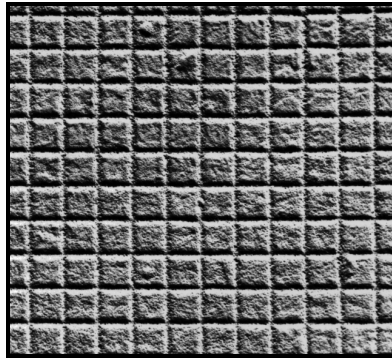


## CALIBRATION SPECIMEN SCANNING TUNNELING MICROSCOPE PRODUCT NO. 607-STM

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 0.463 $\mu$ m and the pattern will not be visible until the imaging system is set to resolve that level of detail.



To calibrate instrument magnification use the following calculation where **A** represents the **distance in mm between limiting lines of the spaces measured** and **B** represents the **number of spaces measured**:

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

### CARE OF THE SPECIMEN

Open the storage box by cutting the white label where the lid and base meet. Discard the piece of foam in the lid (necessary for shipping only).

At all times the surface of the replica must be protected from damage. The replica is mounted on a metal disk which is laying facedown in the storage box. **The disk can be removed by carefully inserting forceps under the rim, using the groove provided in the box base.** Do not grip more than 2mm into the center of the disk. Once the disk is removed from the storage box always lay it down with the specimen side facing up. Store the specimen in the original box or a similar container, which will protect the surface.

**Do not attempt to clean the specimen or remove it from the metal disk.**

**Never allow the specimen to be exposed to water or solvents.**

607-STM TN 3/02

**TED PELLA, INC.**  
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