Mold Adjustments

1. During mold assembly, assure that all mating surfaces are clean and in good condition. Improper cleaning and buildup of concrete, dirt and grease can result in molds that are not square and fasteners that may loosen during operation. Inspect mold components for wear or damage to maintain proper fit between components such as; division plates, mold side bars, end liners, stripper shoes and plungers.

2. Mold should be square within 1/16" (1.5 mm) when measured corner to corner – across outside division plates. Molds that are not within this specification are typically the result of damaged, worn or dirty components (see item #1).

3. Assure that the Posapac bolts and nuts are positioned properly. Vibrator shafts on both sides of the mold should have the nuts facing the outside of the mold while the weight is hanging in the down position as viewed from the front of the mold. This will assist in even vibration and help synchronize the vibrator shafts. It will also enhance motor life, improve mold life, and assure even feeding of material to each mold cavity.

4. Center Posapac weights to the mold cavity.

5. Use proper length bolts. Care should be taken to select the proper length bolts to prevent "bottoming out" of the fastener when installing mold components such as end liners. Bottomed out bolts could give the impression that a component is secure in the mold when it is not, or could cause damage such as cracked liner keys.

6. Check to make certain that the core assemblies are properly aligned. It is important that the cores are suspended vertically in the mold. This can be checked by measuring the distance from the bottom of the core to the mold opening. This measurement should be within +/- 1/32" (.8mm) for molds that produce CMU’s with face shells of the same thickness. Alternatively, the core assemblies can be checked by placing a square on the top plate and checking the core bars.

7. Always keep vibrator assemblies in pairs. Do not mix and match sheaves. When replacing sheaves or belts on one side of the mold, always replace the sheave and or belts on the other vibrator shaft. Mismatched sheaves result in uneven vibration, mold shifting, reduced mold feeding and reduced mold life. It is important to note that belts should be purchased in matched sets and should not be mixed.


9. Pallet guides must not touch the mold compartment. This will dampen the mold vibration. Recommended clearance is 1/8" (3 mm).
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Mold Adjustments

10. Mold cavities must be parallel from top to bottom. The recommended tolerance is .015" (.3 mm) as measured from top to bottom. It is essential to proper stripping of the unit that the mold not be smaller at the bottom than it is at the top.

11. Always use the shortest feed and finish times possible to produce your product. This will help to increase production rates and greatly reduce mold wear. Use the auto-feed religiously.

12. Keep agitator grids free from excessive material buildup. Clean agitator grids every 8 hours or more frequently if you are using a wet or sticky material. This will improve mold feeding.

13. Add 1 fluid ounce (in volume not weight) of grease to vibrator bearings every 8 hours of production (pertains to both standard vibration and SmartPac vibration).

14. Make sure stripper head plate is installed correctly. Current models have a V-notch in the front, right side to help reduce the possibility of putting the stripper head plate in backwards.

15. Do not weld or bolt additional material to the mold top plate fence. Modifying the fence will increase stresses applied to the mold top plate itself as well as to the welds holding the fence on. These additional stresses can cause premature failure of the mold top plate.

16. The use of stripper shoe gages can greatly improve mold life. They ensure that the proper clearances within the mold are held.

17. Mix design has tremendous effects on abrasiveness. The "sharper" harder aggregates are significantly more abrasive than the "rounder," softer ones. Admixtures can improve mold life by reducing feed times.

Machine Adjustments

1. Assure that the block machine is level within 1/32" (.812 mm) maximum. Refer to the To Install A Vibrapac section of the V3-12K Installation Manual.

2. Install the Mold. Refer to section 5.4 - Installing the Mold of the V3-12K Operation and Maintenance Manual. Make certain that all 4 sheaves are in alignment.
Mold Adjustments

3. Adjust the mold. Assure that the mold is level, centered and located 5/8" (15.875 mm) above the mold throat. Refer to section 5.5 - Adjusting the Mold of the V3-12K Operation and Maintenance Manual.

4. Level the apron plate/feedbox to the mold. Refer to section 5.6 - Apron Plate Adjustment of the V3-12K Operation and Maintenance Manual.

5. Level and align the stripper head to the mold. Refer to section 5.8 - Adjusting Stripper Head of the V3-12K Operation and Maintenance Manual.

6. Check for proper synchronization of vibration. Refer to Technical Service Tip: The Importance of Synchronizing Vibration.

7. Air compaction improves mold life by smoothing out the stripper head and reducing finish times.

If you have questions, please contact the Besser technical service department at 1.800.530.9980 or +1.989.354.4111, or e-mail techservice@besser.com.