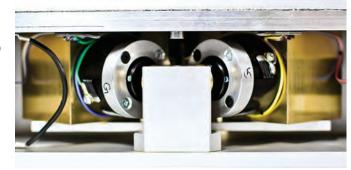


Why Researchers Partner With Herzan

Uniquely Experienced

For over 28 years, Herzan has helped researchers remove disruptive environmental noise from their measurements, focusing on high-performance, uncompromising solutions to achieve the lowest noise floor possible. Herzan's mission is to help researchers maximize the quality of data collected by their instrumentation by designing research-grade environmental solutions to **isolate acoustic, vibration,** and **EMI noise** under any ambient lab conditions.

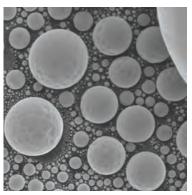


ADVANCED TECHNOLOGY: Industry Leading Environmental Control

Researchers across many applications have partnered with Herzan to remove noise from their measurements, including:



SEMICONDUCTOR



MATERIAL SCIENCE



BIOLOGICAL SCIENCE



PRODUCT TESTING

Leading Technological Solutions

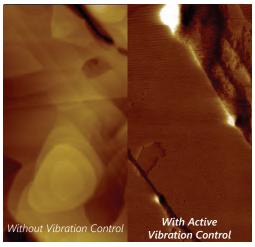
Herzan's catalog of environmental solutions focus on three critical areas: **unmatched isolation performance**, **application-tailored design**, and **premium production quality**. These three areas drive product design at Herzan and continue to be the reason why users around the world feel confident recommending Herzan products to colleagues when searching for the right environmental solution.



Vibration Control

Herzan partners with Table Stable, the company whose founder originated active vibration control technology, to deliver innovative solutions for low-frequency vibration isolation platforms. Herzan's active vibration control platforms are dynamic feedback loop systems, comprising of piezoelectric sensors, actuators, and control electronics to deliver sub-hertz vibration isolation performance in all six degrees of freedom. Herzan's platforms can adapt to any instrument size, from compact AFMs to large-scale Semiconductor tools.

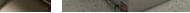
Herzan also designs, engineers, and manufactures passive vibration control platforms for compact instruments wanting an affordable alternative to standard optical tables and air-based work benches.



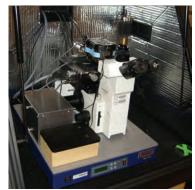
Vibration Noise Impact on AFM Image







Modular and Scalable Active Vibration Control Platforms

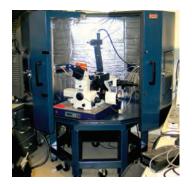


Desktop Active Vibration Control Tables Desktop Passive Vibration Control Tables



Acoustic Isolation

Herzan's acoustic enclosures are distinctly designed, engineered, and manufactured in its California headquarters, delivering unparalleled broad frequency acoustic isolation for a variety of research applications. Herzan's standard acoustic enclosures can be easily customized or upgraded, depending on the research application or need. Additionally, Herzan specializes in developing completely customized acoustic enclosures to fit individual instruments, offering uncompromising performance, accessibility, and feature capability.



HIgh-Access Workstation Enclosures



Modular and Paneled SEM Enclosures



Desktop Product Testing Enclosures



Custom OEM Acoustic Enclosures



Magnetic Field Cancellation

Herzan partners with Spicer Consulting, the company whose founder originated modern magnetic field cancellation technology, to support electron microscopes from the disruptive effects caused by AC and DC magnetic fields. Each solution is distinctly tailored to the instrument being supported, integrated seamlessly within the room or in a surrounding modular frame, providing dynamic magnetic field cancellation (400X reduction for DC Fields; 100X reduction for AC Fields).





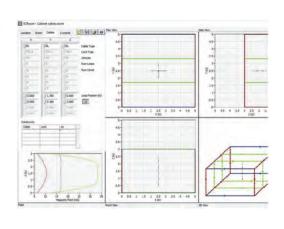
AC and DC Magnetic Field Cancellation for All Electron Microscopes | Integrated Into the Profile of the Room or In A Surrounding Frame

Custom Designed Solutions

Herzan's team of engineers work closely with researchers and instrument manufacturers to customize standard products or design completely unique solutions based on individualized research requirements. Herzan's engineering team supplies an array of resources for users to feel confident they are receiving the exact, uncompromising solution to meet their research requirements, including:





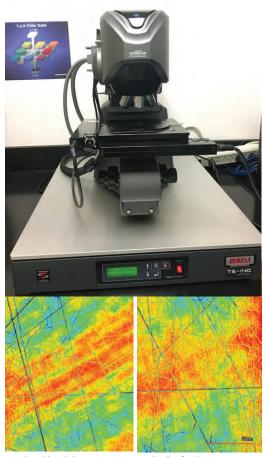


Software Designed to Optimize the Performance of Environmental Solutions



Case Studies

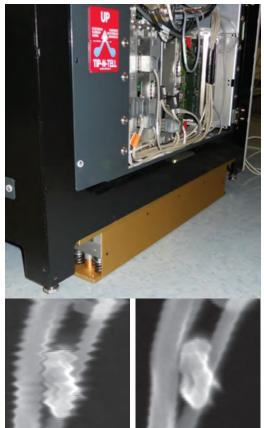
Herzan has partnered with customers around the world to share their experiences highlighting how they were able to eliminate troublesome environmental noise and maximize the utility of their instrumentation by partnering with Herzan to define a solution.



Top: TS-140 Supporting Keyence 3D Confocal Microscope Bottom: Chrome Part Surface Image With and Without TS-140



Customized AVI-200S-6 Platform Supporting Omicron Variable Temperature UHV-STM



Top: AVI-400M Supporting FEI Quanta 650 SEM Bottom: Carbon Nanotube With and Without the AVI-400M

TS-140 Supporting A 3D Laser Scanning Confocal Microscope

Researchers at Essilor USA observed a substantial amount of vibration noise limiting their Keyence VK-X250 3D Laser Scanning Confocal Microscope. The resulting vibration noise affected their surface roughness measurements, resulting in inaccurate results. To combat these issues, Essilor worked with Herzan to discover the best solution for their instrument given the severity of their environment: the TS-140 active vibration isolation table.

Company: Essilor USA

Application: Measure surface roughness of

chrome parts

Instrument Supported: Keyence VK-X250 3D

Laser Scanning Confocal Microscope

Noise Issue: Vibrations, Herzan Solution: TS-140

AVI-200S-6 Platform Supporting A Omicron VT UHV-STM

Researchers at Newcastle University were limited in operating their Omicron Variable Temperature UHV-STM due to excessive vibration noise caused by a nearby highway. They contacted Herzan to specify a supplementary vibration isolation system, which could drastically reduce the vibration noise experienced, while also being easy to retrofit. The AVI-200S-6 was selected, providing drastic improvement to the capability of the STM.

Company: University of Newcastle **Application:** Surface Analysis

Instrument Supported: Ómicron Variable Temperature Ultra-High Vacuum Scanning Tunneling Microscope (VT UHV-STM)

Noise Issue: Vibrations Herzan Solution: AVI-200S-6

AVI-400M Platform Supporting A FEI Quanta 650 SEM

The Zewail Group at Cal Tech operated a Quanta 650 SEM, which was severely limited by disruptive vibration noise and delaying research progress. The SEM's internal air isolation wasn't an option as the group fed a laser into the SEM, requiring positional stability within a few micrometers. A high performance vibration isolation system like the AVI Series helped reduce vibrations and maintain absolute positional stability.

Company: California Institute of Technology **Application:** Material analysis of Carbon

Nanotubes

Instrument Supported: FEI Quanta 650 FEG

SEM with Custom Optical System

Noise Issue: Vibrations Herzan Solution: AVI-400M



Immediate and Local Support

Herzan's support team in California can be immediately accessed to answer any questions or discuss new customer projects instantly. There is no idling on the phone to reach someone or waiting days for someone to return your call; the service and support are immediate. Herzan also encourages its team to take leading action in supporting customer needs, so customers are not waiting for a bureaucratic solution that can take weeks or months for a large collective team to decide.



Worldwide Support Network

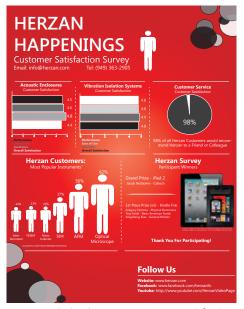
Herzan partners with experienced professionals in the field of environmental control, offering local support and technical services for researchers around the world. Each sales professional has been extensively trained to understand the complexities of customer applications and intricacies of Herzan's products, to deliver the most accurate recommendation possible for each customer.



Customer Focused

Herzan partners with a variety of companies ranging from instrument manufacturers to environmental consultants, all of whom want the same thing: dependable solutions for their customers to ensure their utmost satisfaction. Herzan's history of working closely with these partners has created well-refined systems aimed at optimizing the capability of their microscope, driving progress for a user's research.

In the end, what Herzan's mission is to have the researcher focus on what matters most: their research (and not their isolation solution). We have been privileged to work with some of the most innovative individuals in the scientific research community and are proud to help advance the research performed by our customers.



Herzan works hard to ensure customer satisfaction, with 98% overall satisfaction score



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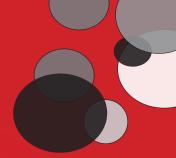






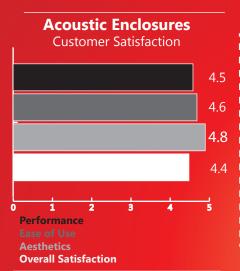
HERZAN HAPPENINGS

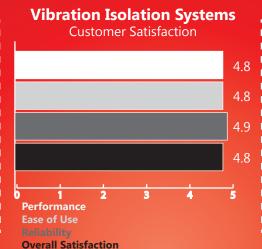
Customer Satisfaction Survey



Email: info@herzan.com

Tel: (949) 363-2905



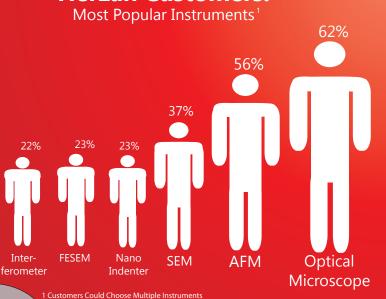




98% of all Herzan Customers would recommend Herzan to a Friend or Colleague

Herzan Survey

Herzan Customers:



Grand Prize - iPad 2 Jacob Notbohm - Caltech

1st Place Prize (x3) - Kindle Fire Gregory Homme - Physical Electronics Troy Small - Basic American Foods Xingcheng Xiao - General Motors



Thank You For Participating!

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