

Let there be light

DEVELOPMENT AND PRODUCTION OF THE LED HEADLIGHTS AND LED AUXILIARY REAR LIGHTS FOR THE PORSCHE 935

Creating a special design – that was the focus during the development of the high-performance LED headlights and LED auxiliary rear lights for the Porsche 935. Our extensive know-how in the field of light and visibility and our many years of experience enabled us to develop an innovative high-performance lighting system in cooperation with Porsche Motorsport.

The subject of light and visibility has been a component of our service portfolio for many years. Whether it involves concept development, lighting or thermal design, the production of samples and models, or environmental testing

– we take on the management of the entire project and provide support from the initial idea to series production. The focus is on innovation and design. A very good example is the development of the high-performance LED headlights and the LED auxiliary rear lights for the Porsche 935 in the motorsport sector.

SMALL SERIES WITH BIG CHALLENGES

Our job was to develop and produce a small series. “The particular lighting challenge for the headlights was to implement the bi-function of the main light and the direction indicator from the same reflectors. The rear light also used a single light guide for the brake light, tail light, and direction indicator functions. In the end, we succeeded in generating a huge amount of luminous flux with excellent homogeneity in a small installation space,” says David Maisenbacher, Team Leader Light and Visibility at Bertrandt.

TECHNICAL DETAILS OF THE LIGHTING SYSTEM:

HEADLIGHTS:

- 48 white and 16 yellow high-power LEDs per headlight
- 13,200 lumens headlights
- 400 m range
- Cooling by air flow through the headlights (active when stationary, passive when moving)
- 1 kg per headlight

AUXILIARY REAR LIGHT:

- 3 red and 1 yellow high-power LED per rear light
- Waterproof integration into the carbon endplate without a separate light housing
- Passive cooling by a heat sink embedded in the endplate
- 0.25 kg per rear light (without endplate)



Image courtesy of Porsche

As this is an exclusive supercar, the quality requirements went far beyond those of standard motorsport lighting.

Image courtesy of Porsche