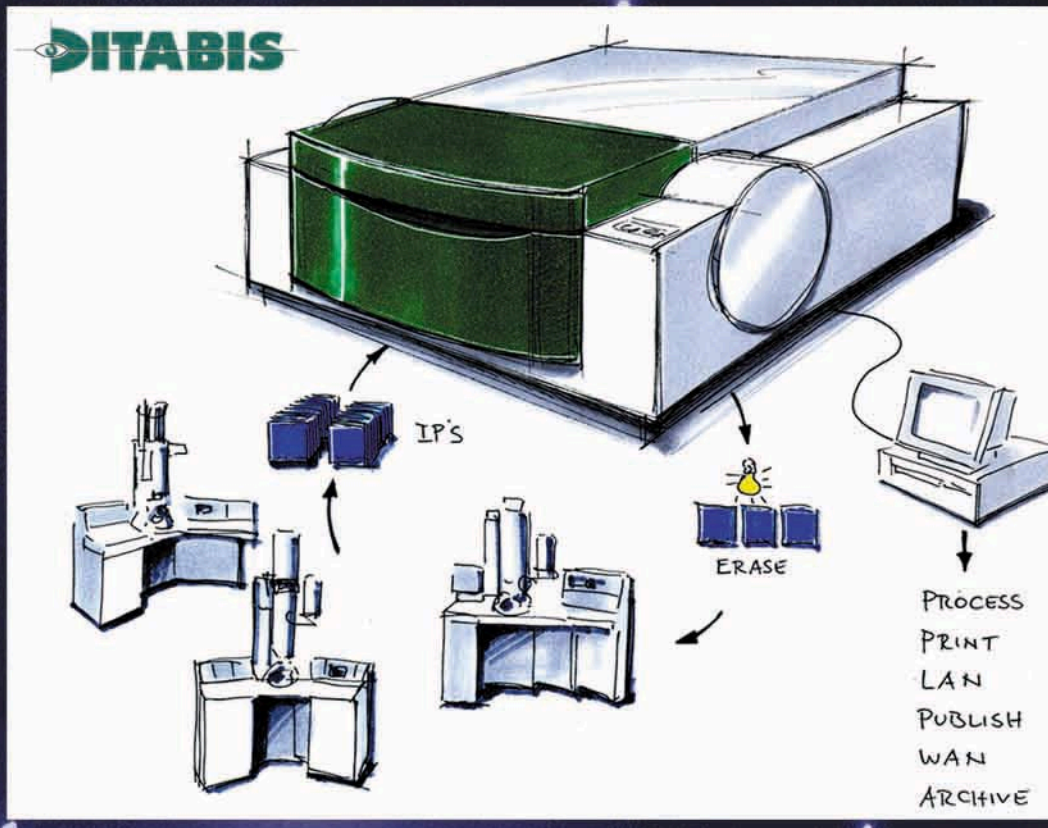
6000 x 5000 Pixels Digital Imaging for TEM

The DITABIS™ Imaging Plate Technology is designed to replace conventional sheet film in the transmission electron microscope. It provides a new level of digital resolution and dynamic range to TEMs by viewing the same wide field of view as film with up to 6000 x 5000 pixels resolution. Having 10 times the sensitivity of film and a six orders of magnitude dynamic range this technology exceeds the performance of any other digital or analog system. Unlike CCD cameras the Imaging Plates can be used with the same routines as conventional film but without the need for wet chemistry. Reusable plates and their suitability to single or multiple instruments make the micron VARIO the most cost effective high-resolution digital TEM solution.



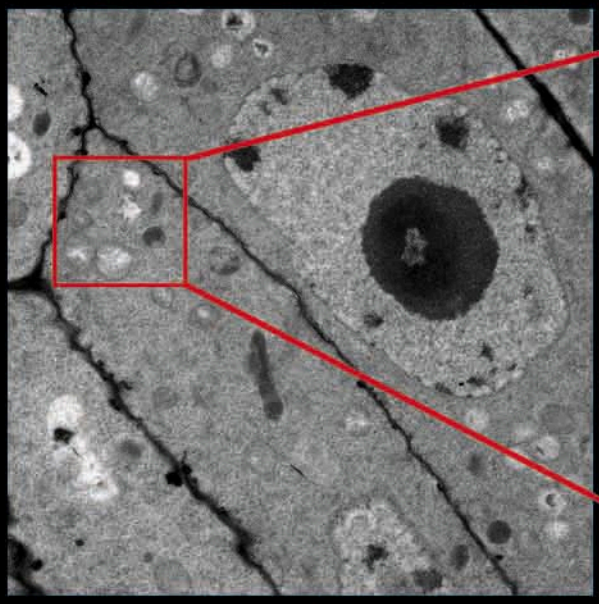
- ✓ Extraordinary image quality
- ✓ Highest sensitivity and dynamic range
- ✓ 6000 x 5000 pixels in traditional film image area
- ✓ Cost effective - reusable plates - serves multiple TEMs
- ✓ Easy to use - direct replacement for film
- ✓ No installation required on the TEM
- ✓ No wet chemistry

NEW

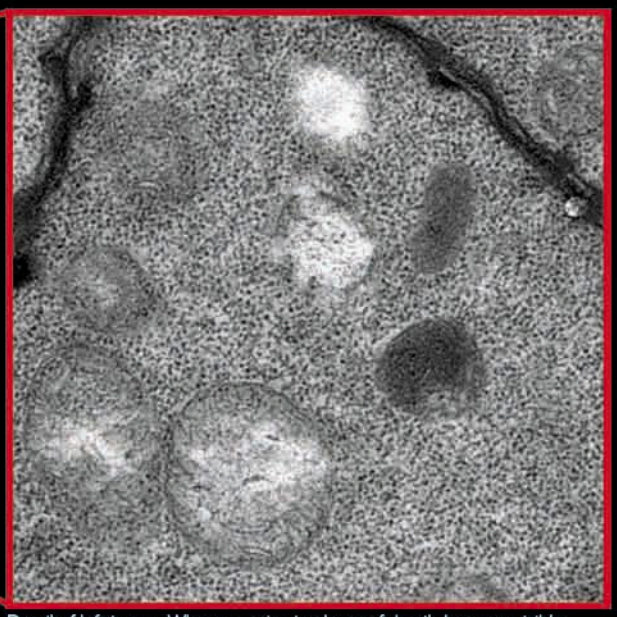
micron VARIO

Scalable Resolution: Readout Pixel Size 50μm - 15μm

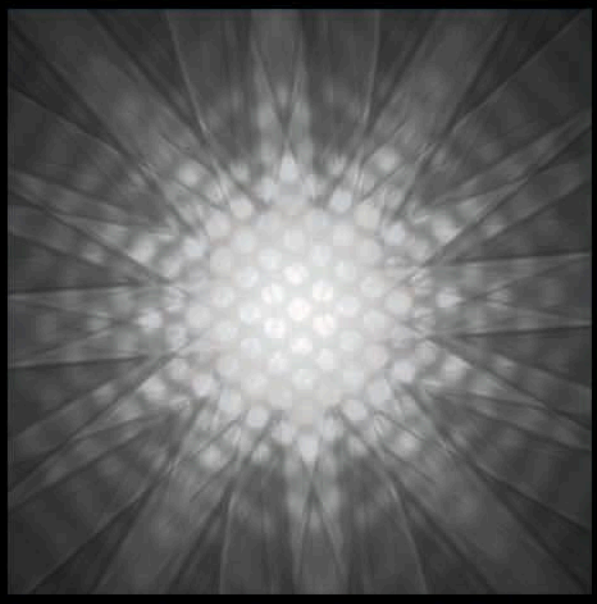
Imaging Plate Technology for Life Science & Material Science



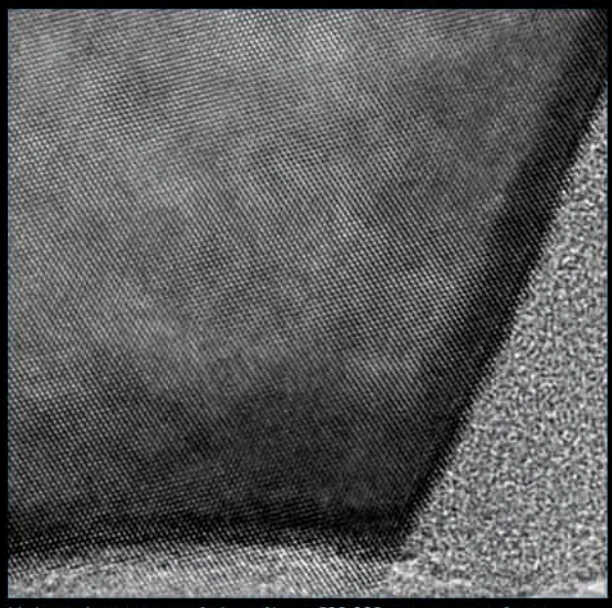
High definition TEM image of a plant cell (3000 x 3000 pixel)



Detail of left image. When zooming in plenty of details become visible.



Convergent Beam Electron Diffraction of thin silicon film. The high contrast range was recorded in one image and has been compressed for printing.



High resolution image of silicon film at 590 000 primary magnification.

System Specifications

micron

Readout Pixels	
micron VARIO	from 6000 x 5000 max. at 15.0 µm to 1800 x 1600 max. at 50.0 µm
micron 17.5	5000 x 4500 max. at 17.5 µm
micron 25	3600 x 3200 max. at 25.0 µm
Imaging Plate Size	81 x 100 mm
Effective Area	80 x 90 mm
Readout Time	2 - 3 min / frame
A/D-Conversion	2 channels of 16 bit at different gains, 20 bit combined
Dynamic Range	6 orders of magnitude at one scan
Power	230V - 50 Hz; 120V - 60 Hz, 100W
Dimensions (W/D/H)	675 / 580 / 305 mm
Weight	60 kg

OS Platforms	Easy to use Windows 98/NT/2000/XP
Scanning	Full software control of all parameters, featuring application specific parameter sets
Data Format	16 / 24 / 32 bit data format with comment and setting information in header
Image Viewer	Quick preview, zoom and look-up-tables, data base functions
Image Processing	Various filters and arithmetic functions; alignment, rotation, threshold
Correction Functions	Background correction
Analyse Functions	Points, lines and areas, 2D-FFT, 3D-Plot, peak measurement function
Data Conversion	Data export to TIFF, PCX, GIF, JPEG, change of resolution and dynamic range

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