

# ANTI-VIBRATION TABLE

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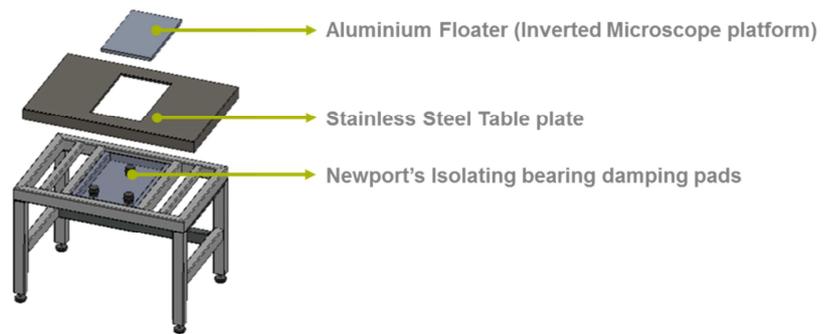
## ORIGIO standalone passive anti-vibration table

The Origio passive anti-vibration table is constructed of a steel frame with a Stainless Steel surface.

The AV part is a solid aluminium plate which is machined to form the 'floater' on which the inverted microscope is placed.

Anti-Vibration is achieved by using patented Newport's isolating bearings damping pads placed under the Aluminium Floater.

Adjustments can be made to the Aluminium Floater to maintain an ergonomically efficient work position for the micro manipulators.



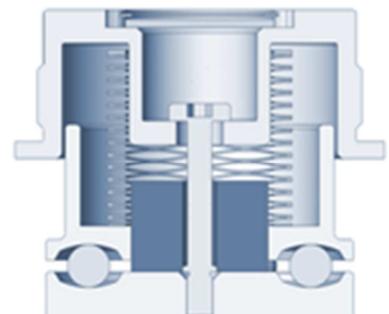
## WORKING Principle



Those six-degree of freedom bearings work within a defined range of weight under which the bearings deflect or compress. The amount of deflection is a function of the payload on each bearing. Vertical and horizontal vibration is effectively attenuated and your precision application is isolated from the vibration.

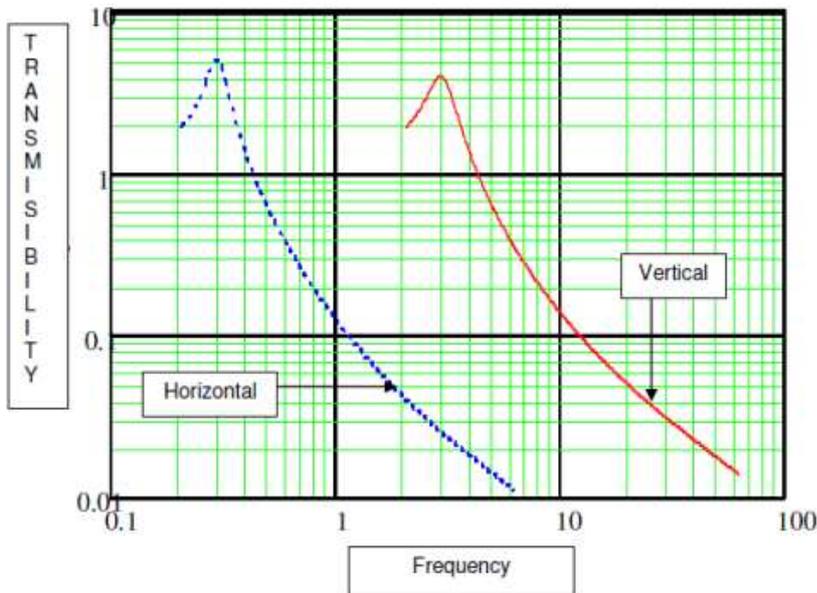
**Horizontally:** The patented isolator works in horizontal direction by utilizing steel ball bearings sandwiched between precision raceways, forming the plane of isolation. When the ball bearings displace and restore into their positions in raceways, they act like nonlinear springs that cut off the transmission of vibrations. The oscillating motion of the ball bearings has no "natural" frequency, therefore the resonance between the two halves of the isolation plane become physically impossible. As a result, the isolator filters out a broad band of input vibration frequencies and insures a constant level of vibration transmission reduction.

**Vertically:** Vertical vibration isolation is handled by the Newport proprietary, nonlinear spring mechanism with near zero tangential stiffness for vibrations. The natural frequency of the spring remains relatively low and constant across a large range of spring compression, effectively isolating the vertical vibrations



See below graph of the effective vibrations:

**Isolation Performance**



**Isolation Efficiency**

	Horizontal	Vertical
@ 5 Hz	98%	60%
@ 10 Hz	99%	85%

**KEY BENEFITS**

- Maintenance free: Unlike competitive products, the passive anti-vibration mechanism requires no maintenance like compressed air, oil or complicated setups.
- Easy to install

**SPECIFICATIONS**

19. **Dimensions: 75 x 120 x 79 cm** •Load: 29 -59 kg •Float: 55 x 35cm •Weight: 142 kg

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