

## Isolated Foundations and Inertia Block Products

Isolated foundations and inertia masses are typically free-floating concrete and/or steel masses that are supported by vibration and shock isolators. Isolated foundations are typically used to protect precision machinery or equipment from incoming vibration and shock. Whereas, inertia masses are typically used to add mass to a machine to control motion and to improve isolation of transmitted forces to surrounding areas.

**Coil Spring Mounts, Elastomeric Isolation Elements, Foundation Isolation Material, and Vibration Mounts** are all commonly used as isolation elements under isolated foundations and inertia blocks.

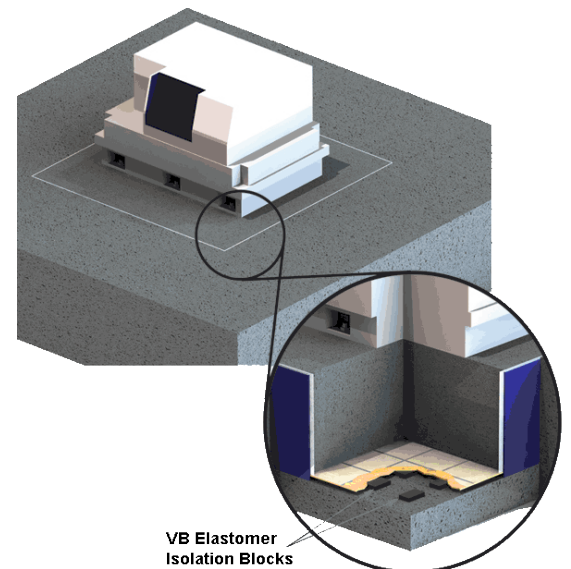
Isolated Foundations and Inertia Masses are used to:

- increase machine stiffness to resist twisting and misalignment due to changing weight and force,
- reduce machine motion and minimize wide fluctuations in weight distribution,
- allow the use of a lower stiffness isolation system that cannot be achieved using a direct isolator mounting method,
- increase mass damping for improved isolation effectiveness,
- lower the center-of-gravity for improved stability,
- increase the "foot print" of a machine to spread out the load bearing area.

Typical Applications:	
<ul style="list-style-type: none"> <li>○ Precision Machine Tools</li> <li>○ Coordinate Measuring Machines</li> <li>○ Generators and Compressors</li> <li>○ Vibrating Conveyors</li> <li>○ Sensitive Electronic Equipment</li> </ul>	<ul style="list-style-type: none"> <li>○ Computer Rooms</li> <li>○ MRI Rooms</li> <li>○ Printing presses</li> <li>○ HVAC Systems</li> <li>○ Laboratories</li> </ul>

**VB™ Isolation Blocks** are elastomeric cushions designed for use under concrete slabs and isolated foundations supporting sensitive equipment that needs protection from incoming vibration and shock. They also work to protect neighbors and surrounding area from a source of vibration and shock.

VB Elastomer Isolation Blocks have individual load ratings from 8,000 to 47,000 lbs. and can be configured to have *dynamic* natural frequencies as low as 7.5 Hz.

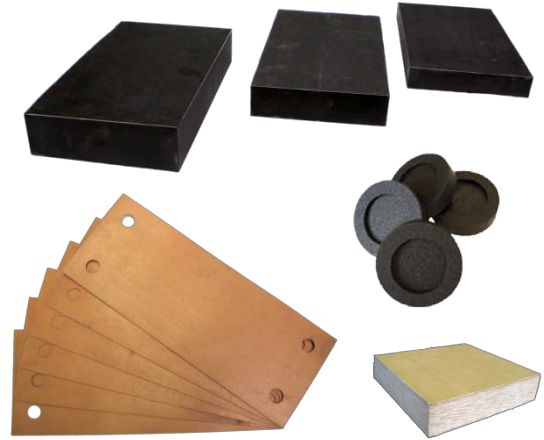


## Elastomeric Cushions and Pads

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Elastomeric isolation pads can be inserted between a machine base and a concrete supporting surface to provide high frequency vibration isolation and to protect the machine base from irregular surface conditions. Parts can be cut and holes provided for a custom fit application.

Vibro/Dynamics Application Engineers will design an Isolation Pad System to meet your exact need. The machine's static and dynamic forces will be analyzed and the Isolation Pad System designed and configured to provide much better vibration isolation and support when compared to hard mounting.



A variety of different pad material and thicknesses are available:

- **Neoprene**
- **Nitrile**
- **Hydrin**
- **EPDM**
- **MIL-C-882 Fabric Reinforced**
- **ASTM, SAE, AASHTO Grades**
- **Commercial Grades**

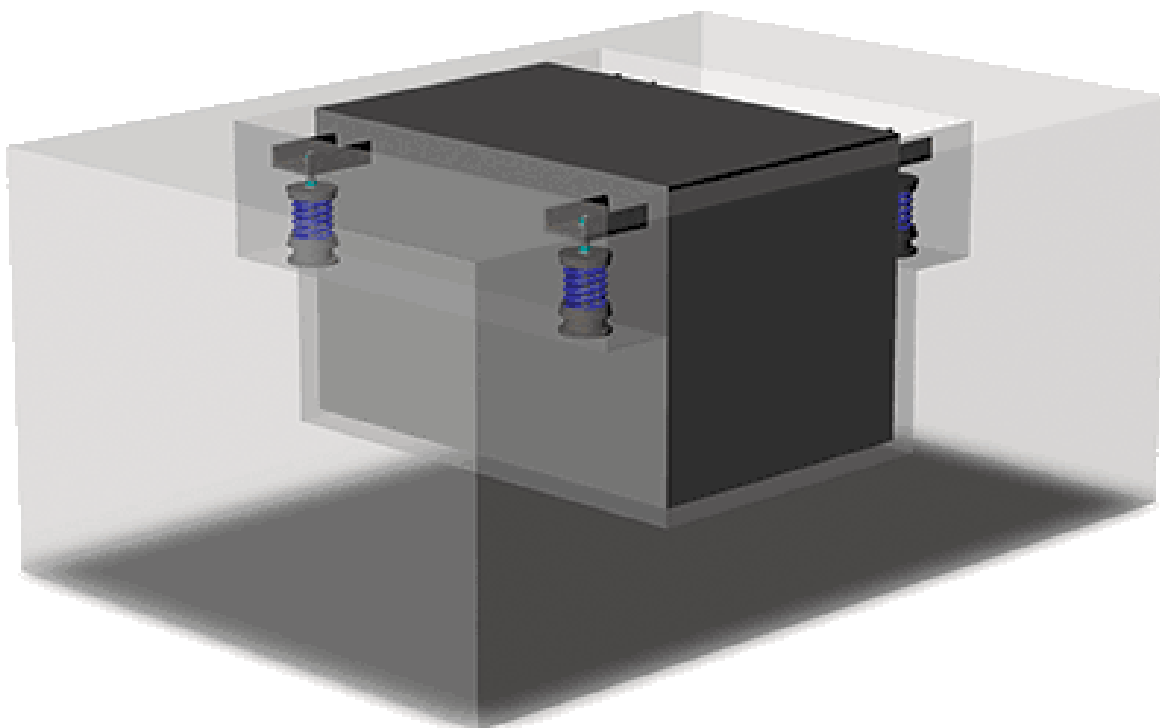


## Coil Spring Mounts

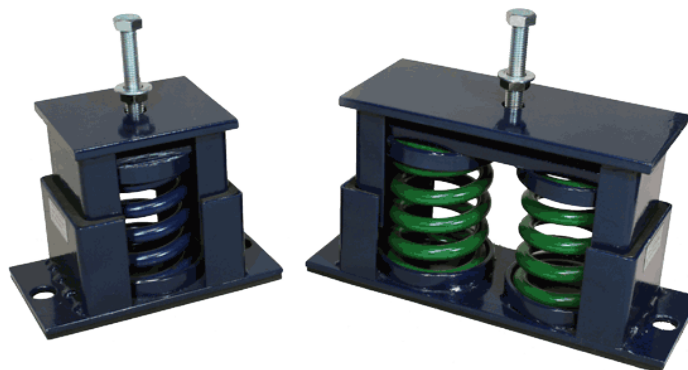
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Isolator models **VSC**, **VSM** and **SV** are excellent, low-frequency, coil spring isolators that can all be used in isolated foundation and concrete slab applications. These mounts can also be used in inertia block applications under forging hammers, stamping presses, generators, etc.

Typical natural frequencies range from 2.5 to 6 Hz, resulting in very effective vibration and shock isolation.



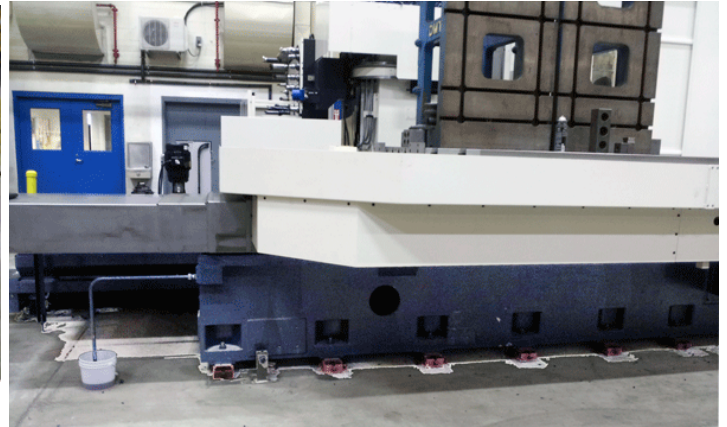
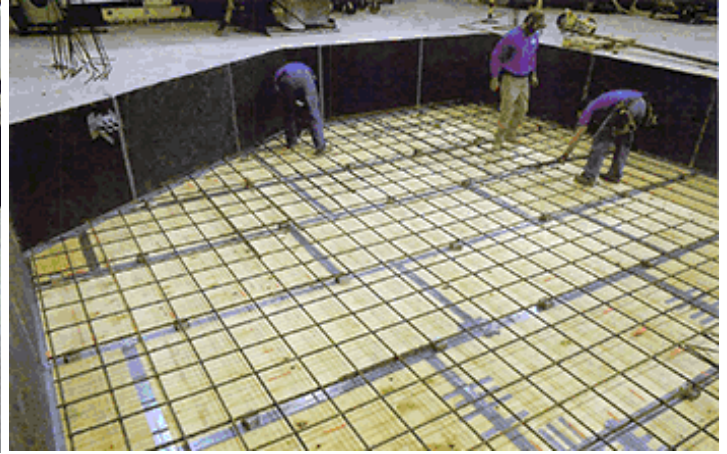
**Vibro/Dynamics VSC Spring Mounts** are versatile isolators that can be configured to meet just about any need or requirement. Opened, housed, restrained, integrated leveling and custom configurations are all available to suit your particular need.





## Foundation Isolation Materials

Vibro/Dynamics can provide Engineering Assistance and supply a variety of foundation isolation foams and padding to meet your needs.



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Manufacturers of technologically advanced vibration isolators, machine mounts, and vibration and shock control systems since 1964