

BAY STATE GRAIN STORAGE ANNEX



Owner

Bay State Milling
Company

Size/Capacity

1,000,000 bushel wheat
storage

Completion Time

8 months

Younglove's Services

- Conceptual design
- Structural engineering
- General construction
- Construction management
- Slipform concrete construction
- Equipment installation

Tolleson, Arizona

This new grain storage annex will provide storage, blending, and transfer capabilities to Bay State Milling's existing flour milling operations. Nine 35-foot-diameter by 140-foot-tall slip-formed concrete silos were constructed in a 3-by-3 arrangement, creating four interstice bins. Each of the main silos and interstice bins were equipped with steel cone hopper bottoms to facilitate complete gravity clean-out. Due to the usage of this facility, construction details followed "food grade" requirements. The total added storage is approximately 1,000,000 bushels.

Filling of the new annex is accomplished through a series of bucket elevators from the existing receiving operations and drag conveyors and distributors at the roof level. Grain is reclaimed by drag conveyors for blending purposes. Once a final blend is complete, a pneumatic transfer system moves blended grain to the existing mill.

Younglove installed a 226-foot-long truss bridge between the flour mill and the new grain storage annex to elevate the pneumatic transfer line. A new 15,000-bushel-per-hour rail receiving drag conveyor inside the existing below-grade tunnel was also installed.



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