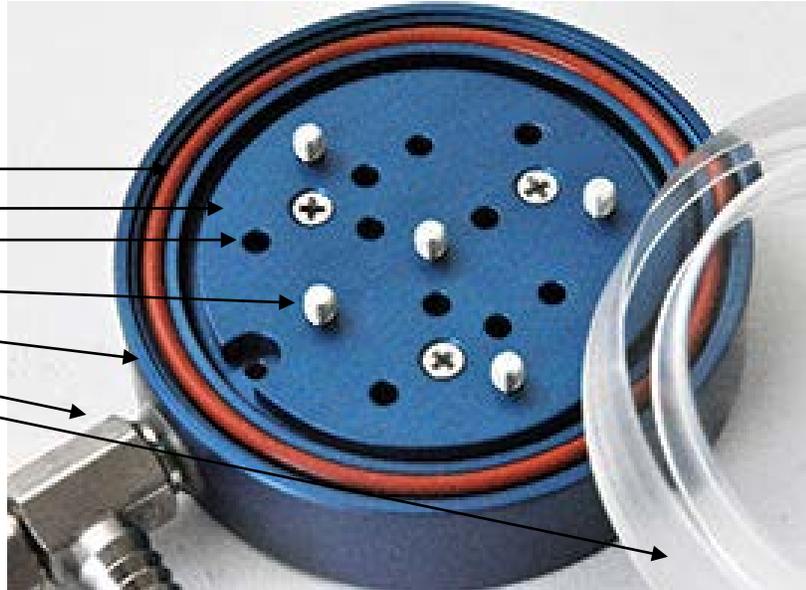


**PELCO<sup>®</sup> Vacuum Desiccator for Hitachi M4 Stubs**  
**Product Number 16179-4**

- (3) O-ring seal
- (5) Holding Plate
- (6) Sample holding O-rings
- (7) M4 Adapter Pins
- (1) Aluminum Body
- (4) Vacuum Valve
- (2) Clear Acrylic Lid



**General description:**

The PELCO<sup>®</sup> SEM Sample Stub Vacuum Desiccator has been designed to hold Hitachi M4 thread stubs. This product is compatible with 15 and 25mm diameter stubs.

The PELCO<sup>®</sup> SEM Sample Stub Vacuum Desiccator comprises a fully pumped blue anodized aluminum body (1) with a clear acrylic lid (2), a silicon O-ring seal (3) and a vacuum valve (4). Samples stored under vacuum are protected from dust, contamination and oxidization. The holding plate (5) contains small O-rings to securely hold the M4 adapter pins (7). When using standard pin stubs with 6 or 9mm long pins, the maximum sample height is 10mm above the surface of a standard pin mount.

**Loading/removing samples:**

Use gripper tweezers to load or remove the stubs with pin adapters. When you load the stubs with samples, you will notice a resistance (holding O-ring) and the pin stubs need to be pushed in past that resistance. For removing the samples you have to pull the pins past the resistance. Remove the pin adapters before placing sample stub in the SEM.

**Evacuating the PELCO<sup>®</sup> SEM Sample Stub Vacuum Desiccator:**

Load the pin adapters with the samples using suitable stub grippers. Clean the O-ring if needed, clean the sealing face of the lid if needed and place the lid on the O-ring. Connect a pump to the 1/4" barb fitting, open the valve and pump down. Depending on the pump, the pump down time can vary from 10 seconds to minutes. After pump down, close the valve and disconnect the pump. The lid is held by vacuum. The samples and the sample desiccator are now ready for storage or transport. We advise to re-pump once a month.

**Venting the PELCO<sup>®</sup> SEM Sample Stub Vacuum Desiccator:**

Hold the vacuum desiccator horizontal or place on a suitable horizontal surface before opening the valve. We advise to connect a venting filter to reduce dust entering the desiccators. Please be aware that the lid is only held by vacuum and can fall off when not held horizontal. Lift the lid, place on a clean non-scratching surface and remove sample(s) as needed.

**Vacuum pump:**

The small volume of the vacuum desiccators can be pumped down by virtually any pump or vacuum system. A dry pumping system such as our diaphragm pump (Product No. 3436) or a scroll pump is preferred. When using a rotary pump, install a foreline trap to reduce backstreaming. Another possibility is to use a port with a valve on an available high vacuum system. Use ¼" thick walled silicon vacuum tubing (Product No. 92490-253) for vacuum connection.

**Transport:**

When the PELCO<sup>®</sup> SEM Sample Stub Vacuum Desiccator is used for transporting or shipping sample, please evacuate or re-pump the desiccator shortly before shipping and secure the lid with adhesive tape or elastic band. We advise to use 3M<sup>™</sup> Kapton<sup>®</sup> tape (Product No. 16089-4) which can be easily removed and leaves a clean surface. In case of accidental venting, the lid is held in place by the tape.

**Maintenance and care:**

The moving parts in the valve are self lubricating and do not require maintenance. Keep all vacuum sealing surfaces clean and scratch free. Clean the sealing O-ring when needed.