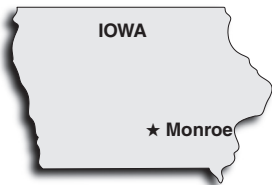


Storage, Receiving, and Drying

IOWA COOP SEEKS TO MAKE BRANCH ELEVATOR A MORE ATTRACTIVE PLACE FOR DELIVERIES



Two Rivers Cooperative
Pella, IA • 641-628-4167

Founded: 2001
Storage capacity: 4.85 million bushels at four locations
Annual volume: 10 million bushels
Annual revenues: \$73 million
Number of members: 1,020
Number of employees: 48
Crops handled: Corn, soybeans
Services: Grain handling and merchandising, feed, agronomy, fuels, cardrol fuel stations

Key personnel at Monroe:

- Tracy Gathman, general manager
- Scott Bensink, location manager
- Brian Schippers, superintendent

Supplier List

Aeration fans.....Sukup Mfg. Inc.
Bin sweep.....Sioux Steel Co.
Bucket elevators.....Schlagel Inc.
Catwalk.....Tri-Co Fabrication
Contractor/millwright..... Buresh Building Systems Inc.
ConveyorsSchlagel Inc.
Distributor.....Schlagel Inc.
Elevator buckets Maxi-Lift Inc.
Grain dryerSukup Mfg. Inc.
Grain temp system.....Tri-States Grain Conditioning Inc.
Manlift..... Alimak Hek
Steel storage.....Sukup Mfg. Inc.
Steel tank erection Midwest Bin Erectors LLC
Tower support system Tri-Co Fabrication



Two Rivers Cooperative's branch elevator in Monroe, IA, with storage now totaling approximately 1.5 million bushels following the addition of a 515,000-bushel corrugated steel tank in foreground left and two 30,000-bushel wet tanks at right. Also included was a 4,700-bph tower dryer. Photo courtesy of Two Rivers Cooperative.

Two Rivers Cooperative in the past few years had been experiencing a familiar litany of growing pains at its 1-million-bushel branch elevator in Monroe, IA (641-259-2232).

The truck lines backed up during harvest. Storage filled up too quickly, and excess grain had to be sent to a temporary storage bunker at another Two Rivers location. And the dryer on-site was old, worn down, and dried at 1,000 bph “on a good day.”

That was the assessment of General Manager Tracy Gathman, who has led the cooperative since it was formed through merger in 2001 and was general manager of one of its predecessor

companies before that (*see page 44*).

In 2016, the cooperative set out to correct those deficiencies by adding a 515,000-bushel corrugated steel tank, a 15,000-bph receiving pit and leg, a 4,700-bph tower dryer, and a pair of 30,000-bph hopper-bottom wet tanks.

Hired as general contractor and millwright on the nearly \$4 million project was Buresh Building Systems Inc., Hampton, IA (641-456-5242).

“We’ve had a lot of experience with Buresh,” says Gathman. “Brian (Buresh) and his crew built our greenfield elevator at Tracy (IA) in 2011, and we were very pleased with their work. At Tracy, we went from an empty

cornfield in March to a working elevator in September, and the bid was competitive.”

In 2016, the new project also ran from March to September.

The Expansion

The new Sukup dry storage tank stands 90 feet in diameter, 88 feet tall at the eave, and 111 feet tall at the peak. It includes a flat concrete floor, outside stiffeners, 16-cable TSGC grain temperature monitoring system, and a Daay bin paddle sweep. A set of six Sukup 40-hp centrifugal fans provide 1/7 cfm per bushel of aeration with the help of three roof exhausters.

New storage also includes a pair of Sukup steel hopper tanks standing 30 feet in diameter, 61-1/2 feet tall at the eaves, and 77-1/2 feet tall the the peak. These are aerated with two 5-hp fans providing 1/5 cfm per bushel while storing wet grain.

Adjacent to these tanks is a 500-bushel mechanical receiving pit. This feeds into a 15,000-bph Schlagel receiving leg equipped with 20x8 Maxi-Lift Tiger-Tuff orange buckets mounted on a 22-inch Goodyear belt. That leg plus a pair of 5,000-bph Schlagel wet and dry legs are encased in a 16-foot-x-16-foot Tri-Co support tower.

The receiving leg feeds grain into a six-duct Schlagel Swing-Set double distributor. From there, a 25,000-bph Schlagel drag conveyor takes grain out to the big tank, or gravity spouts deposit grain into the wet tanks.

The new storage empties onto 10,000-bph Schlagel drags running back to the new receiving leg.



Ground-level view of new construction, from left: 515,000-bushel Sukup steel tank; 4,700-bph Sukup tower dryer; Tri-Co support tower encasing three Schlagel legs and a Schlagel Swing-Set distributor; and to 30,000-bushel Sukup wet tanks. Photo by Jerry Perkins.

The project also includes a propane-fired Sukup dryer rated at 4,700 bph at five points of moisture removal. Gathman notes that Monroe doesn't get enough natural gas to spare for a big dryer, but Two Rivers is a propane dealer and uses its own supply.

The site includes space to add a second 90-foot storage tank when needed, and the ground already has been prepared for building the foundation.

Ed Zdrojewski, editor