



EM-Tec XL100 multi holder for 4 large stubs or 4 sample holders

[Products #12-000281 and #12-000381](#)



Description

The [EM-Tec XL100 multi holder](#) can hold up to 4 large SEM sample stubs or SEM sample holders up to 53mm diameter. The innovative X-shape design saves weight, enables easy loading but still covers an area of 100x100mm. At the centre of the EM-Tec XL holders an X-shape cross is engraved to assist determining the SEM stage X-Y travel directions. Each “leg” of the holder is identified with a number.

Capacity

Compatible large SEM sample stubs are:

- Standard pin stubs with 25.4, 32, 38 and 50mm diameter
- Zeiss short pin sample stubs with 25.4, 32, 38 and 50mm diameter
- Hitachi M4 threaded sample stubs with 25, 32 and 50mm diameter

Compatible EM-Tec SEM sample holders are:

- EM-Tec R32 and B26 bulk sample holders
- EM-Tec M26, M32 and M40 metallographic mount holders
- EM-Tec P4, P6 and P8 multi pin stub holders
- EM-Tec F25, F35 and F47 filter holders

Operation



- Check if the SEM stage allows the required sample area travel.
- Check if there is enough space in the SEM chamber to freely move around the loaded XL100 multi holder without touching anything in the SEM chamber
- Move the SEM stage to the center position
- Attach the EM-Tec XL multi holder on the SEM sample stage; use an appropriate SEM stage adapter if needed.
- Load the stubs/holders on the XL100 multi holder
 - Pin stubs/holders – place the pins in the selected hole and secure with M3 screw with the provided allen key driver
 - M4 threaded stubs/holders – screw the stubs/holders on the M4 screw. The holders can be rotated by loosening the M3 screw; adjust rotation of the stub/holder as needed and secure position with the provided allen key driver
- Note the position (1-4) of the stubs/holders on the EM-Tec XL100 multi holder
- Close the SEM chamber and pump down; due to the large total sample size, pump-down time might be longer
- Determine travel directions according to the engraved cross and the engraved numbering
- Analyse first sample and move to the next until all sample are finished
- Vent the SEM, remove stubs/holders and repeat procedure if needed.

Specifications

Maximum stubs/sample holder size:	Ø53mm
Maximum number of large stubs/sample holders:	4
Holding method – pin stubs/holders:	M3 set screws
- M4 threaded stubs/holders:	Rotable M4 screw adapters
Overall dimensions:	90 x 90 x10mm
SEM stage compatibility - standard pin:	#12-000281
- EM-Tec stage adapters M4:	#12-000381
- Hitachi M4	#12-000381
Material for XL100 holder:	Vacuum grade, stress-free cast aluminium

Maintenance

The EM-Tec XL100 large multi holder is maintenance free. Do not use oil or grease on this holder to prevent contamination. Avoid using adhesives on this holder. If needed this holder can be cleaned with a 50/50 solution of isopropanol/acetone.

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