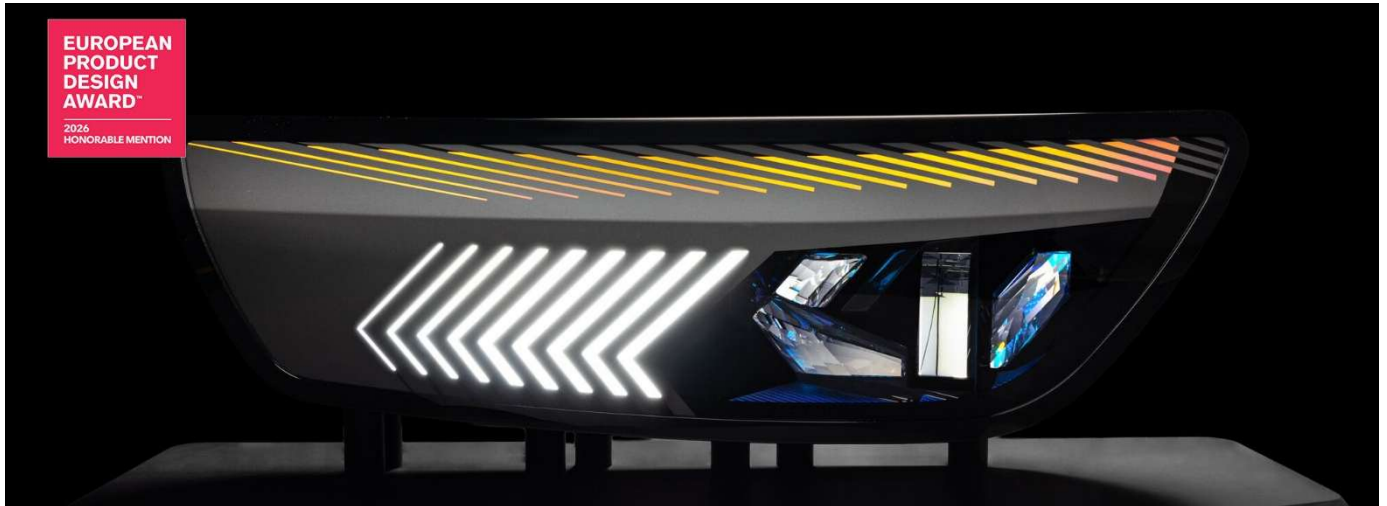




Lösungen Case Studies European Product Design Award 2026

European Product Design Award 2026

FrontIQ Light Concept

What will the vehicle front of the future look like? With the FrontIQ Light Concept, LEONHARD KURZ demonstrates how lighting, innovative surface technologies, and industrial manufacturing can come together to create a new design element. Developed in collaboration with Swarovski Mobility and SP3, the concept received an Honorable Mention at the internationally renowned European Product Design Award (EPDA) 2026 in the 'Conceptual (Design only or Prototype) – Automotive & Transport Product Design' category.

Challenge

Vehicle lighting is taking on an increasingly broad range of functions: In addition to conventional lighting functions, brand identity, communication, and interaction are becoming key priorities. At the same time, innovative designs must be suitable for efficient, scalable production. With the FrontIQ Light Concept, we combine distinctive lighting design with new communication functions. The concept is based on an industrially viable manufacturing technology.



Solution

The FrontIQ Light Concept reinterprets the headlight as a three-dimensional light sculpture. To achieve this, we combine our expertise in thin-film and surface technology as well as industrial process integration, with Swarovski Mobility's crystal expertise and SP3's know-how in lighting system development. The result is a sculptural design unit that seamlessly integrates lighting effects, aesthetics, and functionality: Crystals provide targeted light guidance and a sense of depth, while a holographic carbon structure adds visual accents. Lighting and communication functions – from town lights and dynamic cornering lights to driving direction indicators and vehicle status, such as autonomous driving – turn the vehicle front into an information carrier and enable interaction with other road users.

The concept is based on production-ready, highly efficient manufacturing technology: The 3K IMD process combines injection molding, forming, and decoration in a single process. By potentially eliminating upstream thermoforming, lacquering, and laminating processes, it offers opportunities to save energy, resources, and costs. A polyurethane layer applied using PUR flooding also protects the decoration, microstructures, and surface. At the same time, the technology enables the use of recycled materials and bio-based components.



These are the features that convinced the jury:

- Three-dimensional lighting design with a high degree of design freedom
- Individual, brand-specific lighting signatures
- Integration of lighting, surface design, and communication functions
- Production-ready, highly efficient 3K IMD manufacturing technology as the basis of the concept
- Potential to reduce process steps as well as energy consumption, resource use, and costs
- Possibilities for using recycled materials and bio-based components

Our Partners:

KraussMaffei

SCHÖFER 
a KURZ company

سابك
sabic



SP3

SWAROVSKI
Mobility