

## Compact & Universal Vice Type SEM Sample Holders

Vice type sample holders with a [standard pin](#) or [M4 threaded](#) hole are quick and easy to use holding the sample by clamping it between the moving jaws. They are especially useful when similar samples or a series of the same sample need to be examined. A vice clamps the sample and provides the rigidity needed for high resolution imaging and is a better alternative to adhesives or glue. All Vice clamps are made from vacuum grade aluminium. Currently available items are:

- 1) Compact cost-effective vice sample holder for sample sizes up to 22mm using one fixed jaw and a spindle driven moving jaw. Can be used in both standard and table top SEMs. Brass spindle and stainless steel screws.
- 2) Single action spring-loaded vice for samples with a maximum clamping size of 12mm. The vice is opened by pushing the moving jaw with a push rod. The rod can be removed when the holder is loaded in the SEM. Dowel pins can be inserted in the fixed and moving jaws to increase the opening to a sample size up to 18mm diameter or to hold awkwardly shaped samples; 4 dowel pins are included. Stainless steel rods and springs.
- 3) Compact double action spring-loaded vice for samples with a maximum clamping size of 26mm. Due to the double sided spring, this vice acts as a centring vice. The jaws are opened by push rods which can be removed when the sample holder is loaded in the SEM. Dowel pins can be inserted in the jaws to increase the opening to a sample size up to 34mm diameter or to hold irregular shaped samples; 4 dowel pins are included. Stainless steel rods and springs.
- 4) Universal double sided spring-loaded larger vice for samples with a maximum size of 42mm. Different types of jaws can be mounted on this universal vice. Opens by pulling the jaws. Dowel pins can be inserted in the brass slider to extend the opening size and to hold awkwardly shaped samples. With the dowel pins a disc of up 50mm diameter can be held; 4 dowel pins are included. Includes triple grooved/smooth vice jaws. Additional optionally available vice jaws are:

**Jaw** with a single 120° large groove for round samples

**Standard jaw** with triple grooved/smooth side. vice jaws can be stacked to increase the jaw height from 12 to 24mm. Brass sliders and stainless steel rods and springs.

**S476 Pin** Vice clamp - includes a 2.5mm Allen key to operate the spindle screw for opening and closing this compact clamp for samples up to **22mm Ø**. Very thin samples can be securely held in this holder. For delicate samples, consider lining the jaws with conductive soft material.

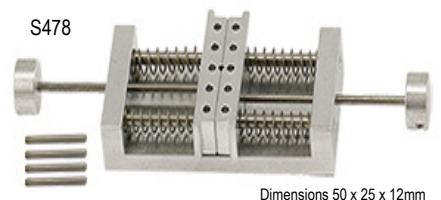
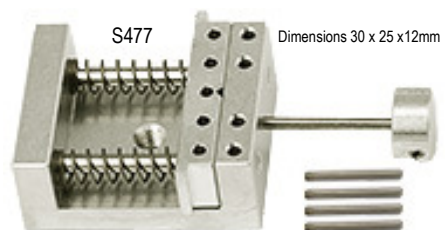
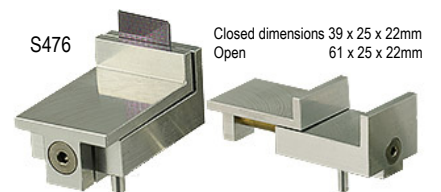
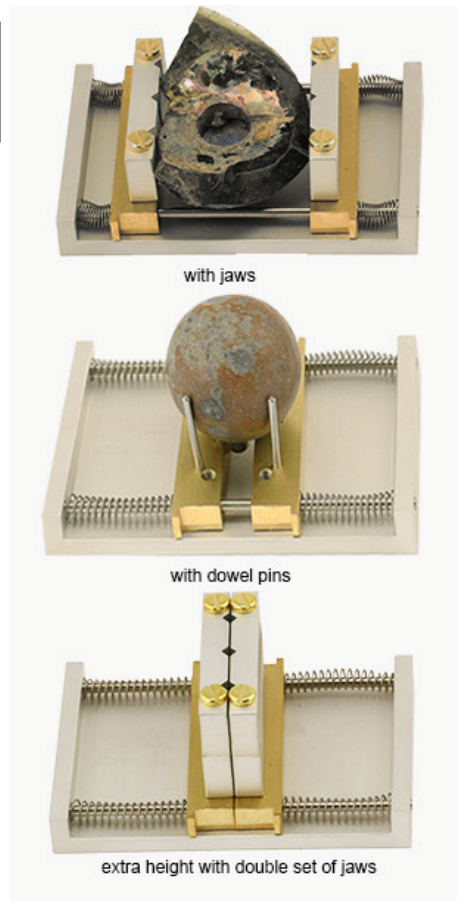
**S476/1** As S476 but with [M4](#) threaded hole

**S477 Pin** single action spring-loaded vice clamp includes one removable push rod and four dowel pins which fit into the top of the jaws. The maximum clamping capacity between the vice jaws is **12mm**.

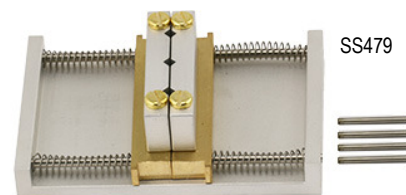
**S477/1** As S477 but with [M4](#) threaded hole

**S478 Pin** Dual action spring-loaded vice clamp includes two removable push rods and four dowel pins which fit into the top of the jaws. The maximum clamping capacity between the vice jaws is **26mm**.

**S478/1** As S478 with [M4](#) threaded hole



**S479** Pin base dual action spring-loaded vice clamp includes two removable push rods and four dowel pins which fit into the top of the jaws. The maximum clamping capacity between the jaws is **42mm**. The aluminium vice plates have reversible jaws with a smooth side and a side with three small grooves. The grooves are more suitable for small round samples or to hold samples with a rough sides. Maximum sample capacity between dowel pins is **50mm**.



Dimensions 76 x 51 x 26mm

**S479/1** As S479 with **M4** threaded hole

**S479/T** Standard triple groove/smooth vice jaw, 12 x 40 x 6mm, each



**S479/S** Single large groove/smooth vice jaw, 12 x 40 x 6mm, each



**Conductive soft jaw lining kit for vice type SEM sample holders** Comprises a conductive neoprene rubber sheet with a conductive adhesive layer on one side. It is intended to hold more delicate samples and to prevent damage to sensitive surfaces. The conductive medium soft rubber provides both a soft grip and a path to earth. This kit has been designed for use on all vice type holders. It comes as one piece and can be cut to size as required. After use it can be easily replaced or removed from the vice jaws (use acetone/isopropanol for cleaning). Supplied as a sheet which holds enough material to cut 5-6 sets of soft jaw linings.



**S480** Conductive soft jaw lining kit for vice type SEM sample holders, 50x120mm sheet

