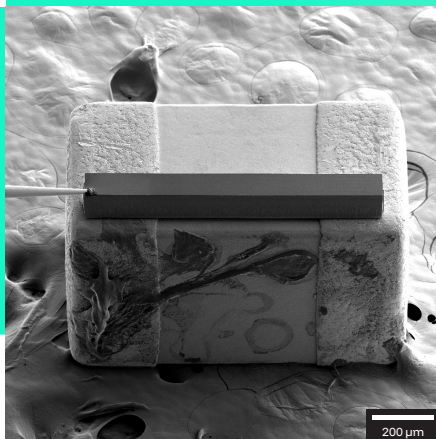
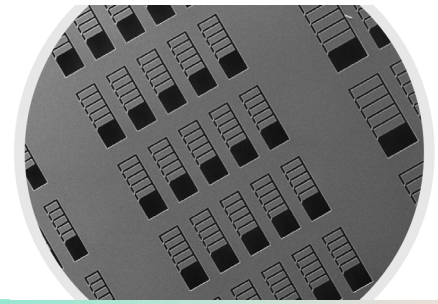
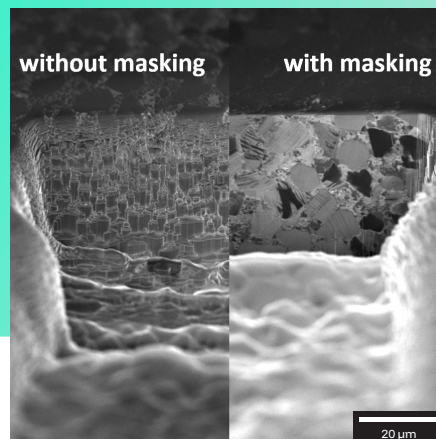


# Tescan TRUE X-Sectioning

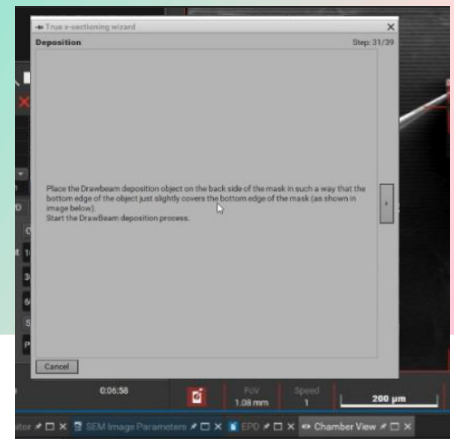
Time-saving method for ripple-free plasma FIB cross-sectioning without sacrificing high beam current



↑ 1 mm mask placed on the sample. Tescan's TRUE X-Sectioning kit contains more than 900 pre-cut Si masks in various widths.



↑ Comparison of Plasma FIB cross-sectioning results on SiC sample. Left image shows the results of milling without masking, with significant ripple artifacts obscuring the true structure of the sample. Right image shows the results of milling with the mask – an artifact-free cross section with clearly visible features.



↑ A step-by-step wizard within Tescan Essence™ guides users through the complete Tescan TRUE X-Sectioning workflow, from mask placement to milling, then mask removal.

## Key benefits

**Suppress ion beam-induced ripple artifacts on hard materials, composite samples, or biological resin-embedded samples** with our easily implemented pre-cut silicon masks

**Streamline the mask placement workflow using the Mask Placement wizard feature of Tescan's Essence™ GUI**, which guides users through the complete placement, milling and lift-out process

**Achieve the ultimate cross section quality while maintaining the advantage of high current plasma FIB milling** by combining TRUE X-Sectioning, to achieve the optimal milling beam, with Tescan Rocking Stage, to remove any visible curtaining

**Select from a variety of application-specific masks included in the TRUE X-Sectioning package** to achieve the best possible surface quality at the target area

## Applications

High-throughput plasma FIB cross-sectioning of challenging materials such as SiC, SiN, ceramics, diamond, glass, tungsten carbide, geological materials and biological resin-embedded samples.

Cross-sectioning of composite materials, highly topographical samples and samples formed from alternating hard and soft layers or porous layers

Protect surface features and assure optimal surface quality during plasma FIB cross-sectioning for 3D tomographic analyses