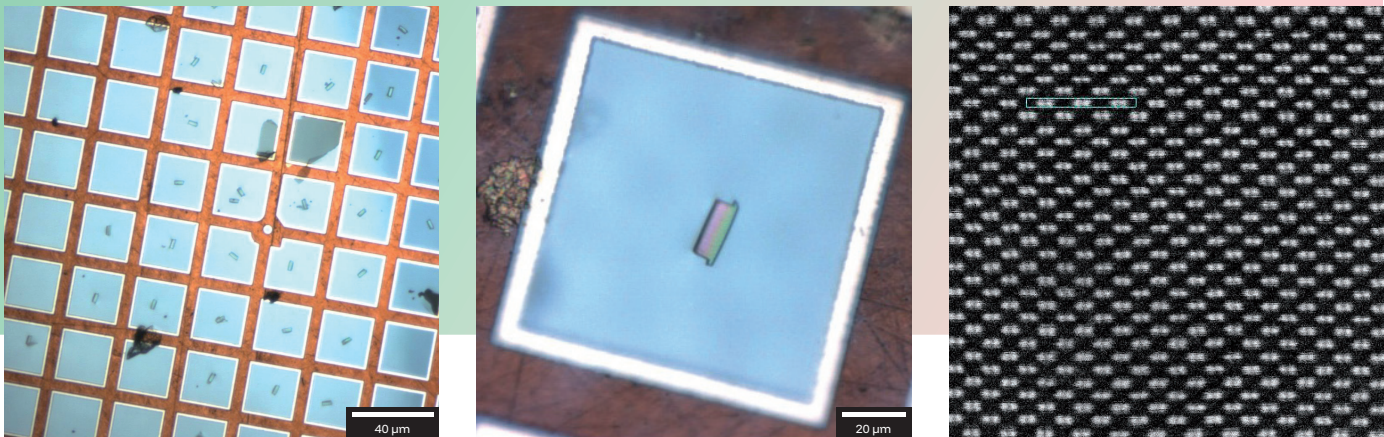


Tescan EXLO

Maximize Throughput, Reduce TEM Specimen Cost – TESCAN *ex situ* Lift Out (EXLO) for TEM Specimen Preparation.

TESCAN EXLO is a high-precision, *ex situ* lift out (EXLO) system designed for semiconductors and Materials Science labs seeking to maximize throughput, reduce cost per TEM specimen and reduce *in situ* lift out FIB-SEM dependency. By moving TEM specimen manipulation outside the FIB-SEM, EXLO enables FIB-SEM and *ex situ* lift out parallel processing, lowering cost per specimen and increasing TEM specimen preparation efficiency. With an intuitive, fully motorized and semi-automated system, users achieve fast, reproducible lift-outs while keeping their FIB-SEM free for critical milling and analytical tasks.



More than 50 TEM specimens successfully lifted out using TESCAN EXLO (left), with a detailed view of a single TEM specimen (middle), and Cs-corrected HAADF STEM image acquired at 300 keV from a TEM specimen after *ex situ* lift out (right) to an EXpressLO™ patented slotted TEM grid*.

✦ Increase Productivity and Reduce Costs with TESCAN EXLO

Reduce the cost per TEM specimen by optimizing lift-out workflow with an *ex situ* approach that enhances profitability.

Maximize FIB-SEM utilization by enabling lift-out outside the chamber, keeping the FIB-SEM dedicated to milling and high-value processing rather than specimen extraction and manipulation.

Increase lab efficiency with a scalable solution where a single TESCAN EXLO system supports multiple FIB-SEMs, reducing operational costs and accelerating specimen turnaround.

Ensure high-quality, reproducible TEM results across high specimen volumes with a fully motorized XYZR micromanipulator and parfocal zoom microscope that delivers precision and control in every lift-out.

Assure specimen stability and attachment reliability using patented EXpressLO™ slotted grids*, which eliminate carbon film interference and allow for cleaner, thin-film-free TEM analysis (*US Patents 8,740,209; 8,789,826;).

Ensure the integrity of air-sensitive and cryo-prepared specimens by integrating EXLO with inert gas, vacuum, or cryo transfer, protecting against oxidation, contamination, and structural degradation during lift-out and handling.