

## Hitachi S4700

Hitachi S4700 is intended for high resolution nondestructive SEM imaging. It is equipped with a GW Centaurus Backscatter detector for backscatter imaging, a Gatan CL detector for catholuminescent samples and the DEBEN 200 Micro Tensile tester can be fitted on the stage for in-situ tensile testing up to 200 N. An AMTEK Energy Dispersive Spectrometer (EDS) composition analysis is available with elemental and elemental mapping capabilities.

### Specifications:

Electron source: Cold Field Emission

SEM beam voltage: 500 V - 30 kV

SEM resolution: < 1 nm @ 15 kV; 1.2 nm @ 1 kV

EDS resolution: ~ 30  $\mu$  on bulk samples

Maximum sample diameter: 150mm with full rotation

Maximum sample thickness: dependent on working distance and method