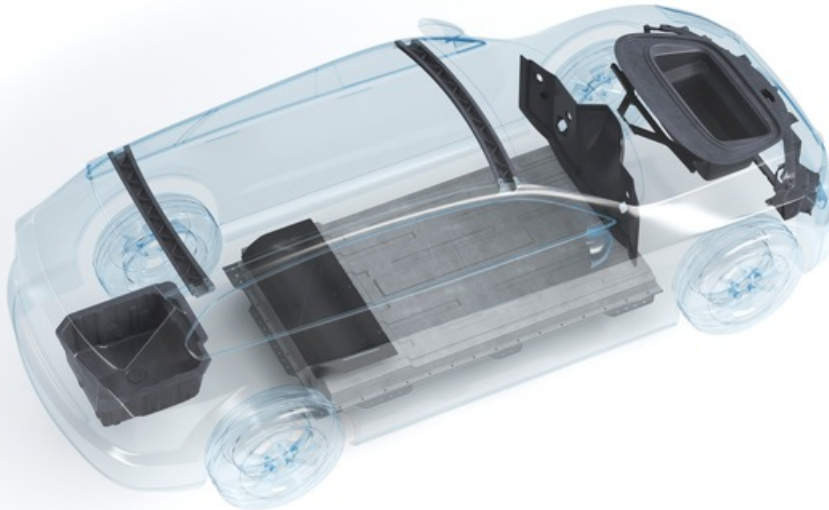


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Röchling Automotive increasingly focuses on lightweight structural design with fiber plastic composites



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- Lightweight design and alternative drives go hand in hand
- Structural lightweight design complements existing product portfolio

Lightweight structural engineering based on fiber-reinforced plastics is replacing heavy metal solutions in body-in-white and battery applications. In addition, the technology offers significantly better design and integration options. These lightweight designs particularly support the strengths of alternative drive systems. Röchling Automotive is intensifying research and development in this area. Several product segments benefit from this - for example, load-bearing tubs and troughs, battery covers and underride guards, as well as a variety of structural components.

Engineering plastics serve as the basis for lightweight solutions. Röchling's high-performance plastics are combined with other materials as required. Multi-material design produces components that are superior to classic solutions. Peter Dill, Director Product Portfolio Global, summarizes the advantages: "In lightweight structural design, plastics are the basis for tailor-made modification of material properties. This opens up numerous possible applications. The lower weight and the possibility of integration offer a welcome opportunity to reduce costs."

Dill explains this using the example of Röchling Automotive's front-end carrier: "Through functional integrations, we reduce the quantity of individual parts. We can directly integrate and install lamps, sensors and active grille shutters at factory. This makes handling easier and minimizes production costs." The lower weight of the components extends the range of electrically powered vehicles and reduces fuel consumption and CO2 emissions, Dill added.

In addition, Röchling Automotive is conducting intensive research on further increasing strength and stiffness through continuous fiber reinforcement. In so-called tape technology, additional reinforcing elements are inserted into the components along the load paths. These "tapes" consist of extremely thin, very long glass or carbon fibers embedded in a plastic matrix. The associated local reinforcement ensures optimum use of the material. The material can be subjected to high mechanical stresses. At the same time, the cost of tape technology is comparatively low.

For Tobias Eisele, Vice President Sales & Marketing Global, the development of structural lightweight competencies at Röchling Automotive is a logical step: "We have already shown in various projects what is possible with lightweight design today and the importance of structural lightweighting will continue to grow. By expanding our expertise in this area, we are focusing on a technology of the future."

You can find more information at <https://www.roechling.com/automotive/products-solutions/structural-lightweight>

The Röchling Group has been shaping industry. Worldwide. For nearly 200 years. We transform the lives of people every day with our customized plastics: they reduce the weight of cars, make medication packaging more secure and improve industrial applications. Our workforce of around 11,100 people is located in the places where our customers are – in 90 locations in 25 countries. The Group's three divisions generated joint annual sales of 2.039 billion euro in 2020.

The Industrial division is the expert for optimal materials for every use. We develop and supply individual products made of plastic for all industrial areas. This is why we have the broadest product range of thermoplastics and composite materials. We supply our customers with semi-finished products or machined components.

The Automotive division advances mobility. Our product solutions in the areas of aerodynamics, propulsion and structural lightweight help solve major challenges. We protect the environment while also improving the driving experience.

The Medical division develops innovative, reliable, customized products, services, and platform solutions for the healthcare industry. As a reliable partner, we help our customers achieve pioneering results in disease prevention and health restoration worldwide.

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Medieninhalte



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