



SCHOTT Offers a Complete Range of Highly Sophisticated Interference Filters

SCHOTT's development, manufacturing, and quality assurance expertise enables customer-specific interference filters for use in space exploration, medical diagnostics, and industrial applications

Mainz (Germany), June 9, 2015 – Specialty glass expert SCHOTT develops and manufactures high-quality customized interference filters for use in a growing number of high-end research and industrial applications. SCHOTT can design sophisticated filters with extremely low tolerances that allow passage and blocking of differing wavelengths to meet any customer requirements, including new applications. The filters can be used in the field of astronomy, such as in the T80/JAST telescope, which was recently put into operation in Spain. They are also used in everything from coatings for high-performance laser applications to medical diagnostics technology, such as sophisticated fluorescence filters and Raman filters. SCHOTT will be exhibiting its filters and other optical glass products at LASER World of Photonics in Munich, Germany from June 22 to 25, 2015 (Booth B1/310).

The company recently manufactured the first lot of 70 customer-specific interference filters for the Observatorio Astrofisico de Javalambre in Spain, which will be used to assist in space observation. These extremely narrow bandpass filters enable astronomers to analyze narrow spectral regions of starlight, while accurately blocking out unwanted wavelengths. Furthermore, the filters are conceived for low wavefront errors, and therefore deliver extremely high image quality. In addition, the transmission spectrum is very homogeneous across the entire surface, which is approximately 106 mm by 106 mm.

“Creating and shipping high-quality filters is particularly important for applications in which filters cannot be easily replaced, such as satellites,” said Dr.-Ing. Ralf Biertuempfel, Product Manager for Filters at SCHOTT Advanced Optics. “Thanks to our many years of experience in the area of space applications, customers can rest assured knowing that our filters will function perfectly.”

SCHOTT is capable of developing and manufacturing sophisticated high-performance interference filters due to its more than 85 years of production experience. In the late 1920s, the company started developing interference filters and antireflective coatings. Today, at SCHOTT's Center of Excellence in Yverdon, Switzerland, a state-of-the-art coating facility, scientists can create filters for a broad range of applications while ensuring a high product reproducibility. The Center of Excellence houses magnetron and ion beam sputtering systems, among others; high-quality polishing machines; and optical online monitoring systems to ensure high process stability. Extremely precise wavefront measurement devices can be used to verify that the imaging quality of the filter meets each customer's specifications.

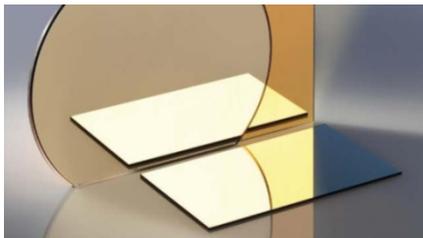


SCHOTT is also capable of providing customized solutions that can meet even the most unusual requirements. “Our experts have experience in converting extremely complex computer calculations of various layer structures into technically realizable solutions. That saves cost and time by achieving the specification for high-tech filters of up to 300 layers during the first trial,” explained Biertuempfel.

Interference filters are also used in blood analysis devices, gas chromatographs, and waste water and combustion analysis devices. “The range of potential applications is immense,” concluded Biertuempfel. “We are a reliable partner because we speak the language of the industry and are capable of reacting to customer needs with flexibility and ease, even if they pertain to complex future applications.”

More Information:

http://www.schott.com/advanced_optics/english/syn/advanced_optics/products/optical-components/optical-filters/interference-filters/index.html



SCHOTT is capable of developing and manufacturing sophisticated high-performance interference filters. Photo: SCHOTT.

Photo download link:

<http://www.schott.com/english/news/press.html?NID=com4708>

SCHOTT is a leading international technology group in the areas of specialty glass and glass-ceramics. The company has more than 130 years of outstanding development, materials and technology expertise and offers a broad portfolio of high-quality products. SCHOTT is an innovative enabler for many industries, including the home appliance, pharmaceutical, electronics, optics, automotive and aviation industries. SCHOTT strives to play an important part of everyone's life and is committed to innovation and sustainable success. The group maintains a global presence with production sites and sales offices in 35 countries. With its workforce of approximately 15,400 employees, sales of 1.87 billion euros were generated in fiscal year 2013/2014. The parent company, SCHOTT AG, has its headquarters in Mainz (Germany) and is solely owned by the Carl Zeiss Foundation. As a foundation company, SCHOTT assumes special responsibility for its employees, society and the environment. www.schott.com

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