



Solutions for Innovation



# NeoScope JCM-6000Plus

NEW

*With the JCM-6000's highly-regarded touch-panel operating environment, the JCM-6000Plus has been further enhanced with a high-sensitivity backscattered electron detector providing high quality images, achieving a high-end, high-performance benchtop scanning electron microscope that is entirely user-friendly.*

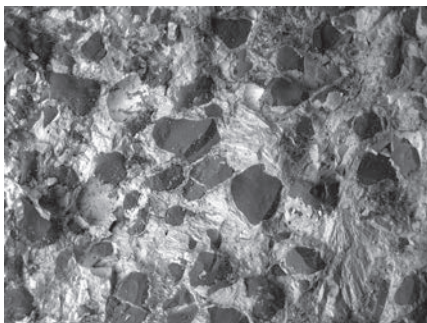
Touch panel & Simple GUI

"Easy" image acquisition

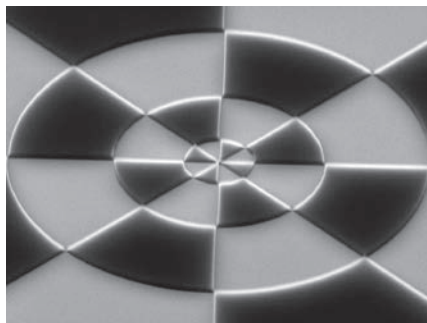
Improved image quality

High-vacuum mode and  
Low-vacuum mode  
provided as standard

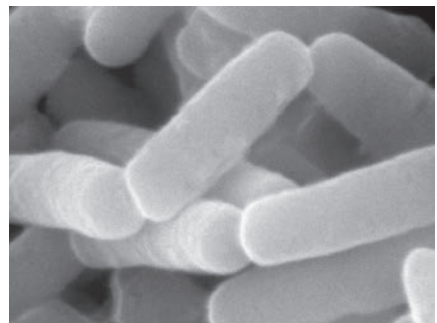
Element analysis



Sample : Azulite  
Low-vac. BED-S  
Accelerating voltage : 15 kV  
Magnification :  $\times 50$

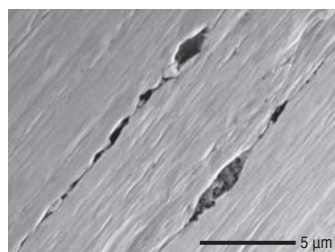


Sample : Patterns on Si  
High-vac. SED  
Accelerating voltage : 15 kV  
Magnification :  $\times 5,000$

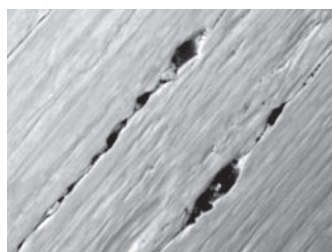


Sample : Bacillus subtilis natto  
High-vac. SED  
Accelerating voltage : 15 kV  
Magnification :  $\times 40,000$

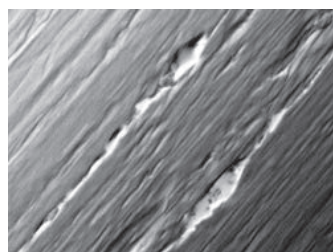
# Installation of High-Sensitivity Backscattered Electron (BEI) Detector



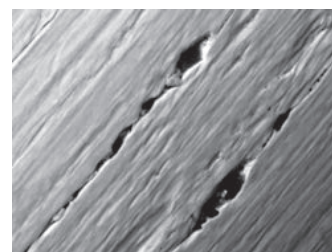
Secondary electron image



BEI composition image



BEI topographic image



BEI stereoscopic image

Sample : Pt wire High-vac. Accelerating voltage : 15 kV Magnification : × 7,000

## Specifications

Magnification	Secondary electron image : × 10 to × 60,000 Backscattered electron image : × 10 to × 30,000 (when image size is 128 mm × 96 mm)
Imaging mode	Secondary electron image, Backscattered electron image (composition, topographic or stereoscopic image)
Accelerating voltage	Secondary electron image ; 5 kV, 10 kV, 15 kV (3 stages) Backscattered electron image ; 10 kV, 15 kV (2 stages)
Electron gun	Small gun with cartridge filament integrating wehnelt
Bias current	Auto bias (linked to accelerating voltage and filament current)
Condenser lens	Two stage electromagnetic zoom condenser lens
Objective lens	Electromagnetic lens
Auto magnification correction	Magnification corrected with reference to sample height (7 mm, WD56 to 53 mm, WD10)
Preset magnification	6 levels, user programmable
Specimen stage	Manual control for X and Y : X : 35 mm, Y : 35 mm
Maximum sample size	70 mm diameter × 50 mm height
Specimen exchange	Draw-out mechanism
Image memory	One, 1,280 × 960 × 16 bits
Pixels	640 × 480, 1,280 × 960
Image processing	Pixel accumulation Image accumulation (recursive)
Automated functions	Full-auto, filament adjustment, alignment, focus, stigmator, exposure
Metrology	Distance between 2 points, angles
File format	BMP, TIFF, JPEG
Computer	PC (desktop PC), OS Windows®7
Monitor	23 inch wide LCD monitor (touch panel)
Evacuation system	Fully automatic, TMP : 1, RP : 1

## Optional accessories

- ◆ Tilt rotation motorized holder  
Tilt : -15° to +45°; rotation : 360°
- ◆ EDS
- ◆ Smart coater
- ◆ 2-axis motor drive stage

## Installation requirements

Power supply	Voltage : Single phase AC 100 V (120 V, 220 V, 240 V) 50/60 Hz, 700 VA (AC 100 V), 840 VA (AC 120 V), 880 VA (AC 220 V), 960 VA (AC 240 V), Fluctuation ±10 % or less, with grounding
Installation Room	
Room temperature	15 to 30 °C
Humidity	60 % or less
Operation table	Sturdy table with a loading capacity of 100 kg or more
Weight	Main console : approximately 50 kg RP: approximately 9 kg Power supply box : approximately 10 kg
Base unit dimensions	(Width) (Depth) (Height) 325 mm × 490 mm × 430 mm

- \* Specifications subject to change without notice.
- \* The official name of Windows is Microsoft(R), Windows(R), Operating System.
- \* Windows is a registered trademark of Microsoft Corp. in the U.S.
- \* Other trademarks referenced in this catalog and marked with\* are the property of our allied companies.

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