



# VIBRO/DYNAMICS

technologically advanced machinery mounting systems

## Machinery Mounting News

Issue 14

### Did You Know?

- That the cost of anchoring a press can more than offset the cost of Vibro/Dynamics Isolators? Add it up! The cost of grout, anchors, shims, grout plates and especially time, add up quickly. Not to mention the costs of releveling a press due to a foundation settling or relocation of a press. It doesn't take long to see that Vibro/Dynamics Isolators are a real value.
- That Vibro/Dynamics now supplies anchoring wedge mounts designed to securely fasten machinery to a floor or foundation?



### What's Inside?

- Isolating large stamping presses using elastomer and spring mount technologies.
- Vibro/Dynamics announces agreement with Nivell AG of Bremgarten, Switzerland.



**Installation of a 1500 ton press on MXL elastomer isolators.**

## CASE HISTORY

## Isolating large stamping presses us

### Elastomer Isolator Technology

Vibro/Dynamics pioneered elastomer isolation and support technology for large presses in 1964. Now, it is the recognized and preferred technology of most North American press builders, not only because it does a great job of isolating vibration, but it is also stable, reliable, and extremely durable.

The isolator elastomers are engineered and applied to remain stable yet offer a high degree of isolation. Once the press is precisely leveled, it remains that way. This is critical for alignment with other equipment. Rolling bolsters operate smoothly for the life of the installation.

There are many "A" and "B" size presses, and many multi-slide presses in the field installed on Vibro/Dynamics elastomer mounts, some for over 15 years, and some weighing over 5 million pounds.

### A Large Press Installed Quickly

Recently, a Verson-Enprotech S4-1500-240-96T transfer press, weighing 800,000 lbs., was installed on Vibro/Dynamics MXL style elastomer isolators, featuring elastomer isolation and Hydra/Level® technology. These isolators provide extremely fast and accurate hydraulic assisted leveling. So fast in fact, that the contract riggers

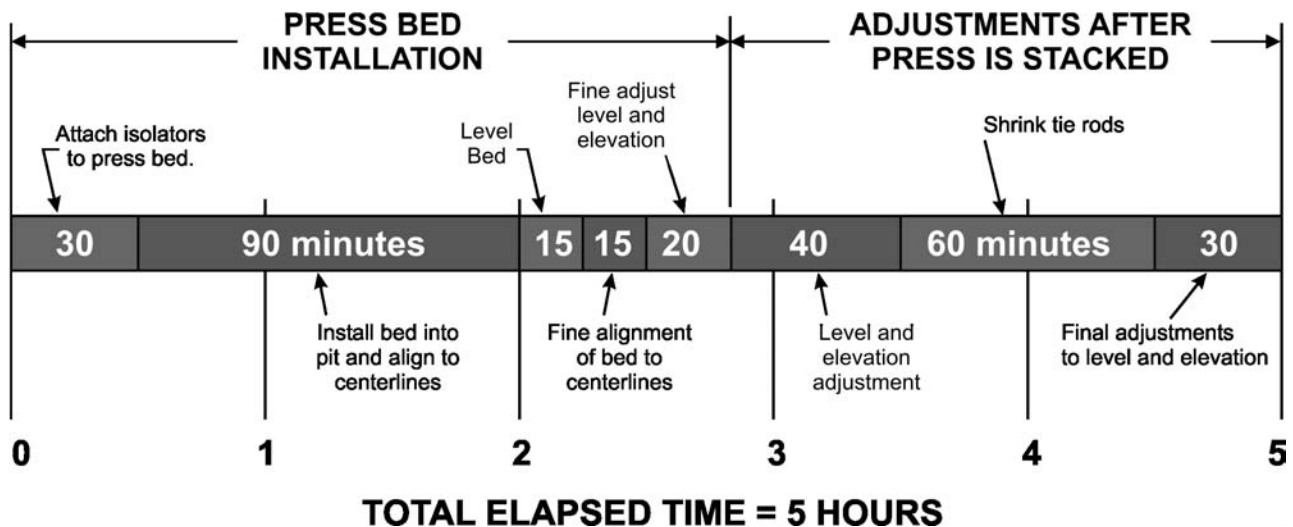
and the Vibro/Dynamics service crew attached the isolators to the press bed, installed it into the pit, aligned it to the foundation centerlines, leveled and fine-tuned the stacked press, and precisely adjusted the press elevation to the rolling bolster rails, all in just five hours.

The speed of installation makes anchoring, grouting, and shimming of large presses seem prehistoric! Anchoring large presses is unnecessary, costly, and time-consuming especially when considering the lengthy process of foundation preparation, grouting, and leveling with shims.

MXL isolators simply set on top of the foundation pier. They have a built-in swiveling capability to compensate for up to a 3 degree grade of the concrete pier surface. Expensive grout plates are eliminated!

### Good Neighbor Policy - Spring Mounts

When installing a press, you need to consider potential neighbor problems. Governmental agencies are establishing vibration standards and becoming increasingly more sympathetic to neighbor complaints. Legal action can shut a press down. This can be very expensive, especially considering lost production.



For more information call 1-800-842-7

# Using elastomer and spring mount technology

A recent case involved the installation of an S1-1200 press. Neighbors started complaining that they were being disturbed by the transmitted shock. After analyzing the press' static and dynamic characteristics, Vibro/Dynamics designed a set of viscous damped, coil spring style isolators for the press that completely solved the problem. This is only one of many examples.

## The First Step In Preventive Maintenance

In addition to reducing transmitted vibration forces, damaging high frequency forces within the press are also reduced. This protects the weaker press components, like fasteners and lube connections, from loosening and breaking. Reversal loads are also typically reduced.

## Earthquake Protection

In June, 1999, a "B" press experienced a 6.7 magnitude earthquake in Puebla, Mexico, only two months after installation. Installation records showed that the press' geometry was unaffected by the earthquake. Vibro/Dynamics isolators provide the horizontal displacement required to protect machines in earthquake prone areas.

## Foundation Movement

In spite of the best preparations, soils may settle and foundations sink. This is a major problem if the press is anchored and grouted. The cost to raise and realign a press may be prohibitive and often leads to a decision to leave the press in an undesirable condition.

No such decisions have to be made when the press is installed on MXL style isolators. Their hydraulic lift-assist leveling feature makes releveling fast, easy and inexpensive.



*Isolators being lifted into place.*



*Isolators secured to press bed.*



*Press bed ready to be installed onto foundation piers.*

machinery mounting news

7668 or visit [www.vibro-dynamics.com](http://www.vibro-dynamics.com)

tools, can making equipment, grinders, CMMs, textile machinery, injection molding machines, forging presses

## What's New?

Vibro/Dynamics Corporation and Nivell AG of Bremgarten, Switzerland have reached a distribution agreement. Under the agreement, Vibro/Dynamics has obtained exclusive rights to distribute the Nivell line of machinery mounting products in North America.

Nivell SK and GS wedge mounts are designed for small machine tools, plastic injection molding machines, die casting machines, and various machines used in the printing, textile and food industries. Maximum load ratings are 4500 lbs. for the SK mounts and 9000 lbs. for the GS models.

Nivell DK mounts are designed to securely anchor machines to a foundation. The DK anchoring wedge design is superior to competition. It features a double wedge design that centers all forces symmetrically around the anchor bolt, making the mount more rigid and stable. Leveling adjustments are easier since the double wedge design cuts in half the torque required to make an adjustment.

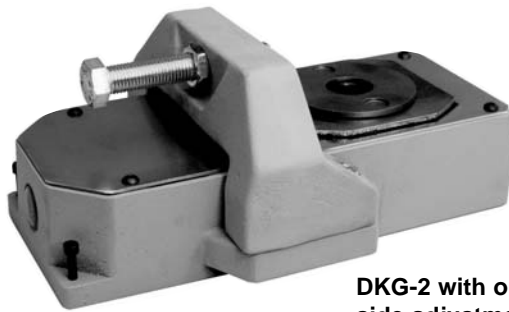
Several options and configurations are available to meet special needs (e.g. cast in concrete models, leveling extension links, spacers, and side adjustments kits to name a few).



SK Series  
Leveling  
Wedge



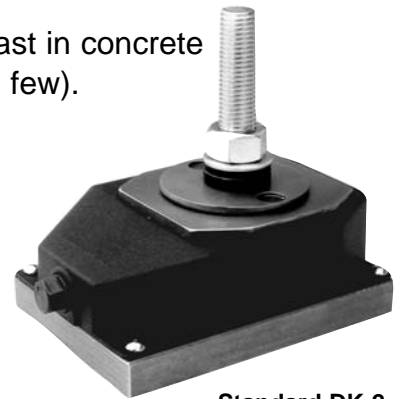
GS41  
Leveling  
Wedge



DKG-2 with optional  
side adjustment kit.



Optional D-4 spacers provide  
extra range of adjustment.



Standard DK-2  
with anchor bolt.

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