

TRANSMISSION ELECTRON MICROSCOPE (TEM)

WITH CCD CAMERA



Make	Model
Philips, Holland	Tecnai 20

- ❖ Transmission Electron Microscope is highly advanced and state-of-the-art instrument.
- ❖ It uses electron beam optics to achieve very high magnifications of the order of 750,000x
- ❖ It collects a wide range of signals carrying valuable information. Tecnai 20 has been especially designed to acquire and process these signals efficiently and effectively.
- ❖ The combination of high-resolution imaging, bright field, dark field, electron diffraction and detailed microanalysis makes the Tecnai 20 a key to material analysis.
- ❖ Tecnai 20 has S-TWIN objective lens for high resolution, while maintaining high tilts (maximum 40°) and a Comp Stage for accurate specimen control and exceptional mechanical stability.
- ❖ The fundamental understanding of a material's properties starts with a thorough characterization of the material morphology, crystal structure, interface structure, surfaces and defects all have their influence on the properties of material. Transmission Electron Microscope has proven to be a very powerful technique for studying a range of general and advanced materials down to the nm level.

Specifications:

- ❖ Electron Source:- W emitter and LaB6
- ❖ Accelerating Voltage:- 200 kv
- ❖ Objective lens:- S- TWIN
- ❖ Point Resolution: 0.27 nm or better
- ❖ Line Resolution : 2.0 nm or better
- ❖ Magnification : 25x to 750000x or higher
- ❖ Single tilt holder with CCD Camera

Applications:

- ❖ Morphology, crystal structure, interface structure, crystal defects can be studied
- ❖ Study of biological micro organisms.
- ❖ Particle Size measurement
- ❖ Liposomes
- ❖ Single crystal Diffraction
- ❖ Virus & Bacterial study