

THE LINHOF TECHNIQUE

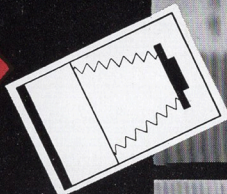
Data Sheet No. **1**

Depth of Field with the Swing Back



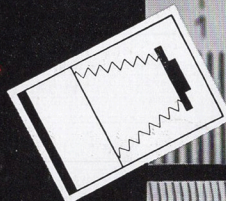
To photograph an inclined subject plane, considerable depth of field is required. As shown at right, the region of sharp focus is very limited. (Taken at $f/6.8$)

1



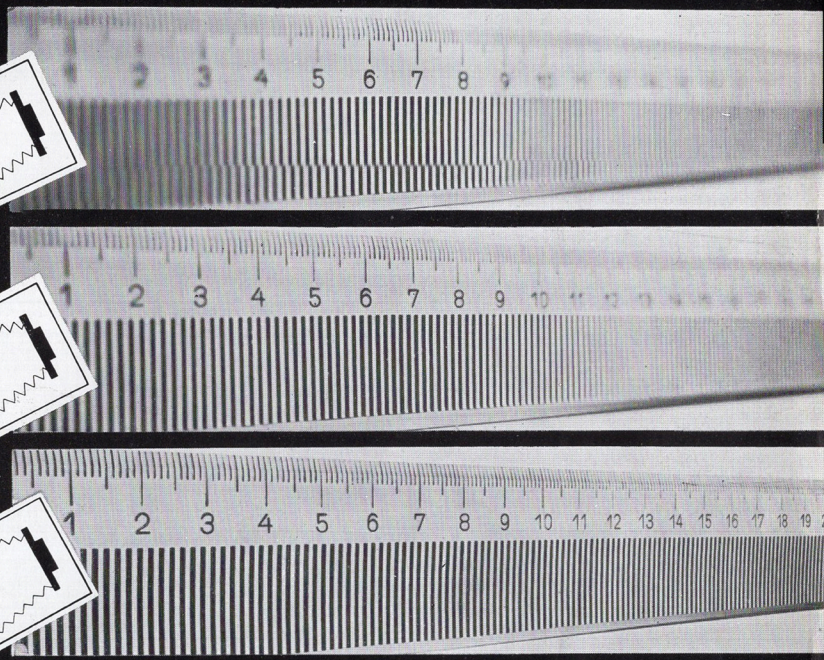
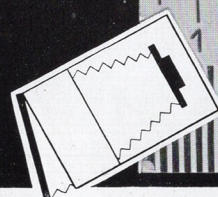
When stopping down to $f/22$ the depth of field is doubled, however, still not sufficient. The exposure time has to be increased 16 times!

2



When using the Swing Back the area of sharp focus extends over the entire subject, thus making it possible to work at full opening. No loss of exposure time! (Taken at $f=6.8$)

3



The LINHOF TECHNIKA with its Swing Back gives the photographer the possibility to increase the depth of field. This method will be applied when the subject has considerable depth, and is at an angle to the camera.

IN THEORY

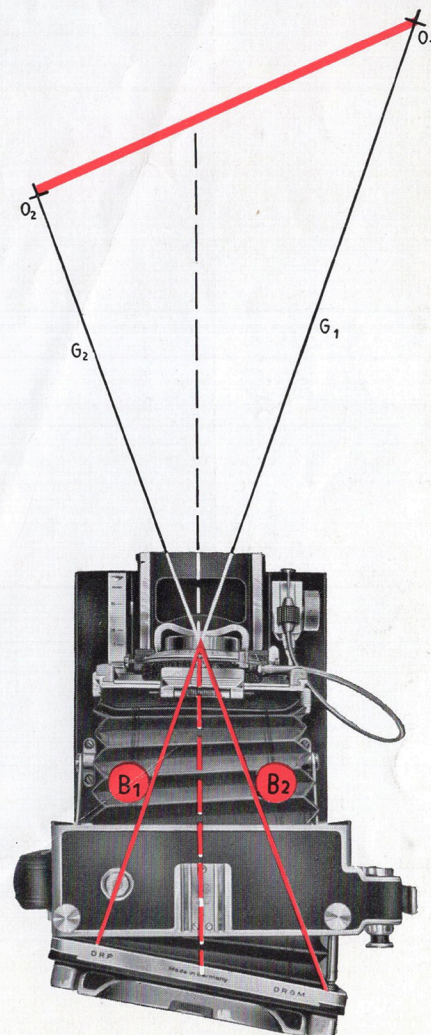
In order to understand just where in the subject region sharpest focus may be obtained, let us consider how a photographic lens forms an image of a plane. The image of any plane is always a plane! If the subject plane is inclined to the lens axis, the image plane is inclined also. The inclination of these two planes is such that, at the line in the space where they would intersect, the plane through the lens at right angles to the axis would also intersect these other two. This means, that, when a subject, which lies roughly in an inclined plane, is photographed, the film position for the foreground subject O_2 is farther from the lens than for the background subject O_1 . If the camera back is swung out, as shown at the right, the entire subject will be in sharp focus.

Every lens-to-subject distance has its particular lens-to-film distance. These distances are in inverse ratio to each other, as for example G_1 to B_1 and G_2 to B_2 . — A non-adjustable camera can either be focused on subject O_1 or O_2 ; by stopping down the lens, a certain depth of field can be obtained. The Swing Back of the LINHOF TECHNIKA makes it possible to get O_1 as well as O_2 and all subjects in the plane between these two points in focus. With the Swing Back flush against the camera, the farthest subject O_1 first is brought into focus; while observing the groundglass, the back is swung out until subject O_2 also appears in focus. This at full aperture!

IN PRACTICE

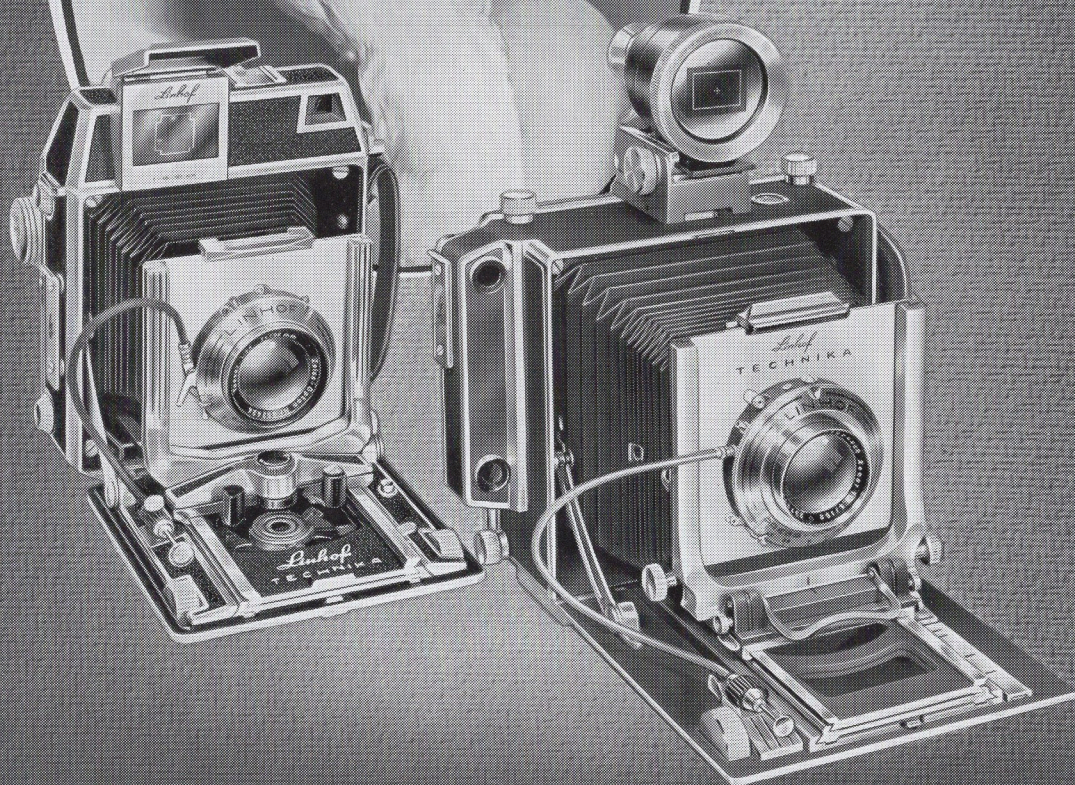
It is really not as difficult as it looks! Three points should be observed: Always check the ground glass image; Do not hesitate to experiment; Lock the camera back after the desired position is found.

THIS, AND MUCH MORE CAN BE ACHIEVED WITH THE
TECHNIKA





Linhof
TECHNIKA



PRÄZISIONS-KAMERAWERK MÜNCHEN 25