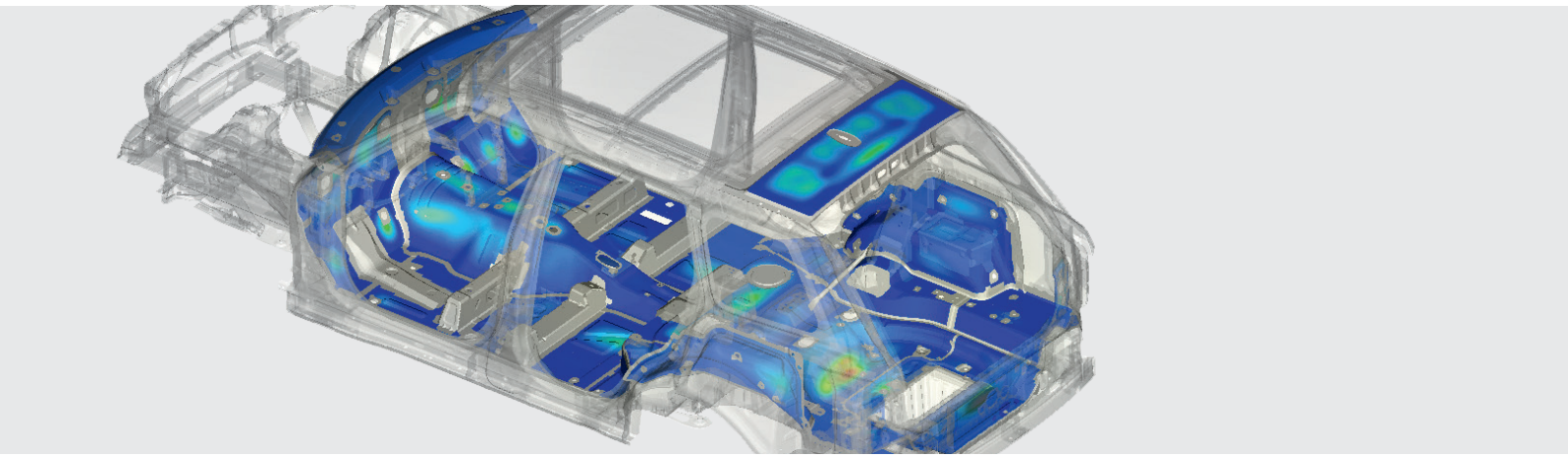
SILVER – for Optimal Damping Package Design



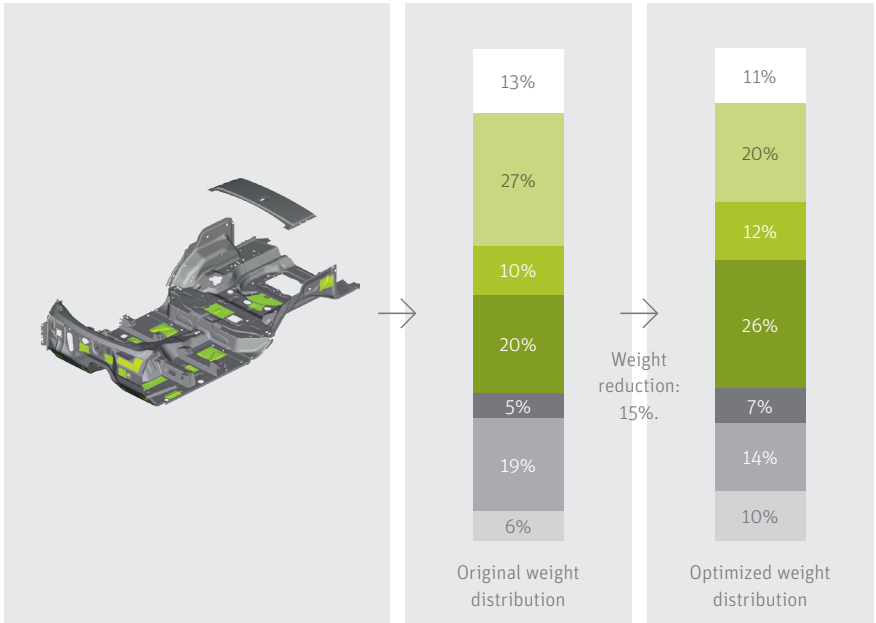
SILVER is a simulation tool which predicts the shape and ideal location of dampers based on a single vibration Finite Elements (FE) simulation performed with NASTRAN.

SILVER rationalizes and simplifies the design process of a damping package by optimizing the overall weight and the distribution of pads among the different areas of the vehicle.

SILVER provides a ranking of vehicle panels that have to be treated because of their high vibration level. Consequently, SILVER makes it possible to efficiently evaluate a particular damping solution (e.g. reference damping configuration versus a proposed modification). It is applied directly on the same FE models used by the OEMs for NVH optimization.

Using NASTRAN DMAP, SILVER offers a dedicated Autoneum-developed interface for data post-processing.

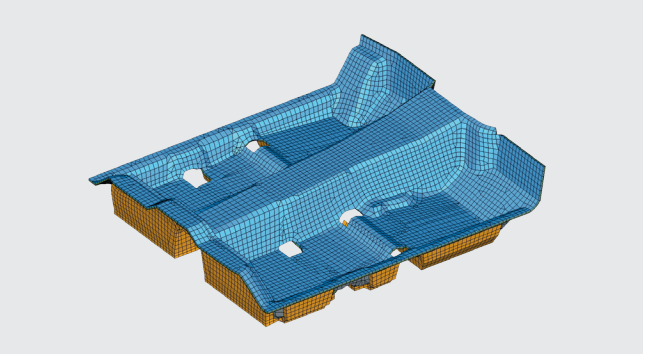
Example:
Refinement of baseline damping package with 15% weight reduction



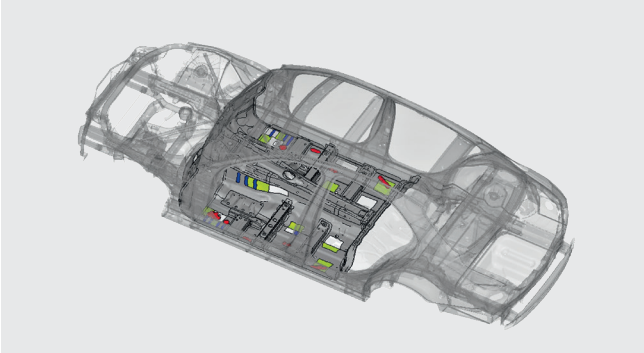
Autoneum's full range of Simulation Tools

Autoneum has designed a full range of Simulation Tools based on our long-standing expertise in vehicle acoustics and thermal management. Our tools predict and optimize NVH in the concept phase to provide our customers with cost-effective solutions and reduced lead times. We are able to thoroughly evaluate all required input data for this process thanks to our broad range of measurement systems.

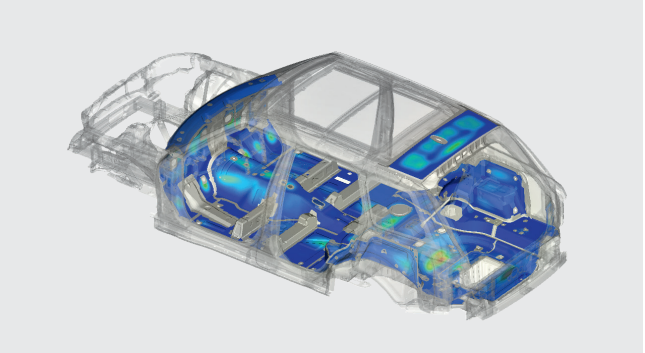
From simulation to validation, Autoneum offers the right solution.



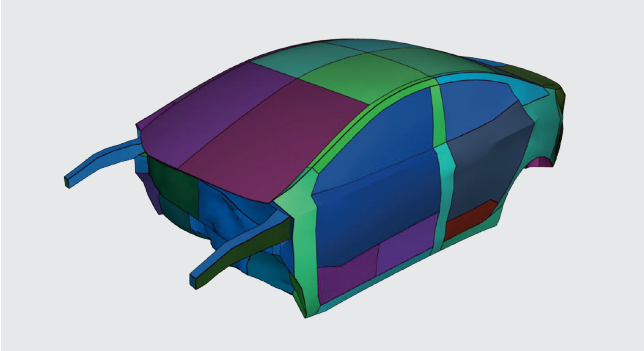
TREASURI2 is the Autoneum Finite Elements (FE) solution for trim simulation in a complete vehicle model.



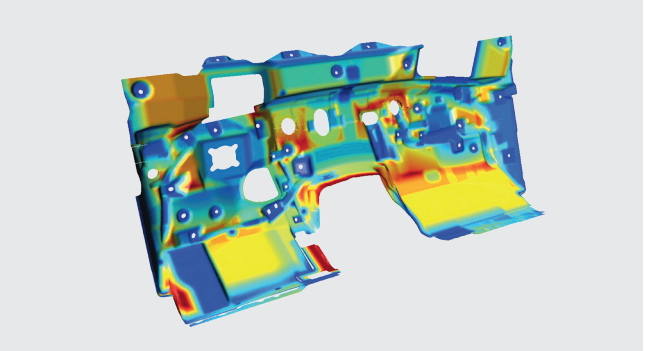
GOLD optimizes simultaneously the damping package and vehicle body panel shape, for weight reduction and full body mid-frequency vibration.



SILVER is the simulation tool that identifies the ideal location of dampers thanks to a single vibration FE simulation using NASTRAN.



REVAMP is the SEA tool for the design of airborne noise sound package in a complete vehicle model.



VisualSISAB calculates transmission loss and absorption performance for sound package parts directly from CAD data.

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