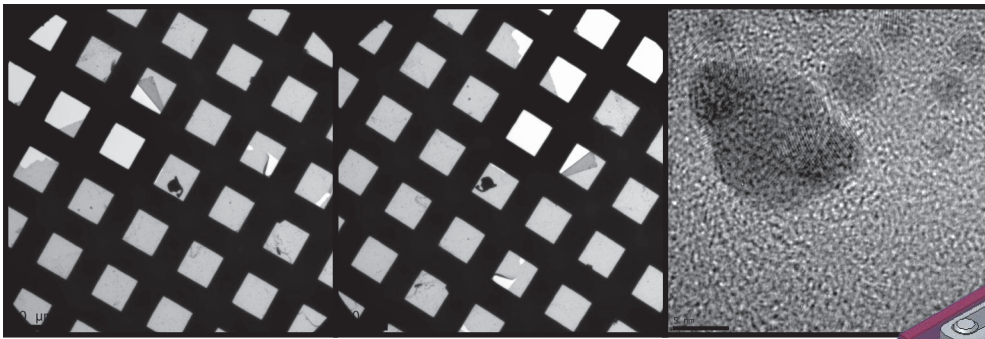


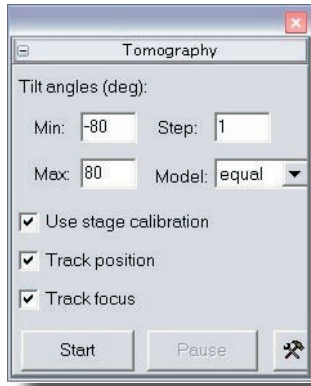
MODEL  
927



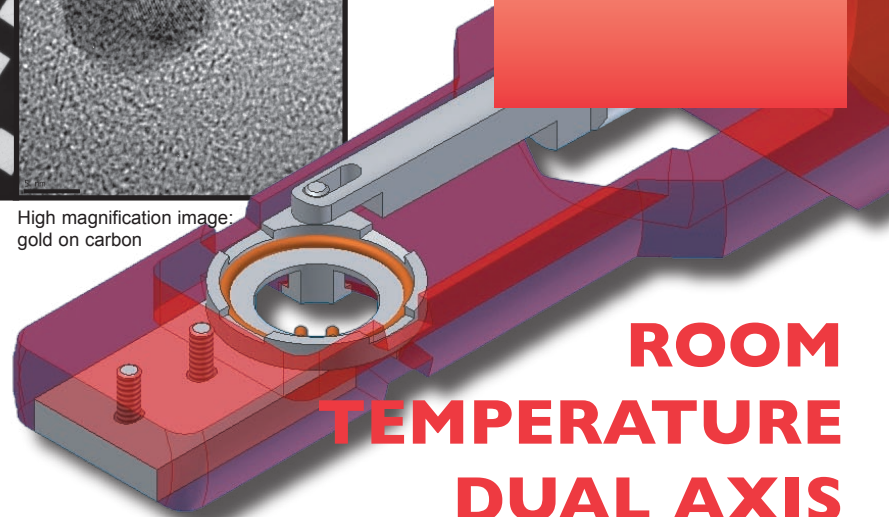
Low magnification map image

90° rotated map image

High magnification image:  
gold on carbon



Gatan 3D Tomography-  
Acquisition Software  
(Model 730)



# ROOM TEMPERATURE DUAL AXIS TOMOGRAPHY HOLDER

## Applications

Tomography is becoming an increasingly more important technique in the visualisation of small three-dimensional structures. Electron tomography is a useful technique that can be used to obtain three-dimensional (3D) reconstructions of electron transparent objects. A series of tilted images is taken in the TEM and these two-dimensional (2D) images are then back projected to generate a three dimensional reconstruction. There are many software packages available to do this. Depending on the maximum tilt range available in the microscope configuration a certain wedge of data may not be sampled. (see figure 1). This effect may be reduced by acquiring another series of images with the specimen rotated by 90° to the first series.

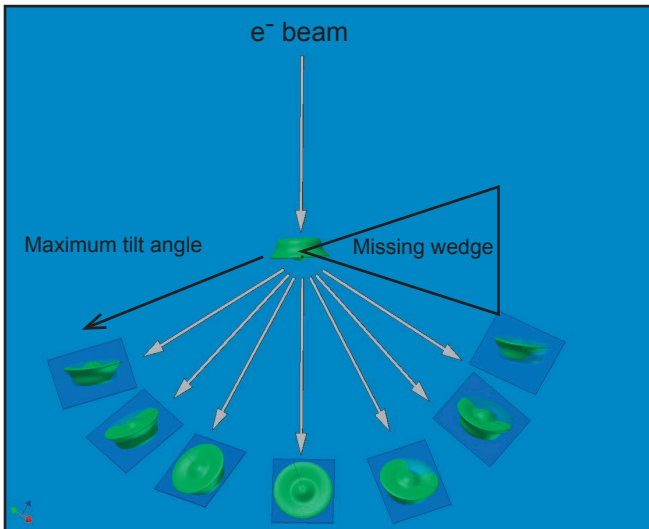


Figure 1: Principle of tomography

The model 927 holder allows the specimen to be quickly and easily rotated by a fixed 90° angle by means of a simple lever fitted to the back of the holder.

Tilt series may be quickly and simply acquired using the Gatan Tomography acquisition software model 730.

Tomograms contain an enormous amount of information and are essentially a three-dimensional map of the structure being studied. Many biological and materials science questions can be answered by electron tomography. Specific structures may be located by the use of high density labelling.

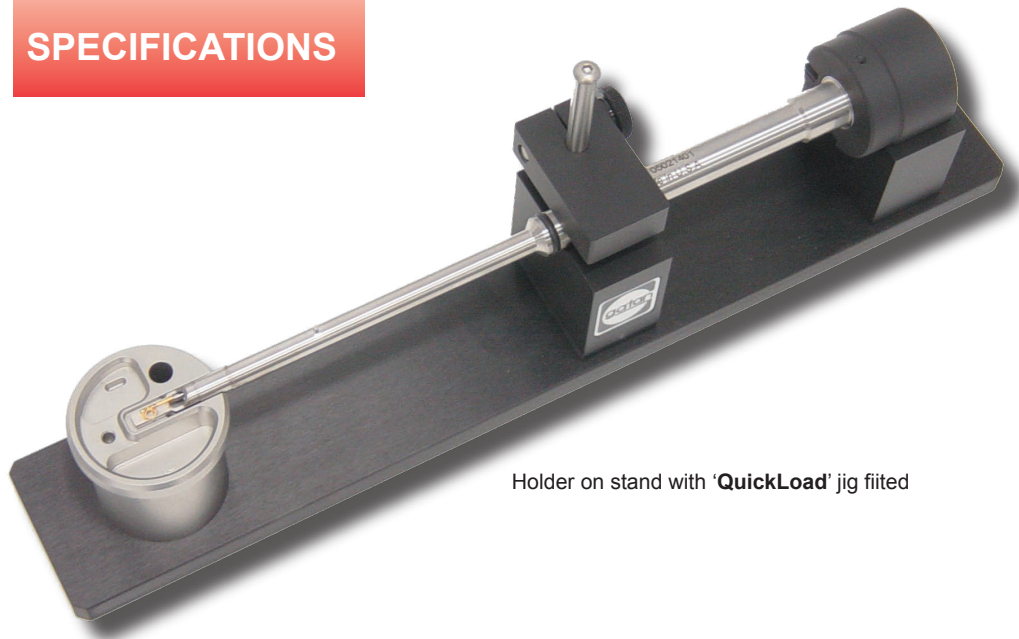
## Low drift and high resolution

The 927 holder benefits from its' light weight, giving good performance even at very high goniometer tilts. The holder is symmetric with no off axis mass or knobs to add any torque to the goniometer at high tilts. Despite its' thin section, the tip is rigid and is protected from being bent whilst specimens are being loaded. The design is optimised to give maximum tilt using standard 3mm specimens.

To allow the highest tilt, specimens are held in the holder cup by wire 'C' clips. A special loading tool and stand are provided making specimen exchange quick and easy.

The loading stand ensures the tip is supported during loading and the special loading tool makes past problems with C clips history.

## SPECIFICATIONS



Holder on stand with 'QuickLoad' jig fitted

**Please note:** Tilt ranges of specimen holders vary according to the manufacturer, model, pole piece and the presence of in-gap accessories of the TEM used. When ordering, please specify the TEM make, model, pole piece, configuration of the EDX detector and local line voltage requirements.

Gatan manufactures a wide variety of analytical, cooling, heating, straining and other speciality or custom holders for most microscope makes and models. Contact your local Gatan representative for more information about specific holders and microscope configurations and microscope configurations.

*Currently available for cantilever goniometers only.*

### Where microscope pole pieces and apertures allow:

<b>Observable area</b>	(zero tilt) (80 degrees tilt)	2.2mm diameter up to 0.75mm
<b>Standard cup material</b>		Titanium
<b>Specimen size</b>		3mm diameter
<b>Number of specimens</b>		1
<b>Rotation angle</b>		+/-90° fixed

*For specific microscope values please consult your local Gatan sales representative.*

## ORDERING INFO

**MODEL**  
**927**

### DESCRIPTION

Single tilt 2-axis room temperature tomography holder with specimen loading jig and accessories.

## CONTACT

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