

TUNGSTEN FILAMENT DESKTOP SEM

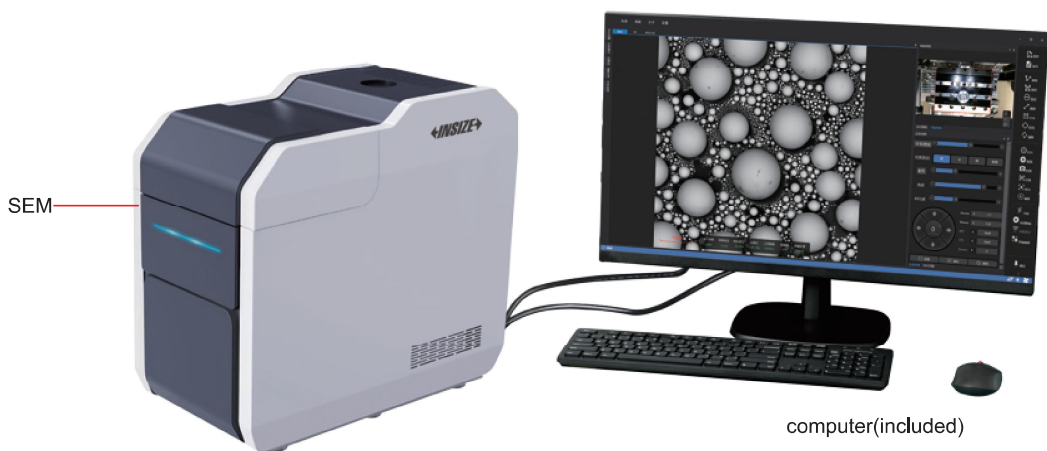
CODE DEM-S100

SE AND BSE
MIXED MODE

NANOMETER
RESOLUTION

IMAGE
STITCHING

EXTRA-LARGE
SAMPLE CHAMBER



- Used to industrial inspection, functional inorganic materials, fiber testing, chemical testing, botanical analysis, life sciences, ternary lithium batteries, pharmaceutical testing, chemical and metallic materials, resistance testing, alumina thin films, metal tips, DBC ceramic substrates, monocrystalline silicon micropowder, metal spheres, pharmaceutical packaging materials, GaN materials, etc.
- The sample stage features beam deceleration mode, enabling real-time observation of weakly conductive samples without gold coating
- The oversized sample chamber supports integration of multiple in-situ platforms for diverse experimental needs, with built-in vibration isolation
- Software modules include auto brightness/contrast, auto-focus, auto stigmation, and image stitching
- Compatible with Oxford and Bruker EDS systems for qualitative and quantitative analysis across elements B (5) to Cf (98), featuring real-time spectral comparison and intelligent report generation

SPECIFICATION

Accelerating voltage	3kV~20 kV continuously adjustable, 1kV step (optional high-end version up to 30kV)
Electron gun	pre-aligned tungsten filament with integrated condenser lens; software-controlled objective aperture
Magnification	25X~300,000X
Resolution	4nm
Detectors	secondary electron detector (SED), quad-segment backscattered electron detector (BSD)
Sample stage	dual-axis: X: 60mm, Y: 55mm; tri-axis and five-axis options available
Sample chamber	185×176×125mm, with optical camera navigation
Vacuum mode	high vacuum
Imaging modes	fast scan: 512×512pixels; slow scan: 2048×2048pixels
Data formats	BMP, TIFF, JPEG, PNG
Auto functions	one-touch auto brightness/contrast, auto-focus, auto stitching, etc.
Power supply	AC 220V, 50Hz, 1kW
Dimension (L×W×H)	650×370×642mm

STANDARD DELIVERY

Main unit	1 pc
Software	1 set
Computer	1 pc

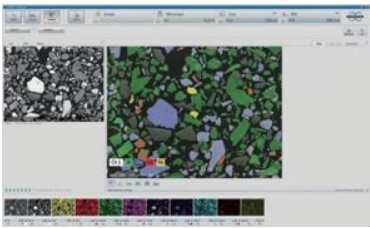
OPTIONAL ACCESSORY

EDS	DES-S100-10/ DES-S100-20 (must be installed in factory)
In-chamber camera	DES-S100-30 (must be installed in factory)
Low vacuum module	DES-S100-40 (must be installed in factory)

FUNCTIONS



gun vacuum hold mode



EDS

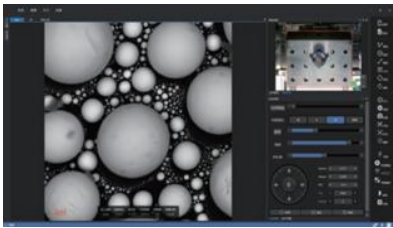
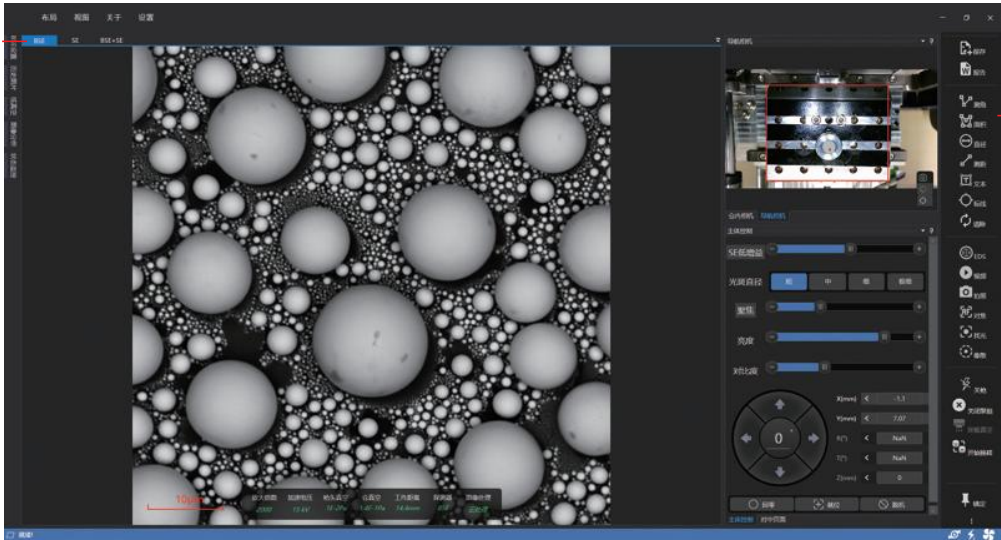


image stitching

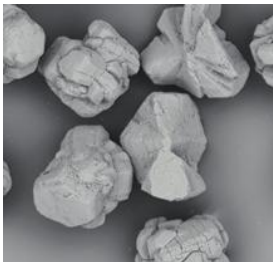
SOFTWARE (INCLUDED)

detectors

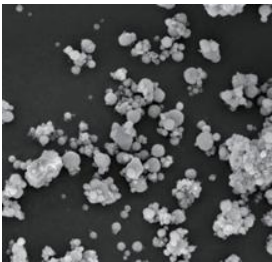


toolbar

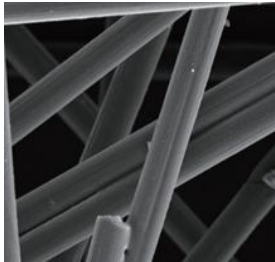
APPLICATIONS



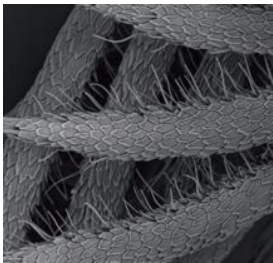
industrial inspection



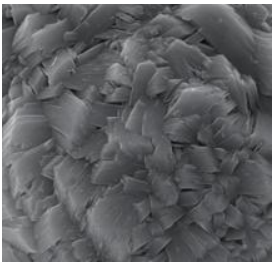
chemical inspection



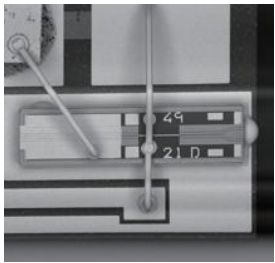
fiber inspection



biological inspection



ternary lithium inspection



chip inspection