MiniTEM

Small | Powerful | Fast
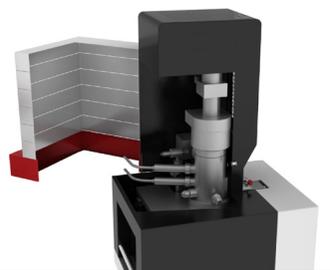
Focus on what's important

○ **SAMPLE PREPARATION**
Preparation steps using conventional staining techniques, or even without staining, simplifies sample preparation.

○ **QUANTITATIVE EM AT YOUR FINGERTIPS**
The Analysis view is where the user creates workflows by applying automated image acquisition and/or image processing and analysis scripts. The scripts can be saved and applied to large sets of images.

○ **INVESTIGATE AND ANALYZE**
The Live/Edit view allows the user to manually mark, measure and annotate objects in the images. The user can easily investigate the sample by moving around, changing magnification and acquiring images.

CASE-STUDIES MATERIAL SCIENCE

Materials science is a complex field of study applying the different properties of matter to various areas of science and engineering. One of the most important tools available to investigate the structure of materials is the transmission electron microscope.
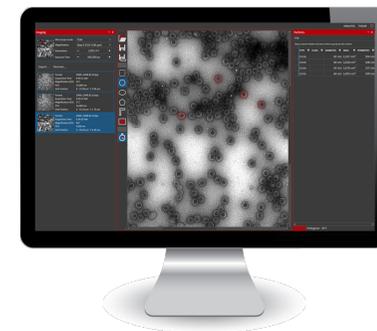
The MiniTEM integrates and optimises the whole process, from sampling to useful result, and delivers the full value of a nano-characterization system in one instrument.

The MiniTEM is designed for fast, simple and cost-effective imaging and analysis of biological samples as well as other nano-sized particles. It is a desktop-top TEM that requires no special infrastructure, and can sit on any table or desk in any lab or office. It runs at 25keV which enables imaging of biological samples with a thickness of up to at least 100nm.
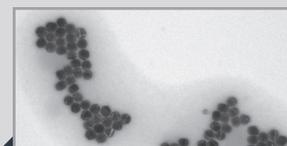
In order to make the MiniTEM as easy to use an ordinary light microscope it has incorporated automatic functions and procedures for microscope alignment, automatic camera and microscope settings for optimal imaging. It also has incorporated analysis tools allowing for automated image acquisition, particle detection and morphology analysis.

INORGANIC NANO-PARTICLES
There exists several solutions on the market for measuring particle size where electron microscopy is one of few direct methods that has the capacity to analyze every single particle at high resolution.

Sample: Earth metal particles
├─── 500nm

POLYMERS
Polymer blends are used in many areas. Being able to differentiate and analyze the composition of different polymer components increases the knowledge about the material and can increase the product quality and development speed.

Sample: Polymer blend
├─── 1μm

FOIL COMPOSITION
In the application of agricultural industry, composite foils are used to preserve the crops. Being able to distinguish between different polymers is essential for evaluating the production process and quality of the product.

Sample: Polymer foil stack
├─── 2μm

Vironova

MORE INFO:

minitem@vironova.com

www.vironova.com/minitem