

Vibration and Shock Isolation Systems for Large Stamping Presses

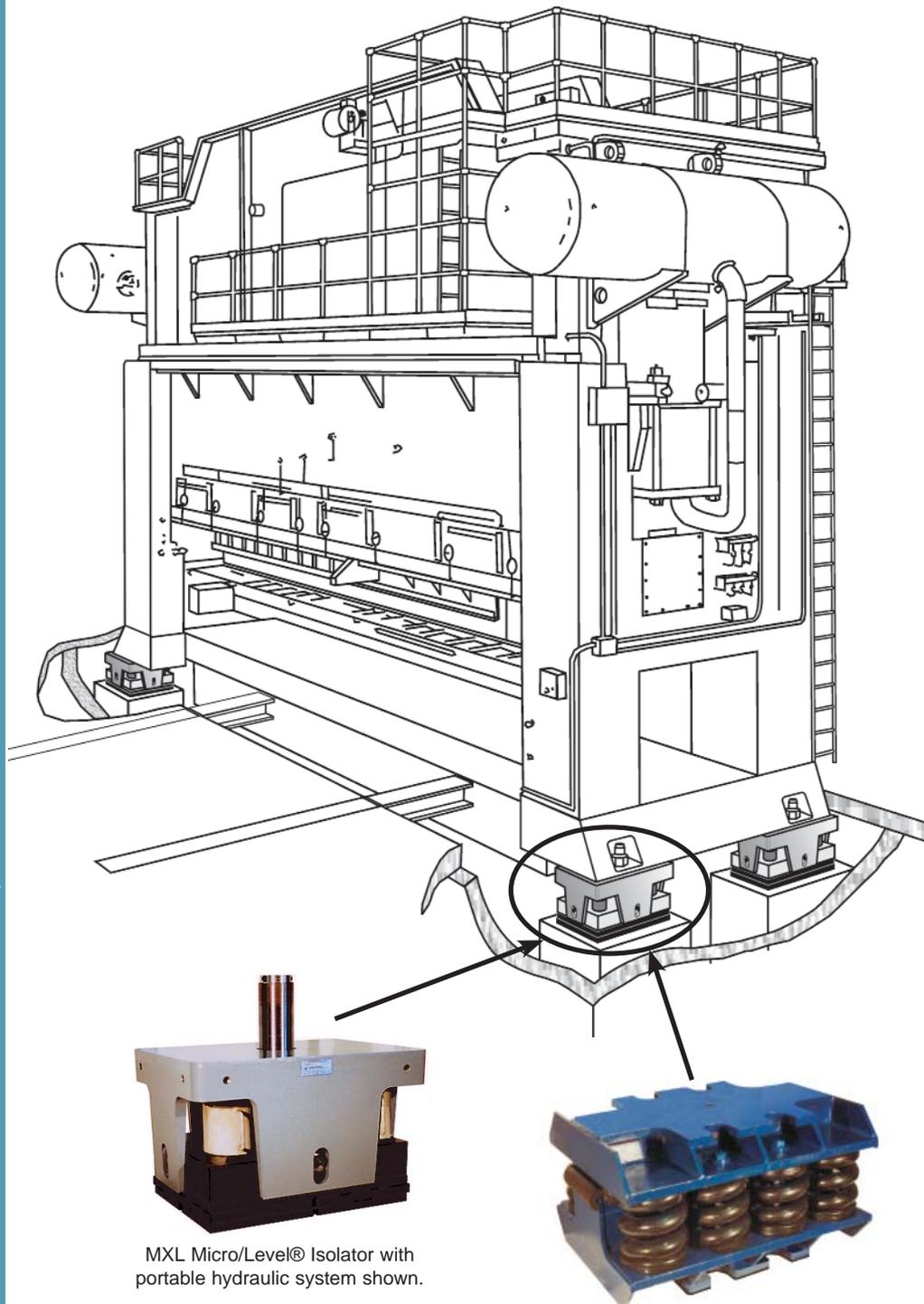
**Your Best Way to Install and Level Heavy
Presses for Effective Vibration and Noise Control**

Vibro/Dynamics specializes in the installation of large stamping presses on anchorless isolation systems that provide faster, easier installations.

Both Elastomeric and Coil Spring type isolation systems are available depending on your vibration and shock isolation requirements.

MXL, MXLP and BFM models are elastomer type isolators that provide an excellent level of vibration isolation. Isolator natural frequencies as low as 8 Hz are possible with the MXL and MXLP models due to their unique multiple-layer elastomer design. Integral precision leveling combined with Hydra/Level® lift-assist capability makes leveling and alignment of even the heaviest presses accurate, fast and safe.

SVX and SVS Hy/Tuned™ Spring isolators offer the highest degree of vibration and shock isolation available. These isolators are the perfect solution for high impact presses located in vibration sensitive or unstable soil areas.



MXL Micro/Level® Isolator with portable hydraulic system shown.

SVS Hy/Tuned™ Isolator with viscous damping system.

Features & Benefits

MXL(P) and BFM Model Micro/Level® Elastomer Isolators

- **Precision Leveling and Alignment**

Ultra precise leveling system ensures precise machine geometry, resulting in reduced wear, increased tool and die life and improved part accuracy and repeatability.

- **Stable Machine Support**

Custom molded elastomers are engineered and applied so that your installation maintains its precise geometry and elevation for the life of the installation.

- **Anchorless Installation**

Since the isolators do not bolt to the floor, installation times and costs are greatly reduced. Anchor bolts, shims, and grout plates are not required and can be eliminated.

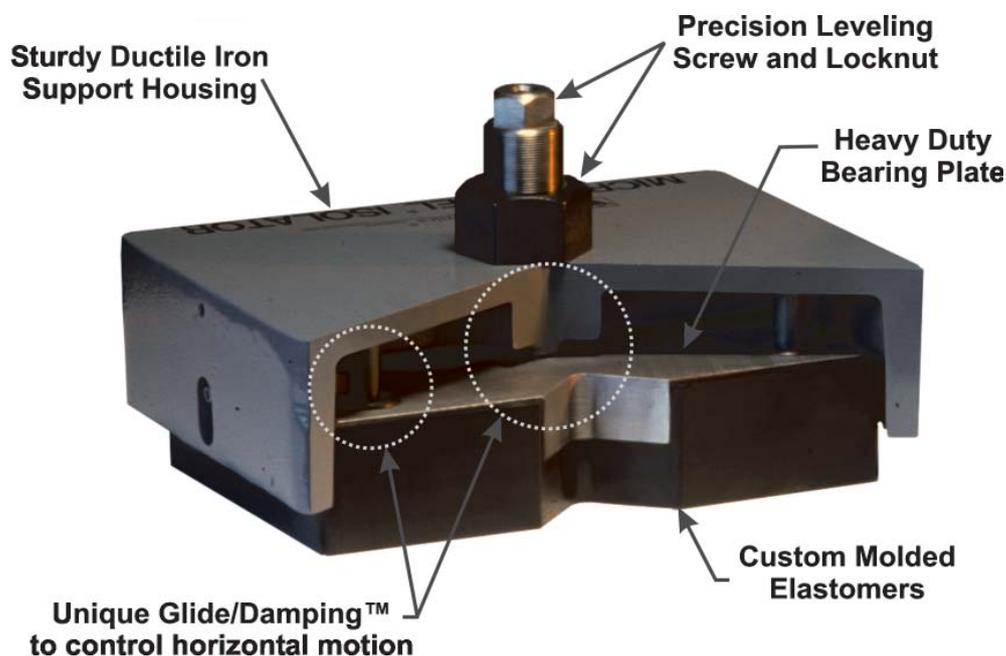
- **Vibration Control**

Actual field tests have shown that our isolators can reduce vibration in a press structure by 82% and in the foundation by 98%, and reduce noise levels by up to 6.5 dB!

BFM Series Isolators

The BFM Series Isolators are designed for stamping presses weighing from 34 to 136 tons. These vertical leveling screw, elastomer type machinery mounts are designed to effectively isolate impact forces between the press and the foundation.

Among the features are a high-strength support housing and bearing plate, a heat-treated leveling adjustment screw, and a custom molded elastomer that effectively isolates vibration. Our elastomers are specifically designed and compounded for machinery mounting applications and are applied to prevent creep or packing down so your press stays level and aligned for the life of the installation.



The MXL & MXLP Series Design

MXL and MXLP Series Micro/Level® Isolators are designed for large mechanical presses weighing from 90 to 2300 tons and over. These anchorless isolators have a built-in leveling system and can swivel up to 2 degrees, eliminating the need for shims and grout plates.

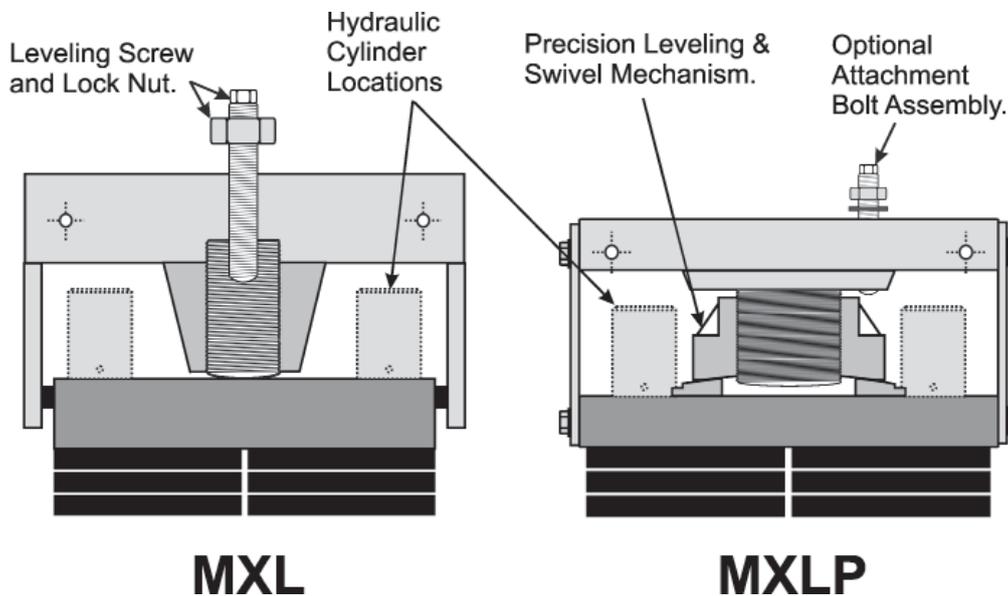
This innovative *patented* design combines multiple-layer elastomer isolation technology combined with our popular Hydra/Level® hydraulic lift-assist feature.

Using multiple layers of elastomers, isolator natural frequencies as low as 8 Hz can be obtained, resulting in very effective vibration and shock isolation.

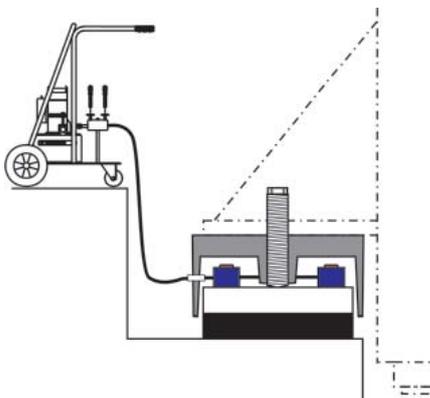
All MXL and MXLP Isolators are Hydra/Level® capable. During leveling and alignment, hydraulic cylinders can be temporarily installed in the isolators, making leveling and elevation adjustments faster, safer and more precise. No cribbing or additional jacks are required!

If your foundation should settle due to unstable soil conditions, the hydraulic cylinders can be quickly reinstalled in the isolators and the press leveled in a matter of hours.

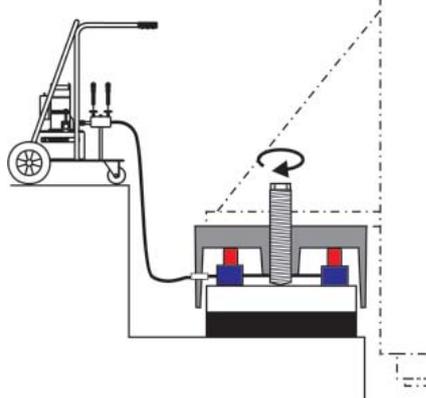
The MXL isolators with permanently built-in hydraulic cylinders are also available. The advantage is added convenience and speed during and after the initial installation.



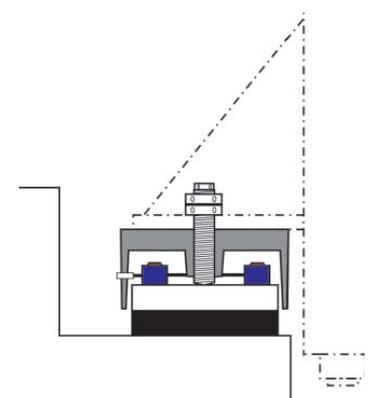
The MXL Hydra/Level® Process



Step 1
MXL Isolators are installed under each foot. The hydraulic pump is then connected to the hydraulic cylinders.



Step 2
The internal hydraulic cylinders raise the isolator housing, while maintaining load on the elastomers, until the isolator leveling screw can be turned by hand.



Step 3
After the press is perfectly leveled and the lock nuts tightened, the hydraulic cylinders are retracted and the pump disconnected.

Typical MXL Installation



An isolator being lifted into place under a press foot.



The isolators are attached to the press feet.

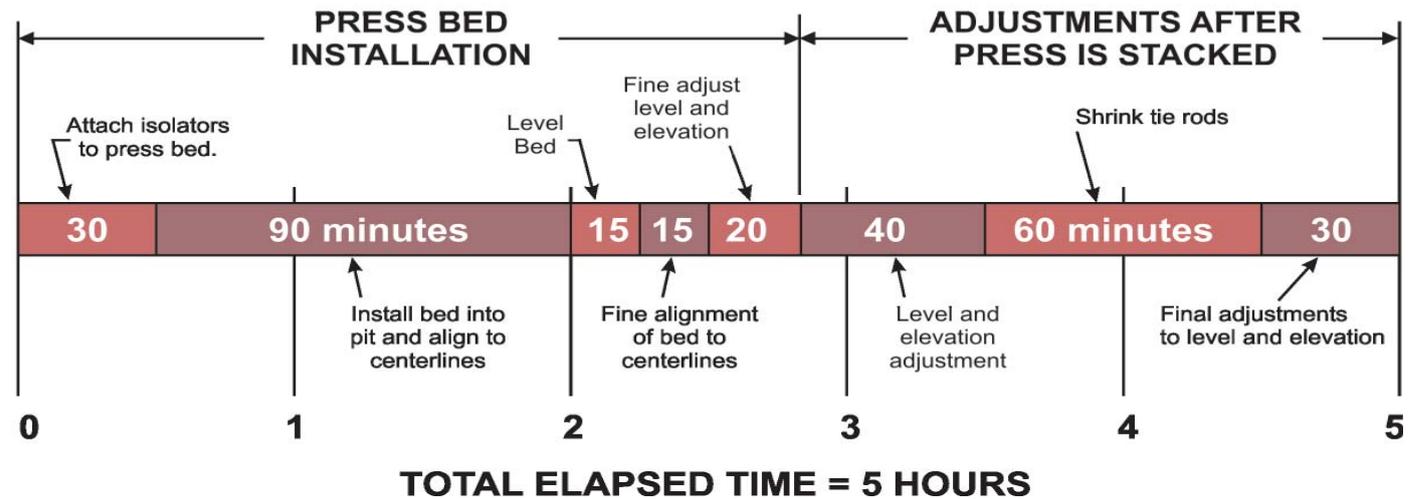


The press bed is ready to be installed into the pit.



Isolators installed, press leveled, and aligned in five hours!

Press Installation Timeline



Hy/Tuned™ Spring Isolators

Vibro/Dynamics SVS and SVX HyTuned Spring Isolators are recommended for presses installed in areas that are extremely sensitive to vibration and shock transmission or in areas with poor soil support conditions.

These isolators have vertical natural frequencies as low as 2 Hz and feature viscous damping to control machine motion. Hydraulic cylinder pockets make shimming easier and safer.

Optional features include built-in leveling and our Lift/Lock™ Hydraulic System. This system is designed for presses using die carts or rolling bolsters. The Lift/Lock System keeps the press from tilting during die changes by hydraulically locking the press elevation.



Installation of an 800 ton press on SVS Viscous Damped Spring Isolators.

Reference List

Aida
AG Simpson
A.J. Rose
A.O. Smith
American Axle
Benteler Industries
Bosch Braking Systems
Brown Boggs Foundry & Machine Co.
Budd-Tallent Company
Burr Oak Tool & Gauge
CalsonicKansei Corporation
Carrier Corporation
Case Corporation
Caterpillar Inc.
Chin Fong Machine Industrial
Dana Corporation
Dayton Rogers
Delphi
Deluxe Stamping
Dennen Steel
Eagle Press & Equipment Co. Ltd.
Eaton Corporation
Elkay Manufacturing
Enprotech Mechanical Services
Federal Mogul
Flex-N-Gate
Ford Motor Co.
Freightliner
General Motors
Gestamp
The Gillette Co.
Greenerd Press
Harley-Davidson
The Heim Group
Hundai WIA Press
ITW
Jenn-Air
John Deere
Johnson Controls
Klein Tools
Knaack Manufacturing
Komatsu Press
KTH Parts Industries Inc.
Lear Corporation
Magna International
Maytag
Metalsa
Midway Products
The Minster Machine Co.
Oak Products
Orchid International
Oxford Automotive
Pacific Press Technologies
PATEC Press
PH Group
Polynorm Automotive
Press Technology Corporation
Pridgeon & Clay
QMC Die Technology
Raybestos Products Company
Schuler-Weingarten Press
Seastrom Manufacturing Company
SET Enterprises
Seyi-America
Shiloh Corporation
Sigma Stamping
Simpac Press
Spartanburg Steel Products
Square D
Steelcase
Sutherland Presses
Tempel Steel
Tower Automotive
Visteon
Vulcan Metal Products
Walker Manufacturing
Whirlpool
Williams, White & Co.
Worthington Industries
York International

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