

Three Tanks, Two Locations

IOWA COOPERATIVE DEALS WITH GROWING VOLUME, TORNADO AFTERMATH



Western Iowa Cooperative
Hornick, IA • 712-874-3211

Founded: 1920
Storage capacity: 24 million bushels at nine locations
Annual volume: 36-38 million bushels
Annual revenue: \$300 million
Number of members: 900
Number of employees: 100
Crops handled: Corn, soybeans
Services: Grain handling and merchandising, agronomy, propane

Key personnel at Mapleton:

- Doug Brouillette, location manager
- Eric Boyle, agronomist

Key personnel at Correctionville:

- Dan Irwin, location manager
- Jamie Lewis, grain superintendent
- Bonnie Heath, office manager
- Dale Wilson, propane manager
- Mark Groszkrueger, shop manager

Supplier List

Aeration fans.....Rolfes@Boone
Bin foundations..... Van Voorst
Concrete
Bin sweeps The GSI Group,
Springland, Mfg.
CatwalksWarrior Mfg. LLC
Contractor ... National Builders Inc.
Conveyors (belt).....Hi Roller
Conveyors
Conveyors (drag) .. The GSI Group,
Schlagel Inc.
Conveyor belting Goodyear
Conveyor Belting
EngineeringNohr Engineering
Co. LLC
Grain temperature system .. Tri-States
Grain Conditioning Inc.
Level indicators..... BinMaster Level
Controls
Millwrights National Builders
Inc., Hoffman Builders
Steel storage.....The GSI Group
Tower support system...Warrior Mfg.
LLC



Above, Western Iowa Cooperative's branch elevator at Mapleton, IA, with new 750,000-bushel GSI tanks at either end of the row of tanks. Below, the cooperative's branch elevator at Correctionville, IA, with new 600,000-bushel GSI tank at center of photo. Aerial photos by JH Photography, Spencer, IA.

If you ask the managers at Western Iowa Cooperative the reason for adding storage capacity at two of the cooperative's nine locations, Mapleton and Correctionville, you'll get a fairly common answer. The volume of grain continues to grow year after year, and the cooperative needed someplace to put it.

In the case of the branch elevator at Mapleton (712-881-1490), however, there was an additional reason for adding two 750,000-bushel steel tanks, says Location

Manager Doug Brouillette.

On April 10, 2011, a tornado ravaged the nearby town of Mapleton, and in the process, destroyed much of the storage capacity of rival Mapleton Grain Inc. Not to disparage Mapleton Grain, Brouillette says, but that grain also needed a home in the meantime. (*Grain Journal* visited Western Iowa's Mapleton elevator a year to the day after the tornado.)

To build the tanks, Western Iowa hired National Builders Inc., Hawarden, IA (formerly

Agri Steel Equipment, 712-552-1200), to build the two tanks at Mapleton plus a third 600,000-bushel tank at Correctionville, 28 road miles to the north. National Builders is a frequent construction partner with the cooperative.

Nohr Engineering, Yankton, SD (605-665-1214), performed engineering services at both locations. Asmusen Bin Builders LLC, Astoria, SD performed the bin erection.

Work on the projects began early in the spring of 2011 and was completed in time for harvest for a confidential cost.

Project at Mapleton

At Mapleton, National Builders constructed two GSI 750,000-bushel corrugated steel tanks at the north and south ends, respectively, of a row of tanks parallel to State Highway 175.

Both flat-floor tanks stand 105 feet in diameter, 90 feet tall at the eaves, and 120 feet tall at the peak. They have outside stiffeners, 14-inch GSI bin sweeps, 24-cable TSGC grain temperature monitoring systems, and SmartBob level indicators.



Mapleton Location Manager Doug Brouillette (left) and Correctionville Location Manager Dan Irwin.

A set of six 60-hp Rolfes@Boone centrifugal fans (36-inch wheel) provide 1/5 cfm per bushel of aeration, with the assistance of 12 roof exhausters.

Overhead, the contractor installed a 20,000-bph Hi Roller enclosed belt conveyor running one direction and a 20,000-bph GSI drag conveyor in the other.

“We haven’t used a lot of enclosed belt conveyors companywide, and the board wanted to try out something different,” Brouillette says. “So far, it (the Hi Roller) seems fine.”

The tanks empty onto above-ground

10,000-bph GSI drag conveyors running back to an existing leg.

Project at Correctionville

Western Iowa’s elevator at Correctionville is at an in-town location without a lot of room for expansion. The cooperative settled on a single 600,000-bushel tank sited next to a relatively new tank and leg.

This tank also stands 105 feet in diameter but is only 70 feet tall at the eave and 99 feet tall at the peak.

The tank is outfitted with a flat floor, outside stiffeners, 12-inch Springland sweep auger, 18-cable TSGC grain temperature monitoring system, and SmartBob level indicators.

This tank also is aerated at 1/5 cfm per bushel, but because of its smaller size, the six Rolfes@Boone centrifugal fans are at 60-hp capacity (33-inch wheel).

A 20,000-bph overhead Hi Roller enclosed belt conveyor takes grain out to the new tank. The tank empties onto a 10,000-bph Schlagel drag conveyor housed in an above ground tunnel.

Ed Zdrojewski, editor