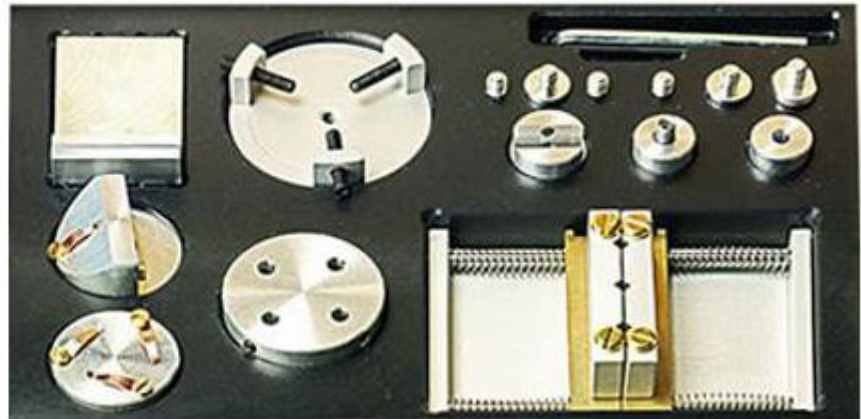




## EM-Tec U2 universal SEM sample holder and SEM stubs adapter kit

[Product #12-003399](#)



### Description

The EM-Tec U2 universal SEM sample holder and SEM stub adapter kit has been created to hold a wide variety of SEM samples up to 42mm. The samples can be flat, round, block or awkwardly shaped. Also included in this kit is a useful selection of SEM stub adapters which enables using this kit on virtually any SEM. Fully compatible with FEI/Philips, JEOL, Hitachi, Tescan, Zeiss/LEO and other brands of SEMs.

The selection of popular and practical EM-Tec SEM sample holders all include an M4 threaded hole. All are fully compatible with the SEM stub adapters provided in this universal sample holder kit and with Hitachi SEMs.

### Contents

The complete kit is presented in a high quality wooden box with all the SEM sample holder and adapters neatly arranged in a hard plastic insert. This kit can also be used to convert cylinder type SEM sample stubs up to 32mm diameter to fit other SEM brands.

#### The SEM sample holders included in the EM-Tec U2 universal kit are:

- [#12-000300](#) EM-Tec V22 compact vise clamp for samples 0-2mm, M4
- [#12-000306](#) EM-Tec H6 mini vise clamp, 0-6mm, M4
- [#12-000314](#) EM-tec P4 multi holder for 4 standard 12.7mm pin stubs, M4
- [#12-000320](#) EM-Tec VS42 universal spring-loaded vise holder for samples up to 42mm, M4
- [#12-000333](#) EM-Tec R32 bulk sample holder for up to Ø32mm samples, M4
- [#12-004920-3](#) EM-Tec S-Clip holder with 3 x S-Clips on a Ø25x10mm stub, M4
- [#12-004927](#) EM-Tec S-Clip holder with 2 x S-Clips on 45°/90° Ø25x16mm stub, M4

#### The SEM stub adapters included in the EM-Tec U2 universal kit are:

- [#11-000106](#) EM-Tec ZR4 short Zeiss pin stub adapter with support rim to M4
- [#11-000116](#) EM-Tec Z4 short Zeiss pin stub adapter to M4
- [#11-000109](#) EM-Tec PR4 standard pin stub adapter with support rim to M4
- [#11-000119](#)(2x) EM-Tec P4 standard pin stub adapter to M4
- [#11-000120](#) EM-Tec KR4 long pin stub adapter with support rim to M4
- [#11-000513](#) EM-Tec J12P JEOL Ø12.2mm stub adapter to pin
- [#11-000514](#) EM-Tec J12H JEOL Ø12.2mm stub adapter to M4



## Instructions on how to use the EM-Tec sample holders and stub adapters on different SEM brands

**FEI/Philips, Tescan, Leica, CamScan, Aspex, Cambridge Instruments SEMs:** Use the #11-000119 and #11-000109 standard pin stub adapters to convert any of the EM-Tec holder in this kit to a pin stub based sample holder. The M4 threaded top of these adapters can be screwed into the M4 threaded hole of the sample holders. Use the #12-000333 with pin adapter for JEOL cylinder stubs.

**JEOL SEMs:** Use the #11-000514 stub adapter with M4 screw to equip the EM-Tec sample holders in this kit with a  $\varnothing$ 12.2mm cylinder base. Virtually all JEOL SEMs include a holder for  $\varnothing$ 12.2mm sample stubs which can be used to hold the converted SEM holders. Hitachi stubs and sample holders can also be converted to  $\varnothing$ 12.2mm by using the #11-000514. The #11-00513 pin stub adapter can be used for holding pin stubs in a  $\varnothing$ 12.2mm stub holder. Note: the adapter arrangement for the JEOL SEMs increases the height of the SEM sample holder; please make sure the adapter arrangement is compatible with the available maximum sample height in your JEOL SEM.

**Hitachi SEMs:** The Hitachi SEMs include an M4 threaded screw on the sample stage; you can use all the included EM-Tec sample holders directly on your SEM. Use the #12-00314 multi pin stub holder for pin stubs. Use the #12-000333 bulk holder for JEOL cylinder stubs.

**Zeiss/LEO SEMs:** Use the #11-000116 and #11-000106 short Zeiss pin stub adapters to convert any of the EM-Tec holder in this kit to a Zeiss pin stub based sample holder. The M4 head of these adapters can be screwed into the M4 threaded hole of the sample holders. Use the #12-000333 with short Zeiss pin adapter for JEOL cylinder stubs.

**Amray, Keysight/Agilent SEMs:** Use the #11-000120 long pin stub adapter to convert any of the EM-Tec holder in this kit to a Zeiss pin stub based sample holder. The M4 head of these adapters can be screwed into the M4 threaded hole of the sample holders. Use the #12-000333 with pin adapter for JEOL cylinder stubs. There might be size limitations on the Keysight/Agilent sample stage.

## Maintenance

The EM-Tec U2 universal SEM sample holder and SEM stub adapter kit is maintenance free. Do not use oil or grease on the holders; this will cause contamination in the SEM. Avoid contamination with adhesives or glues on the holders. The SEM sample holders can be cleaned with a 50/50 solution of isopropanol and acetone.

**TSB 12-003399 EM-Tec U2 universal SEM sample holder and SEM stub adapter kit 2022-05-03 Revision 2**