

Technical Data Sheet

Molybdenum Oxide Crystals

#80046

This test specimen is most useful to determine the rotation between a diffraction pattern and the selected area image.

Select a thin crystal, no overlaid by others, so that a clear Laue diffraction pattern is obtained (see illustration).

Starting from the diffraction pattern, change the strength of the diffraction lens until each diffraction spot shows a small image of the crystal. It will be possible to determine the sense of the rotation of the image as the magnification is increased. Check whether there is an image inversion between the diffraction position and selected area magnification.

The actual magnitude of the rotation angle between the crystal and its pattern can be determined by recording both image and diffraction pattern on a single photographic plate. The correct rotation angle between pattern and image can then be determined by taking into account the sense of rotation and any image inversion.

Note:

After removing this specimen from the EM, the specimen holder should be cleaned of any adhering molybdenum trioxide.