

TECHNICAL NOTES

JEOL NeoScope Stage Adapter Kit for PELCO Specimen Holders Product No.15398



General

The NeoScope Stage Adapter Kit has been developed to enable the use of the wide range of PELCO Specimen Holders with M4 threaded hole on the NeoScope sample stage. Only one NeoScope Stage Adapter Kit needs to be purchased separately to the fit the many available specimen holders. It is more efficient and quicker to mount sample in a dedicated sample mount holder. It will reduce sample preparation procedures, reduce consumable costs and greatly reduce specimen mounting time.

Scope of delivery

- The #15398 NeoScope Stage Adapter Kit consists of:
 - 1 ea NeoScope stage adapter plate with M6 thread
 - 1 ea 18mm adjustable height pillar, M6 threaded with locking nut and M4 screw on top
 - 1 ea 25mm adjustable height pillar, M6 threaded with locking nut and M4 screw on top
 - 1 ea height gauge.

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How to use

At least one PELCO specimen holder is needed with the NeoScope Stage Adapter kit.

- 1 Mount the required adjustable height pillar in the stage adapter plate with the M4 screw at the top. Use the M4 screw to mount the desired specimen holder and make sure that the holder is positioned hand tight against the adjustable height pillar.
- 2 Mount (clamp) the specimen in the specimen holder.
- 3 Position the height gauge vertically (with the longer side upwards) on the stage plate adapter. Adjust the total height of the specimen holder with the specimen to be level with the top of the height gauge by rotating the adjustable height pillar to the desired height. Use the locking nut to lock the pillar in position. The complete assembly is now ready for loading onto the NeoScope sample stage.
- 4 Most likely, the NeoScope is supplied with a 25mm diameter cylinder type sample mount holder. This sample holder can be easily removed from the sample stage by unlocking the two locking screws and lifting the sample mount holder from the stage. Store this sample mount holder in a safe place.
- 5 Load the assembly with the dedicated specimen mount on the Neoscope stage. Lock the assembly using the two locking screws, close the stage (check O-ring), pump down and image sample surface.

Restrictions

- 1 For investigations in an SEM, samples need to exhibit enough conductivity to avoid an electrical charge built-up. Non-conductive samples (plastics, ceramics, paper, biological material) need to be coated with a thin film of gold and a conductive path has to be established to the stage plate.
- 2 The X and Y stage movements are 35mm, although larger sample (and larger specimen mounts can be loaded in the NeoScope, the maximum viewable area is restricted to 35 x 35mm. When loading a large sample, make sure that there is enough space in the chamber to move the sample without touching the chamber walls.
- 3 The NeoScope allows a maximum sample height of 50mm, including the stage plate adapter; do not load assemblies exceeding a total height of 50mm