



## EM-Tec versatile vise clamp SEM sample holders

Products #12-000203, #12-000303, #12-000205 and #12-000305



### Description

The EM-Tec V80 and V120 versatile vise clamp SEM sample holders are large bulk vise clamp holders with re-positionable vise clamp plates. The clamping capacity varies from 1-80mm or 1-120mm respectively. Instead of purchasing multiple U-shaped bulk clamp holders in different sizes, the EM-Tec versatile vise clamps allows for a range of different sizes and even for multiple samples. Available with either the standard 3.2mm pin or an M4 threaded hole for mounting on the SEM sample stage.

### Operation

Consider wearing gloves to avoid contamination. The EM-Tec V80 and V120 versatile vise clamps include re-positionable vise clamp plates at each side. The EM-Tec versatile vise clamps come fully assembled with the vise clamp plates at the widest opening. The vise plates are attached to the base plate by two brass M3x10mm flat head slotted screws. The base plate contains two rows of holes which allows for mount the vise clamp plates at 10/20/30/40/50/60/70 and 80mm and 10/20/30/40/50/60/70/80/90/100/110 and 120mm respectively.



- Estimate the sample size to clamp in the holder.
- Turn the allen screws outwards in the vise clamp plate
- Position and mount the vise clamp plates at the next available positions. (i.e. 60mm when a sample is about 50mm.)
- Place the sample in the opening.
- To hold the sample, gently tighten the allen screws in

both vise clamp plates. Do not over tighten.

- For holding round sample we suggest to purchase the VC16 grooved vise clamp plate and use the groove to stabilise the round sample when clamping from the other side.
- For multiple smaller samples, purchase additional vise clamp plates to mount multiple specimens.



Optional vise jaws are available for large round samples. By using longer M3 screws, the vise jaws can be stacked to double the jaw height from 12 to 24mm. Even very thin samples can be securely held in the EM-Tec CV1 large centering vise sample holder. For delicate samples, consider lining the jaws with conductive soft material.

## Options



- |           |                                                                         |
|-----------|-------------------------------------------------------------------------|
| 12-000204 | EM-Tec VC12 standard smooth vise clamp plate, 12x44x5mm, each           |
| 12-000206 | EM-Tec VC16 grooved vise clamp plate, 16x44x5mm, each                   |
| 12-000207 | EM-Tec VH12 height extension vise clamp plate for VC12, 12x44x5mm, each |

## Specifications

Maximum clamping capacity of V80:	80mm
Maximum clamping capacity of V1200:	120mm
Dimensions of V80:	93 x 44 x 16.5mm
Dimensions of V120:	133 x 44 x 16.5mm
SEM stage compatibility - standard pin:	#12-000203 and #12-000205
- EM-Tec stage adapters M4:	#12-000303 and #12-000305
- Hitachi M4	#12-000303 and #12-000305
Material for vise plates, jaws and screw plates:	Vacuum grade aluminium
Materials for screws:	Brass and anti-magnetic stainless steel

## Maintenance

The EM-Tec V80 and V120 versatile vise clamps are maintenance free. Keep them clean to avoid contamination. In case of hydrocarbon build up, they can be cleaned in an UV cleaner or low power plasma cleaner.

