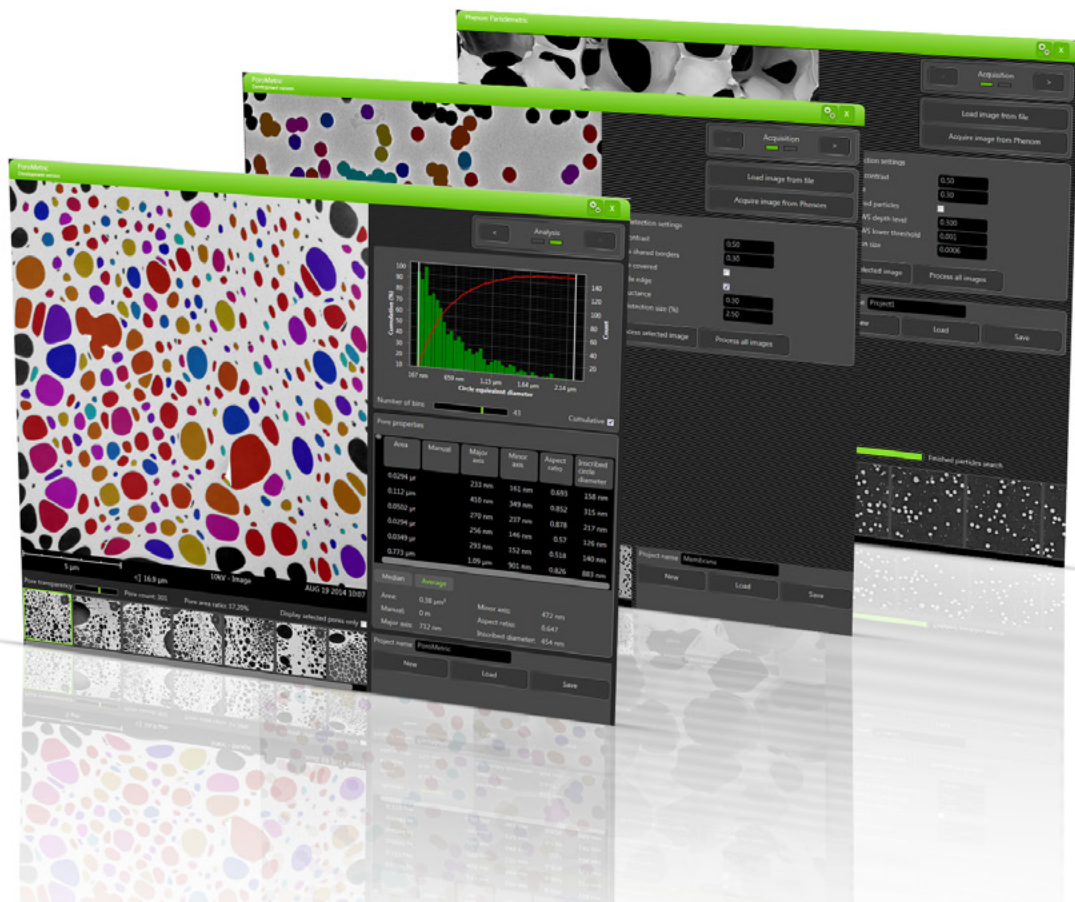


Porometric

Fully automated measurements of pores



Automated user interface

Intuitive & automated user interface

ProSuite

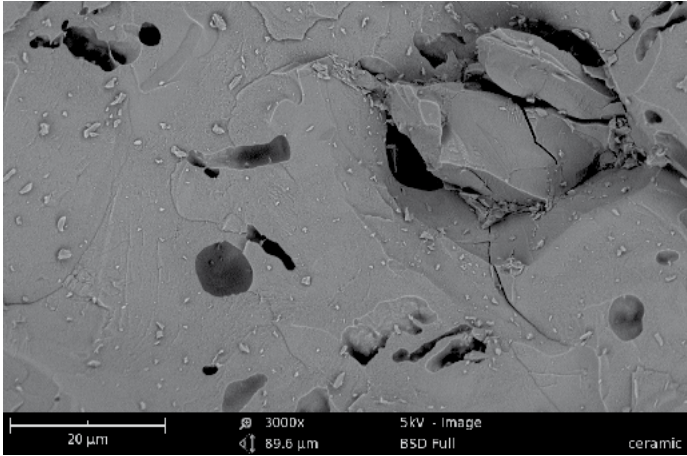
Integrated software in ProSuite

Reporting tool

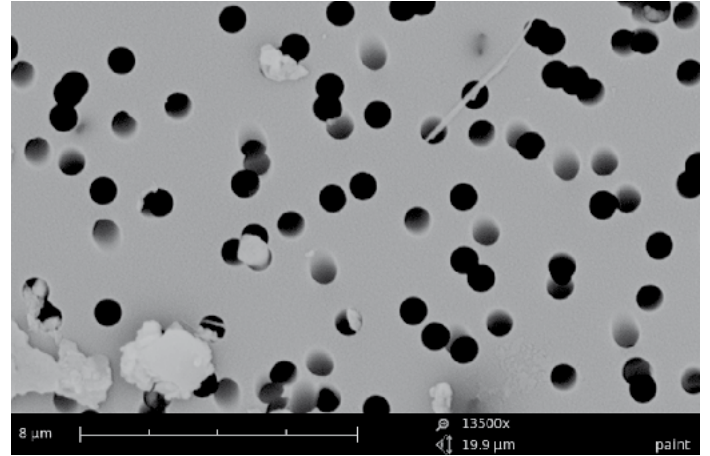
Easy exporting of data for reporting

Automated measurements

Multiple pore parameters



Ceramics



Paint

The visualization and analysis of pores are easier than ever before with the Phenom desktop scanning electron microscope (SEM) and PoroMetric software. The combination of speed, ease of use and superb imaging quality of the Phenom and image pore analysis software of PoroMetric creates a powerful tool for inspecting a wide range of samples like filters and membranes.

PoroMetric

The Phenom desktop SEM with PoroMetric software allows easy generation and analysis of SEM images. The integrated PoroMetric software allows the user to gather data on distribution of pores, and pore parameters like pore size and aspect ratio. The fully automated measurements of PoroMetric allow a level of visual exploration beyond optical microscopy that can lead to new discoveries and innovations. The histogram and generated images can be exported in the selected format

to be used as a reporting tool. PoroMetric allows the user to get a better understanding of the characteristics of the materials, as it extracts detailed information of the complete set of pores. PoroMetric is the first in its class when it comes to measurements of pores. This results in valuable information on the effects which changing the pore structure has on the porosity and filtration process.

Imaging Specifications

Pore analysis

- Pore size range 100 nm – 0,1 mm
- Pore detection speed Up to 1000 pores per minute
- Measured properties Size, shape, count

Pore parameters

Area, circle equivalent diameter, aspect ratio, major axis, minor axis and manual measurement

Graphical display

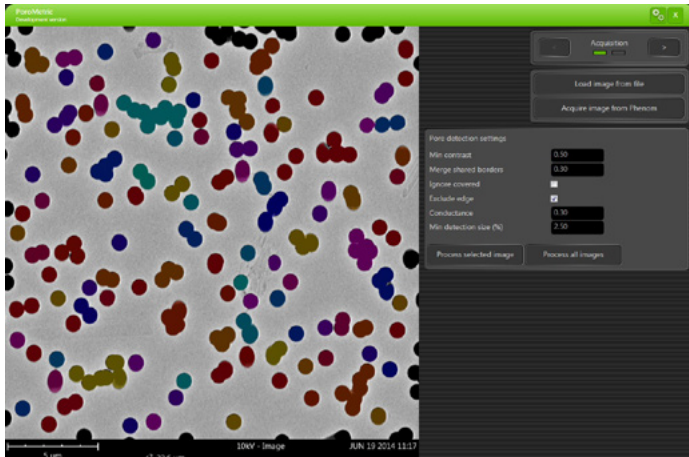
- Plot graphs of the circle equivalent diameter
- SEM images and detected pores

Output

- Report in docx format
- TIFF image format
- CSV file
- Project file (.POME) for offline analysis

Part of ProSuite

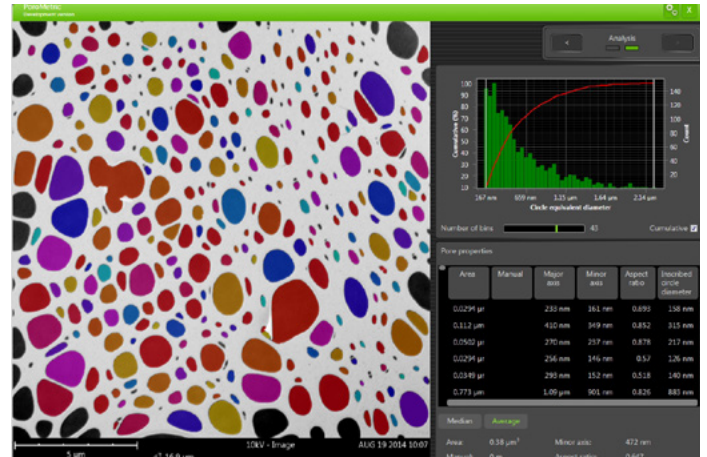
- Network storage enabled
- Phenom integrated system



Membrane

Main advantages of PoroMetric

- Integrated software in ProSuite
- Acquire images directly from the Phenom desktop SEM
- Correlate pore features such as area, aspect ratio, major and minor axis
- Fast and convenient operation improves workflow and makes scheduling simple and predictable
- Image collection is limitless as digital files are easily stored on a network or USB disk for data sharing, communication, or later reference
- The Phenom's ease of use and ability to operate in any environment means anyone can use it to visually interpret a wide range of samples
- Statistical data with high quality images.



Membrane

Markets & Applications

The Phenom desktop SEM and PoroMetric software are easy to use and allow the user to extract the best results. Companies that will benefit the most from PoroMetric can be found in the:

- Filter and sieve industry
- Foam industry
- Ceramic industry
- Pharmaceutical industry
- Non woven industry



ParticleMetric

The Phenom desktop SEM with ParticleMetric software allows easy generation and analysis of SEM images. The integrated ParticleMetric software allows the user to gather morphology and particle size data for many submicron particle applications. The fully automated measurements of ParticleMetric allow a level of visual exploration beyond optical microscopy that can lead to new discoveries and innovations in powder design, development, and quality control.



FiberMetric

In combination with the Phenom desktop SEM, FiberMetric allows the user to produce accurate size information from micro and nano fiber samples.

The automated image characterization generates hundreds of measurements in seconds. In addition to more accurate data acquisition, the automated measurements of the FiberMetric application guarantee a fast return on investment. With FiberMetric it has become possible to measure and analyze samples with large fiber diameter differences.

ParticleMetric Specifications

Particle analysis

- Particle size range 100 nm – 0,1 mm
- Particle detection speed Up to 1000 particles per minute
- Measured properties Size, shape, count

Particle parameters

Area, circle equivalent diameter, surface area, circumscribed circle diameter, volume by area, circumference, aspect ratio, circularity, elongation, grayscale, major axis, minor axis, convex hull, gravity centre (x,y), pixel count, convexity.

Graphical display

- Plot graphs in linear log or double log scale, by number or by volume
- Scatter plots of any given parameter
- SEM image of individual particle

Part of ProSuite

- Network storage enabled
- Phenom integrated system

FiberMetric Specifications

Fiber detection

- 40 µm to 100 nm
- 1 to 1000 measurements per image

Part of ProSuite

- Network storage enabled
- Phenom integrated system

Distributore esclusivo per l'Italia:

ALFATEST
strumentazione scientifica

www.alfatest.it - alfatest@alfatest.it