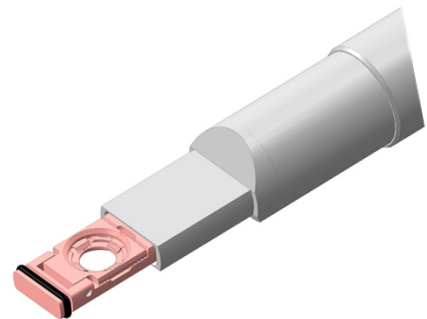
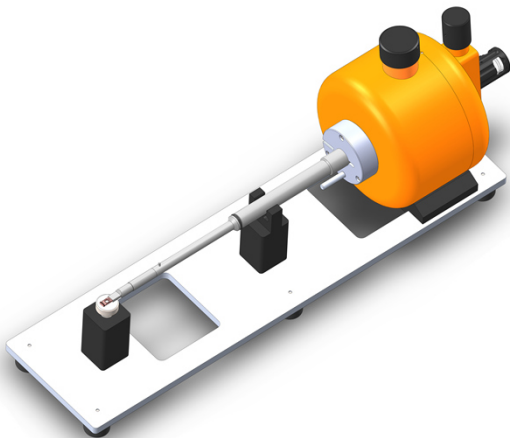


CRYOGENIC INERT GAS / VACUUM TRANSFER TEM HOLDER

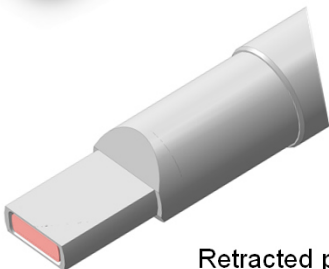
The new Cryogenic Inert Gas / Vacuum Transfer TEM Holder helps to protect environmental sensitive samples during transfer to the TEM. It is optimized for sample loading and unloading in a glove box under vacuum or in the presence of an inert gas such as Argon. Keeping the samples at cryo temperatures during imaging minimizes beam damage during data acquisition.

MAIN FEATURES AND COMPONENTS

- ❑ This holder is especially designed for high resolution as well as low vibration characteristics. The axisymmetric liquid Nitrogen (LN₂) dewar provides high stability during tilting or any movement of the TEM goniometer. This thermally optimized dewar helps to maintain low, steady state sample temperatures at around -175°C or below during ~ 10 hours of high resolution data collection. Temperature stability better than +/- 0.1°C per hour.
- ❑ The holder tip has a thickness of < 1.5mm, which allows for high tilt angles of the TEM goniometer. After sample loading in a glove box under vacuum or a inert gas atmosphere, the sample tip is retracted into the holder. It is then sealed by the holder internal shield and a O-ring around the tip. This helps to protect the sample from undesired exposure to ambient air during transfer. Having the holder pumped in the pre-pump of the TEM, the tip is extracted and the holder inserted in the TEM column vacuum.
- ❑ Available for 3mm standard grid and FEI/ThermoFisher Autogrid.
- ❑ Available for FEI/ThermoFisher, JEOL TEMs and Hitachi 7800x series.



Extracted position



Retracted position
Specimen is sealed

