

## General Description of Standard SEM Pin Stubs

The SEM pin stubs with 9.5mm pin length are the most widely used SEM sample stubs. The pin diameter for all these pin stubs is 3.2mm (1/8") diameter. They are used on FEI, Philips, Tescan, Phenom, Aspex, RJLee, AmRay, Cambridge Instruments, Leica, CamScan, ETEC and Novascan SEMs. Made from high quality, vacuum grade aluminum in different styles and sizes. The SEM pin stubs are manufactured according to original specifications for the pin stubs and enhanced for a variety of applications. The most common diameters are 12.7 and 25.4mm platform diameter. Most flat SEM pin stubs have the standard 3.2mm platform height and a groove for holding and handling. The following standard flat SEM pin stubs are available:

- **Flat SEM pin stubs**



- 6.4mm stub diameter
  - 9.5mm stub diameter
  - 12.7mm stub diameter
  - 12.7mm stub diameter with a flat side for marking or as a reference to relocate a sample position
  - 25mm stub diameter
  - 32mm stub diameter
  - 38mm stub diameter
  - 50mm stub diameter
  - 63mm stub diameter
  - 100mm stub diameter
- **Angled pin stubs** to quickly image a sample under 45° or 90° w/o tilting the sample stage:
    - 12.7mm stub diameter with 45° and 45/90°
    - 25mm diameter with 45°, 45/90°, double 45/90° and double 90°
  - **Flat pin stubs with extra height.** Useful for marking, shorter working distance or to make your own custom stubs. Available as:
    - 12.7mm diameter and 4mm extra height
    - 12.7mm diameter and 6mm extra height
    - 25.4mm diameter and 4mm extra height

- **Low profile 12.7 pin stubs** to enable very short working distances for high resolution SEM imaging and FIB operations. Flat, 90° and 38° pre-tilt (for FEI systems).
- **Engraved pin stubs** with lines and numbers for mounting multiple samples or for relocating a sample. Stub diameters are 12.7, 19, 25.4 and 32mm.
- **Dish cylinder stub** with 12.7mm stub diameter for sample preparation of solutions or fluids directly on the stub. The dish design prevents fluid from dripping of the stub. Sample can be dried on the SEM stub.
- **Cambridge S4 stub**, which is not a pin stub but used on many SEMs with pin stubs. A Cambridge S4 holder or **Cambridge S4 adapter** is needed for the Cambridge S4 stub.
- **SEM pin stub extenders** to quickly adjust height and bring samples closer to the pole piece.