# Rural and In-Town Projects

# NEBRASKA COOP BUILDS RURAL ELEVATOR, EXPANDS IN-TOWN LOCATION

\* Hay Springs \* Hemingford NEBRASKA

Farmers Cooperative Elevator Co. Hemingford, NE • 308-487-3317

Founded: 1918 Storage capacity: 8.2 million bushels at four locations Annual volume: 12-15 million bushels Annual revenues: \$80 million Number of members: 1,400 Number of employees: 50 Crops handled: Hard red winter and hard red spring wheat, corn, millet, oats, sunflowers, barley, soybeans Services: Grain handling and mer-

chandising, feed, agronomy

#### Key personnel:

- Dale Anderson, general manager
- Bart Moseman, grain division manager
- Mark Fritzler, superintendent

#### Supplier List

Aeration fans......AIRLANCO, Chief Agri/Industrial Division Bin sweeps ........Springland Mfg.,

Sudenga Industries Bucket elevators......Schlagel Inc. Catwalks .......Warrior Mfg. LLC Concrete silos ......Hoffmann Inc. Contractor....EBM Construction Inc. Control system.....Easy Automation Inc., Kasa Controls & Automation

Conveyors (belt)......Hi Roller Conveyors

Conveyors (drag) ......Schlagel Inc. Distributors .....Schlagel Inc. Elevator buckets ..... Maxi-Lift Inc. Grain temp system ..... OPI Integris Level indicators..... BinMaster Level Controls

Millwright..EBM Construction Inc. Motion sensors..4B Components Ltd. Steel storage... Chief Agri/Industrial Division, Lowry Mfg. Co.

Steel tank erection ....Quad County Ag Services

Tower support system...Warrior Mfg. LLC

Truck probe ..... CR Mfg. Truck scale..... Sooner Scales



Farmers Cooperative Elevator Co.'s new Mirage Flats 620,000-bushel all-steel elevator near Hay Springs, NE handles grain from a surrounding irrigation district. Aerial photos courtesy of EBM Construction Inc.



The cooperative's flagship elevator in Hemingford, NE with two new 500,000-bushel jumpform concrete silos near the center of the photo.

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Over the course of 2013 and 2014, Hemingford, NE-based Farmers Cooperative Elevator Co. completed two major projects, one at its main in-town location and a new branch elevator 30 miles to the northeast in Mirage Flats.

The latter is a 620,000-bushel all steel elevator serving primarily spring and winter wheat producers who previously had to drive up to 30 miles to deliver their crop. The former was the addition of 1 million bushels of concrete storage at the headquarters elevator in Hemingford.

According to Grain Division Manager Bart Moseman, who has been with the cooperative since 2006, Mirage Flats is a wide spot in the road about 30 miles northeast of Hemingford. The site, however, is in the middle of a U.S. Bureau of Reclamation irrigation district watered from nearby Box Butte Reservoir. Grain producers there had to haul grain either to Hemingford or to a smaller Farmers Cooperative Elevator branch 12 miles to the north at Hay Springs, NE.

At Hemingford, Moseman says, "we were storing a lot of corn and wheat on the ground. We were dumping wheat onto trains to get the facility ready for corn harvest. Now we have better merchandising and blending opportunities."

Cost of the two projects ran about \$9 million. The cooperative awarded the contract for both projects to EBM Construction Inc., Norfolk, NE (402-371-2945), which had been doing millwright work for the company since 1994. Mirage Flats, in fact, was EBM's first greenfield project for the coop. Moseman says he has been pleased with the builder's performance.

Also on-site at Mirage Flats, Quad County Ag Service, Paton, IA (515-968-4180), erected the steel silos, and Easy Automation Inc., Welcome, MN (507-728-8214), supplied the facility automation systems.

At Hemingford, Hoffmann Inc., Muscatine, IA (563-263-4733), built the two new jumpform concrete silos, while Kasa Controls & Automation, Salina, KS (785-825-7181), designed and installed the automation system.

The Mirage Flats facility broke ground in the fall of 2012 and completed by Sept. 30, 2013, in time for fall corn harvest. Work at Hemingford began in



New overhead Hi Roller 20,000-bph enclosed belt conveyors carry grain out to the two newest jumpform concrete tanks at Hemingford.

the fall of 2013. The first silo was done in time for the 2014 summer wheat harvest, and the second was done at the end of October 2014 in time for corn.

## **Mirage Flats**

Storage at Mirage Flats consists of a pair of 310,000-bushel Chief corrugated steel silos standing

80 feet in diameter and 64 feet tall at the eaves. The silos have flat concrete floors, outside stiffeners, 16-inch Springland sweep augers, and fully automated 14-cable OPI Integris grain temperature and moisture monitoring systems. A set of four 50-hp Caldwell centrifugal fans provide 1/7 cfm per bushel of aeration.

Incoming grain trucks are weighed on an 80-foot pitless truck scale from Sooner Scales and sampled with a probe from CR Mfg. located adjacent to the scale.

From there, trucks are routed to one of two 100-bushel receiving pits. Both pits feed into a 20,000-bph Schlagel leg encased in a Warrior tower and equipped with a single row of Maxi-Lift 20x8 CC-MAX buckets mounted on a 21-inch belt.

The leg deposits grain into a Schlagel four-duct syncroset distributor. This can send grain out to storage via Schlagel



Bart Moseman

overhead 20,000-bph drag conveyors or by gravity spout to a Lowry 3,000-bushel surge tank for loading trucks.

The storage silos empty onto Schlagel 12,000-bph drags running through above-ground tunnels back to the receiving leg.

## Hemingford

Hoffmann constructed a pair of 500,000-bushel jumpform concrete silos standing 76 feet in diameter and 134 feet tall, the largest the supplier has constructed at Hemingford to date.

These silos have flat floors, 10-inch Sudenga sweep augers, fully automated 12-cable OPI Integris grain temperature and moisture cables, and BinMaster level indicators. A set of four AIRLANCO 60-hp centrifugal fans supply 1/10 cfm per bushel of aeration on coarse grains.

Hi Roller 20,000-bph overhead enclosed belt conveyors carry grain out to the new silos from existing grain handling equipment. The silos empty through sidedraw spouts and, for final cleanout, onto 40,000-bph Hi Roller enclosed belts.

"EBM performed very well for us," says Moseman. "It's amazing how much having more places to go with grain relieves the harvest pressure."

Ed Zdrojewski, editor