SPECIMEN MOUNTS & HOLDERS FOR JEOL NEOSCOPE DESKTOP SEMS



A wide range of PELCO® sample holders has been designed especially for use in the JEOL NeoScope JCM-6000 and JCM-5000 Benchtop SEMs (as distributed by Nikon). This will enable easy mounting of a wide variety of specimens for users of the Neoscope SEM. To use the sample holders, the standard stage adapter needs to be replaced by the NeoScope Stage Adapter Kit (#15398). The NeoScope Stage Adapter Kit includes a base plate adapter, 2 adjustable height pillars with M4 thread and a height gauge. All specimen holders have an M4 threaded hole and fit directly on the adjustable height adapter.

The wide range of PELCO® specimen holders will allow for investigation of a greater variety of specimens. Easy mounting of specimens will make the NeoScope Benchtop SEM more productive and will give access to more applications. There are also adapters available to accommodate pin stub mounts which are used in other scanning electron microscopes. Cylinder mounts with the M4 threaded hole fit directly on the adjustable height pillar. This enhanced versatility will allow users of the NeoScope Benchtop SEM to share specimen mounts used on other SEM platforms.

We also offer standard 25mm JEOL cylinder mounts which can be used on the sample holder supplied with the NeoScope JCM-6000 and JCM-5000 Benchtop SEMs.



JEOL NeoScope JCM-5000 Benchtop SEM (distributed exclusively by Nikon)



JEOL NeoScope JCM-6000 Benchtop SEM (distributed exclusively by Nikon)



NEOSCOPE STAGE ADAPTER KIT

The NeoScope Benchtop SEM Adapter Kit needs to be fitted on the NeoScope specimen stage to enable using the PELCO® specimen holders. The adjustable height pillars allow for easy height adjustment needed for the NeoScope SEM. The top of the adjustable height pillar is fitted with an M4 screw, so any holder or mount with an M4 threaded hole can be mounted as long as the total height of the stage adapter, pillar, specimen holder and sample does not exceed a total height of 50mm. Just make sure the top of the specimen is level with the top of the height gauge supplied with the stage adapter kit and the specimen will fit into the NeoScope SEM.

15398	Kit includes: Base Plate Adapter, 18mm and 25mm Adjustable Height Pillars, Locking Nut, and Height Gaugeeach
15398-10	Replacement NeoScope Stage Base Adapter Plateeach
15365-2	Replacement 18mm Adjustable Height Pillareach
15374-2	Replacement 25mm Adjustable Height Pillareach
15373-22	Replacement M6 Locking Nut, Aluminumeach

SPECIMEN HOLDERS FOR THE NEOSCOPE BENCHTOP SEMS (Requires #15398 NeoScope Stage Adapter Kit)

Adjustable Profile Holder

Designed to adjust the exact viewing angle for cross section made from wafers or other thin specimens up to a thickness of 3.2mm (1/8"). Angle adjustment range 0-90°. Made of aluminum with stainless steel allen screw. Allen wrench included.

15356-4 Adjustable Profile Holdereach





Compact Variable Tilt Mount

This Compact Variable Tilt Specimen Mount allows for easy mounting and tilting small samples from 0° – 90° and SEM investigation with small working distances. Markings for 30° , 45° , 70° and 90° . Table size is 11×14 mm ($0.46'' \times 0.55''$). Overall size is $14 \times 14.3 \times 14.5$ mm ($0.55'' \times 0.56'' \times 0.57''$). Made of aluminum with stainless steel screw. Allen wrench included.

15439 Compact Variable Tilt Mount, M4each







SPECIMEN MOUNTS & HOLDERS FOR JEOL NEOSCOPE SEMS

ALUMINUM SPECIMEN HOLDERS FOR THE NEOSCOPE BENCHTOP SEMS (Requires #15398 NeoScope Stage Adapter Kit)



Variable Tilt Specimen Holder

Accommodates specimens with a size up to 26 x 20mm or pin stubs up to 18mm (.7") diameter. Tilts 0 - 90° with 10° markings. Additional markings for 30°, 45°, and 70°. Tilt table size is 26 x 20mm, overall size is 33 x 20 x 19mm H. Allen wrench and stainless steel Allen set screws included.

Variable Tilt Specimen Holder, M4each



45° Pre-Tilt Holder Mounts and Pin Stubs

Accepts 15mm M4 mounts on pin with M4 thread. Pin can be rotated and fixed for optimum position. When the pin with M4 thread is removed, this holder also accepts a standard 12.7mm (1/2") pin stub with 3.2mm (1/8") pin. Allen wrench and stainless steel Allen set screws included.



Micro-Vise Holder

Holds a variety of specimens. The maximum gap is 11mm (7/16"). The jaws are 25.4mm (1") wide. Allen wrench and stainless steel Allen set screw included.

15340-4 Micro-Vise Holder, M4......each



Closed position with pushrod in place.

Small Springloaded Vise Clamp

Small springloaded vise clamp for samples up to 12.7mm (1/2"). The jaws are 25mm (1") wide. Jaws also accommodate 1/16" x 1/2" stainless steel pins for more awkward shaped samples. 4 pins are included. Removable pushrod for easy loading is provided. Material: machined aluminum with stainless steel pins and springs. Overall size w/o pushrod 30 x 25 x 12.5mm (1.18" x 1" x ½").

15341-4 Small Sprinloaded Vise Clamp, M4each 15341-20 Replacement Pins for Vise Clamp, 1/2" longpkg/10





Thin Specimen Split Holder Mount

Simple but effective design to hold wafers and thin samples up to 3.2mm (1/8). 15mm dia x 10mm H. Allen wrench and stainless steel Allen set screws included.

15335-4 Thin Specimen Split Holder Mount, M4.....each



Tube / Needle Clamp

removed.

A small tube, needle or wire clamp based on a standard Ø15x10mm cylinder mount with M4 thread. Ideal for examining wire cross sections or needle tips. Holds wires, tubes and needles up to Ø2mm (0.008"); hole is 5mm (0.20") deep. Made of vacuum grade aluminum. Allen wrench and stainless steel Allen set screw included.

15490 Tube / Needle Clamp, M4, Ø15 x 10mm.....each



Small Set Screw Vise

Small set screw vise with an open slot of 4mm (.157") wide and 5mm (.197") deep. Ø15 x 12mm x M4. Allen wrench and stainless steel Allen set screw included.

16335 Small Set Screw Vise, M4, Ø15 x 12mm Heach



Large Set Screw Vise

Set screw vise with an open slot of 10mm (.394") wide x 5mm (0.197") deep. Ø25mm (1") x 10mm (0.394") high. Allen wrench and stainless steel Allen set screw included.

16371 Large Set Screw Vise, M4, Ø25 x 10mm H......each



Double Slotted Mini Vise

Double slotted set screw vise with 2 ea. 1mm wide x 3mm deep slots to clamp thin specimens or cross sections. Simple but effective design to hold wafers and thin samples up to 1mm (.039") thick. 15mm diameter x 6mm H. Allen wrench and stainless steel Allen set screws included.



16341 Double Slotted Set Screw Vise, M4, Ø15 x 6mm H......each

Large Double Slotted Vise

Large Double Slotted Set Screw Vise with 2 ea. 2.5mm by 5mm deep slots. Dimensions Ø25x10 mm (1 x 0.4"). Clamp thin specimens and cross sections without the need for tape or conductive paint. Allen wrench and stainless steel Allen set screws included.



Large Double Slotted Set Screw Vise, M4, Ø25 x 10mm Heach

Single Pin Stub Holders

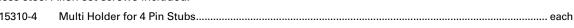
For holding and viewing SEM mounts with the standard 3.2mm pin. Made of aluminum, includes a pin locking screw. Two different heights are available: 10, 15mm. Allen wrench included.





Multi Holder for 4 Pin Stubs

Accommodates up to four standard 12.7mm (1/2") pin stubs with 3.2mm (1/8) pin. Allen wrench and stainless steel Allen set screws included.





Multi Holder for 5 JEOL Stubs

Holds up to five 9.5mm JEOL cylinder mounts, commonly used in JEOL SEMs. Size is Ø31.5 x 10mm and fits in standard 32mm mount holder. Allen wrench and stainless steel Allen set screws included.





JEOL or ISI/ABT/Topcon Mounts Adapter

Small cylinder mount adapter accommodates JEOL or ISI/ABT/Topcon Ø9.5, Ø12.2mm, and Ø15mm cylinder mounts. Allen wrench and stainless steel Allen set screws included.

Adapter Holder for Cylinder Mounts, M4each 15401



Cylinder Holder, 22mm (7/8")

Specimen holder for cylinders up to 22mm (7/8") diameter. Allen wrench and stainless steel Allen set screw included.

Specimen Holder for Cylinders up to 22mm (7/8")......each 15402



45° / 90° Combination Holder

Versatile combined specimen holder for 90° cross sections and 45° pin stub. Allen wrench and stainless steel Allen screw included.





Metallographic Mount Holders - Mulitple Sizes Available!

(A)	15403	1" or 25mm Metallographic Mount Holder, M4each
(B)	15404	1-1/4" or 30mm Metallographic Mount Holder, M4each
(C)	15405	1-1/2" or 40mm Metallographic Mount Holder, M4each
(not shown)	15406	2" or 50mm Metallographic Mount Holder, M4each





SPECIMEN MOUNTS & HOLDERS FOR JEOL NEOSCOPE SEMS

ALUMINUM SPECIMEN HOLDERS FOR THE NEOSCOPE BENCHTOP SEMS (Requires #15398 NeoScope Stage Adapter Kit)



Bulk Specimen Holder

Holds irregular and round specimens up to a diameter of 32mm (1.25"). Two sets of stainless steel Allen screws and Allen wrench included.

15308-4 Bulk Specimen Holder, M4.....each



Straight Bulk Specimen Holder

Versatile specimen holder to clamp irregular shaped specimens. Opening is 15.9 W x 25.4 L x 9.5mm D (5/8" W x 1" L x 3/8" D). Allen wrench and stainless steel Allen set screws included.

15320-4 Straight Bulk Specimen Holder, M4.....each



Multipurpose Specimen Holder

Accepts up to 25.4mm (1") diameter specimens. Slotted design also allows for clamping elongated or rod shaped specimens. Allen wrench and stainless steel Allen set screw included.

15305-4 Multipurpose Specimen Holder, M4.....each

PELCO SEMClamp™ HOLDERS FOR JEOL NEOSCOPE SEMS



PELCO Mini SEMClamp™ Ø15 x 10mm

Mini SEMClamp™ on a Ø15 x 10mm M4 cylinder mount. Convenient for holding flat or thin specimens such as Si chips, wires, foil and small tubes. Material: vacuum grade aluminum with brass screw.

15494 PELCO Mini SEMClamp™ Ø15 x 10mm, M4each



Small PELCO SEMClamp™ 15 x 10mm

PELCO SEMClamp™ holder 15mm (0.6") long with 10mm (0.4") wide clamping area. Convenient holder for clamping down samples up to a thickness of 7mm under the clamping strips. Overall dimensions 23 x 20 x 9mm (0.9" x 0.78" x 0.35"). Material: machined aluminum with brass screws.

15347-4 Small PELCO SEMClamp™ 15 x 10mm, M4each



Medium PELCO SEMClamp™ 25 x 15mm

PELCO SEMClamp^{IM} holder 25mm (1") long with 15mm (0.6") wide clamping area. Convenient holder for clamping down samples up to a thickness of 7mm under the clamping strips. Overall dimensions 33 x 25 x 9mm (1.3" x 1" x 0.35"). Material: machined aluminum with brass screws.

15348-4 Medium PELCO SEMClamp™ 25 x 15mm, M4each



Recessed PELCO SEMClamp™ 25 x 15mm

5mm recess allows for background free imaging and no contact with sample surface in imaging area. Clamping area is 25mm (1") long and 15mm (0.6") wide. Maximum thickness 7mm under the clamping strips. Overall dimensions $33 \times 25 \times 11$ mm (1.3" x 1" x 0.43"). Material: machined aluminum with brass screws.

15346-4 Recessed PELCO SEMClamp™ 25 x 15mm, M4 each

PELCO SEMClip™ CYLINDER MOUNTS FOR HITACHI TM3030/3000/1000

16324-10	PELCO SEMClip™ M4 Cylinder Mount, Ø15 x 6mm, 1 Clipeach
16327-10 16327-20 16327-30	PELCO SEMClip™ M4 Cylinder Mount, Ø25 x 6mm, 1 Clip each PELCO SEMClip™ M4 Cylinder Mount, Ø25 x 6mm, 2 Clips each PELCO SEMClip™ M4 Cylinder Mount, Ø25 x 6mm, 3 Clips each
16326-10 16326-20 16326-30	PELCO SEMClip™ M4 Cylinder Mount, Ø32 x 10mm, 1 Clipeach PELCO SEMClip™ M4 Cylinder Mount, Ø32 x 10mm, 2 Clipseach PELCO SEMClip™ M4 Cylinder Mount, Ø32 x 10mm, 3 Clipseach
16356-20	PELCO SEMClip™ M4 Cylinder Mount, Ø25 x 16mm, Double 90°, 2 Clips each
16241	PELCO SEMClip™ M4 Mount, 12 x 12 x 14mm, 90°, 4 Clipseach
15349-10	PELCO SEMClip™ on Compact Variable Tilt M4 Mount 0-90°, Table Size 11 x 14mm, Overall Size 14 x 14.3 x 14.5mm, 1 Clip
16357-20	PELCO SEMClip™ M4 Cylinder Mount, Ø25 x 16mm, 45/90°, 2 Clips each



PELCO SEMClip™ REPLACEMENT CLIPS & SCREWS

Made from a spring grade beryllium-copper alloy. Thickness of clip is 0.25 mm (0.01"), overall length is 12.7 mm (1/2"), width at tip is 1.6 mm (1/16"), hole diameter is 2.2 mm (0.087").

16399	PELCO SEMClip™ Clipspkg/10
16399-10	PELCO SEMClip™ Screws, Brass, M2 x 3mm Lengthpkg/10

SPECIMEN MOUNTS & HOLDERS FOR JEOL NEOSCOPE SEMS

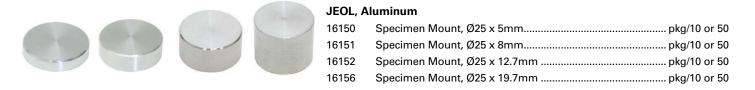
SPECIMEN MOUNTS FITTING THE NEOSCOPE STAGE ADAPTER KIT (Requires #15398 NeoScope Stage Adapter Kit)



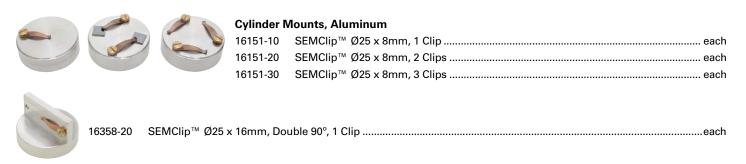
MOUNTS WITH ENGRAVED & NUMBERED DIVISIONS



JEOL 25mm CYLINDER MOUNTS (Fit Standard NeoScope Sample Holder)



PELCO SEMClips[™] (Fit Standard NeoScope Sample Holder)





SINGLE M4 MOUNT STORAGE TUBE & MAILER

A 15mm diameter, M4 threaded mount can be protected and held securely in the cap (base) of the tube on an M4 screw. Suitable for Ø15mm mounts. Mounts are sold

separately. Inside dimension of clear tube: Ø21mm (0.83"), max sample height on stub is 20mm (0.79"). Outside dimensions are Ø23mm (0.9") with a height of 52mm (2.05"). Clear tube is made of polystyrene, cap is made of low density polyethylene (LDPE). Sold in packs of 10.

16630-4 Single Mount Storage Mailer, M4.....pkg/10



PELCO® 10 SEM MOUNT STORAGE HOLDER & BOX

Versatile storage box and holder for SEM mounts with M4 threaded hole in the base. Tapered plastic posts allow easy storage and retrieval. Numbered 1 – 10 to accommodate Hitachi mounts from 15 to 32mm diameter. Can hold 10 of the 15mm mounts, 8 of the 25mm or 2 of the 32mm with enough space

to place and remove the mounts. Maximum specimen height for 6mm high Hitachi SEM mounts is 15mm with closed lid.

16791 PELCO® SEM Storage Box and Holdereach



PELCO® X-TREME 10 SEM MOUNT STORAGE BOX WITH HOLDER

Very strong and rugged clear polycarbonate box to store standard SEM mounts with M4 threaded hole in the base. This box is watertight, crushproof and dustproof. The strong hinges, locking clasps and

O-ring seal makes this an ideal transport, shipping and storage box for SEM samples on pin mounts. The holder insert is numbered 1-10 and accommodates Hitachi SEM mounts from 15-32 mm diameter. Same storage capacity as Product No. 16791 above.

16795 PELCO® X-TREME SEM Storage Box w/ Holdereach



PELCO TABS™ CARBON CONDUCTIVE TABS, DOUBLE COATED

The simplicity of application and smooth, clean surfaces of PELCO Tabs™ Carbon Conductive Tabs are a significant improvement compared to many of the other common adhesives that have been used in SEM mounting.

Both tab sides have a thick conductive adhesive (conductive inner tab is 35µm and the adhesive is 45µm on each side for a total thickness of 125µm [5 mils]) with a liner on both sides, a transparent liner and white liner respectively. They are ready for immediate use. The top protective liner does not have to be removed until the sample is ready to be mounted. This reduces possible contamination. Outgassing is negligible.

The conductive adhesive is a carbon filled acrylic, free of solvents. It can be removed from the specimen mount with ethyl acetate, ethanol, isopropanol, alcohols or our 3M™ Adhesive Remover 80924 which is solvent-free. Temperature maximum is 60°C (140°F). High purity carbon tabs may contain very small impurities of Al and Si.

16084-1	PELCO Tabs™, 12mm OD	pkg/100
16084-2	PELCO Tabs™, 25mm OD	pkg/54



CARBON CONDUCTIVE TAPE, DOUBLE COATED

These carbon tapes are conductive and may be used conveniently for SEM or EDS applications. Same material as the PELCO Tabs™, Carbon Conductive Tabs. The purity of this tape is identical

to the PELCO Tabs™; only very small impurities of Al and Si may be found.

Both sides of the tape have a thick conductive adhesive (conductive inner film is 35µm and the adhesive is 45µm on each side for a total of 125µm [5 mils]) with a white liner. The double adhesive and conductive design permits quick mounting of samples without using liquid or colloidal adhesives.

Relatively solid and non-porous; does not absorb small samples. Thickness is 0.16mm. Can be used down to -20°C (-4°F) and temperature max. is 60°C (140°F). Available in 8, 12, 20, 25, and 50mm W x 20m L (.31, .47, .79, .98, and 1.96" x 21.8 yd). Core diameter is 76mm (3"). SEM mounts not included.

16073	Carbon Tape, 8mm W x 20m L	each
16073-1	Carbon Tape, 12mm W x 20m L	each
16073-2	Carbon Tape, 20mm W x 20m L	each
16073-4	Carbon Tape, 25mm W x 20m L	each
16073-3	Carbon Tape, 50mm W x 20m L	each



3M™ COPPER CONDUCTIVE TAPE, SINGLE ADHESIVE SURFACE

The tape is easily cut to size and may be quickly applied to a specimen mount or other surface. Carbon or metallic coating normally is applied to the sample and mount. An electrical discharge bridge is then completed from sample, through the copper and its conductive adhesive

to the grounded specimen mount.

The tape is dead soft copper with a conductive acrylic adhesive. It is supplied on a removable liner for easy handling and cutting. The tape offers excellent conductivity through the foil backing. **For Sale in US Only**.

16072	3M™ Copper Conductive Tape, 6.3mm W x 16.46m L (1/4" x
	18 yd)each
16072-1	3M [™] Copper Conductive Tape, 12.7mm W x 16.46m L (1/2" x
	10 vd\

SPECIMEN MOUNTS & HOLDERS FOR JEOL NEOSCOPE DESKTOP SEMS





PELCO® CYLINDER MOUNT GRIPPERS

Stainless Steel, tweezer style grippers with a convenient angle for easy handling and transporting of many types of SEM cylinder mounts. Size ranges from 10-32mm dia., for JEOL, Hitachi, and ISI/ABT/Topcon mounts.

1666	PELCO® Cylinder Mount Gripper for Ø15mm, 140mm L eac	ch
1659-25	PELCO® Cylinder Mount Gripper for Ø25mm, 153mm L eac	ch
1659-32	PELCO® Cylinder Mount Gripper for Ø32mm 154mm L	٦h



PELCO[®] CONDUCTIVE CARBON GLUE

Conductive carbon glue with an acrylic binder. The acrylic binder provides a much stronger bond than water or isopropanol based carbon paints. This carbon glue forms a thin, conductive and flexible layer with excellent adhesion on a wide variety of substrates. Ideally suited for conductive bonding or conductive painting where a strong bond and good conductivity is required. Let air dry or speed up heating up to max. 65°C (149°F). Supplied in a bottle

with a brush, 30g. Acetone (#16023) can be used as thinner/extender or as a cleaner to remove the carbon glue.

- Service Temperature: -40°C to +120°C (-40°F to +248°F)
- Solid Contents (graphite and carbon black): 39%
- Binder: Acrylic
- Carrier: Acetone based
- Sheet resistance: 47 ohm/sq

16050	PELCO® Conductive Carbon Glue, 30g each
16023	Acetone, Thinner/Extended/Cleaner, 30ml each

PELCO® CONDUCTIVE GRAPHITE PAINT

Conductive graphite paint is ideal for mounting conductive and non-conductive SEM specimens on stubs. Non-conductive specimens may require additional conductive paths. Supplied with convenient applicator brush in cap.



PELCO® Water Based Graphite Paint

Water based graphite paint contains no hydrocarbons as solvents and will give less contamination in high vacuum. Good choice for mounting samples for FE-SEM applications. Flat surface texture. Average flake size 1µm. Service temperature: 149°C.

16051 PELCO® Conductive Graphite Paint, Water Base, 50g.....each



PELCO® Isopropanol Based Graphite Paint

Conductive graphite paint, also known as carbon cement, primarily designed for SEM sample preparation. The graphite flakes, with an average size of 1µm, are bonded by a cellulose resin with isopropa-

nol as diluent. Good bonding properties on most materials. Graphite content is 20%. Ideal to mount samples on sample stubs or to make a conductive path to the sample surface. Let fully dry before using in the SEM. Maximum service temperature: 200° C. Use Graphite Paint Thinner/Extender (#16054) to dilute when needed.

16053	PELCO® Conductive Graphite Paint, Isopropanol
	Base, 30geach
16053-20	PELCO® Conductive Graphite Paint, Isopropanol
	Base, Squeeze Bottle, 20geach
16054	Graphite Paint Thinner/Extender, 30mleach

FOR PRODUCT DETAILS AND COMPLETE SELECTIONS

www.tedpella.com

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