

Press Release



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Joint project of Covestro, Engel Austria and Dr. Schneider

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Modular table concept for the car of the future

Many things will change in the car of the future. New forms of mobility will turn the car of the future into a multifunctional, mobile living and working space. In the interior, there will be new functions, a trend towards individualization, but also the desire to make the best and most comfortable use of space. To make this new "living space" functional, flexible and appealing, lightweight and easily moldable plastics are the material of choice.

[Covestro](#) takes things one step further by using a continuous fiber-reinforced thermoplastic composite (CFRTP). Its [Maezio](#)[®] material is extremely robust and lightweight, while also providing outstanding opportunities for high-quality and aesthetic design. One such current example of what is possible is a space-saving, modular [table concept](#) for autonomous vehicles. Covestro has developed it in cooperation with the mechanical and process technology provider [Engel Austria](#) and [Dr. Schneider Unternehmensgruppe](#) as a direct supplier to the automotive industry.

The objective was to construct a normal-sized table that is as thin as an Ultrabook, and can be stowed just as easily, for instance between the back seats, but is mechanically extremely durable. This table measures 41 cm in length and 32 cm in width, with its thickness increasing from 5 mm on the outer edge towards the inside to 10 mm – which is less than half the thickness of conventional car tables. The later fitting of hinges, already accounted for in the molding process, and ready-molded trays for pen and tablet reduce the number of components and save weight.

Light and robust sandwich construction

An initial version featuring a sandwich construction is shown in the interior concept. The upper and lower sides each consist of 1 millimeter thin layers of



the polycarbonate composite material. The sandwich core is a rigid low-density polyurethane (PU) integral skin foam based on Baydur® 20. Weighing just 690 grams, the table is twice the size of a conventional one and can even be loaded with 50 kg instead of 5 kg.

The manufacturing process was developed with partners at the LIT Factory of the Linz Institute of Technology (LIT) at Johannes Kepler University (JKU) in Linz, Austria. Here, with the help of digitalization, potentials ranging from product development to reuse can be optimally identified and leveraged.

The second step of the project aims at enabling a smooth and economic large-scale production of the table with series-proven processes and to transfer the know-how gained to other applications of CFRTP composites.

Not just for the automotive industry

The polycarbonate composite Maezio® is not only a highly interesting material because of its low weight and moldability. With its noble carbon look, it is also ideal as a surface material for optically appealing surfaces for housings of laptops, smartphones or tablets, but also for sporting goods and other articles. In addition, thanks to their carbon look, clear coatings but also opaque coatings enable the production of durable products with unique surface properties that meet customers' high demands in terms of design.

Our Presskit

Find more information on the topic in our [press kit!](#)

About Covestro:

With sales of EUR 12.4 billion in 2019, Covestro is among the world's largest polymer companies. Business activities are focused on the manufacture of high-tech polymer materials and the development of innovative solutions for products used in many areas of daily life. The main industries served are the automotive, construction, wood processing and furniture, and electrical and electronics industries. Other sectors include sports and leisure, cosmetics, healthcare and the chemical industry itself. Covestro has 30 production sites worldwide and employs approximately 17,200 people (calculated as full-time equivalents) as of the end of 2019.

Forward-looking statements

This press release may contain forward-looking statements based on current assumptions and forecasts made by Covestro AG. Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. These factors include those discussed in Covestro's public reports. These reports are available at www.covestro.com. The company assumes no liability whatsoever to update these forward-looking statements or to make them conform to future events or developments.