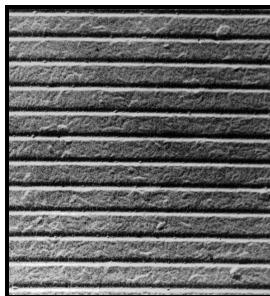


TEM MAGNIFICATION CALIBRATION 463NM DIFFRACTION GRATING REPLICA

Product No. 606

This specimen is a replica of a 2,160 lines/mm parallel line diffraction grating. When imaging the specimen, it should be kept in mind that the line spacing is 463nm ±1% and the pattern will not be visible until the imaging system is set to resolve that level of detail - around x2,500.



To calculate electron microscope magnification:

Take the measurement, in millimeters, between as many limiting lines of the replica pattern as possible. Apply the following formula:

$$\text{Magnification} = A \times 2,160/B$$

Where “A” represents distance in mm between first and last limiting lines measured, and

“B” represents number of spaces between first and last limiting lines measured.

Alternatively, use the online PELCO® Magnification Calibration Calculator by scanning the QR code below:



CARE OF THE SPECIMEN:

When not in use, the replica should be kept in the vial. The replica surface may be damaged if touched. **Never try to clean it.** Care must be taken to avoid bending the grid as distortion may cause the replica film to fracture.

When viewing in the TEM, begin at low magnification with a low illumination level. Increase the illumination a little beyond comfortable viewing level, then reduce it. This helps stabilize the specimen. Before moving the specimen to view another line, reduce the illumination and magnification to starting levels again.