

## Member News

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# CARLEX MAKES A SIGNIFICANT CONTRIBUTION TO THE CAR OF THE FUTURE

**October 17, 2019, Grevenmacher:** Carlex Glass Luxembourg S.A. is investing in “the car of the future“, having taken an active role in the proTRon EVOLUTION Project being developed by the Trier University of Applied Sciences (Hochschule Trier).

The automotive glass manufacturer supplied a progressively engineered windshield for this 21<sup>st</sup> century car project. The first glass prototype was presented on 17 October in the presence of Tobias Hinterwimmer, Quality Manager and Holger Müller, Director of Program Management at Carlex in Grevenmacher and given to Professor Dr. Hartmut Zoppke of the Trier University of Applied Sciences.

The world’s leading vehicle manufacturers have selected Carlex as their preferred partner for industry-leading technology and uncompromising product quality. From the earliest design concepts to product launch and mass production, customers can count on Carlex to provide unparalleled customer service, world-class manufacturing support and innovative solutions. In fact, many of Carlex’s technically advanced windshields are produced in Luxembourg at the Grevenmacher site.



### *A sign for mobility 2.0*

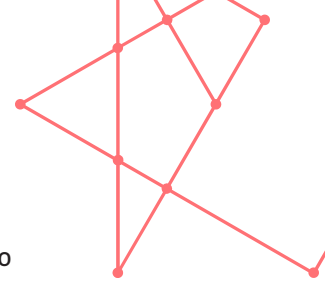
Carlex has been developing innovative lightweight automotive glass products since 2016. This was also the reason why Carlex chose to participate in the proTRon EVOLUTION project. Typically, the limits for the minimum thickness of windshields are determined mainly by the stiffness (vibrations) and the acoustic properties. As required, Carlex succeeded in lowering these limits even further for the proTRon EVOLUTION project and thus developed a windshield with a thickness of 2.6 mm and a weight of only 5.4 kilograms. By comparison, conventional windshields weigh about twice as much.

As an additional challenge, Carlex had to integrate a full-surface heating function into this windshield since, as in the case of electrically driven vehicles, no residual heat from an internal combustion engine can be used for de-icing or de-frosting functions.

### *Innovative solutions for the car of the future*

proTRon, a research and teaching project, aims to provide innovative solutions to address both the current and future challenges facing the automotive industry. Its current focus is on the proTRon EVOLUTION, an energy-efficient e-vehicle designed for urban use. It promises not only an environmental-friendly mobility solution for the 21st century but also a better energy balance and lower energy consumption from production to component, thanks to the utilization of natural fibers over carbon fibers. Furthermore, high shatter-resistance improves passenger safety. Extensive basic tests are conducted in this context.

While trends in the automotive industry may focus on driving comfort, experience and performance, the proTRon EVOLUTION vehicle is a truly environment-friendly transport option. It offers a four-person capacity weighing in at under 550kg, with seamless, lightweight construction and embedded safety concepts, including a fiber-composite body and Carlex-produced windshield. What's more, the car meets all regulatory requirements, including crash safety, and has been developed for possible mass production. The final car is due to be unveiled to the public in 2021.



### *Working at Carlex*

Carlex not only delivers quality products and innovative solutions but has also fostered long-lasting relationships with its customers, thanks to its culture rooted in ethics and integrity.

As a subsidiary of Central Glass, Tokyo, a market-listed corporate entity with 7,000 employees worldwide, Carlex Grevenmacher supplies automotive glass to premium OEMs. Carlex is the only Central Glass automotive business production plant in Europe with about 600 employees. Carlex's reputation for technical innovation, quality and timely delivery rests with the people at Carlex – generations of highly skilled glass makers who take pride in everything they imagine, touch, test and deliver. Guided by a relentless emphasis on its core values, which encompass safety, teamwork, trust, customer-focus and excellence, Carlex has created an environment and culture where employees have everything they need to excel in their professional and personal lives.

Carlex offers:

- challenging opportunities to progress within a growing company;
- a pleasant working climate, favouring autonomy and personal initiative;
- increasing levels of responsibility, in relation to experience and capability,
- possibilities for further education
- and an attractive salary package

Carlex is always looking for interesting candidates, for instance in operations, engineering, programme management, finance, information technologies, supply chain management or maintenance.

Available positions can be found on the Carlex website: [www.carlex.com](http://www.carlex.com)

Carlex also offers internship programs, to give new professionals hands-on experience with a niche manufacturing process.

Internships with Carlex provide exposure to:

- large, complex manufacturing operations
- engineering and production challenges unique to the glass industry
- real world projects with direct impact to operations
- employee and management relationships
- practical business experience within the intern's respective field of study

Internship opportunities are available in all areas, such as for example:

Engineering, Glass Laboratory Analysis, Quality, Environmental Health & Safety, Human Resources, Information Technology, Supply Chain Management, Research and Development or Sales.

For more information concerning Carlex, visit the website [www.carlex.com](http://www.carlex.com)

