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THE CONTAFLIX ON THE MICROSCOPE

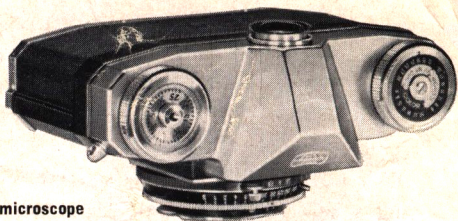
The **CONTAFLEX** on the microscope

Instruction for use holding ring and intermediate ring

Photomicrographs can easily be made with the **CONTAFLEX**, since the taking lens is also the finder lens of this single lens reflex camera. This is very convenient in so far as there is no necessity for an additional observing tube or a focusing ocular. Only a holding and an intermediate ring are necessary and, of course, the bracket used for attaching of the **CONTAFLEX** converter lenses.

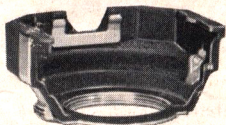
The holding ring is slipped over the eyepiece tube (see ill.) and clamped tight with the milled screw (1). The attachment bracket must first be pushed from below on to the grooves at both sides of the lens of the **CONTAFLEX** until it snaps in audibly, then the intermediate ring is screwed tightly into it. (To remove the bracket press the chromium-plated locking catches on both sides).

The microscope is focused as usual. Then attach the **CONTAFLEX** to it and fasten it by means of the milled screw (2) on the holding ring. The



**Attaching the
CONTAFLEX to the microscope**

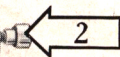
**CONTAFLEX-
attachment bracket**



intermediate ring



holding ring



**microscope with Zeiss-
Winkel Compensation-
Plan-Ocular KPL 12.5x**



camera lens should be focused to ∞ and the diaphragm opened to the full aperture (1:2.8). Stopping down the camera lens will not alter the brightness of the finder image but may lead to trouble in other respects.

Observing the finder image closely the holding ring is slowly moved a little higher until the finder image or the circular image area are illuminated as uniformly as possible. For this purpose the milled screw (1) must be loosened and tightened once again when focusing is completed.

Fine focusing is then carried out by means of the coarse and fine adjustment of the microscope. This can be examined in the viewfinder of the *CONTAFLEX*. If the microscopic image is bright, the ground-glass screen ring can be used. (The split-image rangefinder is unsuitable on account of the small aperture resulting from the use of the microscope.) If the finder image appears too dark in the ground-glass screen ring, the correct focusing can be determined by a comparison with the fine rings of the Fresnel lens, which are visible in the viewfinder.

Good photomicrographs of suitable contrast are in general possible only when the illumination is correct according to Köhler's principle. Other-

wise, disturbing straylight which decreases contrast may occur on the specimen slide as well as in the microscope tube.

To achieve a good and uniform illumination of the finder image, the diaphragm of the camera lens must be placed on the same spot as is occupied by the pupil of the human eye when the microscope is used for visual observation. With regard to the measurements of the camera lens only oculars are suitable which have been computed for a relatively great ocular distance. Furthermore, the ocular of the microscope must yield a plane image in order to produce a picture sharp up to the corners on the film, which lies plane in the camera. For use with the CON-TAFLEX we recommend the Compensation Plan-Ocular KPL 12.5 x of Messrs. Zeiss Winkel, Göttingen, if it proves impossible to obtain a uniform illumination and sufficient marginal definition with the existing ocular. When the KPL 12.5 x ocular is used the upper ring bearing the inscription must be unscrewed (see ill.). It is also possible to use photographic oculars with correction adjustment. They must be adjusted to ∞ .

The reproduction size of the film of the CON-TAFLEX is appr. $\frac{1}{5}$ of that of the microscope

magnification (exactly 1:5.5). If a **CONTAFLEX** photomicrograph is enlarged 5.5 x and viewed from a distance of 250 mm, the impression will be the same as that of visual microscopy.

For further particulars and advice consult your photographic dealer or the department "Wissenschaftliche Contax- and Contaflex-Photographie" of **ZEISS IKON AG.**, Stuttgart-S, Dornhaldenstrasse 5.



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