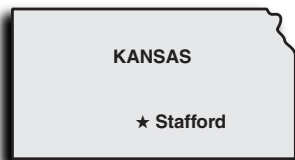


# A Better Neighbor

NEW STEEL ANNEX EXPECTED TO REDUCE NEED FOR GROUND PILES, LABOR



Kanza Cooperative's new 1-million-bushel steel annex at its branch elevator in Stafford, KS. Drone photo courtesy of Warrior Mfg. LLC.



## Kanza Cooperative

Iuka, KS • 620-546-2231

**Founded:** 1915  
**Storage capacity:** 20 million+ bushels at 14 locations  
**Annual volume:** 24 million bushels  
**Annual revenue:** \$200 million  
**Number of members:** 3,800  
**Number of employees:** 200  
**Crops handled:** Hard red winter wheat, corn, soybeans, sorghum  
**Services:** Grain handling and merchandising, feed, hay, agronomy, fuels

### Key personnel at Stafford:

- Paul Eisenhower, location manager
- Dickie Young, superintendent
- Sean Shaw, elevator operations
- Levi Blevins, elevator operations
- Jay Kerschenske, elevator operations

## Supplier List

Aeration fans..... GSI  
Bin sweeps ..... GSI  
Bucket elevator .... Warrior Mfg. LLC  
Catwalks ..... Warrior Mfg. LLC  
Contractor... Grain Elevator Equipment Inc.  
Conveyors ..... Warrior Mfg. LLC  
Elevator buckets ..... Maxi-Lift, Inc.  
Grain temperature system .... Rolfes@Boone  
Millwright.. Grain Elevator Equipment Inc.  
Project designer ..... AgriMech Consulting LLC  
Steel storage..... GSI  
Tower support system.... Warrior Mfg.



Ground-level view of the two new GSI 500,000-bushel tanks with 15,000-bph Warrior legs, conveyors, tower, and catwalks. Ground-level photos by Ed Zdrojewski.

The area of central Kansas surrounding the town of Stafford has produced some outstanding crop yields in recent years, despite weather-related problems in other parts of the state.

At the Kanza Cooperative branch elevator there (620-234-5252), that has meant piling grain in a 900,000-bushel temporary storage bunker. Even though the cooperative's employees are diligent about tarping, the practice still has generated some complaints from neighbors, says Location Manager Paul Eisenhour, who has been at Stafford since 2002.

In addition, he says, maintaining the pile was taking a lot of man-hours, especially picking up the grain, when it came time to ship.

Kanza Coop took a crack at reducing those costs in 2017 by building a 1-million-bushel standalone steel annex on its property at the edge of town. General contractor on the \$4 million project was Grain Elevator Equipment Inc., Shawnee Mission, KS (913-381-3788). "They've been doing work for Kanza Coop for years," says Eisenhour.

Construction began around March 1 and was completed by Sept. 5.

### Annex Details

The annex was built on an old gasoline filling station site, so soil conditions made extensive ground preparation

work necessary. The structure's two 500,000-bushel GSI corrugated steel tanks are supported by 16 pilings per tank sunk 102 feet deep.

The GSI tanks stand 90 feet in diameter, 85-1/2 feet tall at the eaves, and 109-1/3 feet tall at the peak.

The corrugated steel tanks are outfitted with outside stiffeners, flat floors, 12-inch GSI sweep augers, and 16-cable Rolfes@Boone grain temperature monitoring systems.

A set of four GSI 50-hp centrifugal fans per tank deliver 1/7 cfm per bushel of aeration through in-floor ducting with the assistance of seven roof exhausters per tank.

The annex includes a single 1,000-bushel mechanical receiving pit, which delivers grain to a 15,000-bph Warrior leg encased on a 12-foot-x-12-foot-x-150-foot Warrior tower with wraparound stairs. The leg is equipped with a single row of Maxi-Lift 16x8 CC-MAX gray elevator buckets mounted on an 18-inch belt.

At the top, a two-way valve sends grain out to the new steel storage via a pair of 15,000-bph Warrior drag conveyors mounted on Warrior catwalks. The tanks also can be filled by an overhead 15,000-bph drag running out from existing elevator structures.

For recovering the grain, the two

storage tanks are equipped with sidedraw spouts. Once the level of grain drops below the sidedraws, it empties onto a 15,000-bph above-ground Warrior drag conveyor running back to the facility's existing concrete house

*Grain Journal* visited the Stafford elevator at the end of August, when the annex was about a week from completion. Eisenhour says plans are to load the tanks with the fall harvest, one dedicated to corn and the other to grain sorghum. The tanks potentially could be used for wheat with next year's harvest.

*Ed Zdrojewski, editor*



Location Manager Paul Eisenhour.



Closer view of the new 15,000-bph Warrior leg and overhead drag conveyors, with Warrior tower equipped with wraparound stairs.





LLC