

EM-Tec versatile off-set strip and 90 degrees sample holder kit

[Product # 12-000266](#)

Introduction

The EM-Tec versatile off-set and 90 degrees sample holder kit is a sophisticated, yet easy to use cost effective SEM holder to further extend the use of Scanning Electron Microscopes. It has been designed to cover multiple applications:

- offset sample stub mounting (allows larger samples to be imaged on smaller stages)
- 90 degree sample mounting to view samples from the side
- 90 degree sample mounting on stages w/o tilt
- 90 degrees needle mounting of samples on needles or needle probes
- compatible with both pin stubs and Hitachi M4 sample stubs.

EM-Tec versatile off-set and 90 degrees sample holders kit items

The EM-Tec versatile off-set and 90 degrees sample holder comprises the following items:

1. 1 x 12-000366 off-set strip with 23mm off-set distance
2. 1 x 12-000367 90 degrees sample holder block
3. 2 x 11-000116 short pin stub to M4 adapter
4. 2 x 11-000119 standard pin stub to M4 adapter

Off-set strip advantages

The off-set strip brings the a sample on a pin stubs or a Hitachi stubs 23mm away from the centre of the SEM stage. This will enable larger sample to be imaged on smaller SEM stages by moving the middle to the edge and bringing the side of the larger sample in the centre of the stages. Particularly useful on Hitachi and JEOL table top SEMs.

Off-set strip for 90 degrees imaging

The off-set strip brings the 90 degrees holder away from the centre of the sample stage, so when a sample or sample stub is mounted at 90 degrees, the sample is closer to the center which allows for easy rotation of the sample (in the X-Y plane). Also very useful for table-top SEMs which have been configured with simple sample stages lacking tilt and rotation.

90 Degrees sample imaging advantages

An additional feature of the 90 degrees holder is the ability to accept a needle with a shaft diameter up to 3.2mm. Samples can be mounted on the needle and easily imaged form different angles by manually rotating the needle in the holder. Due to the long distance from sample to sample stage, there are hardly disturbing background features. To fully reduce background signal, you could place a silicon wafer or carbon disc on the off-set strip directly underneath the sample. The vertical distance to the center of the stub connection is 16mm which makes this holder kit compatible with pin stubs and Hitachi M4 stubs up to 32mm diameter.



1- 90 degrees holder for needle type samples
 2- 90 degrees holder for pin stubs
 3- 90 degrees holder for Hitachi stubs
 4- Off-set strip for Hitachi stubs
 5- Off-set strip for Hitachi stubs

EM-Tec off-set and 90 degrees sample holders kit configuration examples

The EM-Tec off-set and 90 degrees sample holder kit is truly versatile and fully compatible with all standard SEMs such as FEI and Tescan, Zeiss SEMs with short pin, Hitachi SEMs and with the EM-Tec SEM stage adapters system. For use on JEOL SEMs, a JEOL pin stub adapter needs to be used. It can be used in a large variety of configurations included (but not limited too):

1. off-set strip for pin stubs
2. off-set strip for pin stub holders
3. 90 degrees holder for pin stubs or pin stub holders with the off-set strip
4. 90 degrees holder for pin stubs w/o off-set strip
5. 90 degrees holder for needle type samples with a maximum diameter of 3.2mm
6. off-set strip for Hitachi stubs with M4 threaded hole
7. off-set strip for sample holders with M4 threaded hole
8. 90 degrees holder for Hitachi stubs or M4 threaded sample holders with the off-set strip
9. 90 degrees holder for Hitachi stubs w/o off-set strip
10. connect multiple kits together for longer off-set distances and different angles
11. etc.

Overall size of the compact EM-Tec versatile off-set and 90 degrees sample holder is only 36x25x12.7mm.

- Off-set sample strip dimensions are: 36x12.7x5mm.
- 90 degrees sample holder dimensions are: 12.7x12.7x20mm

The EM-Tec versatile off-set and 90 degrees holder kit is fully compatible with the following SEMs:

- SEMs using pin stubs; FEI, Philips, Tescan, Aspex, RJLee, AmRay, Cambridge Instruments, Leica, CamScan, ETEC and Novascan SEMs.
- Zeiss SEM and FIB systems
- Hitachi SEMs using M4 threaded screws
- EM-Tec SEM stage adapters with M4 screws
- JEOL SEM if a JEOL stub adapter with M4 screw is used

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