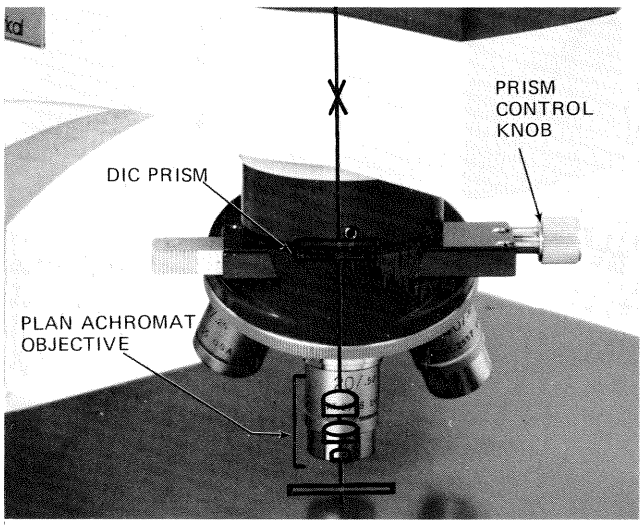
Supplement for No. 1860 Industrial Microscope
Reference Manual

OPERATION FOR
DIFFERENTIAL INTERFERENCE CONTRAST



1. Adjust microscope for brightfield operation.

2. Turn filter wheel to Position 1 (Figure 5). Turn analyzer turret located under microscope body to Position 1.

3. Place 10X DIC Prism Slide in slot above nosepiece, prism-end first with magnification designation up. Push slide into "detent" position; this places prism in optical path.

NOTE: To temporarily remove DIC prism from optical path, push slide in fully, beyond detent, to stop.

4. Turn nosepiece to place 10X objective in optical path. Turn coarse adjustment to raise objective.

5. Place a suitable specimen having little detail on stage.

6. Viewing through microscope, turn coarse adjustment to lower objective and bring specimen into approximate focus. Adjust height of stage, if necessary, by loosening stage locking lever. (See Page 9.)

7. Bring specimen image into sharp focus using the fine adjustment. Adjust the aperture diaphragm as directed. (See Page 15.)

8. Rotate Prism Knob until greatest darkness or maximum extinction is attained. This is called the "zero order."

NOTE: Be sure the DIC prism and objective magnifications match as the improper prism causes a dark streak in the field.

9. Turn the prism knob 1/4 to 1/8 revolution to obtain optimum image detail or best compromise. A definitive shadowing will appear in the specimen image to give it a depth dimension. This enhances specimen characteristics not readily seen in regular brightfield incident light.

10. Further turning of the prism knob presents specimen features in brilliant colors which can be useful in delineating boundaries or areas of interest in various opaque materials. The colors may also be useful to find areas of equal slope. This completes the procedure for obtaining incident light interference contrast in the specimen image. The same procedure should be followed for the 20X and 40X objectives.

DIC PRISMS

1860-101 10/79 SUPPLEMENT

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SCIENTIFIC INSTRUMENT DIVISION
BUFFALO, NY 14215

PRINTED IN U.S.A.