Material Handling

The MPAQ Material Handler is the perfect addition to a busy concrete plant. A PLC (programmable logic controller) inside the panel keeps your aggregate bins full and is designed for unattended operation.

The integrated manual backup guarantees that you can always operate the plant since it's implemented with plain switches (no electronic components).

Using simple selector switches in the overhead bins you can assign which ground hopper supplies material to each bin. The high bin indicators in the overhead bins start the filling sequence. The system automatically closes the ground hopper’s gates and purges the belts after the high bin indicator is covered again with material.

To increase overall speed, if another bin calls for material while replenishing the first bin, the next delivery starts only a few seconds after the first bin is full. Belts don't have to empty completely. A preset "material gap" on the belt allows the turnspout to relocate to the next bin just in time to deliver the next material coming up the belt.

Sophisticated logic allows to set one of the bins as a high priority, while the other bins operate in a “first come first serve” mode. And flow switches are programmed to trigger alarms in case the material or the machinery stops for any reason.

All things considered, the MPAQ material handling system is an economical way of increasing your plant production capacity.

The above panel is designed for a plant with four ground hoppers (bottom right), horizontal and incline belts, a turn-spout on top of the overhead bins (top left) to replenish the four aggregate bins.

Since each plant is different, we customize the material handler panel and the PLC program to each plant.