

AGREX GRAIN STORAGE ANNEX



Owner

Agrex, Inc.

Size/Capacity

1,068,800 bushel annex storage
11,600 bushel truck loadout capacity

Completion Time

7 months
Completed 10/2011

Younglove's Services

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

Superior, Nebraska

Younglove was awarded the contract to construct three 65-foot-diameter by 130-foot-tall silos for Agrex, Inc., for additional on-site storage. The foundation design consisted of 514 auger-cast piling, each being 16 inches in diameter by 54 feet deep. We then formed and placed a 2.7-foot-thick mat slab over the piling, formed and slipformed the 9-inch-thick silo walls, and placed the silo roof.

An above-grade tunnel was constructed down the center of the silos for a reclaim conveyor. Once the tunnel walls were placed, a flowable fill material was pumped into the silo bottom to an elevation of 6.5 feet above the mat slab. We then formed and placed the silo aeration slab in the elevated slot.

Grain is transferred to the annex with a 30,000-bushel-per-hour InterSystems belt conveyor. The grain has the option to either be scalped through two 15,000-bushel-per-hour Baasch scalpers or continue to be transferred with two 30,000-bushel-per-hour InterSystems drag conveyors. Reclaim of grain is through an electric proportioning gate that feeds a 30,000-bushel-per-hour InterSystems belt conveyor, which feeds back into the existing grain reclaim system.

In an 18-foot-diameter attached slipformed silo is a 10,000-bushel-per-hour InterSystems bulk loadout scale for trucked grain loadout. The annex silos are designed for 1/10 cfm per bushel provided by Airlanco. Heat detection cables by Boone Cable Works provide continuous grain temperature readouts. Each silo bin bottom has a GSI bin sweep to assist in final clean-out of grain at the silo bin bottoms.



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Builders of trust*

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