

VIBRO/DYNAMICS

technologically advanced machinery mounting systems



Micro/Level® Isolators



MXL and BFM Series for Large Presses

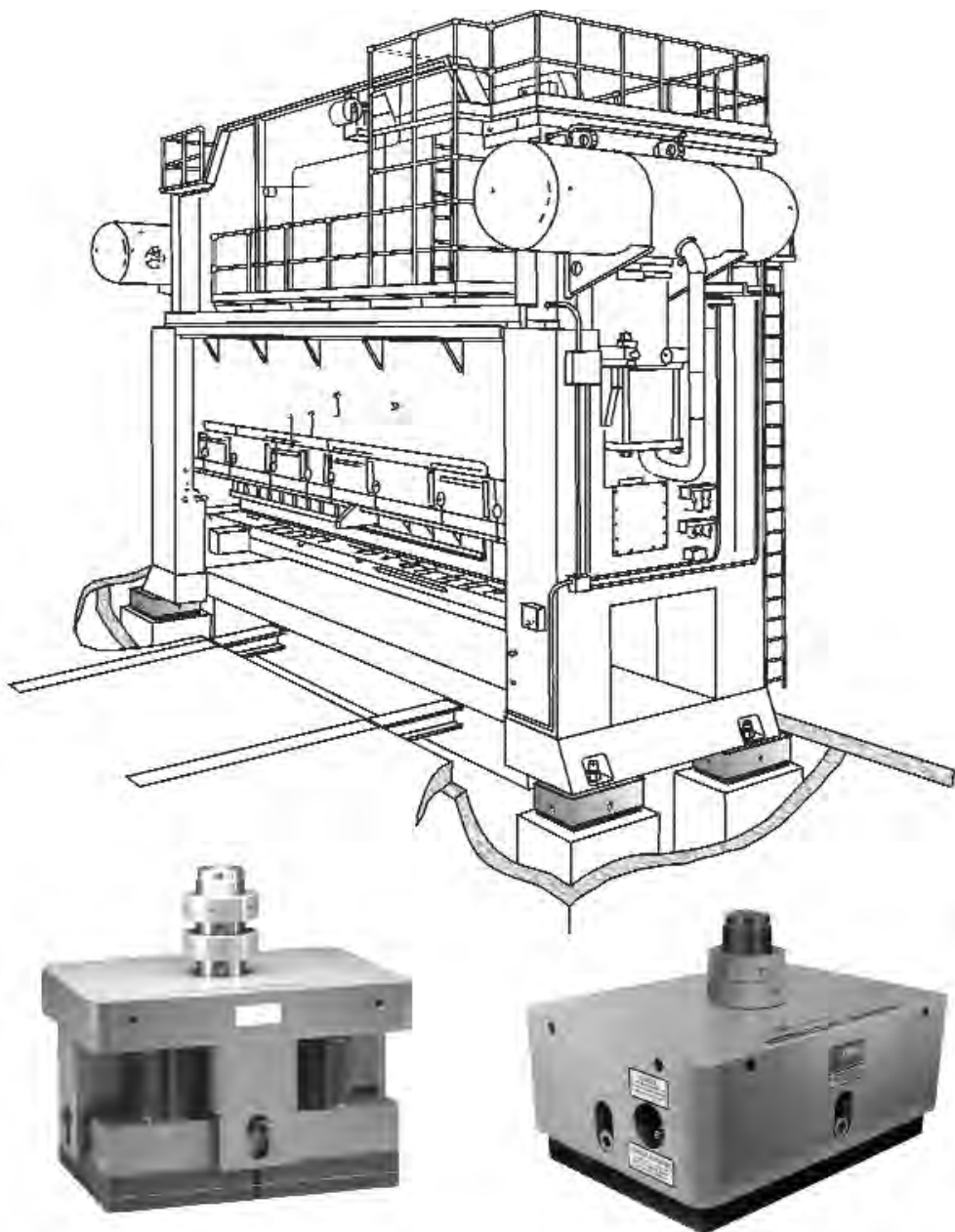
**Your Best Way to Install and Level Heavy
Presses for Effective Vibration and Noise Control**

**MXL and BFM Series
Micro/Level Isolators are
designed for the free-standing
installation of large Mechanical
Presses, weighing from 34,000
to over 2.3 million kgs. (75,000
to 5 million pounds).**

**These Isolators are designed
to provide the conditions
necessary for a successful
press installation:**

- **Precision leveling and alignment for increased tool and die life,**
- **Proper support for machine stability and no walking, and**
- **Vibration isolation for longer machine life and an improved working environment.**

**In addition, our HXL & HLM
Series Isolators feature our
patented Hydra/Level® System,
making leveling and aligning
even the heaviest presses
faster and easier, especially
when aligning presses that
have rolling bolster rails.**





The BFM

Features and Benefits *(Based on Actual Case Histories)*

● Precision Leveling and Alignment

Ultra precise leveling adjustments can be made using the isolator's precision leveling screw. Actual Case Studies have shown that the *Benefits of Precision Leveling and Alignment* are: *Reduced Wear & Tear on the Machine; Increased Tool and Die Life; and Improved Part Accuracy and Repeatability.*

● Proper Machine Support

Using the precision leveling capabilities of VIBRO/DYNAMICS' Isolators, a machine's support condition can be adjusted to mirror its weight distribution. *Benefits are Machine Stability, Reduced Machine Motion, and No Walking.*

● Free-Standing Installation

VIBRO/DYNAMICS' Isolators do not bolt to the floor or foundation. *Benefits are Fast, Easy Installations; No Anchor Bolts, Shim Plates or Grout; Reduced Installation Time, and Plant Layout Flexibility.*

● Vibration Control

Actual field tests showed that VIBRO/DYNAMICS' Isolators reduced vibration in a press structure by 82%, in the foundation by 98%, and reduced noise levels by 6.5 dB! *Benefits are an Improved Working Environment for Personnel, Elimination of Neighbor Complaints, and Extended Life for Machine and Surrounding Equipment.*

Rugged Ductile Iron Support Housing

Unique Glide/Damping™ Motion Control System

MXL and BFM Isolator Options

The **Hydra/Level®** System is a patented hydraulic lift-assist system available in the MXL & BFM Series Micro/Level® Isolators. Built-in hydraulic cylinders make leveling and aligning even the heaviest machines faster and easier, especially when aligning a transfer press with rolling bolster rails. No separate jacks or cribbing are necessary. Installation times are typically reduced several days, resulting in significant savings.



Model HLM 1900 supporting a 1500 Ton Transfer Press

When the internal hydraulics are activated, the load on the precision leveling screw is reduced until it can be adjusted by hand. Precision leveling adjustments are made in this manner.

Lod/Sen™ is an optional Electronic Fine-Tuning (EFT) System available in both MXL and BFM Series Isolators. Electronic sensors within each isolator are connected to a Lod/Sen Analyzer to accurately determine a machine's support condition.



Model F/T 410 Lod/Sen Analyzer with 9 Series Lod/Sen Isolator

Easy-to-read graphical displays indicate which isolators to adjust, and how much to adjust them, for optimum machine support.

Ultra-precise leveling and support adjustments, without guesswork, result in an optimally supported, more productive machine.

The MXL &

This innovative *patented* design combines with our popular Hydra/Level® hydraulic

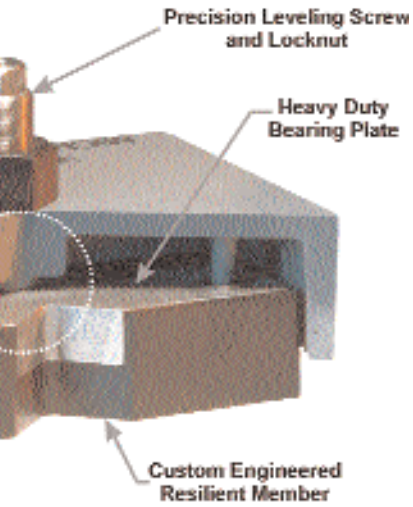
By using multiple layers of elastomers, it can be as low as 8 Hz, resulting in very effective

High-Strength Support Housing

Hydraulic Cylinders
Built-in on HXL Models.
Temporarily Mounted on MXL Models.

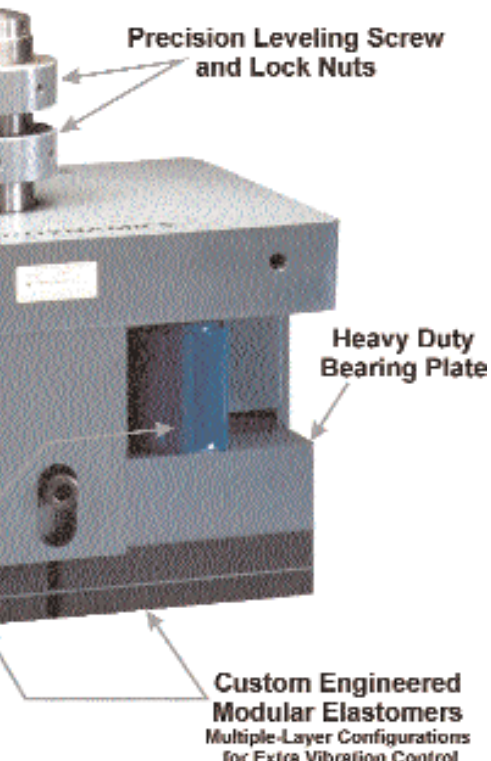


M Design

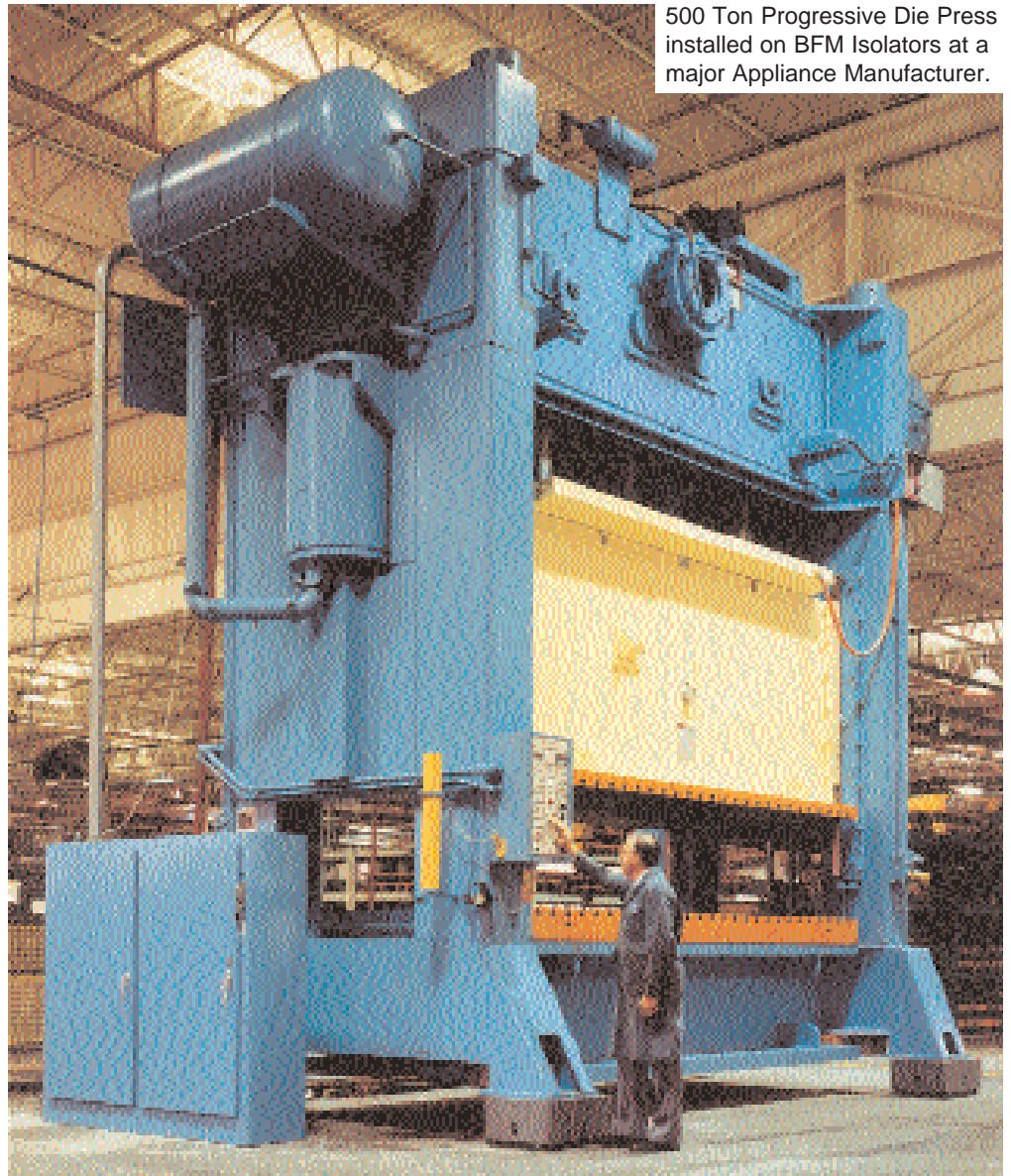


HXL Design

uses multiple layer elastomer technology
 lift-assist feature.
 Isolator dynamic natural frequencies can
 reduce vibration and shock isolation.



500 Ton Progressive Die Press installed on BFM Isolators at a major Appliance Manufacturer.



Installation of a Pit-Mounted Press Bed on HLM Series Micro/Level Isolators.

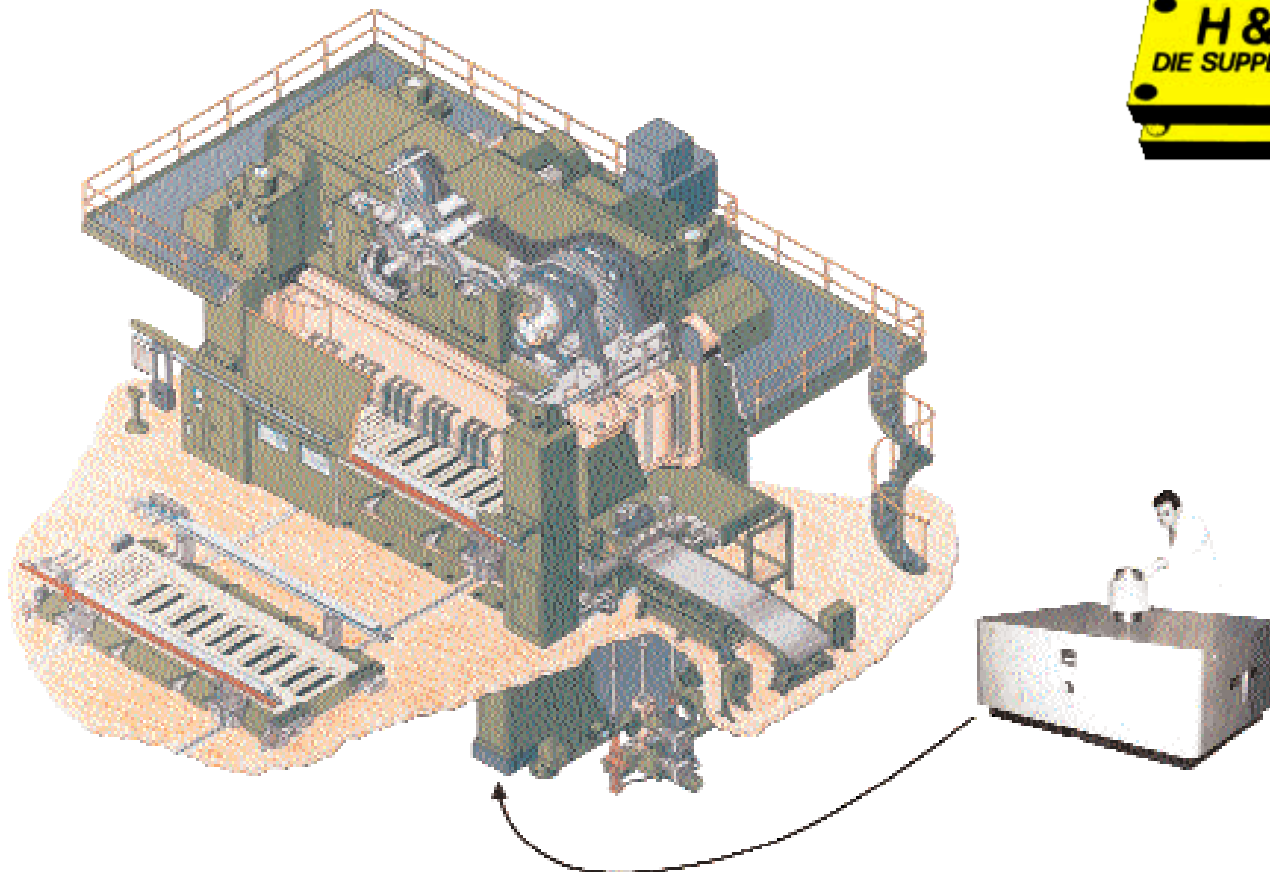
VIBRO/DYNAMICS



Custom Engineered Isolators for Optimum Performance

- MXL and BFM Series Isolators are available in over 84 different sizes with multiple models and load capacities.
- Our wide range of sizes and load capacities allows us to Custom-Engineer isolators for your machine that will provide the best combination of isolation effectiveness and machine stability.
- Proven durability -- large press installations in the field since 1970.

- VIBRO/DYNAMICS manufactures more than 10,000 different isolator models that include either elastomer or steel coil spring cushioning elements, and either vertical leveling screw or wedge type leveling systems.
- VIBRO/DYNAMICS offers a variety of Installation Advisory, Hydra/Level, Lod/Sen, and Engineering Services as well as on-site training.



A 3,000 Ton Transfer Press, weighing over 1,130 Metric Tons (2.5 million pounds), installed on four HLM Hydra/Level Isolators at a Big 3 Autobody Plant. (Pit mounted installation with the isolators below the floor line).

Typical Applications for MXL and BFM Series Micro/Level Isolators

- | | | |
|----------------------------|------------------------|---------------------|
| ● Punch Presses | ● Transfer Presses | ● Blanking Presses |
| ● Progressive Die Presses | ● Forging Presses | ● Hydraulic Presses |
| ● Plastic Molding Machines | ● Die Casting Machines | ● Cold Headers |
| ● Container Machinery | ● Floating Foundations | ● Special Equipment |

Technical Assistance

To assure the best installation, our application engineers will carefully analyze your particular application needs and recommend the proper isolator for the best installation. Please give us a call, and we will be happy to assist you in your selection.

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