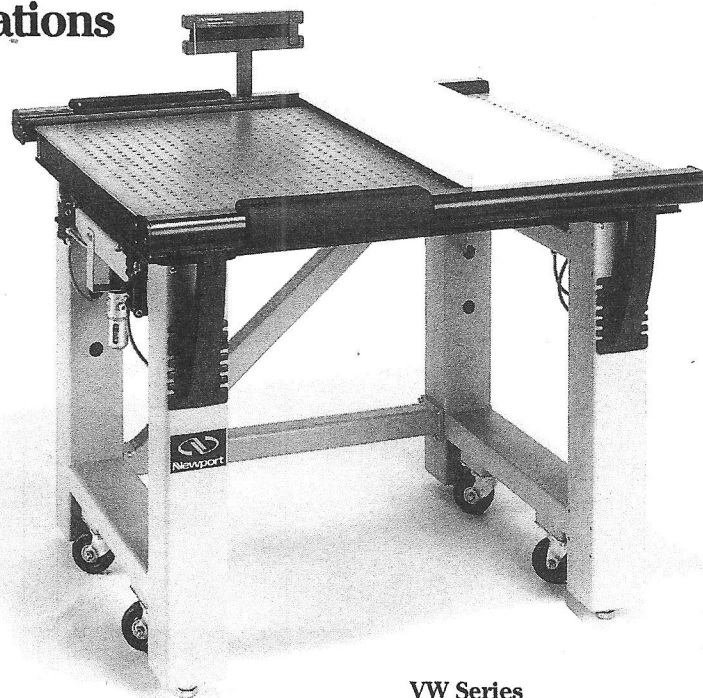


Vibration Isolated Workstations

U.S. Patent 5,071,108



VW Series

- Complete vibration isolation system in one rigid, freestanding unit
- Exclusive laminar-flow damping
- Patented self-centering piston movement
- Ideal for sensitive instruments and general experimentation
- Economical vibration protection for loads up to 800 lb. (350 kg)
- Optional casters, shelves, and armrests

Newport's **VW Series Vibration Isolated Workstations** are the ideal platform for devices affected by vibration like interferometers, microscopes and balances, as well as for general experimentation. Sensitive instruments like these can show significant improvements in resolution and repeatability when isolated from floor motions by the VW Series Workstations. It incorporates the same isolator technology as the advanced **Stabilizer™ Model I-2000** (see page 16. 40) and possesses improved breadboard performance specifications.

Special care was taken to ensure excellent performance in the 20–30 Hz floor vibration frequency range corresponding to dominant ambient vibration frequencies, especially those common to multi-floor buildings. The interchangeable pneumatic isolators provide excellent protection against vertical *and* horizontal floor motions.

These workstations integrate Newport's rigid, laminated honeycomb panel technology and pneumatic isolation systems to provide a mounting platform which is rigid, yet thin and lightweight. The system accommodates high center-of-gravity loads with exceptional stability. Equipped with optional casters, the system is easy to move without forklifts or other equipment and may safely be lifted by building elevators.

A range of sizes, work-surface options and accessories may be combined to tailor the system for a variety of applications.

System includes a floor stand with independent leveling feet for each leg, three automatic leveling valves, selection of table tops and a choice of isolators.

Specifications

Isolator Natural Frequencies at 30 psi (2.1 kg/cm²):

Vertical	≤2.5 Hz
Horizontal	≤2.0 Hz

Required Air Pressure 75 psi (5.3 kg/cm²) maximum

Load Rating (in addition to top):

Standard	0–260 lb. (0–120 kg)
Heavy Load	120–800 lb. (55–350 kg)

Work Surface Height 30 to 32 in. (762 to 813 mm)

Six work surfaces to choose from:

Option	Table Top
71	Damped, magnetic stainless steel top, 4.3 in. (103 mm) thick steel core with sealed mounting holes (see CSD breadboards, page 16. 70). Clean and oil-free.
01	Magnetic stainless steel top, 4.3 in. (103 mm) thick steel core with sealed mounting holes (see CS breadboards, page 16. 70). Clean and oil-free.
02	Magnetic stainless steel top, 2.3 in. (58 mm) thick honeycomb core, with sealed mounting holes (see XSN breadboards, page 16. 71).
03	Magnetic stainless steel top, 2.3 in. (58 mm) thick, no mounting holes, honeycomb core.
04	Non-conductive high pressure laminate surface; no mounting holes; 2.3 in. (58 mm) thick; honeycomb core provides rigidity similar to our XSN breadboards. Class 100 cleanroom compatible.
05	Special static dissipative plastic laminate. Similar to 04 option, but includes a surface with guaranteed resistance to ground of between 10 ⁶ and 10 ⁹ ohms. Grounding straps and hardware included. Class 100 cleanroom compatible.

Ordering Information

1. Select desired size and work surface from chart.

The system includes standard isolators for loads up to 260 lbs. (120 kg). Heavy-load isolators, shelves, casters, and armrests are available as options (see below).

Table Size	Damped, stainless steel, sealed mounting holes 4.3 in.(109mm) thick	Stainless steel, sealed mounting holes 4.3 in.(109mm) thick	Stainless steel, sealed mounting holes 2.3 in. (58mm) thick	Stainless steel, no mounting holes, 2.3 in. (58mm) thick	Non-conductive high pressure laminate, 2.3 in.(58mm) thick	Static dissipative high pressure laminate, 2.3 in.(58mm) thick
30×36 in.	VW-3036-OPT 71	VW-3036-OPT 01	VW-3036-OPT 02	VW-3036-OPT 03	VW-3036-OPT 04	VW-3036-OPT 05
750×900 mm	M-VW-3036-OPT 71	M-VW-3036-OPT 01	M-VW-3036-OPT 02			
30×46 in.	VW-3046-OPT 71	VW-3046-OPT 01	VW-3046-OPT 02	VW-3046-OPT 03	VW-3046-OPT 04	VW-3046-OPT 05
750×1150 mm	M-VW-3046-OPT 71	M-VW-3046-OPT 01	M-VW-3046-OPT 02			
30×60 in.	VW-3060-OPT 71	VW-3060-OPT 01	VW-3060-OPT 02	VW-3060-OPT 03	VW-3060-OPT 04	VW-3060-OPT 05
750×1500 mm	M-VW-3060-OPT 71	M-VW-3060-OPT 01	M-VW-3060-OPT 02			
36×36 in.	VW-3636-OPT 71	VW-3636-OPT 01	VW-3636-OPT 02	VW-3636-OPT 03	VW-3636-OPT 04	VW-3636-OPT 05
900×900 mm	M-VW-3636-OPT 71	M-VW-3636-OPT 01	M-VW-3636-OPT 02			
36×46 in.	VW-3646-OPT 71	VW-3646-OPT 01	VW-3646-OPT 02	VW-3646-OPT 03	VW-3646-OPT 04	VW-3646-OPT 05
900×1150 mm	M-VW-3646-OPT 71	M-VW-3646-OPT 01	M-VW-3646-OPT 02			
36×60 in.	VW-3660-OPT 71	VW-3660-OPT 01	VW-3660-OPT 02	VW-3660-OPT 03	VW-3660-OPT 04	VW-3660-OPT 05
900×1500 mm	M-VW-3660-OPT 71	M-VW-3660-OPT 01	M-VW-3660-OPT 02			

2. Options

To order the following options with your workstations, append these codes to the model number (see examples below).

Option Code	Item†
10	Heavy load isolators Designed for superior vibration isolation of heavier loads up to 800 lbs. (363 kg)
11	No isolators Appropriate for application where vibration isolation is not important
20	6 in. shelf/padded armrest package
21	10 in. shelf/padded armrest package
22	14 in. shelf/padded armrest package
23	21 in. shelf/padded armrest package
30	Padded Armrest and Front Support Bar
40	Casters
50	Cable Management System*

Examples:

For a 30 × 36 in. workstation with 2 in. honeycomb core, ¼-20 mounting holes, standard isolators, and a 10 in. wide shelf with a padded armrest package, the model number is:

VW-3036-OPT 02 21

3. Accessories Ordered Separately

Size [in. (cm)]	Model Number
Extra Shelves and armrests sold as accessories do not include support brackets.	
6 × 30 (14 × 76)	VW-S630
6 × 36 (15 × 91)	VW-S636
10 × 30 (25 × 76)	VW-S1030
10 × 36 (25 × 91)	VW-S1036
14 × 30 (36 × 76)	VW-S1430
14 × 36 (36 × 91)	VW-S1436
21 × 30 (53 × 76)	VW-S2130
21 × 36 (53 × 91)	VW-S2136
Casters	VW-C
Padded Armrests	VW-A
Support Bar (specify work-surface width (XX) as 36, 46 or 60 inches)	VW-SBA-XX
Cable Management System*	CMS

*See page 16. 59 for description.

†Note: If you decide to purchase a system without isolators, and would like to later upgrade to isolators, just order VW-ISL-KT to receive an Isolator Retro-fit Kit.