

CeramOptec to expand its portfolio with anti-reflection coatings

Coating solutions for light wave transmission ranges from UV-C to NIR now available

The fiber optics specialist CeramOptec is expanding its portfolio with anti-reflection coatings. As of now, oxide-based coating solutions are to be realized for light wave transmission ranges from UV-C to near-infrared light (NIR) in a new vacuum system at the production location in Livani/Latvia. The ultra-modern vacuum coating system provides the ideal prerequisites, also for the processing of custom products.

Bonn/Livani, 05.09.2018 – CeramOptec, one of the leading international developers and manufacturers of multimode fiber optic cables made from quartz glass, is to expand its portfolio with anti-reflection coatings for the end faces of optical fibers and fiber bundles. As of now, anti-reflective coatings made from silicon dioxide (SiO₂), aluminum (III)-oxide (Al₂O₃) and hafnium dioxide (HfO₂) as well as other oxide compounds are to be realized in an ultra-modern vacuum coating system at the production location in Livani/Latvia. The layers are to be generated through vapor deposition and generally reduce reflection losses from the fiber core and fiber sheath from seven to eight percent to under 0.1 percent. The anti-reflection coatings are available for light wave transmission ranges from UV-C to near-infrared light (NIR). One typical application is coatings for the optimized transmission of 266nm UV-C light.

With this portfolio expansion of anti-reflection coatings, CeramOptec is reacting to the growing industrial demands on the light throughput of quartz glass-based fiber products. Over and above this, the fiber optics specialist can now execute all steps of glass fiber production at its own production location. This secures high quality standards and above all shortens the delivery times for individual custom-made fiber products. The vacuum chamber erected in Livani provides ideal conditions for such products, also for the processing of custom products. With over one cubic meter of useful volume and an inner chamber diameter of 1100mm, the chamber is unusually large, which means that it can be used to process very long fibers and fiber bundles. In this way, the system covers the full spectrum of possible anti-reflection coating solutions for fiber optic products. Prospective customers can find more information on the coatings portfolio and contact data for individual enquiries on www.ceramoptec.com.

About CeramOptec

CeramOptec[®], in cooperation with Ceram Optec SIA, specializes in the manufacture of multimode fiber optic cables made from quartz glass. The medium-sized company was founded in 1988 and is today a subsidiary of biolitec AG, one of the leading international medical technology companies in the field of laser applications. With subsidiaries in China and distribution partners in the USA, France, India, Japan and Korea, CeramOptec is strongly represented not just in Europe, but also on the Asian and North American markets. The company's range comprises fibers, fiber bundles, assemblies and cables for numerous application areas, amongst these industrial and medical laser applications, aerospace sensor systems and spectroscopic applications in the fields of astronomy and the chemical industry. One special product in its range is the manufacture of glass fiber cores with square to octagonal geometries (non circular core fibers/NCC), which are mainly used in astrophysics applications. The biolitec group has 245 employees in total.