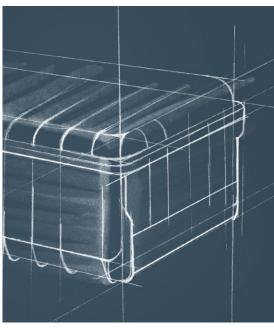
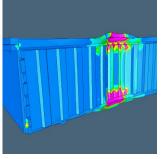
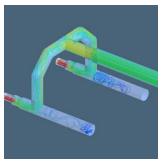
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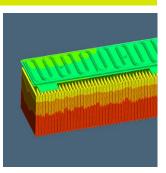
TECHNICAL COMPUTATION

ENERGY STORAGE SIMULATION









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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