



VIBRO/DYNAMICS

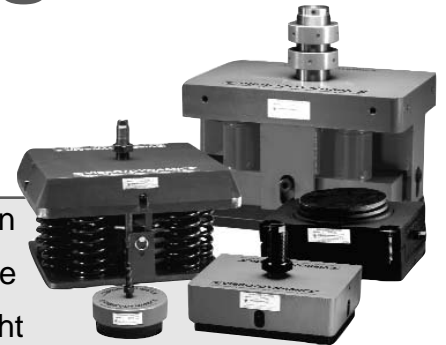
technologically advanced machinery mounting systems

Machinery Mounting News

Issue 13

Did You Know?

- That Vibro/Dynamics has the broadest line of vibration isolators in the industry? We are the only manufacturer that offers a complete line of both elastomer and spring isolators so that you get the right isolators for the job, not just what someone offers! Elastomer Isolators are available with either vertical leveling screw or wedge leveling configurations. And our Spring Isolators are available with either viscous or material damping and integral leveling or non-leveling versions. Custom Spring Isolator design is our specialty!
- That Vibro/Dynamics offers Engineering and Installation Services designed to make the installation of your machinery quick and easy? Some of our newest services are covered in this Newsletter. See our website for complete details on all of the services offered by Vibro/Dynamics Corporation.



What's Inside?

- Isolating high-speed presses that don't have dynamic balancers.
- Spring Isolators with hydraulic Lock-Out™ System help solve neighbor problem.
- Case History of the installation of a Turret Punch Press.
- New isolators for the Forging Industry.
- Dynamic MTS Test System service now available at Vibro/Dynamics.
- Vibro/Dynamics announces its new Leveling and Alignment Assessment Service to help keep your machines in top running order.

Isolating high-speed presses without dynamic balancers

Do you have a high-speed press, running 300 SPM or more, that is disturbing your employees and neighbors? If so, you may be interested in installing your press using Vibro/Dynamics Hy-Speed™ Spring Isolators with an inertia plate.

The inertia generated by the slide moving up and down can generate a great deal of force. Only an isolation system with a natural frequency lower than the press' operating speed can isolate these forces.

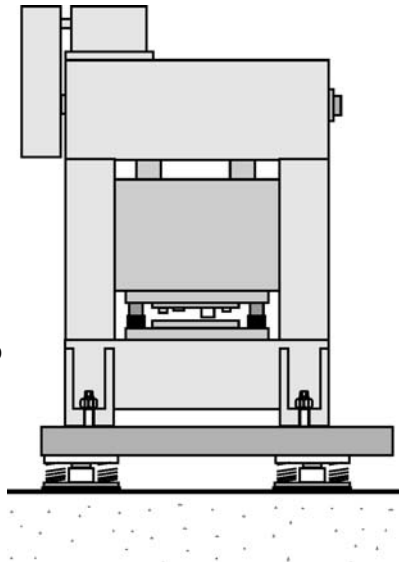
Elastomer isolators may do an excellent job of reducing higher frequency impact forces, but typically do not have a low enough natural frequency to isolate inertial forces.

Spring isolators, if properly designed and applied, will do a very effective job of isolating inertia. However, their relatively low stiffness can result in excessive motion if the amount of inertia is too high relative to the press weight.

For these cases, inertia plates are used to reduce motion by adding mass. Inertia plates can also be designed to move the press' center-of-gravity to a more favorable position as shown in the figure above.

Aligning the dynamic force centerline with the center of gravity helps reduce rocking.

Vibro/Dynamics Engineers are experts at designing inertia blocks and spring isolation systems. Contact us and we'll design a system that meets your specific needs.



Spring Mounts and Die Carts? No Problem!

What do you do when you have a 1000 ton press disturbing the neighbors, but can't use soft isolators because of potential alignment problems with a die cart? Well, you call Vibro/Dynamics for a solution! That's what a Wisconsin motor lamination stamper did.

Die carts need to be aligned with the press to work properly. When dies are loaded and unloaded, the press' center-of-gravity shifts and the press tilts. The tilt of the press may be great enough to cause elevation problems with a die cart. The softer the isolators, the more the press will tilt. Since spring isolators are soft, how can you use them without a potential elevation problem?

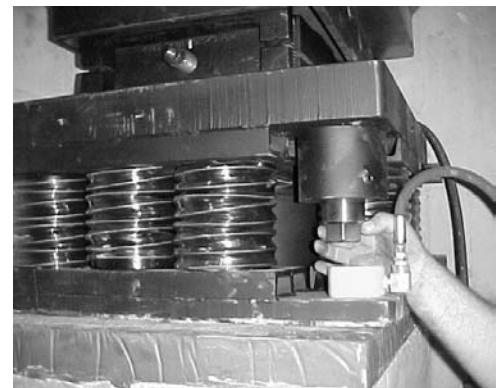
The solution was simple! Vibro/Dynamics designed a custom set of spring isolators, Model VSVLH3310, to do the job! These isolators are very effective at reducing transmitted vibration and shock and have a hydraulic cylinder "Lock-Out" feature that makes loading and unloading dies fast and easy.

During a die change procedure, the hydraulic system is engaged. The hydraulic cylinders extend to a predetermined height and act as stop blocks, keeping the press from tilting.

After the installation of the isolators, the customer ran the press that night. No neighbor complaints!

Effective vibration and shock isolation while maintaining precise elevation.

No problem!



For more information call 1-800-842-7

Vibration and Noise Reduction in Turret Punch Press

A manufacturer of electronic assemblies for the Video Game Industry contacted us about their hard-mounted installation of an Amada 344Q Turret Punch Press.



The press was generating high levels of noise and vibration. The Company asked us if we could do anything to reduce the high noise and vibration levels caused by the Amada press.

Vibro/Dynamics responded quickly, supplying isolators that provided the following results:

- ▶ The isolators provided a 3-to-1 reduction (67% isolation) in the peak floor acceleration level.
- ▶ Vibration in the press foot was reduced 13%
- ▶ Sound Level Meter reading (all-pass) showed that the sound level was reduced 2.1 dB without the use of a sound enclosure.

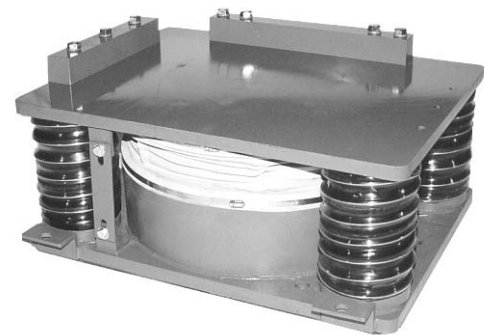
Contact us and we will send you a copy of the complete Case History.

New FSV Hy/Damp™ Spring Isolators for Forging Industry

Vibro/Dynamics is pleased to announce the latest addition to its growing line of Viscous Damped Spring Isolators.

The FSV Hy/Damp™ Series of Spring Isolators are specifically designed for the die forgers, drop hammers, and screw presses used in the Forging Industry. Their heavy-duty, stress relieved design is made to holdup under the severe operating conditions common in the Forging Industry.

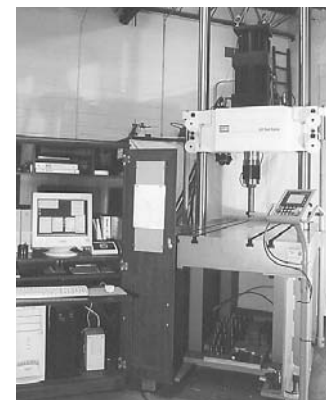
The viscous dampers in these isolators have been designed to effectively control motion, to outperform the competition, and to last under severe operating conditions.



MTS Dynamic Test System - Technicians Available

Do you have to dynamically test motor mounts, dampers, or machine components? We have a 110,000 lb. MTS Dynamics Test System and qualified technicians available to assist you!

Contact Vibro/Dynamics Product Engineering Department for assistance.



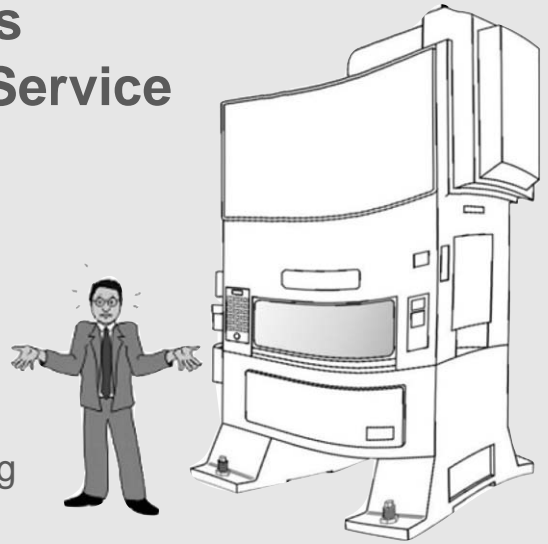
What's New?

Vibro/Dynamics Now Offers Level & Alignment Assessment Service

When Was The Last Time You Checked
Your Press' Level And Alignment?

Did You Know That Precision
Level and Alignment:

- Improves Press Productivity
- Increases the Life of Your Press and Tooling
- Improves Part Quality
- Decreases Downtime & Maintenance
- Reduces the Tonnage Required to Stamp a Part
- Reduces Reversal Loading on Press



It's True! Case Studies by Vibro/Dynamics Prove It!
Protect Your Investment and Contact Vibro/Dynamics Today!

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