



& PHOTONICS

# STACIS® iX **SEM-Base**



STACIS<sup>®</sup> iX SEM-Base<sup>™</sup> active vibration cancellation floor platform system is designed for use with scanning electron microscopes (SEMs). SEMs are among the most vibration sensitive tools made, and these precision instruments typically incorporate an internal vibration isolation system. SEM-Base is compatible with all internal SEM vibration isolation systems.

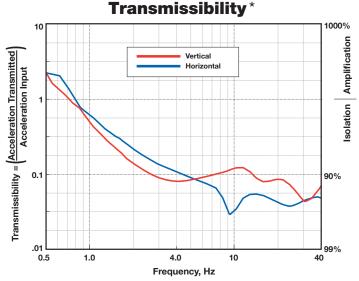
SEM-Base is a compact, cost-effective alternative to our 65 Series STACIS® 2100 Floor Platform. It incorporates STACIS

technology but has a much smaller footprint and installs easily with minimal tuning.

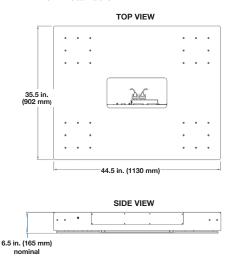
With vibration cancellation starting below 1 Hz, SEM-Base features extended stroke piezoelectric actuators and damped, powder-coated steel plates that sandwich four isolators and TMC's DC 2000 digital controller. The system is only 6.5 in. tall, measures 35.5 in. x 44.5 in., weighs approximately 650 pounds, can support 900 to 2,500 pounds, and has no soft air suspension.

#### **Features**

- Incorporates STACIS® technology
- Active inertial vibration cancellation system
- 35.5 in. x 44.5 in. x 6.5 in., fits most commercial SEMs
- Load capacity: 900 2,500 lb.
- Vibration cancellation starts below 1 Hz
- 6 active degrees-of-freedom
- Installs easily, minimal or no tuning required
- Compatible with all internal tool vibration isolation systems
- No soft air suspension
- Simple, robust, and cost-effective
- Optional casters allow easy portability, no lifting required
- Ask about our SEM-Lift<sup>™</sup> System for installation



\* 2,150 lb. (980 kg) payload with simulated floor vibration at VC-C (500 micro-inches per second, 12.5 microns per second)



### www.gmp.ch

**GMP SA** 

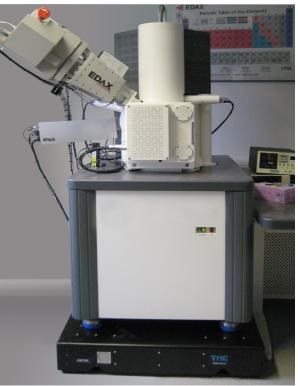
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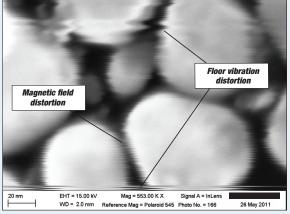
STACIS® iX SEM-Base™ Floor Platform isolating an FEI Helios NanoLab DualBeam SEM/FIB (top left), a JEOL JSM-6700F Field Emission Scanning Electron Microscope (top right), an Hitachi S-3400N SEM (bottom left), and a SEM with EDAX TEXS WDS Spectrometer and EDAX Hikari EBSD Camera (bottom right).

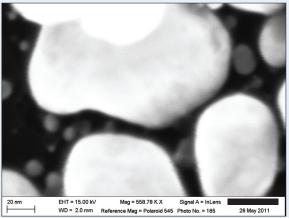


## **APPLICATION NOTE**

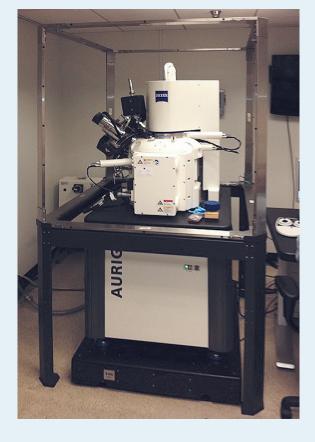
Before and After Images, Zeiss Auriga FIB-SEM on STACIS<sup>®</sup> iX SEM-Base<sup>™</sup> with Mag-NetX<sup>™</sup> (actual customer supplied data)

**Before** After





The before and after photos above are actual images taken from a Zeiss Auriga FIB-SEM installed in a non-ideal environment. The image on the left was taken with the newly installed TMC STACIS® iX SEM-Base $^{\mathsf{TM}}$  Floor Platform and Mag-NetX $^{\mathsf{TM}}$  Magnetic Field Cancellation systems powered-off. The image on the right was taken immediately after both active systems were powered-on.







Ask about helpful options that will ensure

a smooth SEM-Base™ installation.

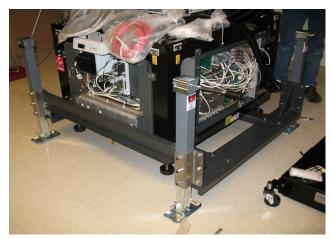


#### **Convertible Roll-Off Crate**





SEM-Base™ (shown with optional retractable casters) may be provided with a convertible roll-off crate. The crate cover converts to a sturdy ramp and the cover slats form a guide for the wheels.





SEM-Lift<sup>™</sup> is a safe and sturdy lifting device for scanning electron microscope (SEM) columns. It simplifies and speeds SEM-Base<sup>™</sup> installation on a previously installed SEM column. SEM-Lift raises the column several inches allowing SEM-Base<sup>™</sup> to be rolled into place.