

STEM Sample Holder for Phenom Pharos Desktop SEM

STEM analyses for all

To advance materials science, researchers often push their analytical tools to the extremes of their capabilities. More users have begun using a single SEM—and in some cases an attractively small desktop SEM—to study a broad range of samples.

The Thermo Scientific™ Phenom Pharos™ Desktop SEM has earned a reputation for its versatility and high-quality imaging performance—even with traditionally difficult samples. Its intuitive user interface helped bring high-resolution imaging to a broad audience, and its FEG source delivers that resolution over the full acceleration voltage range, even as low as 1 kV.

The new STEM Sample Holder for the Phenom Pharos Desktop SEM adds another dimension of imaging capabilities, making application diversity even more accessible and expanding advanced imaging to all levels of microscopy expertise.

The STEM Sample Holder uses the brightness of the FEG source to image very thin samples in transmission mode. The high-energy electrons penetrate the electron-transparent sample and are detected below the sample. Any conventional 3 mm diameter sample can be easily loaded under the clamp, allowing for quick and safe sample exchange. Depending on the imaging mode, different types of signals can be individually detected. The STEM sample holder offers the standard bright-field (BF), dark-field (DF), and high-angle annular dark-field (HAADF) images options and custom configuration is possible.

Key benefits

The world's first desktop STEM sample holder combined with a FEG source

Delivers high contrast under low voltage to increase visibility of structures and morphology

Switches between lower and higher magnifications, accommodates a wide range of materials, and covers large sample areas

Includes bright-field, dark-field, and high-angle annular dark-field imaging modes

*Time between sample loading and readiness to image

**Custom: The STEM holder consists of 11 detector segments that can be selected individually by the user

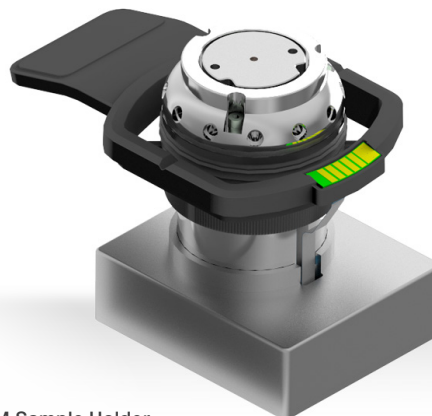
STEM Sample Holder

Samples and imaging

System compatibility	Phenom Pharos G2 Desktop SEM
Sample compatibility	Conventional \varnothing 3 mm TEM grids (clamp mounting)
Time to image	<40 seconds*
Electronics	Integrated in the sample holder
Detection modes	BF, DF, HAADF, custom**
Imaging workflow	Fixed WD, optimized detector settings, full UI integration
Pressure compatibilities	0.1, 10 & 60 Pa
Resolution	< 1 nm

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Phenom STEM Sample Holder.

Learn more at thermofisher.com/phenom