

# APPLICATION BULLETIN

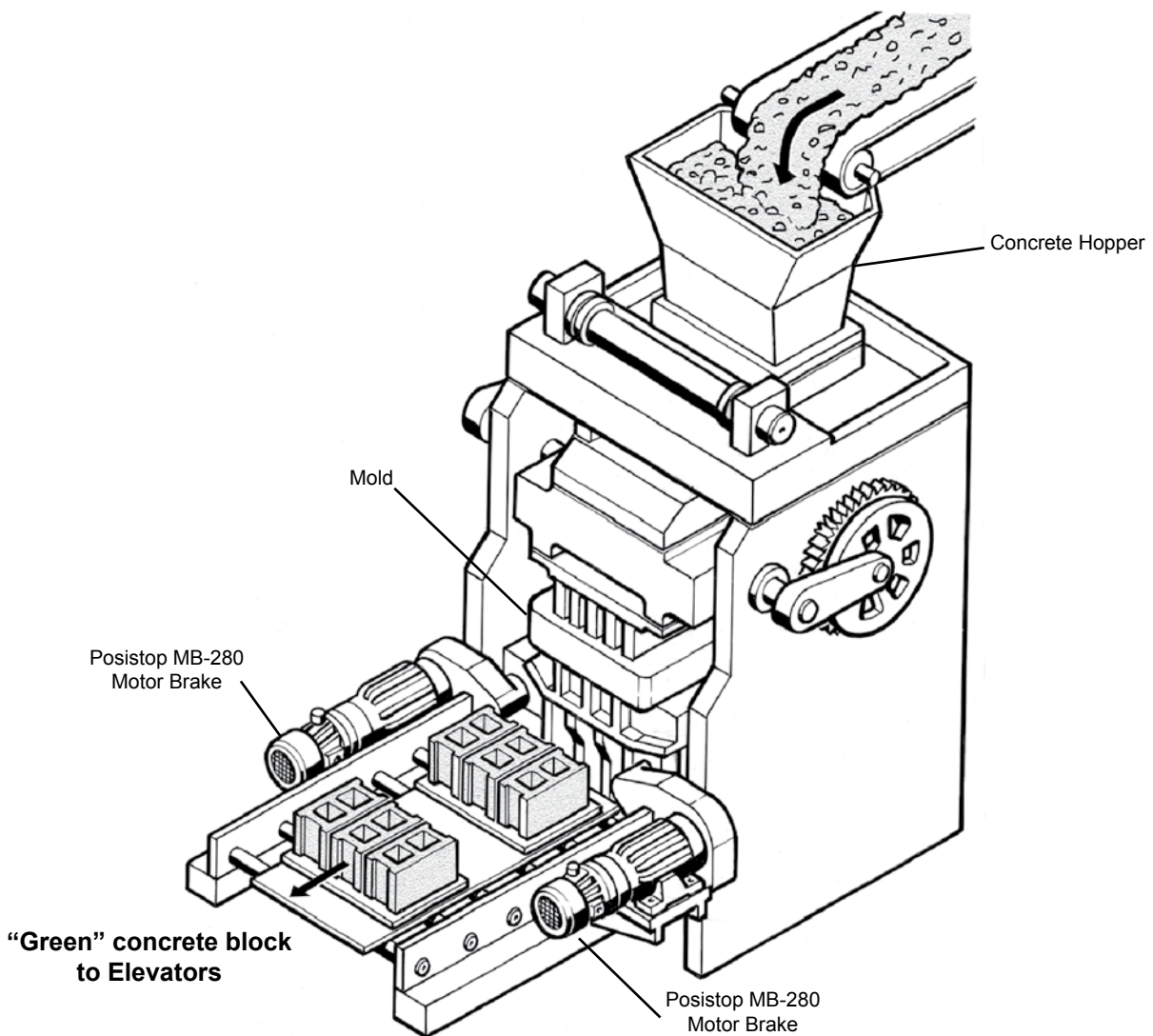


**APPLICATION:** Mold Vibration System

**INDUSTRY:** Concrete Paver and Block Manufacturing

**PRODUCT:** Posistop Brake

## Mold Vibration System



# MOLD VIBRATION SYSTEM

**WHERE THEY ARE USED:** In the production of concrete paver and block, vibration is used during the compaction process to help eliminate air pockets and therefore make a stronger block.

**HOW THEY WORK:** Concrete mix is loaded into a hopper on top of the block machine via a conveyor or bucket hoist. The concrete is fed downward into the mold at the beginning of the cycle. When the mold is completely full, the concrete is compacted by the mold head being pressed down on the lower cavities. Vibration is used during the compaction process to speed up the process and produce a better, stronger product. One method to generate this vibration is to attach fixed weights to the mold and spin them with electric motors. Brakes are used to quickly stop the vibration at the end of the compaction and prior to removal of the "green" block from the mold. If vibration hasn't stopped before the mold begins to separate, the "green" block will begin to collapse.

## **PROBLEMS SOLVED:**

**Consistency** To make consistent block, the weights on opposite sides of the mold need to be synchronized. Dry friction brakes can be slow and inconsistent in responding - throwing the synchronization off and creating inconsistent block.

**Environment** The motors are located at the heart of the block machine. As a result, they are exposed to the worst condition of dust, dirt, wet concrete and oil. These conditions cause excessive heat and wear out the dry friction brakes. The Posistop brakes are totally enclosed ensuring consistent reliable stopping in the dirtiest, hottest, wettest and most inhospitable environments. Our patented oil shear technology keeps the brake cool and running for YEARS.

## **IMPORTANT FEATURES:**

- Quicker reaction time, enabling increased cycle rates.
- Repeatable stopping time assures synchronization which improves density and uniformity of products produced.
- Reliability eliminates high maintenance costs and loss production.
- Oil Shear design dissipates the heat that destroys brakes and motors.



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