

Optical Components

Product Information

SCHOTT offers a broad range of cutting-edge components for applications in optics, lithography and science. Known for its leading edge innovations, its highest product quality and its service excellence, Advanced Optics is integrated from material development to finishing operations. We master the entire value chain! Processed products include precision-molded, polished and coated aspherical lenses, prisms, optical glass filters and interference filters as well as precision components, such as CNC-processed parts, plane-parallel substrates and wafers. Further details on our comprehensive portfolio on high precision optical components can be found at: www.schott.com/advanced_optics/english/our_products/processing_components

Main Products and its Applications



Lenses: spherical, aspherical, cylindrical

Lenses are indispensable in any optical systems. Over the years, SCHOTT has accumulated a comprehensive experience in the production of lenses. Besides its extensive technical expertise and its know-how SCHOTT has also invested in modern technology to manufacture standard as well as customized lens solutions for our customers. Among the offered lenses are aspheres, spherical lenses and cylindrical lenses.



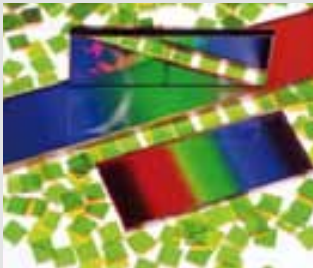
Optical Filters

Optical filters made by SCHOTT are widely used, including medical, imaging, surveillance and industrial applications. Working in close collaboration with our customers SCHOTT has become one of the world's most preferred and comprehensive supplier of filters. The offered portfolio comprises of optical filter glasses, interference filters as well as special filters like contrast enhancement or night vision filters.



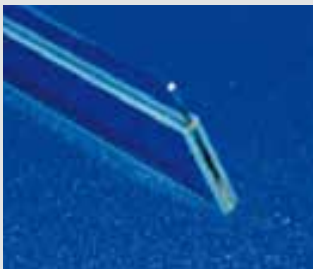
Plano Optics – Substrates – Windows

SCHOTT is a specialist in the production of thick or thin plane parallel polished substrates of the highest precision. Over the years, we have built up strong know-how in the technique of flat polishing and achieved excellent quality in surface roughness, flatness and cosmetic surface properties. We provide polished substrates according to customers' drawings and specifications.



Coatings

SCHOTT performs standard and custom-designed coatings. We deposit thin films onto glass and other substrates for spectral wavelengths between 200 and 3000 nm. "Hard coatings" do not need any additional protection, because the layers usually consist of very stable metal oxides. "Soft coatings" usually require additional measures to protect the filters. This can be achieved by a supplementary cementing with a suitable glass. Within certain areas of the UV spectrum it is not possible to use optical elements due to the inherent absorption involved. In such cases the coated substrates are fitted into appropriate mounts and protected by suitable glass.



Sub-Assembly

SCHOTT supplies optical and opto-mechanical mounted parts and assemblies. Such parts can be assembled either by using adhesives or by mechanical assembly. As a reliable supplier, requirements such as high precision and quality, solid assembling, vacuum tightness and optical properties (such as transmission and reflection) can be assured.



Precision CNC-Machined Parts

CNC machined parts have been processed to complex forms. Processed with diamond tools these parts have a matte (non-transparent) finish. The process involved typically uses 3- or 5- axis machines. Coupled with the use of CAD software, nearly all-geometrical forms can be achieved. SCHOTT has many years of experience in the production of blanks and thereby has a variety of CNC-machines available.



Prisms

SCHOTT offers prisms as transparent optical elements with flat polished surfaces that refract, reflect or disperse light. They allow easy positioning within an optical system and have excellent thermal stability. A total internal reflection is possible, avoiding light loss in the optical path. The offered prisms can be coated to a specific custom design and sub-assembly like gluing and cementing to integrate the prisms in custom designed hardware can be offered.

Further information available on detailed product flyers.

For more information please contact:

Advanced Optics
SCHOTT AG
Hattenbergstrasse 10
55122 Mainz
Germany

Phone: +49 (0)6131/66-1812
Fax: +49 (0)3641/2888-9047
info.optics@schott.com
www.schott.com/advanced_optics

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