

Team 15: New products made from old automobile seat belts

“Do you know that around 500,000 cars are scrapped every year in Germany. 6.6 million meters of seat belts are destroyed during the deconstruction and dismantling of old and broken-down cars, even though the high quality material is unharmed.

This is how our startup SAFE SIT comes into play: We recycled and upcycled old seat belts and used them to manufacture high-quality outdoor furniture.”, reported team consisting of 10 students at the final presentations of the 5th semester projects.

The client and supervisor of this project was Professor Dr. Robert Groten from the Niederrhein University of Applied Sciences.

His recognized the high potential of this unused material for further processing opportunities assigned the task to the students to research and develop products out of seatbelts from deconstructed cars. Sustainability is the major issue in this project. The strap material is UV-resistant and does not need to be refined for the use of outdoor furniture. This avoids the production of new polyester and reduces CO2 emissions.

The project team showed various possibilities of producing textile surfaces from automobile seat belts in their prototypes "LOUNGESTER" and "PILLOWINGO".

Based on the outdoor chair and the pillow, a variety of design opportunities and processing options can be shown.

The students of project team number 15 cannot yet announce the foundation of a startup based on the project's outcome in the future. For now, the team members are concentrating on their bachelor's degrees. However, the foundation stone for a start-up have been laid.