Phenom ProX Scanning Electron Microscope

University of Stuttgart Institute of Machine Components

IMA-TechSheet #0102220 V2



Phenom ProX with EDX



Sealing edge, uncoated in BSE material contrast display

Description:

- Intuitive and quick to use desktop scanning electron microscope (all-in-one)
- Chemical material analysis by energy dispersive X-ray spectroscopy (EDX), point analysis, line scan and mapping
- Allows high resolution display at high magnification (120x-45.000x)
- Integrated light microscope for documentation and sample navigation
- Low pressure mode allows non-conductive samples to be viewed without vaporization
- Display in material and topography contrast
- A sputter coater Balzer SCD 050 is available to vapour coat samples with a conductive gold layer

Technical Data:

Magnification:	120x- 45.000 x
SEM-detector:	Four-quadrant
	Backscattered electron
	detector (BSE)
Electron source:	CeB6 (Cerhexaboride)
Resolution 7x7 pixel:	25 nm
Specimen size:	max. ø25mmx20mm
EDX Energy	140 eV
resolution	
Detectable	Carbon (6) to
elements:	Americium (95)



Deposit in a PTFE sealing ring

Available Test Methods:

- Chem. material analysis, particle analysis
- Topography analysis (3D impression)
- Measurement of geometric sizes
- Depth-of-sharpness display of samples at high magnification