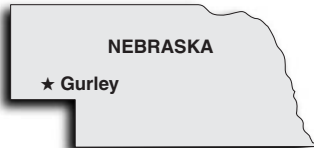


Needed Expansion

97-YEAR-OLD LOCATION ADDS 1 MILLION BUSHELS OF CONCRETE STORAGE



NEBRASKA

★ Gurley

Crossroads Coop Association
Sidney, NE • 800-833-2951

Founded: 1988

Storage capacity: 8 million bushels
at nine locations

Number of members: 1,700

Number of employees: 35

Crops handled: Corn, hard red
winter wheat, millet, sunflowers

Services: Grain handling, cleaning,
and merchandising

Key personnel at Gurley:

- Tim McCabe, location manager
- Jon Calahan, project manager
- Rich Krahulik, chief operations manager
- Deb Brauer, Crossroads general manager

Supplier List

Aeration fans.....AIRLANCO

Bucket elevators.....Intersystems

Catwalks LeMar Industries Corp.

Cleaner Baasch & Sons/
Intersystems

Concrete silo..McPherson Concrete
Storage Systems

Contractor/millwrightHABCO
Inc.

Conveyors Intersystems

Consulting engineer..... Jim Manley

Distributor.. Hayes & Stolz Ind. Mfg.
Co. Inc.

Dust collection systemKice
Industries Inc.

Elevator buckets Maxi-Lift Inc.

Grain temperature systemRolfes@
Boone

Level indicators..... BinMaster Level
Controls

Speed reducers Dodge

Steel storage Meridian Mfg.



Crossroads Cooperative added three new McPherson Concrete jumpform tanks (left) at its location in Gurley, NE. Aerial photo courtesy of McPherson Concrete Storage Systems.

A grain elevator has been in operation in Gurley, NE since 1916. In 1988, Crossroads Cooperative, headquartered in Sidney, NE, purchased that elevator and in 2012 increased its storage capacity by 1 million bushels by adding three hopper-bottom McPherson Concrete jumpform tanks.

Ground was broken for the project in February 2012, and it was completed in October.

The project also included the addition of a Kice cyclone dust collection system, two Meridian loadout and screenings hopper tanks, a Baasch & Sons grain cleaner, and an Intersystems grain cleaner.

Gurley Location Manager Tim McCabe (308-884-2206) said the additional storage was needed for a couple of reasons.

“We needed the storage space to have flexibility during harvest” McCabe says, “and to keep up with rail shipping requirements.”

The company hired HABCO, Inc., Salina, KS (785-823-0440), as the general contractor, and Robinson Electric, Scottsbluff, NE (888-858-2768), as the electrical contractor.



Project Manager Jon Calahan, left; Chief Operations Manager Rich Krahulik, center; and Gurley Location Manager Tim McCabe. Ground-level photos by Alex Lord

Concrete Tanks

The three new McPherson Concrete tanks at the Gurley location brings the location's total capacity to 2.5 million bushels. Two of the jumpform tanks

stand 60 feet in diameter and 132 feet tall. Both tanks have a conical hopper-bottom, with a depth of 21 feet and a slope of 37 degrees. They have a capacity of 343,418 bushels each.

The third jumpform tank stands 58

An Intersystems gravity screener cleans grain at 25,000 bph.



feet and 132 feet tall. This tank has a conical hopper-bottom with a depth of 20.5 feet and a slope of 37 degrees and a storage capacity of 320,345 bushels. All three tanks sit on reinforced concrete ring foundations above auger cast concrete pilings.

The tanks are monitored by 11-cable Rolfes@Boone grain temperature monitoring systems, while grain levels are monitored by BinMaster top-level indicators. Aeration is provided at 1/10 cfm per bushel by five AIRLANCO 10-hp centrifugal fans per tank, with the assistance of three 2-hp roof exhausters per tank.

The tanks are filled by a series of 20,000-bph Intersystems drag conveyors supported by LeMar catwalks. The tanks are emptied partially by sidedraw spouts and then by screw augers designed to empty the hoppers.

Other Additions

The project at Crossroads Cooperatives Gurley location also included a 20,000-bph Intersystems leg with a 22-inch Goodyear belt and 20x8 Maxi-Lift

CC-Max buckets. A four-outlet Hayes & Stolz electric distributor directs grain to all areas of the facility.

Crossroads also installed two new grain cleaners above the concrete tanks during the 2012 project. One of the cleaners is a 25,000-bph Intersystems gravity screen grain cleaner used to remove fine particles in wheat before load-out. The other cleaner is a 20,000-bph Baasch & Sons scalping grain cleaner used to take out corn stalks.

In addition to the new leg and grain cleaners, two Meridian welded-steel hopper tanks were installed, a 5,000-bushel tank for truck loadout and a 2,200-bushel tank for screenings.

Current Construction

The cooperative currently is installing a 10,000-bph Schlager bucket elevator, dump pit, and a 10,000-bph Schlager conveyor on the elevator's north side where a wood elevator that was built in 1942 was torn down in 2012. The leg and conveyor will serve seven existing steel corrugated tanks.

Alex Lord, associate editor