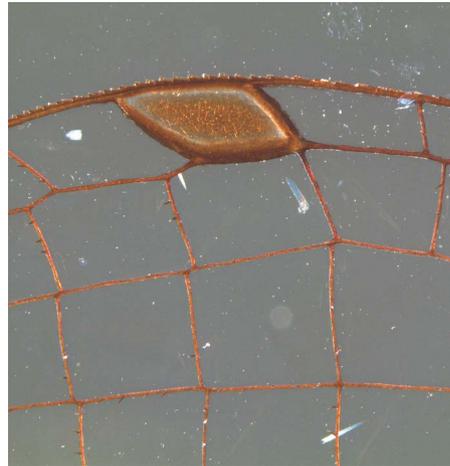
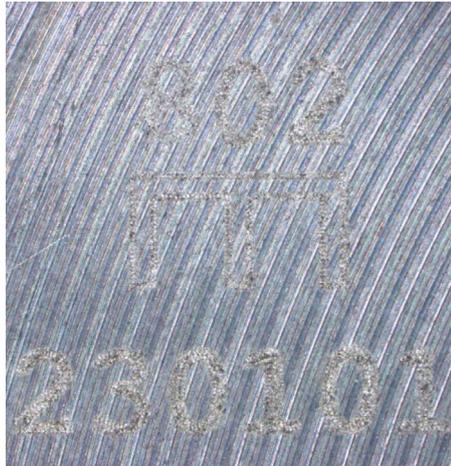


# Illumination for stereo microscopy



**SCHOTT**  
glass made of ideas



**Make  
details  
visible**

Different lighting options –  
the correct illumination is vital

Samples in microscopy can be diverse – from the investigation of circuit boards or flower seeds, where homogeneous illumination may be vital to stitch images together, to corrosion samples where it's often necessary to define the surface topography by shadow effects.

To make all relevant details visible, the correct illumination is crucial as it provides the required contrast. This is achieved by offering lighting options that are as varied as the samples themselves, and selected according to sample type. They all have different characteristics that will influence the accurate investigation of your sample.

**SCHOTT provides reliable lighting solutions for stereo microscopy that make all relevant information visible and results reproducible.**

We offer a range of lighting options with different characteristics, which will strongly influence the accurate investigation of your specimen. For the ideal lighting, different parameters have to be taken into account, such as the angle and form of the illumination, as well as light quality factors such as color temperature, brightness, diffused or focused light, color filters, and polarization.





# Fiber optic illumination

SCHOTT's ColdVision and KL series combine fiber optic light sources with a broad range of light guides to offer high levels of flexibility and light quality. The robust design of the ColdVision series makes it ideal for harsh industrial environments while the KL series is designed for demanding microscopy applications.



## Fiber optic light transmission for heat sensitive samples

SCHOTT launched its first cold light source in 1970, and these sources were quickly established as a market standard. Because the light is guided from the cold light source via light guides, heat at the sample is kept to a minimum.



## High light intensity for high magnifications

Combining the high light output of SCHOTT's light sources with our efficient light guides offers significantly higher intensities compared to direct LED illumination. Our fiber optic models are useful for magnifications over 30x.



### Halogen light sources for natural colors

With halogen light options, natural color reproduction is available across the full spectrum.



### Robust design for use in harsh environments

The robust metal housing, high quality components, and long lifetime of the ColdVision series make it ideal for harsh environments in industrial applications.



# LED illumination

SCHOTT's VisiLED and EasyLED series for stereo microscopy deliver precise LED lighting for a wide variety of applications. In addition to offering powerful light heads, there are also darkfield options and ways to control of individual ring light segments. These capabilities can be used to enable various contrast methods that make the invisible visible.



## Advanced control options for specialized tasks

With a broad range of control options, you can select exactly the right product whether you have a basic lighting need or require two computer-controlled light heads for more specialized lighting.



## Fanless for clean room or sterile hood use

In general, no fan is used for direct LED lighting, which can be advantageous if you are performing stereo microscopy in a clean room or under a sterile hood.



## LED lifetime of 50,000 hours for work without maintenance

LEDs that last 50,000 hours provide maintenance-free lighting for years.



## Compatible with all OEM designs for use in a wide range of systems

Mounting adapters are available for all common microscopes, making the series suitable for a wide range of systems.



# Applications

Two of the main application areas for SCHOTT illumination systems are stereo-microscopy and machine vision. While machine vision demands precise and efficient illumination in challenging environments, stereo microscopy requires versatile and compatible lighting systems that deliver consistent results.



## Laboratory and diagnostics

SCHOTT illumination systems are essential for the laboratory and diagnostics industries, delivering intense, homogenous light for stereo microscopy. Accurate results depend on the tiniest of detail, and our portfolio delivers the illumination that provides the medical evidence, no matter how simple or complex the system.

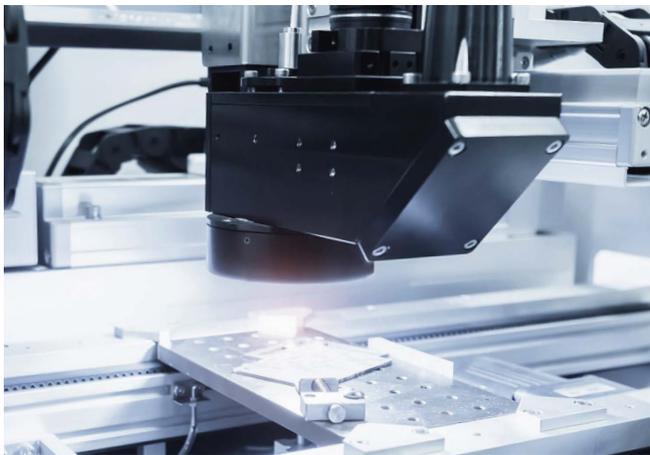
## Quality control

Effective industrial analysis and product development relies on knowledge and information. SCHOTT offers highly controllable illumination systems that provide all the information you need. Our products have the quality and reliability for a lifetime of performance.



## Education

SCHOTT understands the value of education. Whether in a school laboratory or at a top university, our complete range of light guides, sources, and accessories are opening young minds to the thrill of scientific investigation. With easy-to-use products and the latest technology, our light guides are reliable partners in classrooms all over the world.



## Machine vision

Industrial machine vision, process control, automated inspection systems, and robotic analysis rely on effective lighting systems to deliver powerful and precise illumination for optimum performance. Applications include wafer inspection, coaxial lighting with high intensities, and failure analysis in glass with extreme homogeneous line light.



Why  
**SCHOTT?**



## Realistic images

A decisive factor in stereo microscopy is achieving a realistic and reproducible image, as well as accurate documentation of the sample. With SCHOTT's illumination systems, previously hidden details are made visible.



## Expert consultancy

With a long history in microscopy, we understand all areas of this important investigative technique – not just in theory but also in action. Our knowledge of the market and its applications enables us to provide consultancy on the best solution.



## Broad portfolio

Our wide range of fiber optic and LED solutions covers all common stereo microscopy applications. This gives you a one-stop-shop with the option to choose the optimal solution for your applications.



## Large resources and stable structure

As an established company on the market, we enable with our production facilities and sales offices around the globe a reliable supply and a local contact partner.

**schott.com**

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