The Focused Ion Beam (FIB) is a dual-beam system, meaning it has both an electron beam and an ion beam. It can therefore be used for high-resolution imaging (as in a SEM) and also as a tool to machine micron-scale test pieces into the surface of a sample.

It does this by bombardment with high-energy gallium ions, removing material via sputtering in a pattern defined by the user.

**TECHNICAL SPECIFICATIONS**

- Schottky thermal field-emission electron gun for high-resolution imaging
- Gallium ion source for milling, e.g. cantilevers for bend-testing, pillars for compression
- Large voltage range and probe current: Electron-beam: 200V - 30 kV, 0.7 pA - 22 nA; Ion-beam: 500V - 30 kV, 0.1 pA - 65 nA
- High precision 5-axes motorised stage, including the ability to tilt from -10° to +60°.