architecture
- Safety Electronics
- Power Electronics
- Driver Assistance
- Autonomous Drive
- Infotainment and comfort electronics
- Engine and gearbox electronics
- Chassis electronics
- Telematics
- Vehicle body electronics





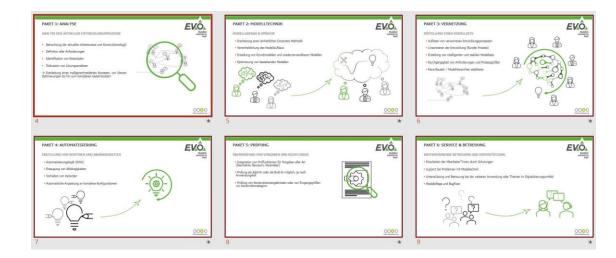


## **CONSULTING**



# DIGITIZATION/PARAMETERIZATION/STANDARDIZATION, INFORMATION SECURITY AND EVO REDADAIR

- Digitization/parameterization/standardization
- Package 1 analysis of the current development processes
- Package 2 model technology; modeling & setup
- Package 3 meshing; development of a model set
- Package 4 automation; development of routines
- Package 5 validation; review of specifications and guidelines
- Package 6 service, further support and update
- Consulting Information security (based on DIN ISO 27001)
- ISMS trainings
- ISMS Scope / GAP Analyses
- Preparation for certification ISO 27001
- ISMS preparation for audit
- TISAX Level 3 audit support



- •EVO RedAdair: We deploy experienced project managers who are specialists in several specialist areas as "project savers" for our customers. Senior project managers are regularly trained via our EVO Campus and their best practices are iteratively included in the training programs.
- Specific training and further education via EVO Campus

## **EVO CAMPUS**



# COMPETENCE AND TRAINING CENTRE

The EVO Campus is our in-house competence and training centre. We also offer training and qualification programs for our customers, partners and suppliers. We adapt our program individually to their needs.

- Training program for project manager /SE-TL training courses
- Supplier qualification
- Softskill and project management trainings for groups and individuals
- Process engineering, customer systems and customer processes, Catia
- Production plant visits
- E-learning platform with tutorials
- Training as technical product designer (3 apprentices / year)





### PRE-DEVELOPMENT



# OUR THINK TANK

EVO "Think Tank" promotes the creativity and out-of-the-box thinking of our employees. This is how our think tank works:

- •All submitted employee ideas are evaluated by our think tank development experts.
- •If the idea has potential, a project team is organized. The capacities for this are planned according to the project framework.

# **Current Projects**

- Individualized orthosis
- Handycover for photo prohibition zones
- Analog hands-free kit with multifunction

# **Patents & Utility Models**

 Various projects are currently in the patenting phase



# **OUR CUSTOMERS**

### **BUSINESS NETWORK**





































































Innovation leben.





Europe's heart of aerospace







# **CONTACT**





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