

Is my old Concrete Mixer Costing me Money?

– Ensuring an Efficient Precast Works





Roland has been in business for two years making concrete fencing, splash blocks and related wet cast landscape slab units made of wet pour mix. He was using a front end loader to charge the sand and rock to a worn out spiral blade mixer. Once the aggregates were loaded, bagged cement and bagged color were measured and added into the mixer manually. It took over twenty minutes to mix and blend a twenty seven hundred pound concrete batch and often with inconsistent quality concrete batches.

His next problem was he couldn't produce enough concrete volume during the day to pour all the molds timely and had labor standing idle which was costing him money.

Once I studied Roland's production area it became clear he could increase his production by rearranging the larger wet cast forms in different pouring patterns within the building. For the larger moulds, by simply positioning his existing wet cast forms from multiple X shaped patterns to an inline straight row pattern, the efficiency and pouring of the concrete molds became faster.

During the automatic filling process a vibration table with frequency controller which the carrier and moulds travel across for compaction to speed up the production process. The carriers are self-stacking on top of each other which saves huge amounts of curing space. These additions increased his production greatly and partially prepared him for a system in the future to stack and destack products automatically while using the least amount of labor.

The second major step was him using a totally automated concrete batching system which consists of four aggregate bins, weigh scales, planetary mixer with multiple gates, cement



batcher and automatic controls. I helped him find a used cement silo and auger which eliminated a huge amount of labor. The past manual and labor intensive concrete plant operation turned into a high tech facility that eliminated labor, increased production, provided consistent concrete and made Roland more money so he can grow his business into the future.

