

1500 Ton Transfer Press Installation on Vibro/Dynamics® MXL Leveling & Isolation System

Time Saving, Cost Effective Installation of Large Stamping Presses

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 many 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.

A Large Press Installed Quickly

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 a thing of the past!

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 unnecessary and can be eliminated!

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 press components, like fasteners and lube connections, from loosening and breaking. Reversal loads are also typically reduced.

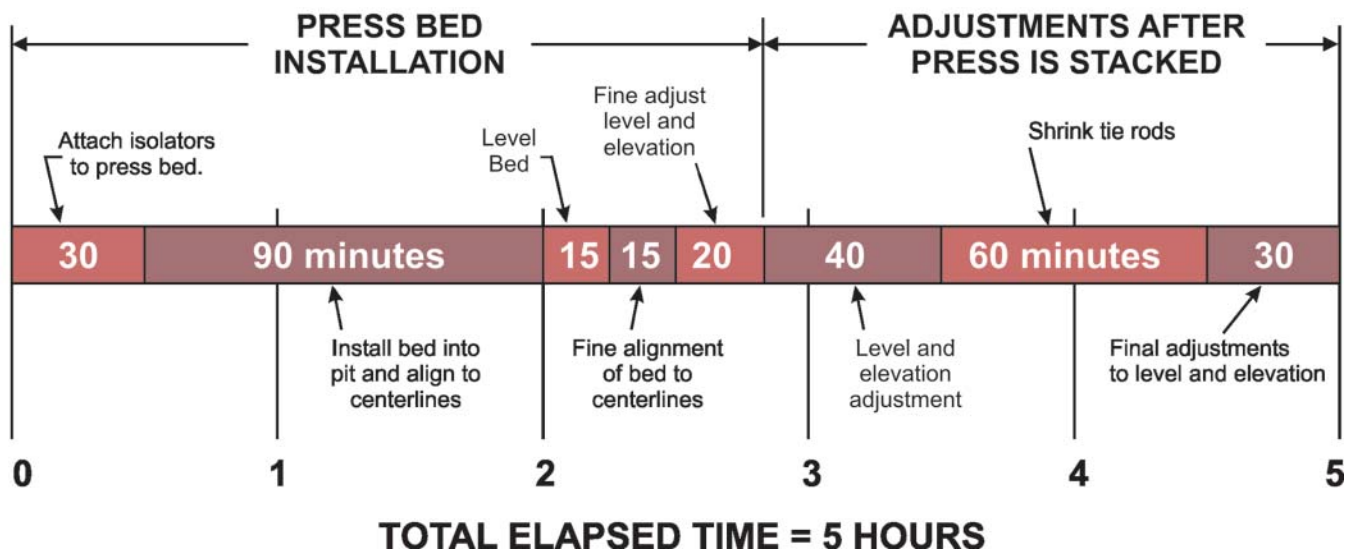
Foundation Settling

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.

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 isolation and displacement required to protect machines in earthquake prone areas.



1st Installation & Leveling Service - Press Bed (186,000 lbs.)

1. Attaching Isolators to Press Bed - 1 man/hour by riggers (0.5 hours elapsed time).



2. Set bed in pit and align with centerlines - 4.5 man/hours by riggers (1.5 hours elapsed time).



3. Rough level bed $\pm 0.0005''$ - by Vibro/Dynamics (0.25 hours elapsed time).

4. Align bed to centerlines - 0.75 man/hours by riggers (0.25 hours elapsed time).

5. Fine adjustment of bed level ($\pm 0.00025''$) & elevation - by Vibro/Dynamics (0.3 hours elapsed time).

2nd Installation & Leveling Service - Fully Stacked Press (800,000 lbs.)

1. Press leveled & elevation set before shrinking tie rods - by Vibro/Dynamics (0.7 hours elapsed time).



2. Tie rods stretched - 2 man/hours by riggers (1.0 hour elapsed time).

3. Fine adjustment of bed level ($\pm 0.00025''$) & elevation - by Vibro/Dynamics (0.5 hours elapsed time).

Total Rigging Time for Complete Job = 5 hours (8.25 man/hours)