After the Storm

FOLLOWING CLEANUP AND REPAIRS, MINNESOTA COOP DOUBLES STORAGE, ADDS DRYER



Meadowland Farmers Cooperative Lamberton, MN • 507-752-7352

Founded: 1905
Storage capacity: 30 million bushels at nine locations
Annual volume: 55 million bushels
Annual revenues: \$350-400 million
Number of members: 3,500
Number of employees: 95
Crops handled: Corn, soybeans, oats, hard red spring wheat
Services: Grain handling and merchandising, feed, petroleum, agronomy

Key personnel:

- John Valentin, general manager
- Pete Valentin, grain merchandiser
- Dave Wellnitz, Delhi location manager
- Gary Robinson, assistant manager

Supplier List

Aeration fans Sukup Mfg. Co.
Bearing sensors4B Components Ltd.
Bin sweepsHutchinson
Bucket elevatorSchlagel Inc.
CatwalksWarrior Mfg. LLC
Contractor Elevator Works Inc.
ConveyorsSchlagel Inc.
Distributor Schlagel Inc.
Electrical contractor Anderson
Electric Inc.
Elevator bucketsTapco Inc.
Engineering VAA LLC
Grain dryerZimmerman Grain Dryers
Grain temperature system TSGC Inc.
Level indicators BinMaster Level Controls
Magnets Puritan Magnetics Inc.
Millwright Elevator Works Inc.
Motion sensors 4B Components Ltd.
Steel storage Sukup Mfg. Co.
Steel tank erectionJim Rothers
Tower support systemWarrior Mfg.
LLC



Two new 515,000-bushel Sukup corrugated steel storage tanks effectively double storage capacity at Mead-owland Farmers Cooperative's branch elevator in Delhi, MN. Photos by Ed Zdrojewski.

A storm featuring straight-line winds over 90 mph in July 2011 devastated Meadowland Farmers Cooperative's branch elevator in Delhi, MN (507-641-3304), knocking over the facility's two 90-foot-diameter Brock dry grain storage tanks.

Fortunately, says Grain Merchandiser Pete Valentin, the concrete foundations remained intact, and they were able to replace them with new GSI tanks. However, the cooperative used the incident to plan a major expansion at Delhi including a doubling of dry grain storage capacity and a new wet grain complex including a dryer, wet grain storage tank, and a second receiving pit and leg.

Elevator Works Inc., Lamberton, MN (507-752-7884), had performed the reconstruction work after the storm, and Meadowland kept the contractor on for the expansion project. "They're local guys," says Valentin at the Lamberton-based cooperative, "and they've done a lot of projects for us in the past. They do a good job."

In addition to Elevator Works, VAA LLC, Plymouth, MN (888-583-3527), served as the

engineer on the project. Anderson Electric, Lamberton (507-752-6191), served as electrical contractor.

Construction got underway in April with the demolition of an old wooden elevator to make room for two more 90-foot-diameter corrugated steel tanks. Those tanks were ready to receive grain from the 2012 harvest, even though harvest came early that year in southwest Minnesota. Final touches on the project were being completed when *Grain Journal* visited the site early in May 2013.

New Storage

The cooperative added a pair of 515,000-bushel Sukup corrugated steel tanks immediately north of the original two tanks. The new tanks stand 90 feet in diameter and 88 feet tall at the eaves.

Both tanks have flat concrete floors and are outfitted with outside stiffeners, 12-inch Hutchinson sweep augers, 15-cable TSGC grain temperature monitoring systems, and BinMaster level indicators.

A set of four Sukup 25-hp centrifugal fans



The Delhi facility, from left: 4,800-bph Zimmerman tower dryer; two Schlagel legs, a 15,000-bph receiving leg and a 10,000-bph dry leg; 12-foot-x-12-foot-x-150-foot Warrior tower; 75,000-bushel Sukup wet tank visible behind the tower; two receiving pits, one of them new; grain storage complex, with one of two new 515,000-bushel Sukup tanks visible at far right.

provide 1/10 cfm per bushel of aeration through in-floor ducting. Each tank also has four 2-hp powered roof exhausters and 18 vents.

Additional storage on the south side of the property adjacent to the Minnesota Prairie Railroad short-line tracks is a new Sukup wet holding tank. This 75,000-bushel tank stands 36 feet in diameter and 84-1/2 feet tall at the eaves.

It also includes a 12-inch Hutchinson sweep auger, 7-cable TSGC grain temperature monitoring system, and a pair of Sukup 10-hp centrifugal fans

supplying 1/10 cfm per bushel with the assistance of 12 vents.

Dryer Complex

The wet tank is part of a small complex that also includes a 4,800-bph Zimmerman tower dryer powered by propane. The dryer has not been fired up yet.

Between the new complex and the main storage four-pack, Elevator Works added the facility's second receiving pit outfitted with a 70-foot Weightronix dump-through scale. The mechanical pit feeds a Schlagel 15,000-bph leg equipped with a single row of Tapco 18x8 CC-HD buckets mounted on a 20-inch Goodyear belt.

Atop the leg, a four-hole Schlagel swing-type distributor can send grain to the dryer, the wet tank, or onto a set of 15,000-bph Schlagel drag conveyors running over to the storage complex.

The new storage tanks, in the meantime, empty onto above-ground Schlagel 15,000-bph drag conveyors running to an existing leg.

Ed Zdrojewski, editor