

Vision IsoStation™ Series

# Vibration Isolation Workstation



The Vision IsoStation provides industry leading performance and more user friendly features and accessories than any other vibration isolation workstation. All of the features and accessories have been designed specifically to improve ease-of-installation, set-up and lab space utilization.

## **Better Performance - More Options**

The Vision IsoStation is offered with platform sizes from 24"x24" up to 36"x72" to accommodate the widest range of applications from small bio-instrumentation isolation up to medium size optical investigations that may have previously needed a full sized optical table. The Vision IsoStation will be available in two load capacities, 500lb gross and 1,300lb gross, delivered by Newport's high-performance I-125 and I-325 Series pneumatic isolators. Both versions reduce transmitted vertical and horizontal vibrations by 85% or more after 5Hz and by more than 95% after 10Hz.

## **Easier to Use**

The Vision IsoStation features a unique platform interface that acts as a docking surface, an accessory mount and a restraint to keep the breadboard atop the frame. The interface also features float height indicators and frame bubble levels to make set-up and installation easier than ever. These same features are also useful when the system is relocated to another lab or if system performance needs to be verified. With these new features and integrated leveling feet and casters standard on all versions the system is much easier and safer to transport and install. Another unique feature of the Vision IsoStation is a new shipping package that not only reduces packaging materials but also allows users to simply roll their system off into their lab, it's as plug-and-play as can be! Since the breadboard is shipped pre-installed on the frame customers no longer need to lift the heavy breadboard during installation.

## **New Accessories**

The Vision IsoStation family also includes a new offering of accessories designed specifically for modern scientific and biological investigations. This includes several new instrumentation and accessory storage options.



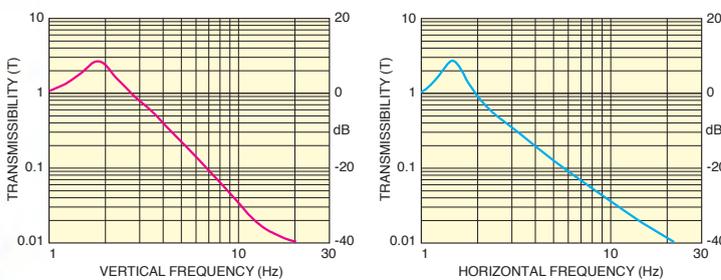
# Vibration Isolation Workstations

## Performance

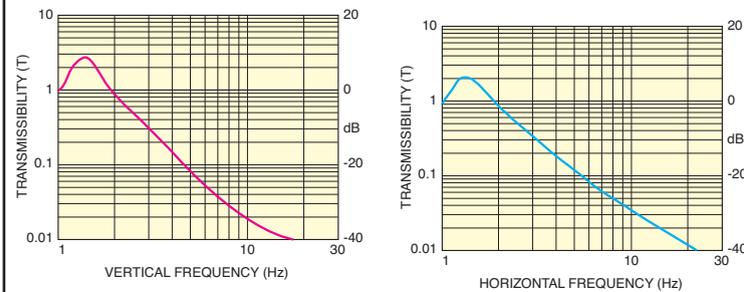
### Isolation

The Vision IsoStation is available in two isolated load capacities, 500lb gross and 1,300lb gross, provided by Newport's high-performance I-125 and I-325 Series pneumatic isolators. Both versions reduce transmitted vertical and horizontal vibrations by 85% or more after 5Hz and by more than 95% after 10Hz. Both isolator models incorporate hybrid chamber designs, laminar flow damping and horizontal pendulum isolation to provide a quiet and stable isolation platform. Unisolated versions are also available and can be field upgraded to provide isolated performance in the future.

Vision IsoStation I-125 Series Isolators



Vision IsoStation I-325 Series Isolators



Model	Vertical Isolation, Res*(Hz)	Vertical Isolation, 5Hz*(%)	Vertical Isolation, 10Hz*(%)	Horizontal Isolation, Res*(Hz)	Horizontal Isolation, 5Hz*(%)	Horizontal Isolation, 10Hz*(%)	Amplification at Resonance, Vert.(dB)	Amplification at Resonance, Horz.(dB)	Valve	Load per Isolator[lb (kg)]
125A Series	1.8	85	95	1.6	86	96	9	6	IPV-S2	125 (60)
325A Series	1.5	90	98	1.2	90	98	6	4	IPV-S2	325 (150)

## Platforms

The Vision IsoStation is available in multiple platform sizes from 24"x24" up to 36"x72" to accommodate the widest range of applications from small bio-instrumentation isolation up to medium size optical investigations that may have previously required a full sized optical table. Two standard worksurface thicknesses are available. A 2" thick industrial grade or IG breadboard provides a 34 inch working height and the 4" thick research grade or RG breadboard provides a 36 inch working height. Custom worksurfaces are also available including special materials, thru holes and custom shapes to provide OEM's and multi-user facilities with a more customized solution.



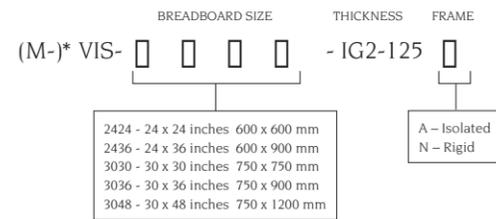
IG and RG Series 2 in. Breadboards



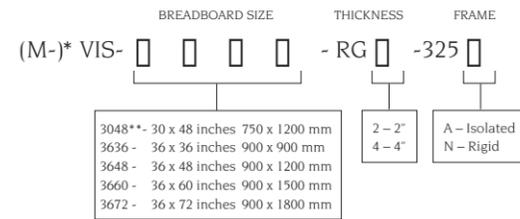
RG Series 4 in. Breadboards

	RG Series	IG Series
Working Surface	400 Series ferromagnetic stainless steel 3/16 in. (4.8 mm) thick with integrated damping layer	400 Series ferromagnetic stainless steel 0.134 (3.4 mm) thick with integrated damping layer
Thickness [in. (mm)]	2.4 (59); 4.4 (112)	2.3 (58)
Surface Flatness [in. (mm)]	±0.004 (±0.1), over 2 ft (600 mm) square	±0.006 (±0.15), over 2 ft (600 mm) square
Core Design	Trussed honeycomb, vertically bonded closed cell construction, 0.010 in. (0.25 mm) Steel sheet materials, 0.030 in. (0.76 mm) triple core interface	Trussed honeycomb, vertically bonded closed cell construction, 0.010 in. (0.25 mm) Steel sheet materials, 0.030 in. (0.76 mm)
Broadband Damping	Constrained layer dampers and Integrated Damping	Integrated Damping including constrained layer core, damped working surface and composite edge finish
Mounting Hole Type	Cut (not rolled) threads with countersink 1/4-20 holes on 1 in. grid (M6-1.0 holes on 25 mm grid) 0.5 in borders (12.5 mm borders)	Cut (not rolled) threads with countersink 1/4-20 holes on 1 in. grid (M6-1.0 holes on 25 mm grid) 0.5 in. borders (12.5 mm borders)
Hole/Core Sealing	Easy clean conical cup 0.75 in. (19 mm) deep Non-corrosive high impact polymer material	Easy clean conical cup 0.75 in. (19 mm) deep Non-corrosive high impact polymer material

## Base Model Numbers



\*The M- prefix designates metric threads



\*The M- prefix designates metric threads  
\*\*3048 is only available in 2" thickness

## Accessories

### Extension Shelves

To help users optimize the vibration isolated workspace Newport offers the Vision IsoStation extension shelves to provide a spacious, non-isolated work area to use for documentation, sample preparation or component assembly. The extension shelves are available in straight or angled configurations and provide more space than traditional "sliding shelves" to optimize isolated workspace. The extension shelves mount directly to the Vision IsoStation corner brackets and have both attachment point and level height adjustment to match the height of the floating breadboard and also compensate for any floor irregularities. The top surface features a durable black laminate finish that improves visual contrast for finding the smallest of loose objects like lenses, optical fiber or tissue samples.

Model	Description
<b>Straight Extension Shelves</b>	
VIS-ES-24	24 in. deep straight extension shelf
VIS-ES-30	30 in. deep straight extension shelf
VIS-ES-36	36 in. deep straight extension shelf
<b>Angled Extension Shelves</b>	
VIS-ESL-30	30 in. deep angled extension shelf, left side
VIS-ESL-36	36 in. deep angled extension shelf, left side
VIS-ESR-30	30 in. deep angled extension shelf, right side
VIS-ESR-36	36 in. deep angled extension shelf, right side

### Ergonomic Support Bar with Armrests

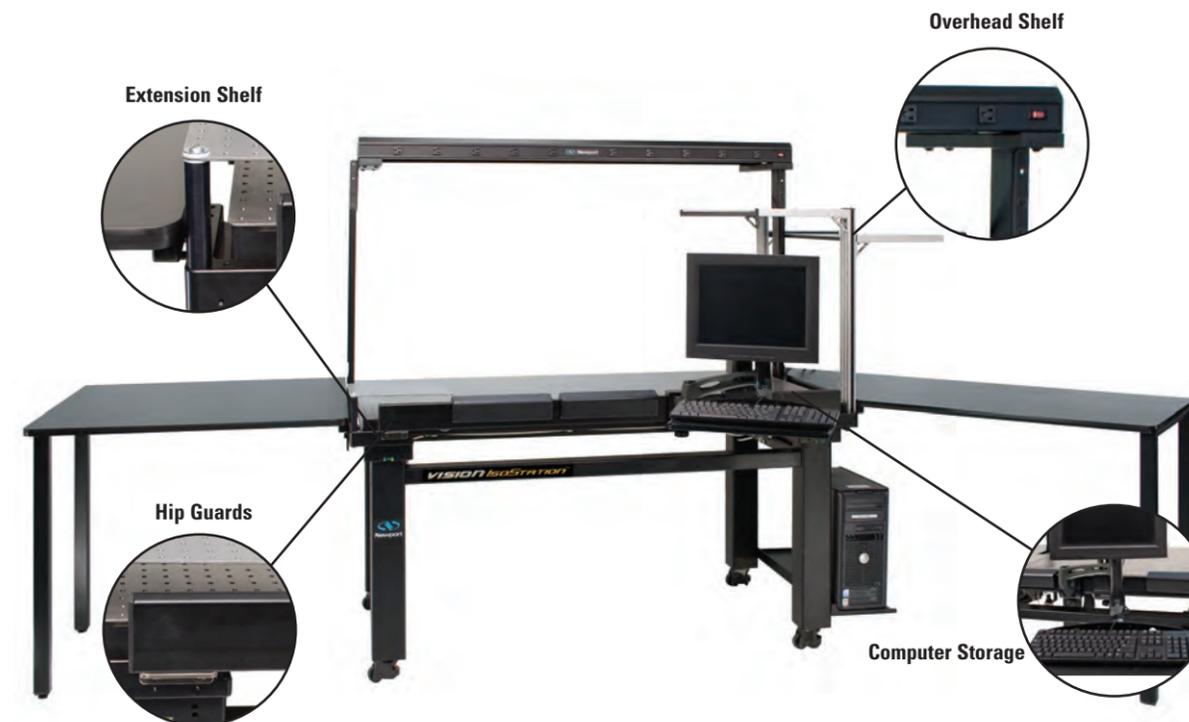
A popular accessory for many workstations is the front support bar or hip guard that includes padded armrests which provides an ergonomic support for users that are manipulating microscopes, instruments or performing precision assembly. The hip guard can also serve as a mounting area for other accessories including monitor arms, keyboard shelves or serve as a protective barrier for the workstation. The Vision IsoStation hip guard is unique since it can be used in conjunction with enclosures such as Faraday cages or light curtains since those enclosures mount to the top of the Vision IsoStation's special corner brackets, not the support bar like in other workstations. Each guard is shipped with two padded armrests and all required attachment hardware.

Model	Description
VIS-HG-24	24 in. hip guard
VIS-HG-30	30 in. hip guard
VIS-HG-36	36 in. hip guard
VIS-HG-48	48 in. hip guard
VIS-HG-60	60 in. hip guard
VIS-HG-72	72 in. hip guard

### ACWS Air Compressor

Newport also offers a low-cost, ultra-quiet air compressor to provide a clean, high-quality and reliable air supply to properly float Vision IsoStations. The ACWS air compressor features a smaller footprint, lighter weight and an ultra-quiet 30dB operating noise level for use in sensitive lab environments.

	ACWS, ACWS-02
Operating Sound Level (1ft) (dB)	30
Tank Capacity (liters)	1.0
Supply Voltage	115, 230 V



### Faraday Cage

The Vision IsoStation Faraday Cage helps reduce electromagnetic interference from affecting sensitive experiments or processes like patch-clamp investigations or sensor calibration. The Faraday cage mounts on top of the Vision IsoStation corner brackets to provide clearance for the use of other accessories like a front support bar or overhead shelving. The Faraday Cage is shipped fully assembled and features a roll-up front panel design and reinforced side access ports. Custom sizes and other enclosures, including light tight enclosures are also available.

Model	Description
VIS-FDC-2424	24 inch x 24 inch Faraday cage
VIS-FDC-2436	24 inch x 36 inch Faraday cage
VIS-FDC-3030	30 inch x 30 inch Faraday cage
VIS-FDC-3036	30 inch x 36 inch Faraday cage
VIS-FDC-3048	30 inch x 48 inch Faraday cage
VIS-FDC-3636	36 inch x 36 inch Faraday cage
VIS-FDC-3648	36 inch x 48 inch Faraday cage
VIS-FDC-3660	36 inch x 60 inch Faraday cage
VIS-FDC-3672	36 inch x 72 inch Faraday cage



### Vision Overhead Shelf

The Vision IsoStation overhead shelf features a 13.4 inch deep surface and 200lb load capacity. What makes this overhead shelf unique is its specially designed front and rear edge guards that prevent expensive instruments from accidentally falling onto the workstation and either causing equipment damage or creating a potentially dangerous laser safety issue. Just one accident could cost thousands in equipment damage, weeks of lost progress and possible permanent eye damage.

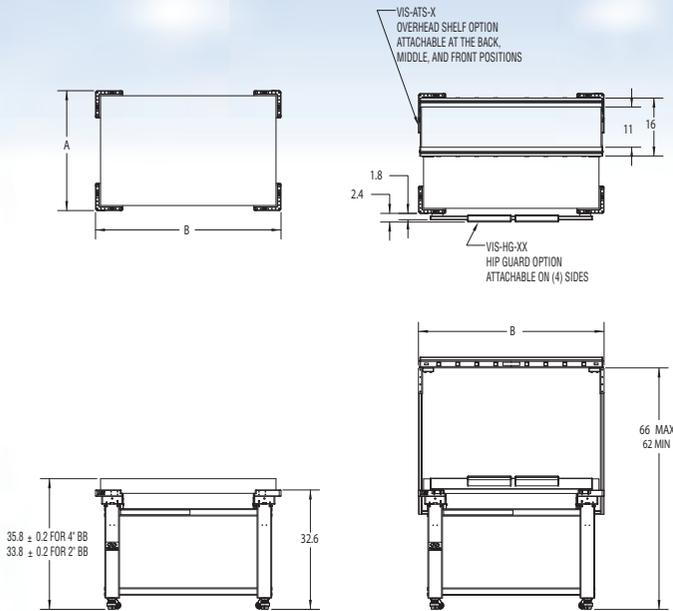
	VIS-ATS-36	VIS-ATS-48	VIS-ATS-60	VIS-ATS-72
Shelf width	36 inches	48 inches	60 inches	72 inches
Shelf depth	13.4 inches			
Mounting	Side of frame; front, middle or rear			
Electrical outlet	NEMA 5			
Outlet Quantity	6 on front, 6 on rear	8 on front, 8 on rear	10 on front, 10 on rear	12 on front, 12 on rear
Height adjustment	4 inches			
Shelf without electrical outlets*	VIS-ATSE-36	VIS-ATSE-48	VIS-ATSE-60	VIS-ATSE-72

### Computer Storage

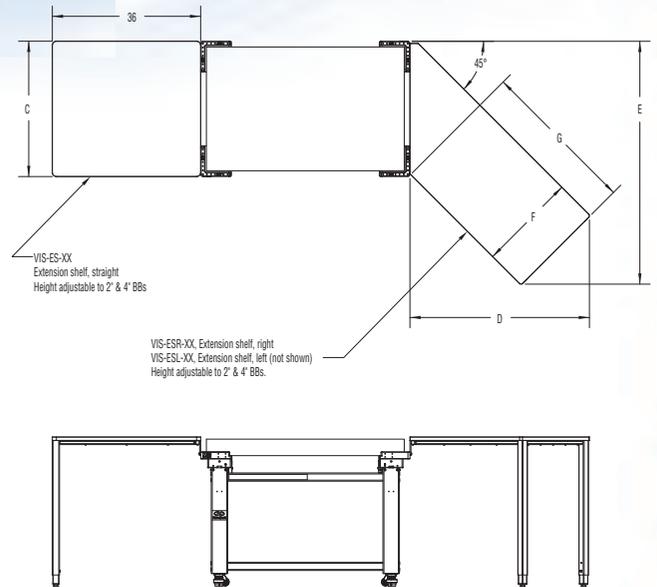
A side mounted shelf provides a safe and organized place to locate a desktop computer chassis. This shelf attaches to the Vision IsoStation frame to raise the computer chassis several inches off the floor to protect it from accidental spills and contamination. The keyboard and flat panel monitor arm accessories can mount to the optional rails or the front of the IsoStation frame to provide optimal accessibility and flexibility. Both the keyboard shelf and monitor arm feature articulated arms. The keyboard shelf also includes an integrated mouse shelf for either left or right hand use.

Model	Description
VIS-FPA	Flat panel monitor mount
VIS-KBA	Keyboard mount
VIS-KBFP	Flat panel monitor mount and keyboard mount kit
VIS-SCS-24	24 in. deep computer shelf
VIS-SCS-30	30 in. deep computer shelf
VIS-SCS-36	36 in. deep computer shelf

## Dimension Drawings



MODEL	DIM A (IN)	DIM B (IN)
VIS2424	26.8	26.8
VIS2436	26.8	38.8
VIS3030	32.8	32.8
VIS3036	32.8	38.8
VIS3048	32.8	50.8
VIS3636	38.8	38.8
VIS3648	38.8	50.8
VIS3660	38.8	62.8
VIS3672	38.8	74.8



MODEL	DIM C (IN)	DIM D (IN)	DIM E (IN)	DIM F (IN)	DIM G (IN)
VIS-ES-24	26.8	-	-	-	-
VIS-ES-30	32.8	-	-	-	-
VIS-ES-36	38.8	-	-	-	-
VIS-ESR/ESL-30	-	44	59	23.8	38
VIS-ESR/ESL-36	-	45	64	28.0	36

## New Features

All standard Vision IsoStation systems are shipped completely assembled and include integrated frame leveling feet with casters, a pre-installed optical breadboard and corner brackets. These unique corner brackets feature integrated bubble levels, multiple attachment points and provide docking, seismic restraint and float height indication of the breadboard. A new roll-off package is makes unpacking and installation fast and easy.



Simply remove the outer packaging and shipping straps



Engage the casters



Position the ramp at the end of the crate



Roll system into position



Finally, level the frame using the integrated leveling feet and bubble level indicators and plug air supply into the pre installed ARF.

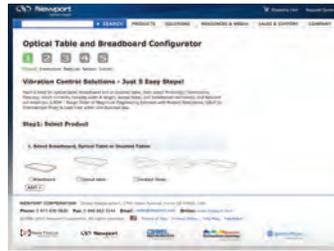
These standard features make the Vision IsoStation easier to install, set-up and optimize for your application than any other isolated workstation available.

## The Vision of Newport

The Vision IsoStation represents the innovation, customer focus and value that Newport's Vibration Control Team has been delivering to customers for more than 40 years. In addition to our broad standard product offering our capabilities at designing and manufacturing custom solutions is unmatched. With over 40 years of experience no other optical table supplier has manufactured more doubled table systems, specialized isolators, accessories or unique systems solutions than our Custom Products Team. Contact our team today to get the technical support, expert advice and solution options to help drive your innovation and stay within your budget.



SmartTable® Doubled



On-Line Table Configurator



CP Series Cradle Platform



## Newport On YouTube

Newport is dedicated to delivering all the resources our customers need to better understand and utilize our products, capabilities and expertise. We provide a selection of high quality videos on various products and topics on YouTube. Below is a selection of videos featuring vibration control:

Videos:

- Vision IsoStation Workstation
- SmartTable OTS Optical Table System
- Newport Corp Optical Table and S-2000 Stabilizer Isolator set up
- SmartTable OTS System Installation

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