

# **Technical Support Bulletin**

# EM-Tec MV22 combined compact vise and multipin stub sample holder

Products #12-000201 and #12-000301



# Description

The EM-Tec MV22 is a combination of the a compact vise holders and a multi pin stub holder up to 5 pin stubs. The EM-Tec MV22 compact vise clamp includes a knurled brass knob to move the spindle screw for opening and closing this compact vise clamp. The moving jaw can be used as a multi-pin stub holder for up to 5 pin stubs. Available with either the standard 3.2mm pin or an M4 threaded hole for mounting on the SEM sample stage or on an EM-Tec SEM stage adapter.

# Operation of the compact vise sample holder

Consider wearing gloves to avoid contamination.

- To open the EM-Tec V22 compact vise type holder, rotate the knurled brass knob at the front of the holder. Turning the knurled brass knob anti-clockwise will open the jaws; the moving jaw moves towards the back.
- Place the sample in the opening (up to 22mm).
- To close the jaws, turn the knurled brass knob clockwise and clamp the sample. Be careful not to overtighten the screw.

Even very thin samples can be securely held in the EM-Tec V22 compact vise type sample holder. For delicate samples, consider lining the jaws with EM-Tec conductive soft jaw lining kit; #12-003207.

## Operation of the multi pin stub holder

- Completely close the vise part to stabilise the multi pin stub holder part
- Place the pin stubs in the holes at the top; compatible with both standard pin stubs and Zeiss pin stubs
- Capacity is either 5 pin stubs of 12.7mm  $(1/2^{"})$  or a single larger pin stub.

## **Specifications**

Maximum clamping capacity between vise jaws: 22mm Capacity of multi pin stub part: 5 x Ø12.7mm/ 2 x Ø25.4mm / 1 x Ø32mm (or larger) Dimensions closed (w/o pin): 39 x 25 x 22mm Dimensions fully opened (w/o pin): 61 x 25 x 22mm SEM stage compatibility - standard pin: #12-000201 - EM-Tec stage adapters M4: #12-000301 - Hitachi M4 #12-000301

Material for compact vise type holder: Material for spindle:



Vacuum grade aluminium Low friction brass

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Materials for screws:

Anti-magnetic stainless steel

#### Maintenance

The EM-Tec MV22 compact vise clamp is maintenance free. Do not use oil or grease on the screw or brass spindle; this will cause contamination in the SEM. Do not allow debris to accumulate underneath the sliding vise jaw.

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