Technical Data Sheet

Evaporated Platinum Iridium in Holey Carbon Film for Point Separation Resolution Test

#80020

The evaporated alloy forms small discreet aggregates of high contrast particles on the holey carbon support film. These are ideal for testing the resolution of the electron microscope, using the point separation test.

The distance between the centers of two small particles, which can just be distinguished as separate particles, can be taken as a measure of the resolution.

Due to the statistical nature of the electron irradiation of the object, mall local areas of blackening of the photographic emulsion can occur which are not actual specimen structure. It is essential, therefore, to take two successive micrographs of the same field of view at the same focal setting.

Pairs of prints, which are identifiable in two successive micrographs, must be used for any deduction about microscope performance. Furthermore, several pairs of points in different orientations should be selected so that any directional image defects can be allowed for.

If an optical diffractometer is available, it is preferable to examine the negatives with its aid, since it integrates the fine structure and gives a more reliable reading of the particle separation at randomly chosen points.