Fivefold Receiving Boost

NEBRASKA COOPERATIVE ADDS STORAGE, HANDLING CAPACITY AT HOME ELEVATOR



Farmers Pride Cooperative Neligh, NE • 402-887-5463

Founded: 1934

Storage capacity: 18 million bushels at six locations

Annual volume: 15 million bushels

Annual revenues: \$200 million

Number of members: 5,000

Number of employees: 125

Crops handled: Corn, soybeans

Services: Grain handling and merchandising, feed, agronomy, energy

Supplier List

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Aeration fans Chief Agri/Industrial
Division
Bin sweeps Springland Mfg.
Bucket elevatorSchlagel Inc.
CatwalkWarrior Mfg. LLC
ContractorEBM Construction
Inc.
Control system Easy Automation
Inc.
ConveyorsSchlagel Inc.
Distributor Schlagel Inc.
Electrical contractor Hoefer Electric
Elevator bucketsMaxi-Lift Inc.
Grain dryer Brock Grain Systems
Grain temperature system
OPIsystems Inc.
Level indicators 4B Components
Ltd.
Millwright EBM Construction Inc.
Motion sensors 4B Components
Ltd.
Speed reducersDodge
Steel storage Chief Agri/Industrial
Division
Steel tank erectionQuad County
Ag Services
Tower support systemWarrior Mfg.
LLC
Truck probe Gamet Mfg. Inc.
Truck scaleRice Lake Weighing
Systems



Farmers Pride Cooperative's flagship elevator at Neligh, NE, with three new corrugated steel storage tanks in foreground and a new tower dryer visible between the tanks. Photos by Ed Zdrojewski.

It used to take 12 to 15 minutes to dump a semi truck full of grain at the Farmers Pride Cooperative's elevator in Neligh, NE (402-887-5463).

Since the construction of a \$7 million standalone elevator adjacent to the coop's existing facility, however, it now takes two to three minutes to dump the same truck.

"We just had to keep up with the producers," says Location Manager Anna Crabtree, who worked at a variety of grain-related businesses before joining Farmers Pride in 2003.

Grain volumes traditionally have been high at the Neligh elevator. Antelope County in the northeast part of the state is the most heavily irrigated county in Nebraska, she notes. And even without the extra water, newer varieties of corn and soybeans yield well under a variety of conditions, and farmers are harvesting and delivering grain at an ever-faster rate with bigger combines and trucks.

The cooperative's solution was to build an elevator featuring two 600,000-bushel corrugated steel tanks for dried grains, a 150,000-bushel wet tank, a 4,700-bph tower dryer, and a new



Location Manager Anna Crabtree and Sales and Marketing Manager Dave Spencer.

20,000-bph receiving pit and leg.

Farmers Pride began construction on the upgrade in March 2014, and it was completed in time for the fall harvest, which was a record both in Nebraska and across the United States.

The cooperative selected EBM Construction Inc., Norfolk, NE (402-371-2945) as general contractor and millwright on the project.

Crabtree notes that EBM has a track record with Farmers Pride, having built a 400,000-bushel steel tank for the coop in



New receiving pit features a dumpthrough truck scale that reaches a 20,000bph receiving leg.

2011 at Neligh and performed well on that project. Coop board members also liked that EBM is a local company based about 35 miles away from Neligh.

Hoefer Electric Inc., Columbus, NE (402-563-1834), served as the electrical contractor on the project. Easy Automation Inc., Welcome, MN (507-728-8214), supplied the automation system.

Project Specifications

ÉBM constructed a pair of Chief Titan 600,000-bushel steel tanks standing 105 feet in diameter, 81 feet tall at the eaves, and 110 feet tall at the peaks.

The tanks are equipped with outside stiffeners, flat floors, 14-inch Springland sweep augers, 24-cable OPI digital grain temperature monitoring systems, and 4B level indicators. A set of four Chief 40-hp centrifugal fans per tank provide 1/10 cfm per bushel of aeration through in-floor ducting, with the assistance of four roof exhausters.

The wet tank, also from Chief, stands 49-1/2 feet in diameter, 88-1/2 feet tall at the eave, and 102-1/2 feet tall at the peak. Accessories include outside stiffeners, Springland sweep, six-cable OPI digital grain temperature monitoring system, and a 4B level indicator. A pair of Chief 30-hp centrifugal fans provide 1/10 cfm per bushel of aeration through a full-floor system. The tank also has two roof exhausters.

Incoming trucks are sampled ahead of the receiving pit by an Gamet Apollo truck probe. The new enclosed receiving pit is part of an 80-foot Rice Lake dump-through scale. The 1,000-bushel mechanical pit feeds a new 20,000-bph Schlagel leg equipped with a single row of Maxi-Lift Tiger-Tuff 20x8 buckets mounted on a 22-inch belt. The leg is enclosed in a 24-foot-x-14-foot-x-160-foot, six-column Warrior receiving tower.

The leg is one of two depositing grain into a Schlagel five-duct swing-type double distributor. From there, grain travels via an overhead 20,000-bph Schlagel drag conveyor out to the wet tank or to the new 105-foot tanks.

The new tanks empty onto a 10,000-

bph Schlagel reclaim drag in an above ground tunnel running back to the new receiving pit.

An independent 7,000-bph wet leg feeds the new Brock tower dryer, which is powered by natural gas from a main pipeline running alongside the cooperative property. Sales and Marketing Manager Dave Spencer says the dryer received heavy use during the 2014 harvest and performed well for the coop.

"Our farmers like being in and out of the elevator as quickly as possible," he says.

Ed Zdrojewski, editor