

# Focused Ion Beam Systems

**HITACHI**  
Inspire the Next



NX5000



NX9000



NX2000



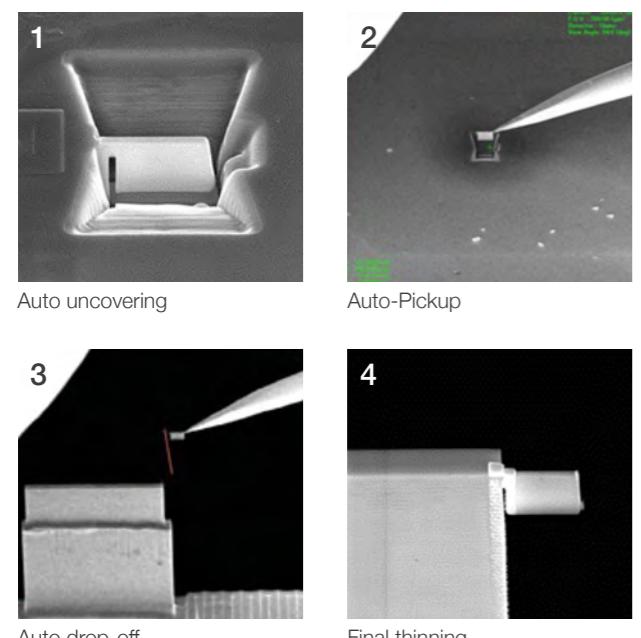


# Ethos NX5000

Our flagship FIB-SEM for the highest demands on TEM samples



The NX5000 "ETHOS" FIB-SEM platform targets advanced position-accurate applications in the areas of automated production of ultra-fine TEM lamellae for aberration-corrected TEM/STEM, high-resolution multi-signal SEM examination of serial sample sections, and fabrication applications.

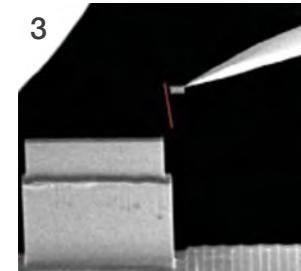


## ✓ Product Features

High-resolution FE-SEM with either cold or Schottky field emitter and dual electrostatic-magnetic objective lens: magnetic immersion mode for high-resolution imaging, magnetic field-free mode for simultaneous FIB operation

Large sample chamber with 155x155mm<sup>2</sup> sample stage and many access points for optional accessories. An airlock for 150mm diameter samples and inert gas transfer ("air protection") is possible

Detector system with 3 in-column detectors (2x backscatter, 1x SE) and chamber SE detector. All 4 signals can be recorded and displayed simultaneously



## ✚ Optional Accessories

Microsampling system: Fully integrated manipulator system for the extraction of TEM lamellae

Noble gas ion gun for gentle perfecting of TEM lamellae

Hitachi HF5000 S/TEM compatible second specimen stage for direct transfer of TEM specimens to the TEM holder

Automation of processes using a graphically orientated modular system

Analytical accessories (EDX, WDX, EBSD, CL, STEM,...)

LN2 Cryo stage

# NX9000

Optimised for large-volume 3D examinations



In this unique system, the Ga-FIB and FE-SEM columns are at right angles to each other. This configuration is ideal for applications where large volumes (biological tissue, materials with large grain structures, semiconductor components, etc.) are to be analysed in 3D without distortion and with the highest resolution, even with very wide fields of view. 3D EBSD analysis can also be carried out with a completely stationary sample, i.e. without sample movement between FIB cutting and EBSD layer analysis.

## ✚ Optional Accessories

EDX, EBSD also for automated 3D analyses

Inert gas ion gun for gentle surface perfection

Automatic series imaging of selected areas within a wide cutting range

# NX2000

FIB-SEM for the semiconductor sector with 200mm wafer coverage



NX2000 is a FIB-SEM optimised for semiconductor applications (defect analysis with KLARF coordinate import, TEM lamella extraction, device development). With 205 x 205 mm X,Y travel, the sample stage even allows full-surface processing of 200 mm wafers without sample rotation. The vertically mounted Ga FIB allows up to 100nA ion current at 30 kV. The FE-SEM column is equipped with a cold field emitter.

## ✚ Optional Accessories

Microsampling system: Fully integrated manipulator system for the extraction of TEM lamellae

Noble gas ion gun for gentle perfecting of TEM lamellae

EDX element analysis

Auto drop-off

Final thinning



**Not sure which product aligns with your needs?**

Our experts are here to provide guidance and help you make the best choice.



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Notice: For correct operation, follow the instruction manual when using the instrument.

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