

# Significantly Increased Storage

WESTERN CONSOLIDATED BOOSTS TWIN BROOKS, SD STORAGE BY 7 MILLION BUSHELS



**Western Consolidated  
Cooperative**  
Holloway, MN  
800-368-3310

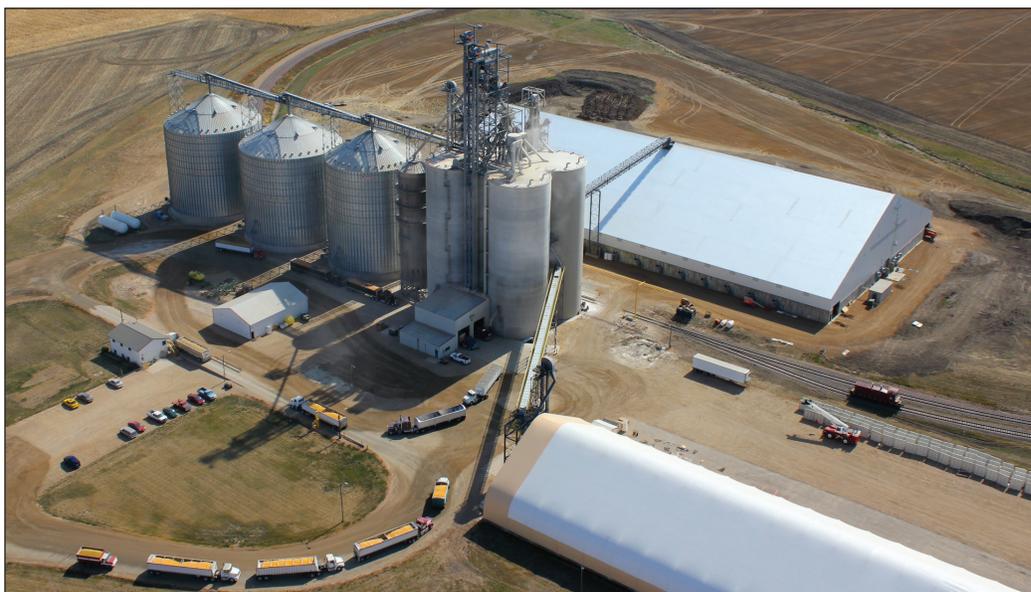
**Founded:** 1983  
**Storage capacity:** 19 million bushels  
at seven locations  
**Annual volume:** 38 million bushels  
**Number of members:** 435  
**Number of employees:** 103  
**Crops handled:** Hard red spring  
and winter wheat, corn, soybeans  
**Services:** Grain handling and mer-  
chandising, fertilizer, seed treatment,  
trucking

#### Key personnel:

- Dean Isaacson, general manager
- Paul Mattson, grain manager
- Steve Negen, Twin Brooks operations manager
- Joe Meyer, Twin Brooks location manager

#### Supplier List

**Aeration fans..** Chief Agri/Industrial Division  
**Bin sweeps .....** The GSI Group  
**Building storage.....** Nucor Building Systems  
**Contractor/millwright ..**SMA, LLC  
**Conveyors .....**Schlagel, Inc.  
**Steel storage...** Chief Agri/Industrial Division  
**Support towers.....** Lemar Industries Corp.



*Western Consolidated Cooperative's Twin Brooks, SD rail terminal includes 8.2 million bushels of grain storage along with a 13,600-foot loop track and fertilizer plant. Photo provided by Western Consolidated.*

In 2005, Western Consolidated Cooperative built a 1.2-million-bushel, 110-car train-loading loop track facility on a Burlington Northern Santa Fe (BNSF) main line in Twin Brooks, SD to take advantage of a strong Pacific Northwest market.

As northeastern South Dakota producers expanded their corn acreage in the late 2000s to meet growing Asia demand, the Holloway, MN-based cooperative decided in 2010 to add more storage capacity at the elevator which is located on U.S. Highway 12, says Joe Meyer, Twin Brooks location manager (800-382-6535).

After taking bids, the cooperative in 2010 choose SMA, LLC, Monticello, MN (888-259-9220), to build three steel tanks. The coop then in 2012 came back to SMA to add a flat storage building.

The two projects, totalling 6.2 million bushels of storage, cost \$13.3 million.

According to General Manager Dean Isaacson, SMA was able to complete the projects in the time frames that Western Consolidated needed.

"SMA was competitive, and we felt they did better work, had good service, and were very dependable," Isaacson adds.

#### 2010 Project

In the summer of 2010, three Chief Titan Series steel corrugated tanks, totaling 2.15 million bushels of storage, were constructed to the northeast of the concrete workhouse.

Two of the tanks measure 105 feet in diameter, 91 feet tall at the eave, and hold 750,000 bushels each. The third tank is 90 feet in diameter, stands 102 feet tall at the eave, and holds 650,000 bushels. All three tanks are flat-bottom with outside stiffeners.

Each of the three tanks is aerated by six Caldwell 50-hp centrifugal fans, with the assistance of six 2-hp roof exhausters providing 1/7 cfm per bushel of aeration on coarse grains. The tanks are not equipped with temperature monitoring or level indicators because of the high turnover of volume at the facility, says Meyer.



*Joe Meyer, left, Twin Brooks location manager; Dean Isaacson, general manager; and Steve Negen, Twin Brooks operations manager. Ground photos by Alex Lord.*

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*Flat storage from the 2012 project consists of a 4-million-bushel Nucor building.*

Each tank is filled by a 20,000-bph Schlagel enclosed belt conveyor supported by a LeMar catwalk that runs from the main concrete workhouse. The tanks are emptied by GSI bin sweeps that feed a 20,000-bph-Schlagel above-ground enclosed belt conveyor.

### **2012 Project**

In the summer of 2012, SMA constructed a Nucor flat storage building

adding 4 million bushels of storage. The building measures 275-feet-x-500-feet and stands 27 feet tall at the eave. It has a 9-foot concrete stemwall.

“The reason we went with a flat storage building is because it allows us to fill and ship grain at our convenience,” he adds, “without having to worry about running out of capacity in our other storage.”

Aeration for the building is provided



*Aeration on the new construction is provided by Caldwell centrifugal fans.*

by sixteen 7.5-hp Caldwell centrifugal fans spaced along the long sides of the building and four 15-hp Caldwell centrifugal fans on each end of the building. The building is filled by a 20,000-bph Schlagel above-ground enclosed belt conveyor equipped with a belt plow. It is emptied by sump holes that feed a 20,000-bph Schlagel enclosed belt conveyor. Payloaders are used for final cleanout.

Looking ahead, Isaacson says the cooperative is planning to build a 110-car unit train facility on a Twin Cities and Western Railroad line outside of Appleton, MN.

*Alex Lord, associate editor*