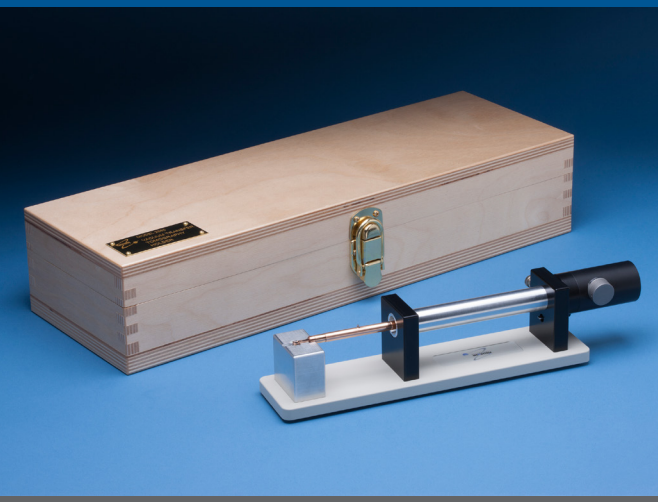
MODEL 2560

Vacuum Transfer Tomography Holder

Provides specimen protection during transfer to transmission electron microscopes

FISCHIONE INSTRUMENTS



MODEL **2560**

Vacuum Transfer Tomography Holder

Provides specimen protection during transfer to transmission electron microscopes (TEMs).

- **An advanced mechanism retracts the specimen into the body of the holder, which seals and isolates the specimen from the surrounding atmosphere**
- **Ideal for sensitive specimens that can be altered by environmental conditions**
- **Optimized for transferring specimens under vacuum or in the presence of inert gas**
- **Provides up to 1 mm field of view in transmission electron microscopes**
- **Capable of tilting to ±70°; can be used for tomography in microscopes with pole-piece gaps > 5 mm**
- **Accepts 3 mm specimens or specimen grids**

PLASMA CLEANING

Fischione recommends that you clean the specimen and specimen holder with its Model 1020 Plasma Cleaner or Model 1070 NanoClean before insertion into the TEM.

During collection of tomographic data, the electron beam will be on the same area of the specimen for an extended time. As a result, organic contamination may build up on the specimen. A plasma cleaning time of 10 seconds to 2 minutes removes the contamination. Longer cleaning times can remove contamination spots caused by previous TEM viewing of non-plasma cleaned specimens.

When not in use, the holder should be stored under vacuum in the supplied Fischione Model 9010 Vacuum Storage Container or the Model 9020 Vacuum Pumping Station (purchased separately).

Vacuum transfer for TEMs

The Model 2560 Vacuum Transfer Tomography Holder is a single-axis holder capable of tilting ±70° and is designed for room-temperature applications. The holder provides up to 1 mm field of view.

Specimen protection from atmosphere

For specimen protection during transfer to the TEM, an advanced mechanism retracts the specimen into the body of the holder, which in turn seals and isolates the specimen from the surrounding atmosphere. The holder is ideal for sensitive specimens that can be altered by environmental conditions; the specimen can be transferred in the presence of vacuum or an inert gas environment.

Loading TEM specimens in vacuum or an inert atmosphere requires the use of a glove box; the holder is designed specifically for use with a glove box to ensure specimen protection and successful transfer to the TEM.

Simple specimen loading and transfer

To load a specimen, place the holder on the loading stand and open the specimen spring clamp with the clamp tool. Once the glove box is pumped, use tweezers to place the specimen in the holder. Retract the specimen within the holder; the spring clamp secures the specimen automatically without the need of the clamp tool. The specimen is now in a vacuum/an inert environment and ready for transfer to the TEM.

Accepts 3 mm specimen or grid

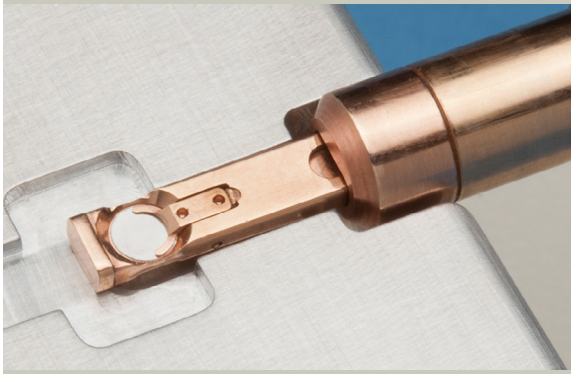
The holder tip accepts a 3 mm diameter TEM specimen or grid, which is secured with a spring clamp. When engaged, the clamp provides a secure force on the edge of the specimen and maximizes specimen visibility, even at high-tilt angles.

UNIQUE CLAMP DESIGN

The spring clamp holds the specimen or grid securely and is easily engaged with the provided clamp tool.

Gather tomographic data

The Vacuum Transfer Tomography Holder tilts ±70° and can be used to gather tomographic data in TEMs with a pole-piece gap > 5 mm.



SPECIMEN PROTECTION

Holder tip extended for specimen loading and unloading (top). Holder tip retracted for specimen transfer to microscope (bottom).

Touch protection

Fischione's advanced tomography holders are compatible with the TEM's touch-alarm that stops goniometer movement in the event that a pole touch occurs. Always be aware of the TEM's pole-piece configuration and follow the microscope manufacturer's recommendation for operating the goniometer at high-tilt angles.

Ordering information

All Fischione advanced tomography holders come with a dedicated loading stand for secure specimen handling, tools to assist in specimen loading and clamping, and a Fischione Model 9010 Vacuum Storage Container for storing the holder in a clean, vacuum environment.

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