



MICROSCOPY

COMBO BF+ DF 2 IN 1 SYSTEM

MICROSCOPY LIGHTING



2 in 1 system (bright- and darkfield) to fit both lighting solutions in a compact manner on any microscope



ADVANTAGES

- Efficient observation, even at low light intensity
- Limited eye fatigue
- Adaptability to different objectives of microscopes
- 2 in 1 system: adjustable illumination angle delivering multiple images with a combined lighting set
- Stable light quality over time

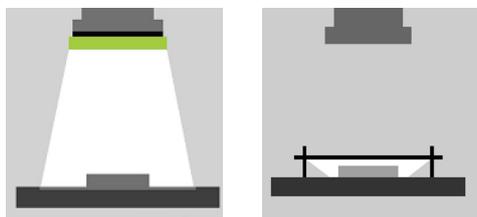
Easy to set-up and easy to interface to an optical system, the ShadowLESS bright- and darkfield rings can be used as a combo with different microscopes.

In a brightfield configuration, an intense light strikes the sample at high angles, allowing an acute observation of surfaces and reliefs, while in a darkfield configuration, the low angle illumination from the sides gives contrasted images enhancing the edges and prints of the sample; key information on the manufacturing quality of metallic, glass or plastic components are revealed and the detection of material deposits is optimal.

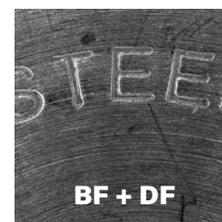
The combination of both systems in a compact arrangement allows for having a uniform light quality from any illumination angle. By adjusting the height of the darkfield with respect to the objective of the microscope, the lighting angle varies from zero degree to low angle. Therefore, various visuals can be rendered by one single system.

The ShadowLESS concept combines high uniformity and high directional light in a unique way. These properties allow an unprecedented inspection comfort with high contrast images, a negligible presence of stray light reflections, therefore a lower eye fatigue and no heat dissipation.

The colour temperature is 5400 K. It remains constant throughout the system longevity, independently of the number of hours the product is used. This consistency enables the users to maintain a stable quality standard over time.



SAMPLES UNDER A MICROSCOPE



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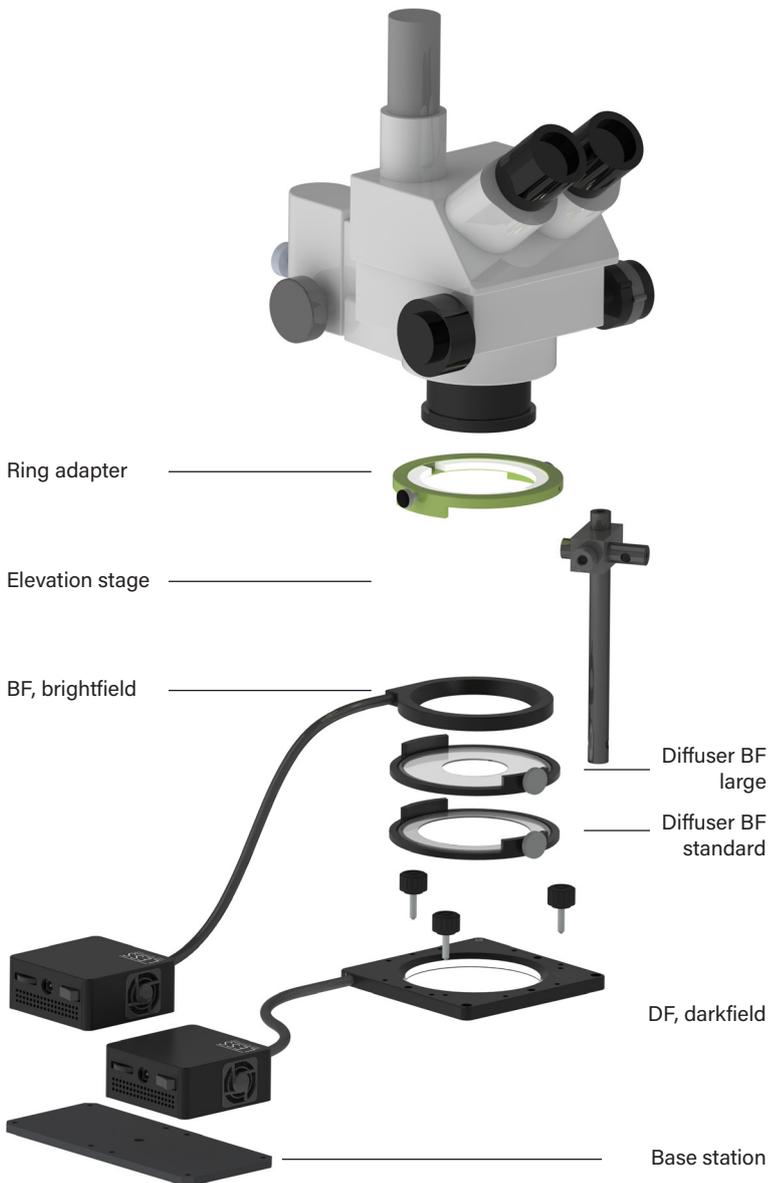
Av. de Longemalle 13
CH-1020 Renens, Switzerland
Tel : +41 21 552 07 10
info@less-sa.com



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ASSEMBLY PLAN



ACCESSORIES

- Ring adapter : available with several inner rings, it makes the illumination systems compatible with microscope objectives of 58 to 80 mm.
- Elevation stage : It allows to adjust the height of the low angle ring light. It facilitates the precise inspection of samples at different heights ranging from 0 to 50 mm.

OPTIONAL ACCESSORIES

- Diffuser large : It allows a better observation of very reflective components. It can be attached and removed quickly.
- Diffuser standard : it allows a better observation of reflective components. It can be attached and removed quickly.
- Base system : It allows to fix the different systems (bright- and darkfield) in a compact manner either directly on the microscope or on the workstation.

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EYE-SAFE
CLASS 1 LASER PRODUCT
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