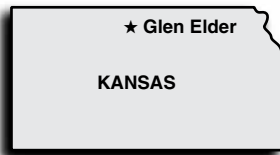


Good Neighbor Expands

KANSAS COOP HANDLES HIGHER VOLUMES WITH LOWER COMMUNITY IMPACT



Farmway Coop Inc.
Beloit, KS • 785-738-2241

Founded: 1911
Storage capacity: 26 million bushels at 16 locations
Annual volume: 30 million bushels
Annual revenues: \$600 million
Number of members: 6,325
Number of employees: 130
Crops handled: Hard red winter wheat, sorghum, corn, soybeans, sunflowers
Services: Grain handling and merchandising, agronomy, distribution center

Key personnel at Glen Elder:

- Rod Barker, location manager
- Joe Senger, superintendent
- Janelle Beatz, office manager

Supplier List

Aeration fans.....AIRLANCO
Bearing sensors..... CMC Industrial Electronics
Bin sweepsSpringland Mfg.
Bucket elevators.....Intersystems
Catwalks LeMar Industries Corp.
Concrete tanks.....McPherson Concrete Storage Systems Inc.
ContractorHABCO Inc.
Control system..... Kasa Controls
Conveyors (belt)...Hi Roller Conveyors
Conveyors (drag)Intersystems
DistributorsHayes & Stolz Ind. Mfg. Co. Inc.
Dust collection system ..Industrial Air, AIRLANCO
Elevator buckets Maxi-Lift Inc.
Grain temperature system..... CMC Industrial Electronics, TempuTech Inc.
Level indicators..... BinMaster Level Controls
MagnetsBunting Magnetics Co.
Millwright..... HABCO Inc.
Motion sensors CMC Industrial Electronics
Tower support systemLeMar Industries Corp.



Expansion project at Farmway Coop in Glen Elder, KS includes two McPherson jumpform concrete tanks at left, Intersystems receiving legs and Hayes & Stolz distributor visible between tanks, and a pair of covered receiving pits in front of tanks. Aerial photo courtesy of McPherson Concrete Storage Systems, Inc.

When Farmway Coop Inc. set out late in 2010 to expand storage and handling capacity at its elevator in Glen Elder, KS (785-545-3321), the reasons would sound familiar to most country elevator managers.

With 1.3 million bushels of new upright concrete storage and twin receiving pits and legs with 50,000 bph capacity, the facility is positioned to load corn, soybean, and wheat trains back to back. The Glen Elder location is on track to load 50 to 60 trains a year, up from about 32 a year earlier on the Kyle Railroad, a short-line with connections to the Union Pacific at Salina, KS.

But there's more to it than that,

says Location Manager Rod Barker, who came to Farmway five years ago from Mid-Kansas Co-op. One new feature of the expanded facility, he says, is a new automation system from Kasa Controls that has improved both safety and equipment maintenance.



Rod Barker

"We used to run things until they quit working," Barker says. "Now, we have a system that shuts equipment down before it fails. It will tell you if a belt is not tracking right or rubbing up on a rub block. It's all Internet-based, and technically, you could run this elevator from a smartphone in Japan, if you needed to."

Other innovations are aimed at the environment in Glen El-

der. For example, the coop installed a custom-designed shed-type housing for the aeration fans on the new tanks to reduce the noise from the fans' operation. "We have homes only 100 feet from the elevator," says Barker.

Additional plans for 2013 call for the installation of an oil-based dust suppression system and an upgrade to the elevator's hazard monitoring system.

"At first, it was a tough go with the city to get the project approved," Barker explains. "But with some give and take on both sides, we're getting along a lot better, and we have a lot of support from the city."

The Project

For the \$10 million project, Farmway hired HABCO Inc., Salina, KS (785-823-0440), as general contractor and millwright and McPherson Concrete Storage Systems, McPherson, KS (800-999-8151), to build two jumpform concrete tanks.

Also heavily involved in the upgrade was Watson Electric Inc., Salina (785-827-2924), which served as electrical contractor and installed the KASA control system.

Work proceeded in two phases, with the first phase beginning in December 2010 and the second phase completed in June 2012, in time for the Kansas wheat harvest.

First Phase

The first (and smaller) phase of construction in 2011 involved the upgrade of equipment serving an existing slipform concrete house.

Specifically, HABCO refurbished an existing Gerber Roto-Flo distributor and added a 40,000-bph Intersystems gravity screener on the rooftop, enabling the operator to clean grain either on receiving or prior to the existing bulk weigh layout system.

Watson Electric also added the KASA control system during this phase.

Second Phase – Storage

In 2012, McPherson built a pair of jumpform concrete tanks rated at 700,000 and 650,000 bushels, respectively. Barker notes that one of the two tanks has an above-ground tunnel for the reclaim conveyor, which took up space that otherwise would go to grain storage.

Both tanks stand 84 feet in diam-

eter and 144 feet high. These tanks are equipped with 16-inch Springland sweep augers, 16-cable TempuTech grain temperature monitoring systems, and BinMaster level monitors.

Second Phase – Handling

Adjacent to the two new tanks, crews constructed a pair of covered mechanical receiving pits holding 1,000 bushels each. A pair of below-ground 25,000-bph Intersystems drag conveyors carry grain from the pits to a pair of Intersystems 25,000-bph legs. These legs are outfitted with a single row of Maxi-Lift CC-MAX 20x8 buckets mounted on 24-inch belts. Either pit can reach either leg.

"We used to run things until they quit working. Now, we have a system that shuts equipment down before it fails. It will tell you if a belt is not tracking right or rubbing up on a rub block."

-Rod Barker, Farmway Coop



Another view of the expansion project at Glen Elder from the roof of the main concrete house, with new construction in the center of the photo.



The legs raise grain up to a six-hole Hayes & Stolz swing-type double distributor. Grain then descends via gravity spouts to a set of 25,000-bph Intersystems drag conveyors running out to the two new tanks.

The tanks empty onto 50,000-bph Hi Roller belts in below-ground tunnels. These deliver grain to an existing 50,000-bph shipping leg for rail loading.

“Everything has worked very well so far,” Barker says.

*Ed Zdrojewski, editor
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The two photos above depict a sound-muffling enclosure designed by AIRLANCO to reduce noise levels for nearby residents.



One of many screens available to elevator operators via a KASA control system shows the contents of two new jumpform concrete tanks and status of equipment serving those tanks. Additional photos by Ed Zdrojewski.