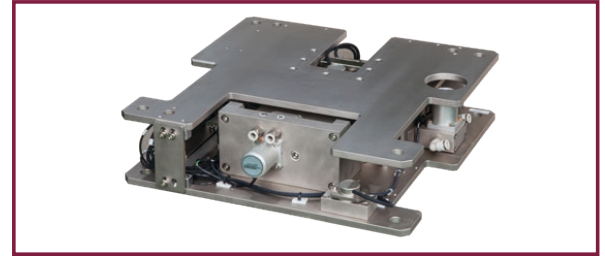


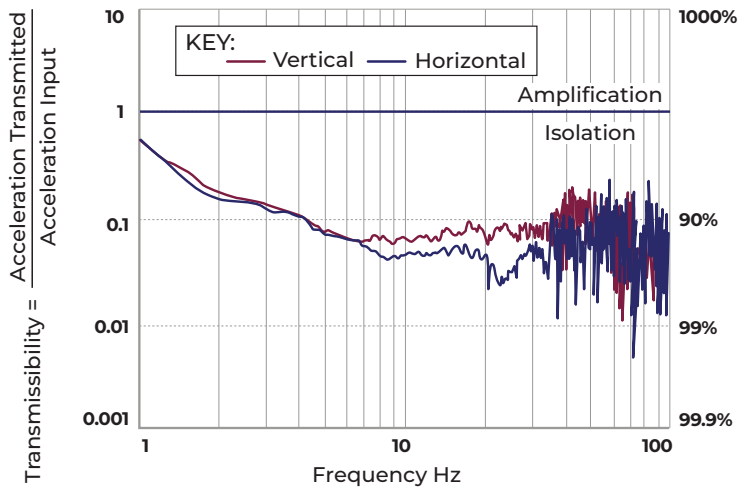
# DAEIL SYSTEMS DVIA-P

## DESCRIPTION

The DVIA-P Series is an active pneumatic vibration isolation system that uses integrated, ultra-precise, motorized linear stages to control vibration for advanced processing tools that require both low-frequency vibration isolation and ultra-fast settling time.



## VIBRATION TRANSMISSIBILITY



40% – 80% vibration isolation at 1 Hz  
≥90% vibration isolation at ≥2 Hz

## KEY FEATURES

### Superior Vibration Isolation Performance

Advanced feedback and feedforward vibration control algorithms are embedded in the DVIA-P, delivering 40 – 70% at 2 Hz in six degrees of freedom.

### Designed for Semiconductor Manufacturing Equipment

The powerful actuators integrated with advanced controls generate a significant amount of force to support the semiconductor and metrology equipment with integrated motorized linear stages.

### Turnkey Solution for Tool and Site Requirements

VEC will design the isolation system based on your unique tool requirements, including pedestals, system enclosure, structural calculations for permitting, and seismic restraints.

## SOPHISTICATED CONTROLS

### A Stage Feedforward

Stage feedforward counteracts movement from motorized stages by producing an equal and opposite force based on advanced information about the stage position.

### B Acceleration Feedback

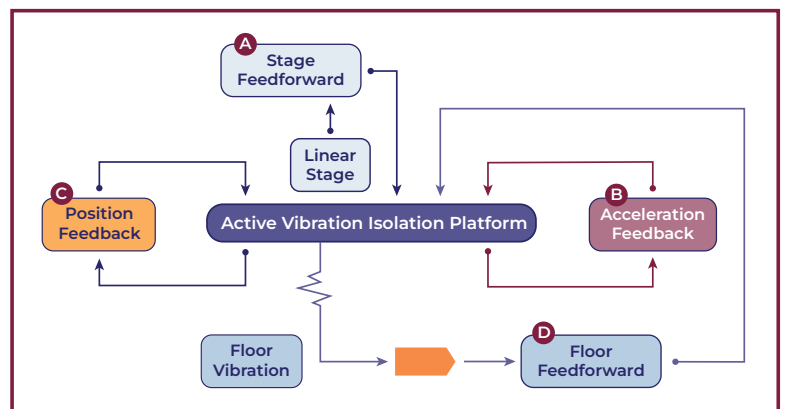
The acceleration feedback system uses sensors and actuators to detect and minimize vibrations from the floor and motorized linear stages.

### C Position Feedback

Position feedback measures displacement through position sensors, and the digital controller drives actuators to return the isolated base to its original position, improving accuracy.

### D Floor Feedforward

The floor feedforward system filters floor vibrations based on known factors like applied force and ambient vibrations, and tunes feedforward gains to operate actuators.



 DAEIL SYSTEMS



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