

Last Place to Expand

COOP ADDS CAPACITY AT THIRD SITE AFTER FIRST TWO BUMP UP AGAINST LIMITS



Farmers Grain & Coal Co.
Mason City, IL • 217-482-3238

Founded: 1899
Storage capacity: 7.5 million bushels at three locations
Annual volume: 9 million bushels
Annual revenues: \$45 million
Number of members: 700
Number of employees: 10
Crops handled: Corn, soybeans, soft red winter wheat
Services: Grain handling and merchandising, farm supplies

Key personnel:

- Jim Liesman, general manager
- Patty Hopp, bookkeeper
- Connie Brownfield, office manager
- Jay Akers, maintenance supervisor
- Bob Buck, outside labor
- Kevin Carr, outside labor
- Harry Allen, Teheran superintendent
- Donny Simmons, Mason City superintendent
- Gina Hollis, Greenview office manager
- William Johnson, Greenview superintendent

Supplier List

- Aeration fans**.....AIRLANCO
- Bin sweeps**Hutchinson
- Bucket elevators**... Union Iron Works
- Catwalk**..... Nostaw Inc.
- Conveyors**Union Iron Works
- Distributors**Schlagel Inc.
- Elevator buckets** Maxi-Lift Inc.
- Grain dryer** Brock Grain Systems
- Leg belting**...All-State Industries Inc.
- Millwright**..... Nostaw Inc.
- Speed reducers** Dodge
- Steel storage**..... Behlen Mfg. Co.
- Steel tank erection** Excellence Buildings Inc.
- Tower support system**... Nostaw Inc.



Farmers Grain & Coal Co.'s branch elevator at Teheran, IL, with two new Behlen steel tanks, Brock dryer, and Union Iron legs in foreground. Aerial photo by Steve Huey, Pekin, IL.

Yields continue to increase year after year in the portion of central Illinois served by Farmers Grain & Coal Co., Mason City, IL, but the cooperative essentially had run out of room at its two largest elevators at Mason City and Greenview, IL.

Not only were both elevators in town, making expansion difficult, but any further additions of permanent storage would put both elevators over the 2-million-bushel

mark, under which tough U.S. Clean Air Act standards would kick in, says General Manager Jim Liesman, who has been with the cooperative his entire career since 1965.

So the logical place to expand was at the coop's 1.75-million-bushel Teheran, IL facility (309-562-7461), about six miles west of Mason City and 22 miles west of Lincoln on State Highway 10.

The project completed in 2010 involved the construction of two new steel tanks, one dry grain and one for wet, a new pit and receiving leg, and replacement of an old dryer with a higher-capacity model.

The cooperative hired Nostaw Inc. from nearby Forest City, IL (309-597-2623), as general contractor and millwright on the \$2.5 million project. Liesman comments that the board visited a Nostaw project for Johnson Grain near Waverly, IL and was impressed with the contractor's work.

Farmers Grain & Coal purchased a house and



General Manager Jim Liesman (left) and Teheran Location Manager Harry Allen.

land next door, in order to make room for the expansion. Construction began in March and was completed around Nov. 1.

Storage and Handling

The Nostaw crew constructed a pair of Behlen corrugated steel tanks, a 400,000-bushel model for dry grain and 186,000-bushel bin for wet grain.

Both tanks have flat floors, outside stiffeners, and 12-inch Hutchinson sweep augers. Neither tank is outfitted with grain temperature monitoring cables or level indicators.

The larger tank stands 91 feet in diameter and 94 feet tall at the eaves, while the smaller tank measures 60 feet in diameter and 82 feet tall at the eaves.

Both tanks are outfitted for 1/7 cfm per bushel aeration capacity. This is accomplished by four 20-hp AIRLANCO centrifugal fans on the big tank and two 20-hp AIRLANCO fans on the smaller.

An adjacent enclosed 1,000-bushel mechanical receiving pit feeds a 20,000-bph Union Iron receiving leg. This leg is outfitted with Maxi-Lift 22x8 Tiger Tuff buckets mounted on a 23-inch All-State belt.



Ground level view of new Behlen wet and dry tanks and 7,000-bph Brock tower dryer. Photo by Ed Zdrojewski.

From the leg, grain passes through a two-way valve to a four-hole Schlagel electric distributor. From there, grain is deposited on one of two new overhead 30,000-bph Union Iron drag conveyors, one running out to the new storage and the other to an existing 1.2-million-bushel bolted steel tank.

The new tanks empty onto an above-ground 10,000-bph Union Iron drag conveyor running back to a dry leg serving the new dryer. This leg feeds another four-hole Schlagel distributor, which sends grain back to storage or to a surge bin for truck loading.

Dryer

The cooperative replaced a worn-out 1,700-bph dryer with a new Brock 7,000-bph tower dryer, at the time the largest Brock manufactured. The installation includes a fuel mixer to allow the dryer to be operated on both natural gas, propane, or a mixture of the two. "Ameren (the local gas utility) had limited our service to what the old dryer consumed, because we're at the end of the line," Liesman comments. "So far, we've just run straight propane this past harvest. So far, it's performed very well for what little grain we dried."

The new dryer is serviced by a 9,000-bph Union Iron wet leg and a 10,000-bph dry leg, both equipped with 18x8 Maxi-Lift Tiger Tuff buckets on a 20-inch All-State belt.

Ed Zdrojewski, editor