VERTICAL PRESS VS HORIZONTAL PRESS

This discussion is as old as "What came first the chicken or the egg?"

I was taught, that God created the chicken and it's reproductive mechanism was the egg.

The first record of vertical presses and CEB was in 1780's in Bise (Be-say) France. The largest area of construction was in the Wajav State. A grape growing region at that time. After all of the world disasters, some of theses structures are still in use today.

There is a lot of information out there or misinformation. Due to patents etc,.many people are stuck with their designs.

Also, let's be factual and honest under certain perfect conditions, all machines produced in America today can turn out good earth blocks.

FACT I: In most areas, of the United States, the Highway and Road Departments will only let you do 3-4" raises or lifts as some builders call it. Because they know dirt/soil can only be compacted so far. 3 to 4" at a time. Any more than that, and you do not reach compactation standards. So a top or bottom press (vertical) does not have to press as hard, and get's even compactation across the block. Horizontal blocks tend to have a soft side and a hard side since the 10" block is being pushed more than 10" to achieve a 10" block. The frictional loss in walls of press mold is one cause of this problem. In addition, as these machines wear they tend to taper the blocks after a time.

FACT II: Most vertical presses use less fuel because the machines do not have to operate under such extreme pressure, which equates to smaller engines, lower fuel consumption, less wear and tear on the equipment, lower maintenance costs.

FACT III: The Peace Corp in the 50's and 60's,used a civa-ram, hand operated machine which was a vertical press, because it took less manual force to compress the block, again a vertical press.

FACT IV: The vertical presses have replaceable liners so they can be brought back to standards when and if wear occurs. Remember when steel and dirt come together, dirt wins, no major rebuild is needed.

Also, the elastomeric press plate stops soil from sticking, so it's not necessary to climb into the machine and clean off the press foot when over wetted soil or cement stabilized soil sticks. This lets the vertical press works with a wider range and types of soils.

FACT V: Thickness of block. Yes, some early top press machines could not hold block thickness and were monster machines. However, for the last 12-15 years, the vertical machine can hold the block thickness to within a 1/16 of an inch or less, as always-continual improvements happen.

The machines are set up to use as much (more or less) pressure to achieve a certain quality of block with controlled thickness.

Also, they are able to make block thickness from 2" to 4 1/2" thick. This is especially beneficial when thinner blocks are needed under window or at bond beam heights or for special effects.

FACT VI: Most vertical presses have the ability, by adding smaller press plates, mold spacer to make 10" – 8" or 7" width blocks. Also, they have the ability to make "Asymmetrical placed" 1 ½" or 2" holes in the blocks if desired.

FACTVII: With vertical machines you are able to use the thin slurry method of building or slip method of laying blocks. No matter what the horizontal people say, you can and will control your blocks thickness.

The fact of the matter it was the vertical machine people who advocated the thin slurry method of building first. This builds a monolithic wall, which is much stronger in earthquakes.

Also, the block delivery conveyor height are ergonomically correct. There is no need to bend over to pickup blocks from conveyor. So there are many factors to consider. *Check them out and choose wisely.*