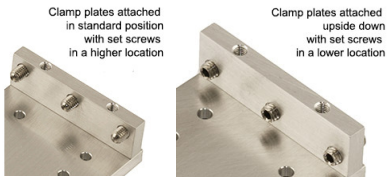
Additional Clamping Jaws for Large Versatile Specimen Clamps

S704

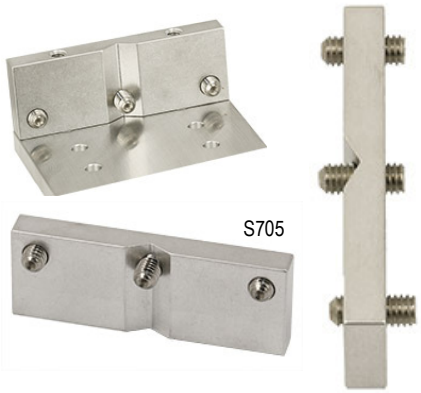
S704 VC12 standard vice jaw plate 12 x 44 x 5mm incl. set screws.

The vice jaw plates can be mounted either way to optimise the height of the clamping screws. When the plates are attached in the standard position, the clamping screws are in a higher position. Attach the plates upside down, and the clamping screw will be in a lower position.
Multiple vice clamps can be used on one vice base plate. The jaw plates can be mounted on the base plate at 10mm intervals maximise sample size compatibility.



S705 VC16 grooved jaw plate 16 x 44 x 5mm incl. set screws

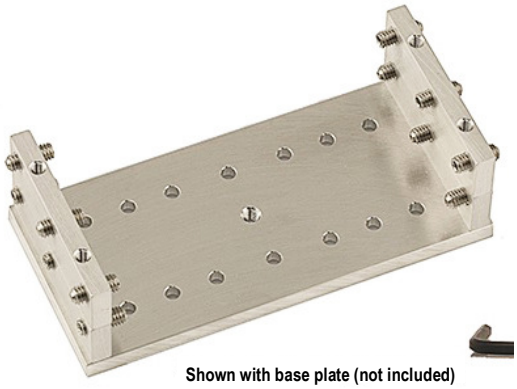
The grooved vice clamping plates can be mounted either way to optimise the height of the clamping screws. When the grooved vice clamping plates are attached in the standard position, the clamping screws are in a higher position. Attach the grooved clamping plates upside down and the clamping screw will be in a lower position.
Multiple vice clamping plates can be used on one vice base plate. The vice clamping plates can be mounted on the base plate in 10mm intervals to maximise sample size.



S705

S706 VH12 height extension clamping plate for VC12 with mounting screws, incl. set screws

S706



Shown with base plate (not included)

Height extension vice clamp with 12mm height and 3 set screws. Can be mounted op top of the standard or grooved vice clamps to increase the clamp height to 24 or even 30mm. The vice clamps can be mounted either way to optimize the height of the set screws.

New Range of Swivel/Tilt Sample Holders

A new range of swivel tilt sample holders which enable the clamping of small and thin samples has been added to the existing selection. These swivel/tilt holders allow for quick and easy tilting in both directions. The full range of the swivel/tilt holders are available for pin stub holders, Hitachi SEMs with M4 thread and JEOL SEMs with a 12.2mm stub holder. Ideal for adding tilt facilities to table top SEMs.

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Mini Swivel SEM Vice Holders ± 90°

For up to 4mm Ø Samples

S713 Mini aluminium swivel/tilt holder for up to 4mm sample std pin stub
S714 Mini aluminium swivel/tilt holder for up to 4mm sample JEOL 12.2mm Ø mount
S715 Mini aluminium swivel/tilt holder for up to 4mm sample Hitachi M4 mount

For up to 8mm Samples

S716 Mini aluminium swivel/tilt holder for up to 8mm sample std pin stub
S717 Mini aluminium swivel/tilt holder for up to 8mm sample JEOL 12.2mm Ø mount
S718 Mini aluminium swivel/tilt holder for up to 8mm sample Hitachi M4 mount

For up to 16mm Samples

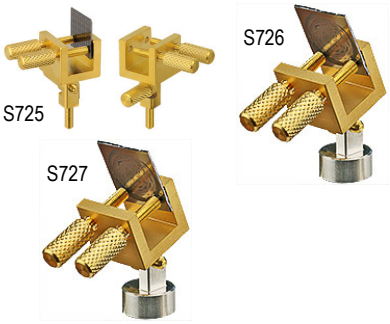
S719 Mini aluminium swivel/tilt holder for up to 16mm sample std pin stub
S720 Mini aluminium swivel/tilt holder for up to 16mm sample JEOL 12.2mm Ø mount
S721 Mini aluminium swivel/tilt holder for up to 16mm sample Hitachi M4 mount

Swivel Mount Adaptors

S722 Aluminium swivel mount pin adaptor for M4 stub
S723 Aluminium swivel mount adaptor for M4 to M4 stub
S724 Aluminium swivel mount adaptor for JEOL 12.2mm Ø to M4 stub

Gold Plated Brass Swivel 10mm Clamping Mounts

Swivel vice GS10 is for larger samples and cross sections from 0-10mm; also allows mounting two cross sections at the time. This is the ultimate holder for imaging cross sections at any desired angle. The swivel head size without clamping screws is only 16 x16 x 14mm. The sample is clamped with the two clamping screws; the swivel head can be locked in place with the tilt clamping screw. Made from gold plated brass. Also available as HG10 for Hitachi SEM and JG10 for JEOL SEMs.



S725 Gold plated swivel mount sample holder for up to 10mm on pin base
S726 Gold plated swivel mount sample holder for up to 10mm on M4 base
S727 Gold plated swivel sample holder for up to 10mm on 12.2mm Ø JEOL base

Versatile 360°/90° off-set sample holder and 90° Quick-Flip holders

90° sample holder and 90° quick-flip kits

These allow the imaging of samples and samples mounted on stubs directly under 90° tilt w/o disturbing background. The 90° sample holder kit has a low profile and small volume to reduce interference with detectors. With the 90° pre-tilt there is no need to tilt the SEM stage (which often runs into limitations on high tilt angles); the 90° sample holder kit avoids those limitations. The 90° mounted stub or sample can be easily rotated in the 90° block to enable quick changes of viewing angles.

Off-set strip

The off-set strip brings the 90° holder away from the centre of the stage. As a result, a sample or sample stub mounted at 90° is positioned closer to the centre of the stage. This allows for easy rotation of the sample (in the X-Y plane). Also very useful for table-top SEMs which have been configured with simple sample stages lacking tilt and rotation.

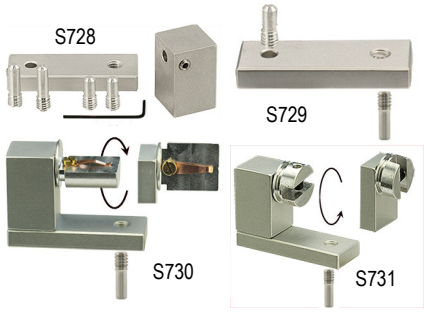
90° sample imaging

An additional feature of the 90° holder is the ability to accept a needle with a shaft diameter up to 3.2mm. Samples can be mounted on the needle and easily imaged from different angles by manually rotating the needle in the holder. Due to the long distance from sample to sample stage, there are little or no disturbing background features. To fully reduce background signal, you could place a silicon wafer or carbon disc on the off-set strip directly underneath the sample. The vertical distance to the centre of the stub connection is 16mm which makes this holder kit compatible with pin stubs and Hitachi M4 stubs up to 32mm diameter.

360°/90° offset sample holder kit items and configurations

This kit is truly versatile and fully compatible with all standard SEMs such as FEI and Tescan, Zeiss SEMs with short pin, Hitachi SEMs and with the most SEM stage adapters. For use on JEOL SEMs, a JEOL pin stub adapter needs to be used. It can be used in a large variety of configurations. Overall size of the compact 360°/90° offset sample holder is only 36x25x12.7mm.
Off-set sample strip dimensions are: 36x12.7x5mm. 90° sample holder post dimensions are: 12.7x12.7x20mm

SEM, TEM, STM Supplies



360°/90° Off-Set Sample Holders cont..

S728 PH90 versatile off-set and 90° sample holder kit
S729 PH23 versatile *off-set strip only*, compatible with pin & M4
S730 PH91 Quick-Flip S-Clip 90° sample holder kit for pin & M4 for Si chips & thin samples
S731 PH92 Quick-Flip mini vice clamp 90° sample holder for pin & M4 samples up to 4mm
S732 PH93 Quick-Flip for thin samples and & samples up to 8mm thickness for pin & M4
S733 PH94 Quick-Flip for samples up to 16mm thickness for pin & M4

Quadruple Vice Holder

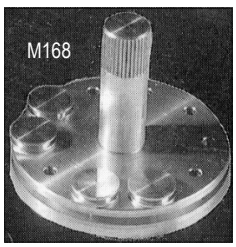
S734 Pin stub vice holder type PS44 for up to 4 samples 0-4mm in size

STEM Imaging Holder

The STEM imaging holder is a cost effective method of adding STEM capabilities to your SEM at a fraction of the cost of a dedicated STEM holder and detector. The holder provides a genuine signal from the converted transmitted electrons, resulting in high contrast STEM imaging. The limiting factors are sample thickness and the accelerating voltage of the SEM.
The height of the holder is is 29.5mm; with the electron absorption sleeve this increases to 37.5mm

The ST1 STEM imaging holder facilitates STEM imaging of TEM samples in an SEM or FESEM. The holder uses the Everhart-Thornley SE detector in the SEM chamber. The TEM grid is placed in the STEM imaging holder and the holder is positioned under the electron beam (typically in the centre of the SEM stage). The TEM sample is scanned with the electron beam and the STEM image is formed by converting the transmitted electrons, which hit the platinum conversion plate, into secondary electrons. The secondary electrons (holding the STEM image information) are collected by the SE detector in the sample chamber. It is advised to use high accelerating voltages (25-30kV) and thin samples to increase the transmitted electron signal. The STEM imaging detector is provided with a black conductive plastic electron absorption sleeve which is placed between the pole piece and the ST1 STEM imaging holder. The sleeve absorbs the secondary and backscattered electrons emitting from the sample surface.
Constructed from vacuum grade aluminium, brass TEM grid holder, platinum electron conversion plate and conductive plastic sleeve. Platinum is used for the conversation due to its high secondary electron signal, stability and corrosion resistance.

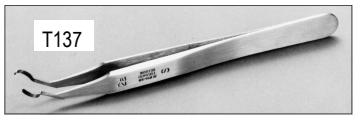
S735 ST1 Stem Imaging holder for 1 x 3mm grid on standard 3.2mm pin base
S736 ST1 Stem Imaging holder for 1 x 3mm grid on M4 thread base

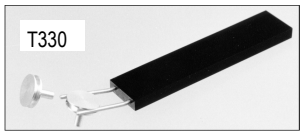


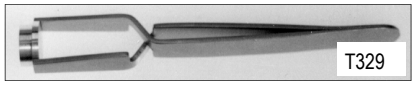
Preparation Stand for SEM Specimens

A cylindrical aluminium block for holding up to 10 specimen mounts for attachment of, or manipulation of samples. A rubber 'O' ring retains the mounts.

M168	Mounting block - pin stubs	each
M169	Mounting block - 10mm cylinders	each







Tweezers for Stubs

Tweezers specially designed for handling **½" specimen stubs** commonly used in SEM.

T137	Tweezer for ½" stubs	each
T330	SEM stub handling tool - A simple robust tool to fit 12.5mm pin stubs as an alternative to T137 suitably angled to allow convenient handling of the stubs in confined areas. The beryllium copper prongs allow a firm grip to be repeatedly achieved without loss of spring tension.	

Tweezer for Hitachi Stubs

T329	Special tweezer for handling 15mm Ø Hitachi stubs	each

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