

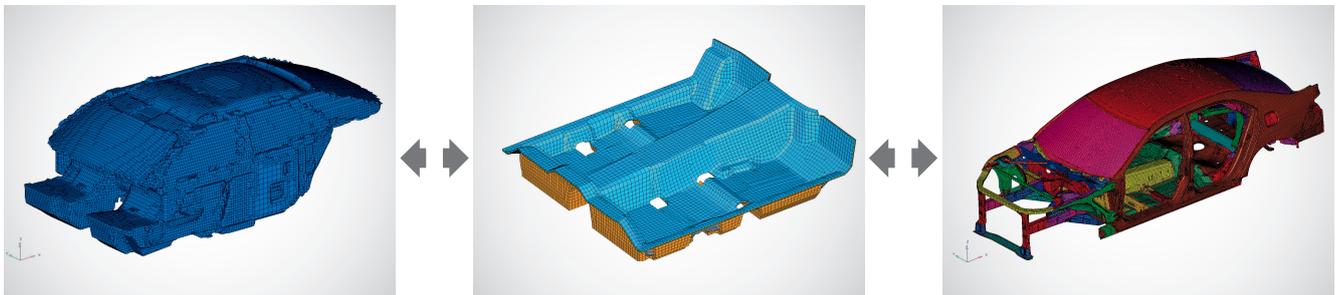
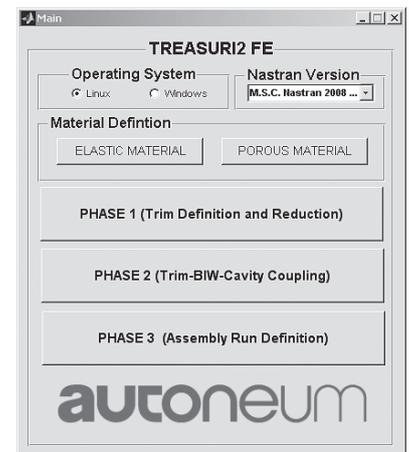
## TREASURI2

### Trim simulation in a complete vehicle model

TREASURI2 is a software that allows the Finite Elements (FE) simulation of acoustic trim components containing porous materials. Compared to existing solutions TREASURI2 simplifies the modeling process thanks to its full integration into MSC Nastran.

It is used to predict noise levels in the passenger compartment (full vehicle acoustics) mainly for structure-borne noise in the low- and mid-frequency range.

Using standard MSC Nastran cards and procedures, TREASURI2 can set-up, solve and post-process vehicle FE models that include trim parts with porous materials.



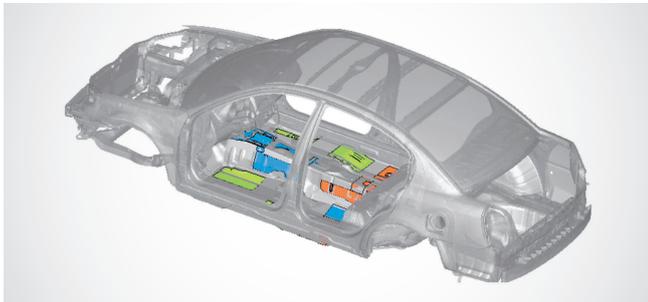
# Simulation Tools – TREASURI2



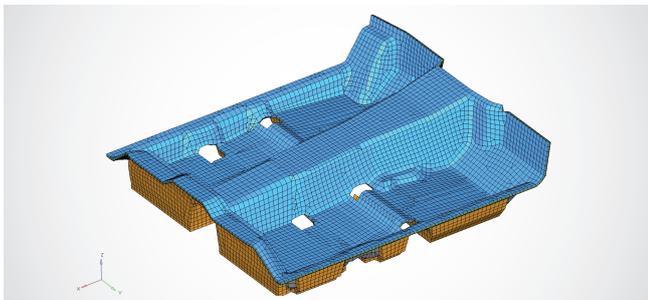


## Autoneum's solution for the optimization of vehicle body structure and acoustic trim

Autoneum has developed a complete tool portfolio that addresses the state of the art in the field of CAE for vibro-acoustics, focusing on body vibration and acoustic trim performance. Our tools predict and optimize NVH in the concept phase to provide our customers with cost effective solutions and reduced lead times.



**GOLD** is a unique simulation tool for the simultaneous optimization of the damping package and vehicle body panel shape, based on standard MSC NASTRAN solution, for the body NVH design.

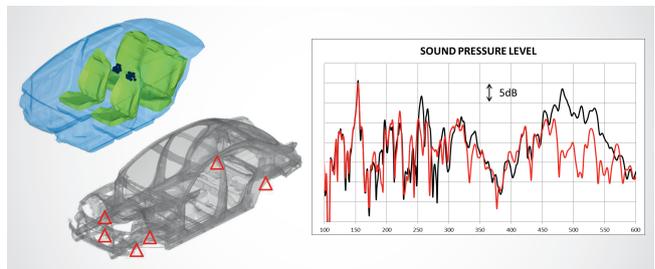


**TREASURI2** is a tool that allows the Finite Elements (FE) simulation of acoustic trim components containing porous materials, thanks to its full integration into MSC Nastran.



As an extension of GOLD and TREASURI2, the new simulation concept **GOLDTrim** features not only the optimization of the damping package (damper pads location, weight, size and material) together with appropriate body panel shapes, but also the optimization of the sound package like dash insulator or carpet insulation system.

The acoustic trim, the damping package and the body panel shape can be optimized with respect to interior SPL improvement and weight reduction.



Interior SPL improvement up to 600 Hz with sound package weight reduction, under structure borne excitation.

### FOR FURTHER INFORMATION, PLEASE CONTACT:

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