

## EM-Tec VS42 universal spring-loaded vise

Products #12-000220 and #12-000320



### Description

The EM-Tec VS42 universal spring-loaded vise clamp includes two reversible vise plates and four dowel pins which fit into the top of the brass sliding bar. The maximum clamping capacity between the vise jaws is 42mm. 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.

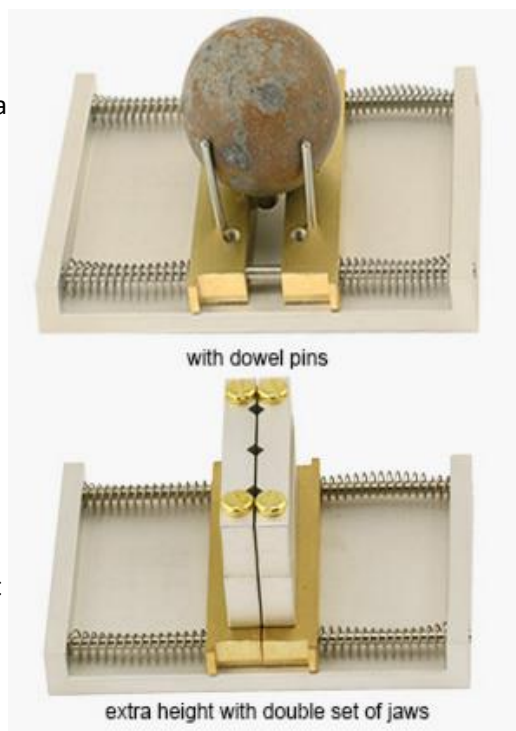
- To open the EM-Tec universal spring-loaded vise clamp, pull on the side of the brass sliding bars.
- Place the sample between the vise jaws and gently release the sliding bars.
- The tension on the 4 springs will hold the sample between the jaws in the middle of the holder.
- The universal spring-loaded vice clamp acts as a centering vise.

The aluminium vise plates are mounted on the brass sliding bars with brass M3 screws. The reversible vise jaws comprise a smooth side and a side with three small grooves. The grooves are more suitable for small round samples or to hold sample with a rough side.

For awkwardly shaped samples, the vise jaws can be removed and 4 dowel pins can be inserted in the brass sliding bar to clamp the sample between the 4 dowel pins.

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.

For samples which are thinner than 1mm, an alternative vise type holder with a screw should be considered. The spring tension is weaker when the jaws are (nearly) closed. For delicate samples, consider lining the jaws with conductive soft material.



## Optional vise plates



- 12-003204 EM-Tec CVC1 standard triple groove/smooth vise jaw, 12x40x6mm, each  
12-003205 EM-Tec CVC2 single large groove/smooth vise jaw, 12x40x6mm, each

## Specifications

Maximum clamping capacity between vise jaws:	42mm
Maximum clamping capacity between dowel pins:	50mm diameter
Dimensions (w/o pin):	76 x 51 x 26mm
SEM stage compatibility - standard pin:	#12-000220
- EM-Tec stage adapters M4:	#12-000320
- Hitachi M4	#12-000320
Material for vise plate and vise jaws:	Vacuum grade aluminium
Material for sliding bars:	Low friction brass
Materials for guide rods:	Precision ground anti-magnetic stainless steel
Material for springs:	Low magnetic spring grade stainless steel
Material for dowel pins:	Precision ground anti-magnetic stainless steel

## Maintenance

The EM-Tec VS42 universal spring-loaded vise clamp is maintenance free. Do not use oil or grease on the guide rods; this will cause contamination in the SEM. Do not allow debris to enter the holes for the guide rods of the sliding bars.

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