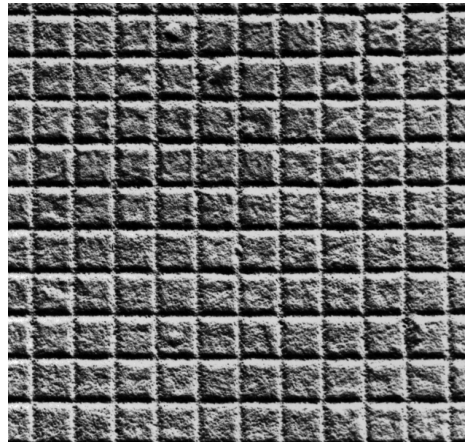


## SEM MAGNIFICATION CALIBRATION DIFFRACTION GRATING REPLICA PRODUCT NO. 604-A TO 604-M

This specimen is a replica of a 2,160 lines/mm waffle-pattern diffraction grating. When imaging the specimen, it should be kept in mind that the line spacing is 0.463µm and the pattern will not be visible until the imaging system is set to resolve that level of detail - around 2,500x. At this magnification the lines of the pattern will be just over 1mm apart.



To calculate the electron microscope magnification using the pattern of the diffraction grating replica:

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

$$\text{Magnification} = A \times 2160/B$$

A is distance in mm between limiting lines.

B is number of spaces between limiting lines.

(Alternatively, use the PELCO® Magnification Calibration Calculator, Prod. No. 252)

### Care of Grating Replica Specimen

When not in use the replica should be kept in a dry and dust-free container. The replica surface may be damaged if touched. Never try to clean it. Dust can be removed using a rubber bulb attached to a glass pipette. Use a gentle stream of air.

604-A-M TN 0602

**TED PELLA, INC.**

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