Rebuilding with Concrete

SOUTHEAST KANSAS COOP RECOVERS FROM SEVERE WINDSTORM

KANSAS McCune ★

McCune Farmers Union Elevator McCune, KS • 620-632-4226

Founded: 1941

Storage capacity: 1 million bushels at one location

Annual volume: 1.25 million bushels

Annual revenues: \$11-16

million

Number of members: 350 Number of employees: 10 Crops handled: Corn, hard red and soft red winter wheat, soybeans Services: Grain handling and merchandising, agronomy, bulk fuels, propane

Key personnel:

- Gary McGown, general manager
- Russ Smith, assistant manager
- Gavin Stewart, elevator superintendent
- Pauline Wells, bookeeper
- Becca Perez, office manager

Supplier List

Aeration fans AIRLANCO
Bin sweeps Hutchinson
Bucket elevator Schlagel Inc.
Catwalk . LeMar Industries Corp.
Concrete tanks McPherson
Concrete Storage Systems
Conveyors Schlagel Inc.
Distributor Schlagel Inc.
Elevator buckets Tapco Inc.

Elevator buckets Tapco Inc.
Grain temperature system

Rolfes@Boone

Leg belting... Goodyear Conveyor Belting

Level indicators BinMaster Level Controls

Millwright Frisbie Construction Co. Inc.

Motors...... Toshiba International Speed reducers................. Dodge



McCune Farmers Union Elevator's single location in McCune, KS. The two new McPherson jumpform concrete at left replace steel storage that was destroyed in a windstorm in May 2009. Photos by Ed Zdrojewski.

Early on the morning of May 8, 2009, the McCune Farmers Union Elevator facility in the tiny town of McCune, KS took the brunt of a huge storm packing straight-line winds estimated up to 120 mph.

Elsewhere in town, the windstorm damaged some roofs and leveled some on-farm bins in the countryside but caused no injuries. At the elevator, however, the storm did about half a million dollars

worth of damage, knocking four steel tankswich capacity of about 216,000 bushels of grain off of their foundations, knocked over a leg, and damaged the roof of a fertilizer plant.

"I live just a couple of blocks to the north of



Gary McGown

the elevator," says Manager Gary McGown. "I was getting ready to leave for the elevator and watched the storm from my front door."

McGown, who has been with the cooperative since 1977 and general manager for the last 10 years, says the facility was insured but only for 50% replacement cost plus cleanup cost. That being the case, the coop board didn't feel locked into replacing exactly what had stood

on the site before.

Ultimately, McGown and the board settled on replacing the lost storage with a pair of 187,000-bushel McPherson jumpform concrete tanks.

"Going with concrete allowed us to do away with a loadout bin, and we thought it would offer more flexibility," McGown says. "Also, at that point, the price of concrete was comparable to the cost of steel."

After taking bids, McCune Farmers awarded a contract for millwright work to Frisbie Construction Co. Inc., Gypsum, KS (785-536-4288). The two concrete tanks were built by McPherson Concrete Storage Systems, McPherson, KS (800-999-8151). (Back in the 1980s, McPherson also constructed a 260,000-bushel jumpform concrete tank at McCune.)

Construction on the \$1.4 million project began late in July 2009, the first tank was completed by late September, and the second tank was done by late October. The first tank was filled with new crop immediately by an overhead conveyor running from the existing concrete workhouse. A new 15,000 bph leg serving the two new tanks was completed just before *Grain Journal* visited the site in late February.



The two new tanks are serviced by Schlagel equipment, including a 15,000-bph leg, 4-hole distributor, and 5,000-bph overhead drag conveyor from the original concrete house.

Project Specifications

The new McPherson jumpform con-

crete tanks stand 44 feet in diameter and 140 feet tall, rated at 187,320 bushels capacity each. They are equipped with flat bottoms, 10-inch Hutchinson sweep augers, 18-cable Rolfes@Boone grain temperature monitoring systems, and Binmaster level indicators.

Each tank also is outfitted with a pair of 50-hp AIRLANCO centrifugal fans capable of generating 1/7 cfm of aeration per bushel, with the assistance of four 2-hp roof exhausters.

Frisbie constructed a new 15,000-bph Schlagel leg between the two new tanks. The leg is outfitted with Tapco 20x8 CCHD heavy-duty buckets mounted on a 22-inch Goodyear Supreme belt.

The leg deposits grain into a Schlagel 4-hole electric rotary distributor, which reaches the two new tanks via gravity spout. The distributor also can deposit grain into the main concrete house (built in 1959).

The new tanks are equipped with sidedraw spouts and also can empty into a spout running back into the new leg.

Ed Zdrojewski,editor



- For moving one barge, or five barges, a wire rope barge puller can be engineered for your needs
- Rugged construction to stand up to the rigors of the river

Metso Minerals Industries, Inc.

Bulk Materials Handling 4000 Town Center Boulevard, Suite 400 Canonsburg, PA 15317

Ph:412-269-5006 • FAX:412-269-5070 Email: bruce.robbins@metso.com



- Reversible hydraulic indexer for use in two directional applications
- Usually arranged to index a string of cars one car length at a time

Metso Minerals Industries, Inc.

Bulk Materials Handling 4000 Town Center Boulevard, Suite 400 Canonsburg, PA 15317

Ph:412-269-5006 • FAX:412-269-5070 Email: bruce.robbins@metso.com



 Dependable hydraulic power and push button controls for one man spotting of hopper, tank and other bulk handling rail cars

Metso Minerals Industries, Inc.

Bulk Materials Handling 4000 Town Center Boulevard, Suite 400 Canonsburg, PA 15317

Ph:412-269-5006 • FAX:412-269-5070 Email: bruce.robbins@metso.com

