

Computational Design of HV Batteries and Housings for E-Vehicles

Our Competence – Your Advantage

- Well-founded and pro-active way of working
- Suitable software packages for required disciplines
- Optimal cost-benefit ratio



We Support Your Development From the Idea to Series Production:

Strength Analyses

- Crush pile indentation test (e.g. ECE R100) including test
- Shock and vibration (e.g. ECE R100)
- Crash calculations (e.g. side crash)
- Acceleration loads (e.g. continuous load from driving operation)
- Burst pressure determination
- Fatigue at operating pressure
- Proof of the connections (e.g. screws)

Flow Simulations


- Pressure loss calculations (e.g. in the heat exchanger train)
- Optimization of the heat transfer
- Analysis and evaluation of cooling concepts


Thermal Calculations

- Steady-state and transient analyses for different operating modes
- Demonstration of the effectiveness of active or passive cooling elements
- Determination of stresses and deformations due to temperature differences




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