ENGINEERING SIMULATION SOLUTIONS

FOR COMPOSITE INDUSTRY

TRANSFORM DEVELOPMENTS WITH VIRTUAL PROTOTYPES

LOWER COSTS
Development, testing & certification

DEVELOPMENT EFFICIENCY
Shorter go-to-market time
Lower development & testing costs

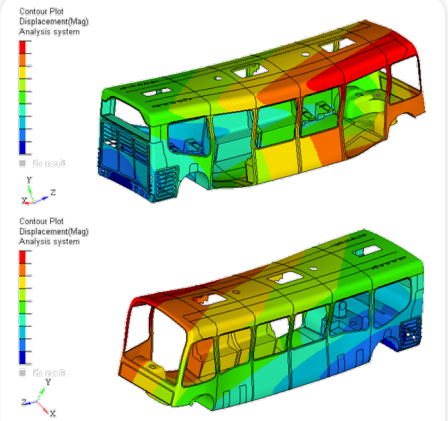
DESIGN OPTIMIZATION
Reduction of labour, material consumption & weight
Lay-up optimization

INNOVATIVE SOLUTION
Improved safety & structural strength

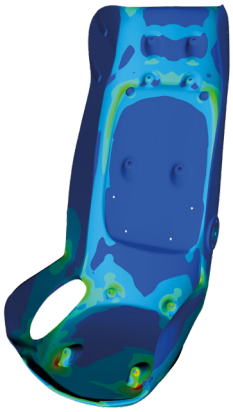
IN-HOUSE MATERIAL TESTING LAB
Full-scale composite material characterization
Static test according to relevant ASTM and ISO standards
Fatigue lifetime investigation
Testing machines up to 100 kN load capacity

INNOVATIVE COMPOSITE ANALYSIS TOOLS
Advanced analysis of sandwich structures, FEA of composites
High-fidelity prediction of deformations, stresses & composite failure
High-precision methods to predict material properties from raw test data using AI and UQ techniques

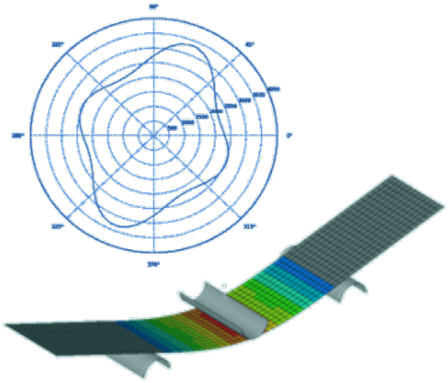
INDUSTRIAL EXPERIENCES | PROJECT EXAMPLES



MODULAR COMPOSITE BUS
Complete analysis of the sandwich structure of a full-composite modular bus chassis.



COMPOSITE RAILWAY SEAT
Analyses from the aspect of deformations, stresses and composite failure



LAY-UP OPTIMISATION
Based on multiple failure criteria
Aided with in-house material characterization