

# Automatic Bin Fill System

provides a fast, automated and cost-effective way to get materials from underground storage bunkers into overhead bins.

The system's standard controls permit automatic monitoring and replenishment for up to six bins. The system allows priority-first replenishment if materials from one underground storage bunker are required more often than others.

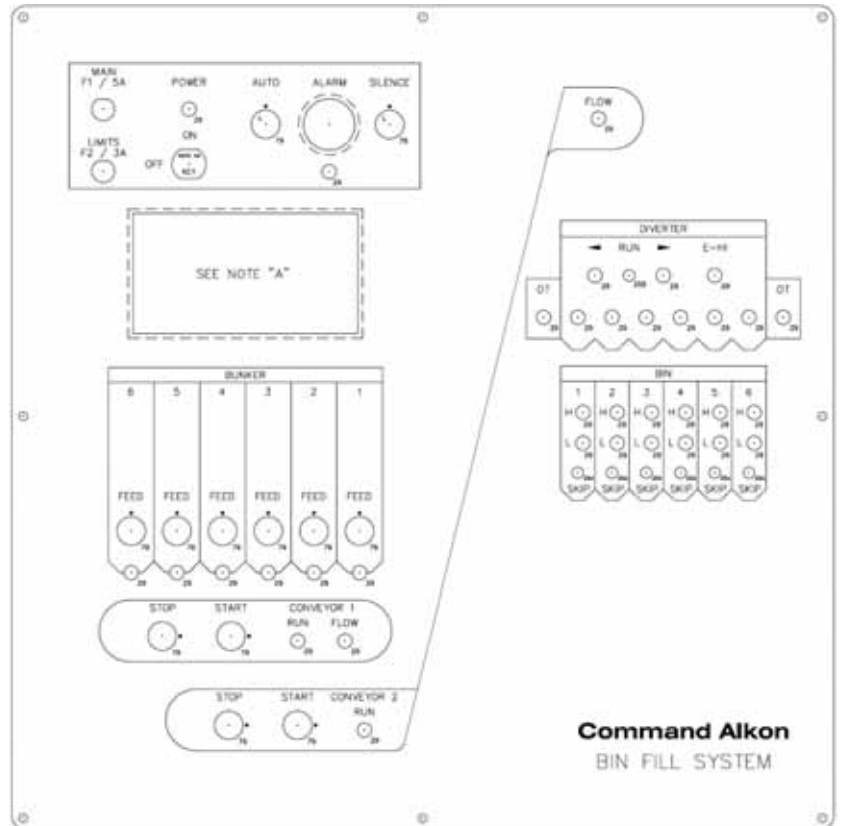
The system is designed to:

- ◆ determine the need for a material
- ◆ rotate the turnhead or shuttle conveyor into the correct position
- ◆ turn on the feed belts as needed
- ◆ open the correct feed gate on the underground storage silo
- ◆ monitor the process until filling is complete

As the system sequences from one material to the next the Automatic Bin Fill system will:

- ◆ close the gate in use on the underground storage
- ◆ determine the turnheadpositioning delay
- ◆ open the feed gate for the next material while insuring the proper belt delay to prevent cross contamination of material bins

Any or all materials can be manually overridden at any time. An alarm indicator alerts the user to plant malfunctions. The emergency stop button halts all related plant motion in the event of a belt break or other hazard.



*“Command Alkon’s Automatic Bin Fill System fulfills a critical role within Florida Rock’s Ready Mix production operations. The Automatic Bin Fill System consistently and reliably ensures the right materials are always available in the plant to meet our production needs. We own seven of them; more are sure to follow in the future.”*

Terry Smith  
Florida Rock Industries

# General Features

- ◆ Individual feed gate controls for up to six storage bunkers
- ◆ Controls for six overhead bins – each with a high and low indicator sensor
- ◆ Controls for one unidirectional turnhead for directing the desired materials to the appropriate bins
- ◆ Controls for a horizontal tunnel conveyor for moving material from underground bunkers
- ◆ Controls for the inclined conveyor, monitor material movement from the bunkers to the top of the plant
- ◆ Conveyor Controls with Start, Flow and Spillage Indicators
- ◆ Rugged NEMA 12 enclosure (20" x 24" x 7") with LCD-controlled panel from which all settings can be monitored
- ◆ Emergency Alarm warns when a conveyor or turnhead stops to avoid overfilling, or in the event of "Empty Bin" emergencies
- ◆ Alarm Silence feature overrides the audible alarm
- ◆ Stand-alone, PLC-based system for reliable and efficient control

## ADDITIONAL ITEMS AVAILABLE

- ◆ Controls for Additional Overhead Bins
- ◆ Emergency High Bin Lights
- ◆ Controls for Additional Ground Bunkers
- ◆ Integration of OSHA Conveyor Start Timers
- ◆ Controls for Bunker Vibrators
- ◆ Controls for Additional Turnheads (4 Bin)
- ◆ Controls for Manual Motor Starters
- ◆ Manual Outputs (i.e. Diverters)

Solutions to build on.

## Benefits of Automatic Bin Fill System

- ◆ Automates bin replenishment, allowing staff to concentrate on more important and time critical operations in the plant
- ◆ "Keep Full" ensures the batch plant bins remain full, preventing production delays

