

OPTIMISERS OF OPTICS

WHEN ENGINEERS OPTIMISE YOUR OPTICAL INJECTION MOULDING



YOUR GLOBAL MOBILITY ENGINEERING EXPERTS

Our team of experts at the Wolfsburg site are able to provide extensive expert knowledge of optical injection moulding.

Compared to injection moulding processes with non-transparent materials, the same defects in optical injection moulding more frequently lead to defective parts. Common defects in the injection moulding process include weld lines, yellowing, air inclusions, streaks, particle inclusions, vacuoles, stress cracks, shrinkage effects and diesel effects.

Most defects can be avoided by adapting the injection moulding process. Sometimes however, it is also necessary to adapt the ambient conditions or optimise the tools in order to ensure the perfect replication of the plastic optics.

Often, optimisation steps that cannot be handled on the process side go hand in hand with increased costs. For this reason, they are not usually applied until a later date, which in turn increases costs. We can help you to identify potential errors in your injection moulding process at an early stage, and show you what optimisation measures are available.

We also offer services for an independent photometric assessment of your concepts. Our team will be happy to carry out a simulated or metrological assessment of your lighting concept in our light laboratory.

Our services at a glance

- Assessment of injection moulding processes
- Analysis of defects in optical injection moulding
- Identification of optimisation measures in optical injection moulding (process and tool-related)
- Simulation of light guide and optical concepts
- Evaluation of light distribution and colour shift (homogeneity, brightness, chromaticity coordinate, ...)
- Luminance images [cd/m^2]
- Illuminance photos [lx]
- Spectrometer measurement to determine chromaticity coordinates
- Light simulation: LucidShape

We have the right testing equipment for just about anything

Our more than 60 m² reflection-free light laboratory provides comprehensive and application-oriented equipment.

In our approx. 300 m² technology centre, we offer the comprehensive development of headlights and taillights, but also ambient and functional lighting.

Contact

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