

News Letter

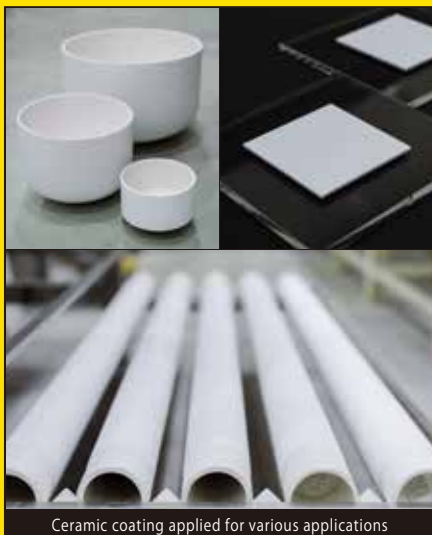
Most suitable ceramic coating for a wide range of applications

Ceramic coating for improving surface properties

Ceramic coating has been widely used due to its superior resistance to abrasion, corrosion and heat. Nikon has begun providing ceramic coatings, utilizing know-how in glass and optical product development and manufacturing accumulated over many years.

Ceramic coatings, whose main base materials are mineral compounds such as alumina and zirconia, significantly improve surface properties. For example, when a crystal is grown in a crucible, they are used for coating the surface of the crucible as an alternative to or for improvement of conventional technologies in order to create crystals of higher purity.

There are two methods for forming ceramic coatings: "wet" processing and "dry" processing. Wet processing can produce coatings at room temperature, produce thick coatings in a short time, and is flexible in terms of choices, combinations of materials and base material geometries. On the other hand, dry processing can produce precise coatings and reduce the cost of batch processing. In addition, it is superior in terms of adherence to base materials as well as reproducibility of coating thickness and quality. Nikon handles both processes.

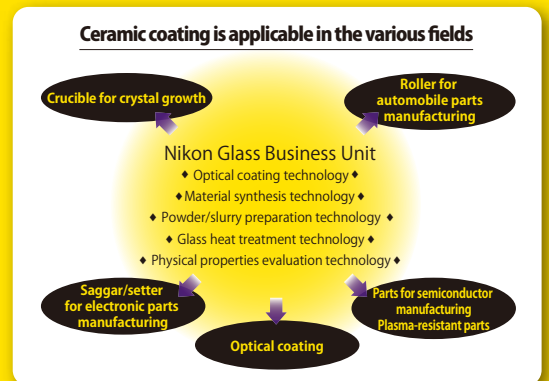


Ceramic coating applied for various applications

Use of extensive know-how accumulated by optical glass manufacturing

Nikon not only makes in-house lens-coatings, but also manufactures and sells optical glass. We have extensive know-how in the field of material synthesis technology for preparing various raw materials in order to achieve required performance, powder/slurry preparation technology, glass heat treatment technology and various physical property evaluation technologies.

Utilizing these technologies and its experience, Nikon suggests the ceramic coatings best suited to the base material geometries and usage conditions required in semiconductor and electronic part manufacturing components and various apparatus manufacturing components. Nikon provides consultation and a variety of options, according to the customer's requirements, for new applications and performance improvement of ceramic coatings.



TOPICS

We look forward to seeing you at our booth at the exhibition.

SPIE Photonics West 2017

Date: January 31(Tue.) –February 2 (Thu.) Venue: The Moscone Center (San Francisco, USA)