

FIBERMETRIC SYSTEM Powered by Phenom



Faster, Better, Easier Fiber Analysis

With the Fibermetric System powered by Phenom



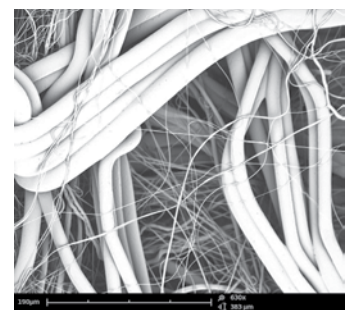
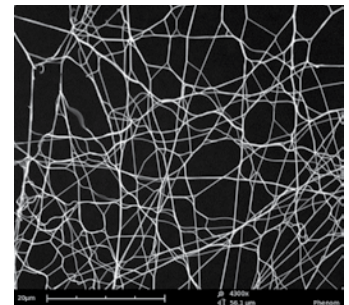
Faster, Better, Easier Fiber Analysis

Now, direct observation and measurement of micro and nano fibers is faster, better and easier than ever before. With the Fibermetric™ system powered by Phenom you can load and image samples in about 30 seconds. Magnifications up to 24,000 times produce accurate information on a large range of fibers as small as 100nm in diameter. Automated measurement generates all the statistical data you need in minutes, and unlike other SEM-based solutions, no laboratory infrastructure or trained microscopists are required.

Save time | Get all your statistical data, automatically | See and measure nearly any micro/nano fiber



The Fibermetric system integrates automated fiber metrology and statistical analysis software with the world's fastest, easiest to use desktop SEM, the Phenom personal electron microscope.



Whether your imaging and analysis requires magnification at hundreds of times (bottom) or thousands (top), the Fibermetric system has the power and speed to help you get the job done fast.

Save time

Based on the fastest scanning electron microscope (SEM) available today, the Fibermetric system has a sample loading time of less than 30 seconds. The system's automated measurement capabilities can speed-up your process even further, generating all the data you need in the time it takes to load a conventional SEM. The system is designed to discover and quantify the properties of your woven and nonwoven fiber samples in minutes.

Get all your statistical data, automatically

Why wait? With the Fibermetric system, you get all your statistical data, automatically. It's fast and easy. Collect hundreds of measurements per image, and generate fiber and pore size distribution plots for quality control and for predicting application properties such as filtration efficiency.

See and measure nearly any micro/nano fiber

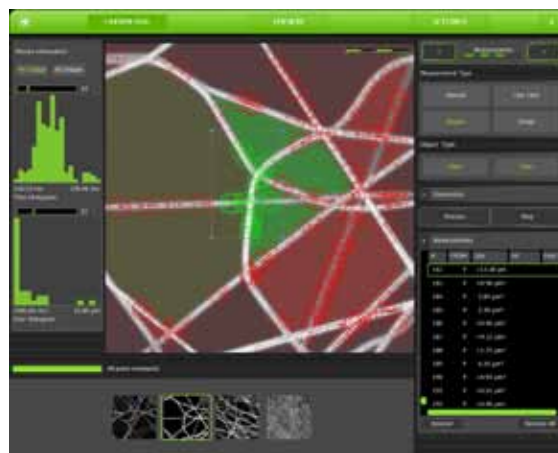
The Fibermetric system accurately images and measures almost any fiber sample with its 4.9 nm/pixel resolution and an accurate edge fit function. Nano fibers with diameters of 100nm are routinely measured with high accuracy. The Fibermetric system delivers better data, faster, to improve your fiber material development and manufacturing.

"Turning insight into value"

The Fibermetric system is the first new member of the FEI® Phenom™ family of personal electron microscopes. These high-resolution desktop imaging tools are easy to operate; everyone on your team can now see beyond the power of light to generate more accurate measurement data, faster than ever before. With its affordable price, ease-of-use, speed and accuracy, the Fibermetric system gives you a rapid return on investment and a sustainable competitive advantage.



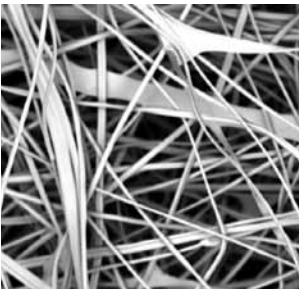
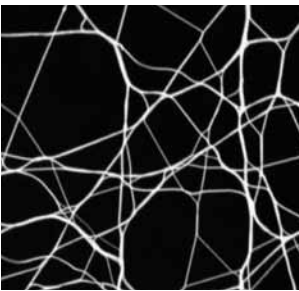
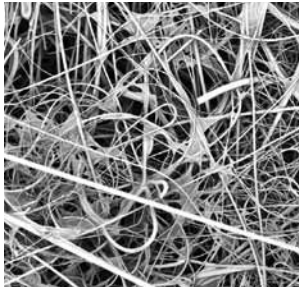
The Fibermetric system is easy to operate; everyone on your team can now generate volumes of sub-micron measurement data, faster than ever before.



The Fibermetric system gathers your statistical data automatically: 1,000 measurements per image or 100,000 per sample, to generate fiber and pore size distribution plots used for R&D and manufacturing support.



Our innovative sample cup and load-lock deliver the fastest time-to-image of any electron microscope. A conventional SEM takes about five minutes to pump down—the Fibermetric system takes less than 30 seconds.



Specifications

System

- Imaging module
- 17" touch screen
- 17" monitor
- Keyboard and mouse
- "Eee Box" PC (with Ethernet, Windows XP)
- Diaphragm vacuum pump
- Power supply
- USB 2.0 flash drive

Imaging Modes

- Light Optical
 - Magnification fixed: 20x
- Electron Optical
 - Magnification range: 120x to 24,000x

Illumination

- Light Optical
 - Selectable axial and off-axis illumination
- Electron Optical
 - Long lifetime thermionic source

Digital Image Detection

- Light Optical
 - CCD Camera
- Electron Optical
 - High Sensitivity Backscatter Electron Detector (multi-mode)

Image Format

- JPEG, TIFF

Image Resolution Options

- 456 x 456 pixels
- 684 x 684 pixels
- 1024 x 1024 pixels
- 2048 x 2048 pixels

Data Storage

- USB 2.0 Flash drive and/or network storage

Sample Stage

- Computer controlled motorized X and Y

Sample Size

- 25 mm (dia) x 30 mm (h)

Sample Loading Time

- Light Optical
 - <5s
- Electron Optical
 - <30s

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