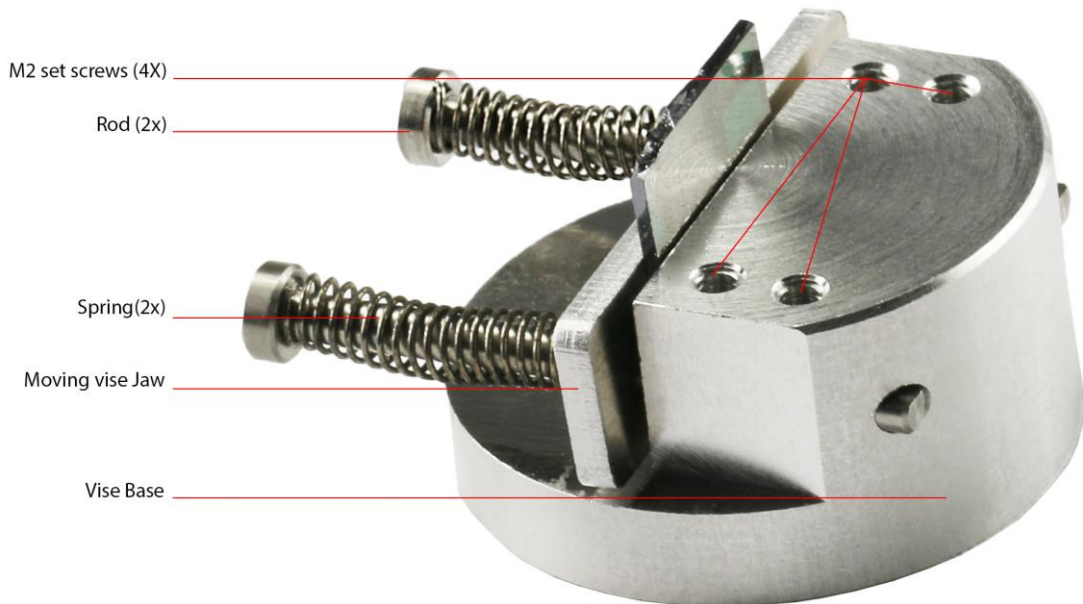




EM-Tec VS8 mini spring-loaded SEM sample vise

Products [#12-002228](#) and [#12-003228](#)



Description

The EM-Tec VS8 spring-loaded vise clamp consists of a vise base of $\varnothing 25\text{mm} \times 12\text{mm H}$, a moving vise jaw and two rods with springs to close the jaw. The maximum clamping capacity between the vise jaws is 8mm. Available with either the standard 3.2 \varnothing mm 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 VS8 mini spring-loaded vise clamp, pull the moving vise jaw against the springs. Place the sample between the vise jaws and gently release the moving vise jaw. The tension on the 2 springs will hold the sample between the moving and the fixed jaw. The sample can be off center in this holder. The EM-Tec VS8 mini spring-loaded vise has been designed to hold thin samples; in the fully closed position there is approx. 200 gram force per spring.

Reducing the spring force

To reduce the spring force, the springs can be shortened; this will also allow for thicker samples. To shorten the spring, the holder needs to be disassembled and assembled:

1. Hold the EM-Tec VS8 holder in the palm of your hand and block both rods
2. Loosen the 2 x M2 set screws on one rod by approx. 1.5 turns, whilst blocking the rod
3. Allow the spring to release the spring tension slowly by opening your hand
4. Remove rod and spring
5. Repeat steps 1-4 for the other rod
6. Remove moving vise jaw
7. Shorten both springs by as needed by cutting the spring wire; springs must be of equal lengths
8. Assemble by placing the moving vise jaw against the vise base with the two holes lined up.



9. Place the spring on one rod and insert rod in hole with flat side towards the screws, push until rod is completely in the vise base; tighten the two M2 sets screws
10. Repeat 9 for the other spring and rod.

Specifications

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| Maximum clamping capacity between vise jaws: | 8mm |
| Dimensions (w/o pin): | Ø25 x 30 x 12.5mm |
| SEM stage compatibility - standard pin: | #12-002228 |
| - EM-Tec stage adapters M4: | #12-003228 |
| - Hitachi M4 | #12-003228 |

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| Material for vise base and vise jaw: | Vacuum grade aluminium |
| Materials for guide rods: | Precision ground anti-magnetic stainless steel |
| Material for springs: | Low magnetic spring grade stainless steel |
| Material for screws: | Low magnetic grade stainless steel |

Maintenance

The EM-Tec VS8 mini spring-loaded vise clamp is maintenance free. Do not use oil or grease on the guide rods or the push rods; this will cause contamination in the SEM. Do not allow debris to enter the holes for the guide rods of the moving vise jaw.

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