

PRESS RELEASE

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Corrosion of Borosilicate Glasses – Berliner Glas Group publishes technical article

Industrial processes in the semiconductor industry, space as well as other high-tech markets require great levels of accuracy with regards to the surface roughness and flatness of integrated components. Glass-like materials are often used to this end.

For a number of components, for example the ones that may be found in lithography machines, the Berliner Glas Group makes use of a special glasslike material – an alkaline free borosilicate glass.

When glass comes in contact with water, the result is often the corrosion of the glass – the surface structure of the glass is changed. During the production processes – polishing, cleaning and etching – contact between the alkaline free borosilicate glass and water is inevitable. It is therefore essential to know what changes take place, in order to realize critical processing steps.

The Berliner Glas Group has researched and applied a variety of processes and so determined the effect of the different phases of production on the borosilicate glass.

On the 20th to 23rd of April 2015, the International Conference on Ceramic Interconnect & Ceramic Microsystems Technologies (CICMT) took place at the Fraunhofer IKTS in Dresden. The conference was organized by the International Microelectronics and Packaging Society (IMAPS), who were supported by the Deutsche Keramische Gesellschaft e.V. (DKG) and the American Ceramic Society (ACerS).

During this conference, Dr. Constans Weber, developer for optical manufacturing technologies at Berliner Glas, held a talk on the subject of „Corrosion of Borosilicate Glasses“, wherein he presented the results of the above mentioned research.

The most critical of these results were published in a technical article.
This document is available for download on the Berliner Glas website:
<http://www.berlinerglas.com/news/white-papers>.

Further information on the CICMT 2015 as well as the IMAPS is
available from the organizer's website:
<http://www.imaps.org/ceramics/index.htm>.

About Berliner Glas:

The BERLINER GLAS GROUP (www.berlinerglas.com) is one of the world's leading providers of optical key components, assemblies and systems as well as high-quality refined technical glass. With more than 1,100 employees, BERLINER GLAS develops, produces and integrates optics, mechanics and electronics into innovative system solutions for its customers. As OEM partners from concept to series production, the BERLINER GLAS GROUP companies serve innovative customers in various market segments – semiconductor industry, medical technology, metrology, laser and space technology, analytics, defense and the display industry.

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