NREC
Nanotechnology Research
& Education Center

Transmission Electron Microscope TECNAI F20

Tecnai F20 is the versatile Nano-Analytical electron microscope that can be used in two different modes:

- High resolution conventional transmission electron microscopy (TEM)
- High resolution scanning transmission electron microscopy (STEM) with Bright Field and Dark Field Detectors

Electron Source is Schottky Field emitter with small energy spread (0.7 eV or less) and high stability and long life.

Micro- and nano-analysis can be performed by embedded Energy Dispersive X ray spectroscopy (EDS) system.

TEM TECNAI F20 basic specification:

• Point resolution	0.24 nm
• Line resolution	0.102 nm
• Information limit	0.14 nm
• Magnification range in TEM mode	25x – 1030 kx
• Magnification range in STEM mode	150x – 230 Mx
• Tilt angle (double tilt specimen holder)	40°
• Diffraction angle	26°
• Camera Length	30 mm – 4.5 m

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