

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.

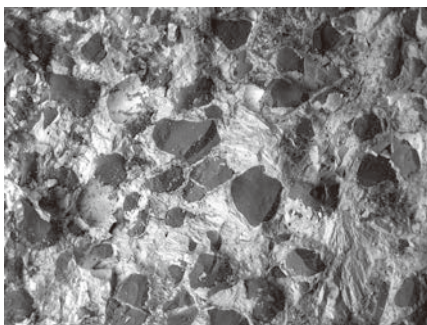
Touch panel & Simple GUI

"Easy" image acquisition

Improved image quality

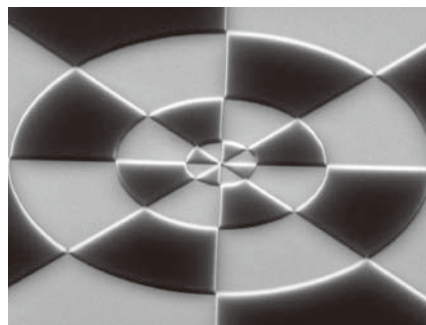
High-vacuum mode and
 Low-vacuum mode
 provided as standard

Element analysis



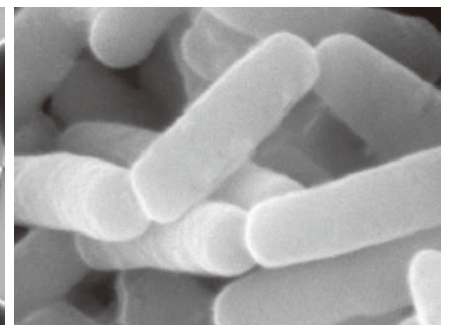
500 μm

Sample : Azulite
 Low-vac. BED-S
 Accelerating voltage : 15 kV
 Magnification : × 50



5 μm

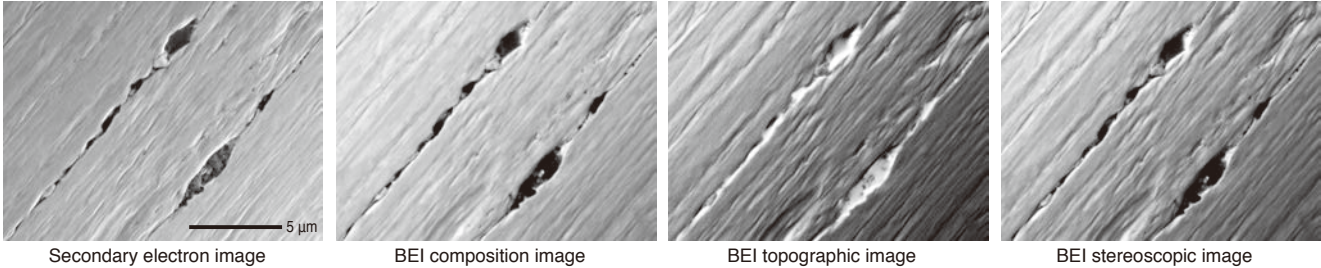
Sample : Patterns on Si
 High-vac. SED
 Accelerating voltage : 15 kV
 Magnification : × 5,000



1 μm

Sample : Bacillus subtilis natto
 High-vac. SED
 Accelerating voltage : 15 kV
 Magnification : × 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 (recursible)
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.
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