



Sapphire windows and lenses

FOR HIGH-DEMANDING APPLICATIONS

Sapphire crystals are transparent in the visible and near infrared, and are extremely hard. These properties make sapphire the substrate of choice for demanding window and lens applications. The medical sector, the food industry, harsh environments such as in aerospace and defense conditions, high lifetime demanding telecom equipment, are examples of the numerous applications requiring sapphire substrates for both their optical, mechanical, and other properties.

Applications and challenges

These demanding applications for sapphire windows or lenses have additional specific requirements for optical, mechanical, and other properties.

Blösch is an experienced partner, with the in-house capabilities and the competence to address and solve all these challenges, and will be able to provide a unique solution for each application.

Blösch's solutions

Blösch is the expert solution provider for high-end coating solutions on sapphire substrates. Thanks to its long experience with manufacturing coated windows or lenses, Blösch assists its customers in the choice of the best sapphire substrate for the application.

Solutions are proposed on the basis of existing technology platforms. Custom adaptations are always possible.

- Substrates: Sapphire windows, lenses or other shapes, down to sub-millileter sizes
- Solderable coatings for hermeticity: Physical Vapor Deposition (PVD) and electroplating
- Optical coatings: Anti-reflection and filter coatings, hard coatings

Blösch provides furthermore the capability of several cleanrooms and factories, contributing to the reliability of supply.

Benefits to the customer

A rapid assessment of the application requirements provides the customer with solution proposals that address all the requirements of sapphire windows or lenses.

Blösch sources its sapphire windows and lenses from a number of suppliers, ranging from high volume substrate suppliers to suppliers of the highest quality material and parts.

Blösch is the one-stop shop provider of high-end coating solutions.