



Vibration Solutions

Acoustic Cabinet	AC-7859
Base	BA-4678
Bungee Option	BO-6748
Active Table	AT-7032
Passive Platform	PP-1101

Acoustic and structural vibrations degrade the resolution and overall performance of an Atomic Force Microscope. Acoustic vibrations are transmitted through air and structural vibrations are transmitted by structures supporting the AFM stage. Reduction in resolution results from vibrations at a resonance in the AFM stage structure that cause the probe to move out of phase with the sample.

Acoustic vibrations are reduced by placing the microscope in an acoustic isolation chamber. Structural vibrations are reduced by using a mechanical isolation platform. Below are the vibration solution products offered by AFMWorkshop.

Acoustic Cabinet

Model ID: AC-7859

The Acoustic chamber reduces vibrations transmitted through air. The enclosure is constructed from 3/4" MDF and has 1" acoustic foam on its interior surfaces. At the rear of the chamber is a sealed passage for wires and cables. The door of the chamber can be configured to open to the left or to the right.

On optional support table is available for the acoustic chamber. The optional support table has an opening at its back side that is 20.5". The AFM system ebox can be stored inside the support table.



SPECIFICATIONS	Outside	Inside
ACOUSTIC CHAMBER		
H	36.0"	33.5"
W	21.5"	17.5"
D	21.5"	17.5"
Weight	70 Lbs	
SUPPORT TABLE		
H	24.5"	23.0"
W	21.5"	20.5"
D	21.5"	20.5"
Weight	40 Lbs	

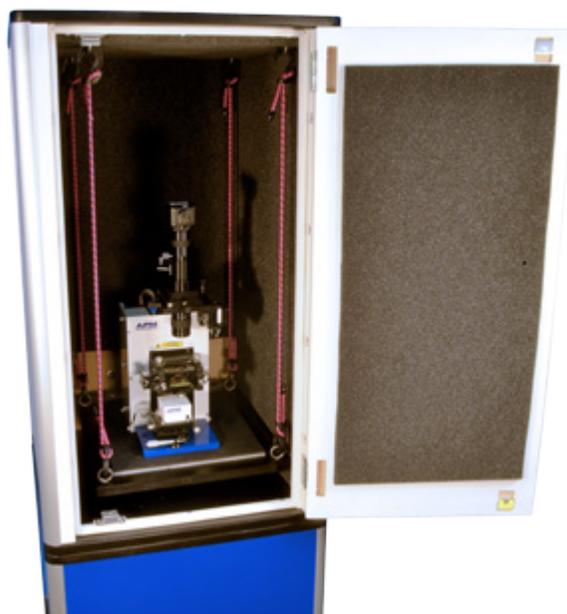


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Bungee Option

Model ID: BO - 6748

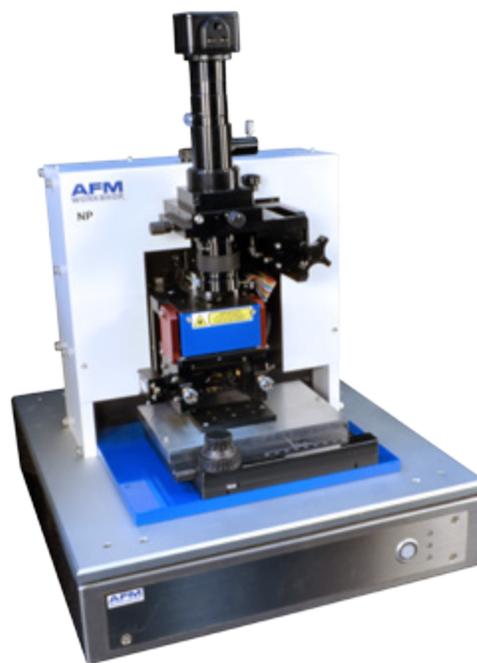
Placing the AFM on a platform suspended by bungee cords offers one of the best structural isolation platforms possible. Further, the **Bungee Option** is a relatively cost effective method for reducing unwanted structural vibrations. The **Bungee Options** is designed to be used with the Acoustic Enclosure (AC-7859) Included with the option are a platform, and bungee cords, as well as associated metal support hooks.



Active Vibration Table

Model ID: AT-7032

An **Active Vibration Table** uses a feedback control method for removing vibrations. An acceleration sensor measures vibrations, and then electromechanical transducers use the output of the sensors to control the motion of the table top. The advantage of an **Active Vibration Table** over the Bungee option is that the **Vibration Table** top is more stable than a platform suspended with bungee cords.



SPECIFICATIONS	
H	5.0"
W	15.5"
D	17.5"
Weight	40 Lbs

Passive Vibration Platform

Model ID: PP-1101

Moderate structural vibration isolation is possible with the **Passive Vibration Platform**. This product is ideal if the AFM location has few structural vibrations and when ultimate AFM performance is not necessary. The **Passive Table** may be used in the acoustic isolation cabinet.



SPECIFICATIONS	
H	2.0"
W	15.0"
D	15.0"
Weight	15 Lbs

Custom/OEM

AFMWorkshop can fabricate acoustic enclosures of almost any size and shape. Please contact us if you have a special requirement for a vibration enclosure.

