

KARL MAYER

WE CARE ABOUT YOUR FUTURE

Demonstrator „Load-through device“ in the back seat of a car

The Application

- Load-through device in the back seat of a passenger car
- Semi-structural part in automotive applications
- Rewarding application for lightweight design with continuous fibre-reinforced thermoplastic material
- Serial use in Sport Utility Vehicle (SUV) cars

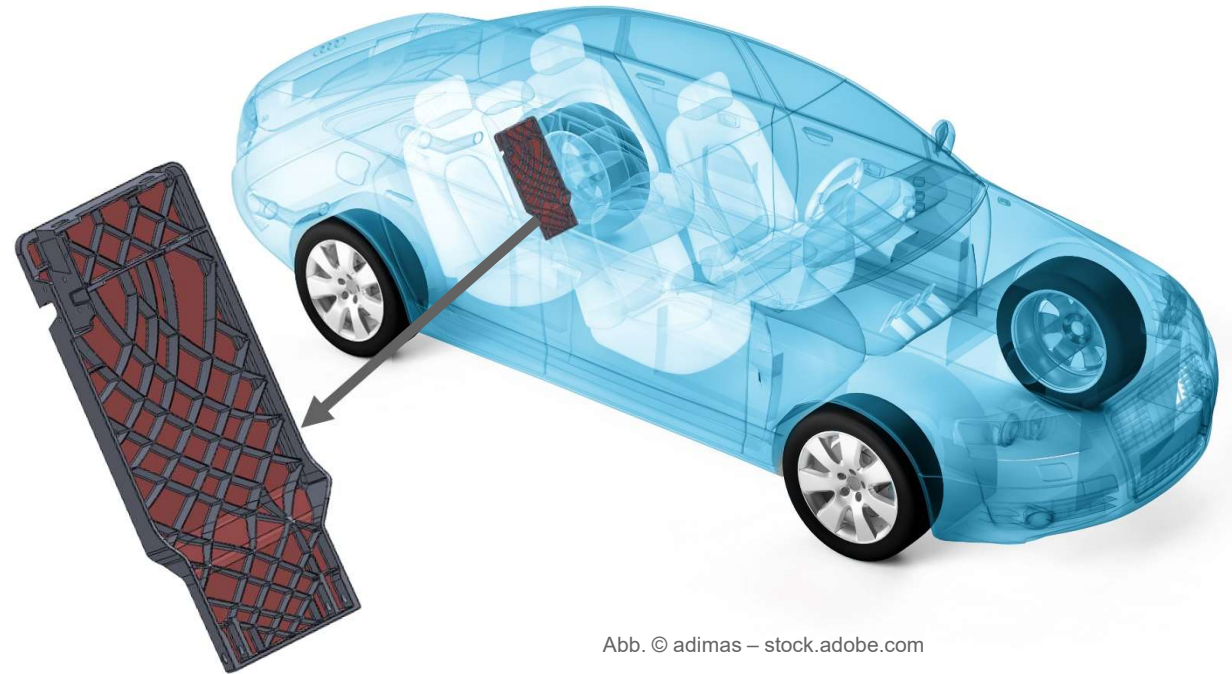


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- Development project within the cooperation alliance ThermoPre® together with the Institute of Lightweight Structures at Chemnitz University of Technology

The Project

Original part

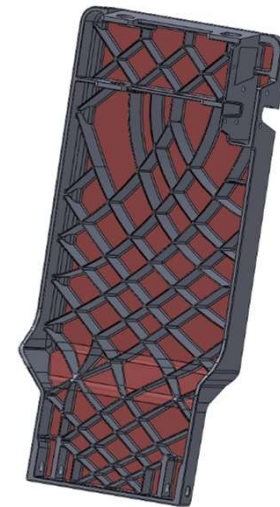


Metal based structure

- Several individual assembly steps requiring cutting, forming and welding of steel sheets
- **Mass: 3,8 kg**

- **Weight savings of 2.2 kg compared to conventional metal design**
- **Fully recyclable**

Lightweight part



Fiber reinforced thermoplastic structure

- Continuous fibre-reinforced thermoplastic tapes with short fibre-reinforced ribs
- Efficient manufacturing with injection moulding technology
- **Mass: 1,6 kg**