

JEOL JSM-6000

Versatile Benchtop SEM

Resolution and Analytical Performance

Superior technology – magnification range from $\times 10$ to $\times 60,000$
Optional EDS for elemental analysis

Simple to Use and Maintain

Intuitive software combined with a Multi-touch display
Automated alignment and image adjustment
Simple and quick sample exchange
Easy filament replacement

Excellent Value

Affordable imaging tool for high resolution and depth of field
Space-saving design
Ideal for multiple users from novice to expert

Features

Both high-vacuum and low-vacuum imaging modes
Both Secondary and Backscattered Electron imaging
Feature measurement
Specimen tilt and rotation
Analytical capability with optional EDS system

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Serving Advanced Technology

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Stylish Mechanism



Intuitive Operation



In addition to intuitive operating software, the NeoScopeII touch panel provides a quick and easy user interface.

Switch between low-vacuum mode and high-vacuum mode with single-touch operation



Automated image control

Vacuum evacuation starts after simply loading a specimen and closing the chamber door. After completing the evacuation, a sharp, clear image appears as a result of the NeoScope' s automated alignment and image adjustment capabilities.

Low-vacuum mode can be selected via a single button located on the front panel.



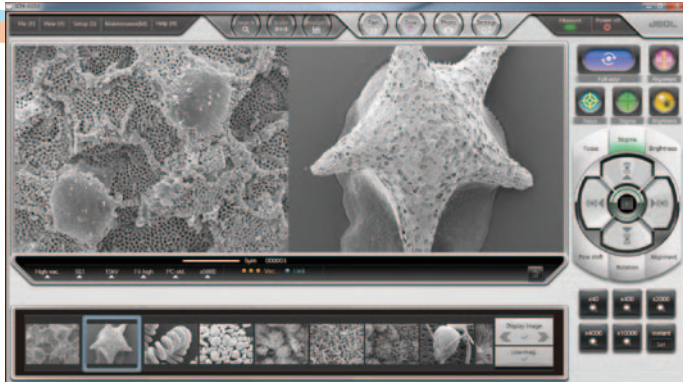
Versatile Functions

High-vacuum/low-vacuum modes are standard.

The high-vacuum mode offers a sharp image.

The low-vacuum mode enables observation without coating.

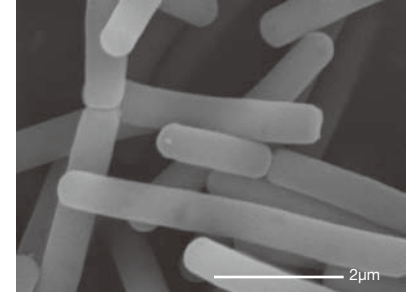
Dual window display



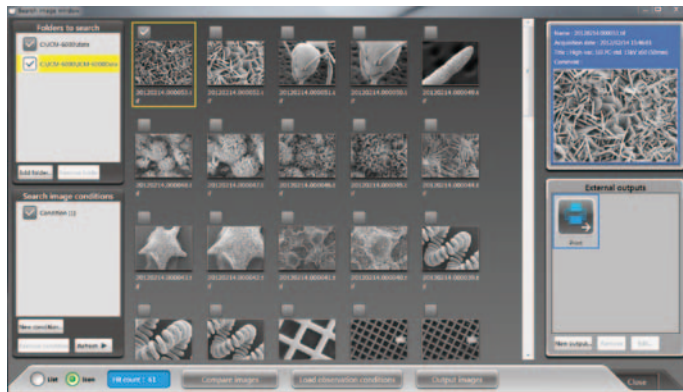
The JCM-6000 can simultaneously display a live image and a saved image for feature comparison and navigation.

◆ High-vacuum mode

Secondary electron image, Original mag : x20,000, Specimen : yogurt fungus



Search window and image handling



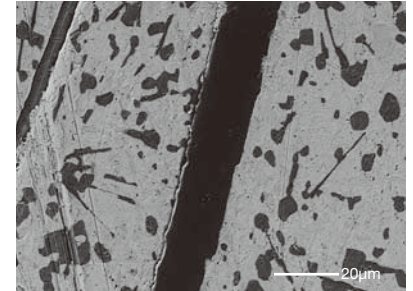
You can print an image simply by selecting and clicking the Print button.

You can also sort images to a folder while checking the images.

In addition, you can reproduce imaging conditions through a saved window.

◆ High-vacuum mode

Backscattered electron image, Original mag : x1,000, Specimen : wood metal



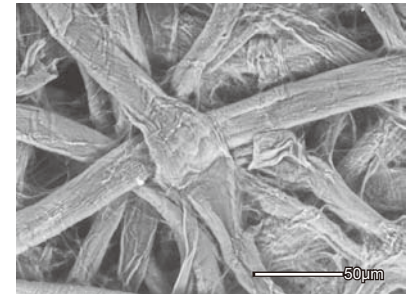
Automatic functions



In addition to automatic functions for axis alignment, focusing, astigmatism correction and contrast/brightness adjustments, the JCM-6000 automatically displays images with single-touch operation.

◆ Low-vacuum mode

Backscattered electron image, Original mag : x540, Specimen : filter paper



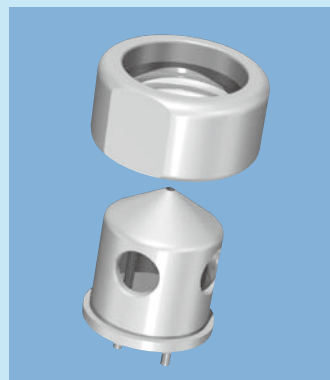
Easy Maintenance

Filament

Changing a filament is quick and easy.

The JCM-6000 uses a cartridge electron source, which is composed of the electron gun and filament.

Cleaning and centering are not required.

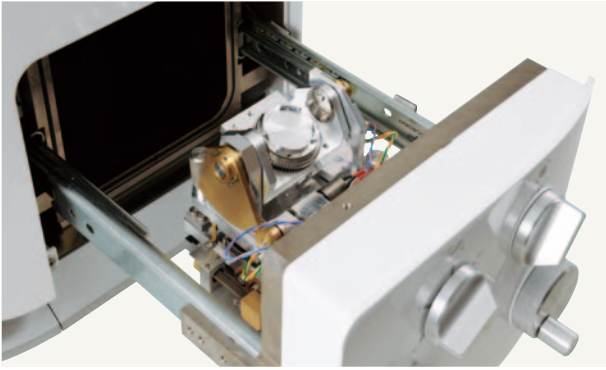


Electron gun filament with an integrated Wehnelt ▶

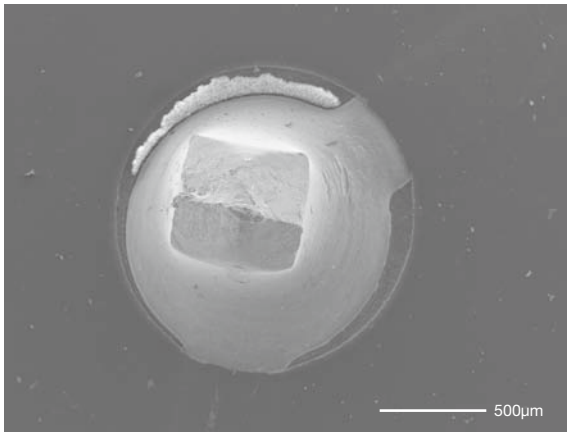
Automatic axis alignment – after replacement

The JCM-6000 automatically aligns the beam axis after changing the filament greatly simplifying the filament exchange procedure for users.

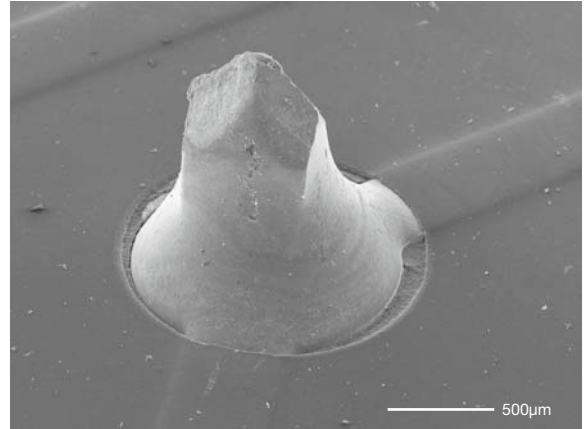
Tilting and Rotating Motor-Drive Holder[※]



Tilt: 0°, Original mag: x45, Specimen: Printed circuit board



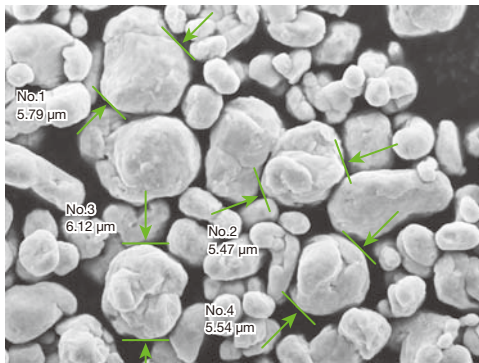
Tilt: 45°, Original mag: x45, Specimen: Printed circuit board



Use of the Tilting and Rotating Motor-Drive Holder enables observation at various angles, providing topographic information on a specimen.

※ Tilting and Rotating Motor-Drive Holder is optional.

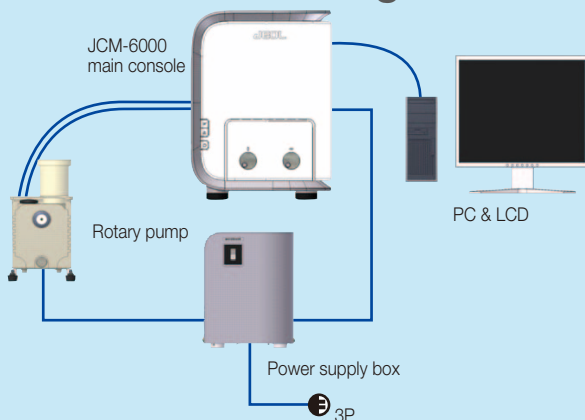
Length measurement



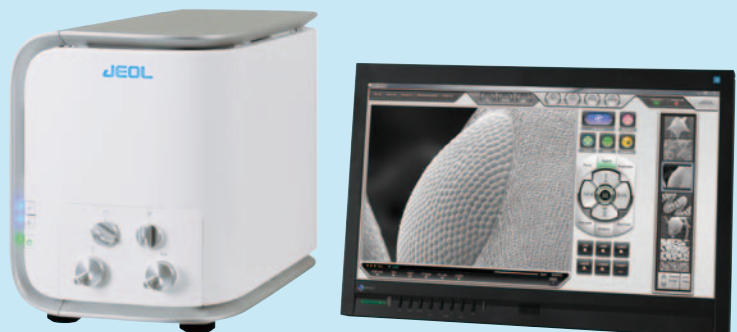
A function to measure the distance between two points is provided. The measurement result is saved in the format of image data and csv data.

Measurement result
Original mag: x4,000
Specimen: Metal particles

Construction diagram



JCM-6000 with Tilting and Rotating Motor-Drive Holder (optional)



New Laboratory

NeoScope II Benchtop SEM

Principal specifications

Magnification	Secondary electron image: ×10 to ×60,000 Backscattered electron image: ×10 to ×30,000 (at image size 128 mm × 96 mm)
Observation modes	Secondary electron image, Backscattered electron image
Accelerating voltage	Secondary electron image: 5 kV, 10 kV, 15 kV (three steps) Backscattered electron image: 10 kV, 15 kV (two steps)
Electron gun	Small electron gun with filament and Wehnelt integrated grid
Specimen stage	Manual control for X and Y, X: 35 mm, Y: 35 mm
Maximum specimen size	70 mm diameter × 50 mm height
File format	BMP, TIFF or JPEG
Computer	PC (desktop PC) OS Windows®7
Observation monitor	23 inch wide LCD monitor (touch panel)
Evacuation system	Fully automatic, TMP: 1, RP: 1

Installation requirements

Power	Single phase AC 100 V (compatible with 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°
Humidity	60% or less
Table (wagon)	Robust one with a withstand load of 100 kg or more
Weight	Main console: approximately 50 kg RP: approximately 9 kg Power supply box: approximately 10 kg
Main console size	325 mm (width) × 490 mm (depth) × 30 mm (height)

Main optional attachments

◆ Tilting and Rotating Motor-Drive Holder

Tilt: -15° to +45°, Rotation: 360°

◆ EDS

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- * The official name of Windows7 is Microsoft®, Windows®, 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.
- * The photo of the front panel (on the previous page) does not correspond to the actual size of the JCM-6000 front panel.

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High technology for quality assurance and the environment.

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NeoScope II Benchtop SEM

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Tilt: -15° to +45°, Rotation: 360°

◆ EDS

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*Products: Hardware and its technical information (including software)

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