Mutual Growth

MINNESOTA COOP EXPANDS TWO SITES TO HANDLE INCREASED PRODUCER VOLUMES



Two West Central Ag Services elevators were upgraded in 2017. Above, the headquarters elevator at Ulen, MN, now with 7.7 million bushels of storage, including three new upright corrugated steel tanks and flat storage building in foreground. Aerial photos by Vern Whitten Photography, Fargo, ND.





West Central Ag Services Ulen, MN • 218-596-8821

Founded: 2000 Storage capacity: 20 million bushels at four locations Annual volume: 60 million bushels Annual revenues: \$500 million

Number of members: 1,580 Number of employees: 188 Crops handled: Hard red spring wheat, corn, soybeans

Services: Grain handling and merchandising, agronomy, financial services

Key grain personnel at Ulen:

- Jesse McCollum, CEO
- Blain Christianson, CFO
- Wes Roll, COO
- Randy Zimmerman, merchandiser

- Mike Jirik, merchandiser
- Jerome Sirjord, merchandiser
- Jeni Haspel, grain accounting
- Josh Gravdahl, operations foreman

Key grain personnel at Beltrami:

- Bryan Mueller, grain manager
- Tim Petry, merchandiser
- · Sarah Awender, grain accounting
- James Gunufson, operations
- Lucas Solie, operations
- Ron Sannes, operations

Supplier List

Aeration fans.... Brock Grain Systems, AIRLANCO, Rolfes@Boone Aeration systems Hanson Silo Company LP

Bin sweeps Springland Mfg. **Bucket elevators** GSI, InterSystems **Catwalks** Warrior Mfg. LLC, GSI

Millwright......Walt Johnson Construction Inc.

Scale automation system.....

CompuWeigh Corp.
Screeners......J&D Construction Inc.

Steel storage......Brock Grain Systems
Temporary storage... Warrior Mfg. LLC,
Hanson Silo Company LP

Towers........ Warrior Mfg. LLC, GSI **Truck scales..** Rice Lake Weighing Systems



West Central Ag Services added 1.6 million bushels of upright steel storage (tanks at far right) and a 2.6-million-bushel temporary storage pile at its branch elevator in Beltrami, MN.

ometimes adding grain storage and handling equipment at a cooperative's grain elevators is just a matter of gratitude.

"The farmers have supported us over the years," says Bryan Mueller, grain manager for West Central Ag Services' branch elevator in Beltrami, MN (218-926-5522). "Their farms have been growing; we're growing to continue to be able to meet their needs."

According to Mueller, who transferred to West Central six years ago from its LLC with CHS in Hannaford, ND, that growth involved \$35 million worth of new construction at the cooperative's headquarters elevator in Ulen, MN and the branch in Beltrami.

At Ulen, the work included 2 million bushels worth of new upright steel storage, a 60,000-bph leg and reversing belt conveyor for both receiving and loadout, and the construction of a 3-million-bushel flat storage building directly over an existing temporary storage pile.

At Beltrami, 2017 construction



Bryan Mueller, Beltrami manager

included 1.6 million bushels of upright steel storage for wheat, a pair of 20,000-bph pits and legs, and a 2.6-million-bushel temporary storage pile for corn.

West Central took bids and hired Walt Johnson Construction, Alexandria, MN (320-763-9005), as general contractor and millwright for the bulk of the work at both locations.

"We've used Walt Johnson for three expansions at Beltrami, as well as projects in Ulen, including a new fertilizer plant," says Mueller. "We've grown our

trust in them over time."

Other major players at the two locations:

- VAA LLC, Plymouth, MN (763-559-9100), performed structural engineering, civil engineering, and general arrangements.
- Greystone Construction Co., Shakopee, MN (952-496-2227), was the contractor on the flat storage building in Ulen.
- Hanson Silo Company Co. LP, Lake Lillian, MN (320-664-4171), constructed the temporary storage system in Beltrami and did some work on the Ulen flat storage.
- Braseth Sales, Ulen (218-596-8773), erected the upright steel storage at the Ulen location.
- The Tradesmen Construction Inc., Alexandria, MN (320) 762-1143), performed site preparation work.
- Central Minnesota Masonry Inc., Alexandria (320-763-4084), poured concrete foundations.

Construction began in April 2017.



Work was completed the following February in Beltrami and March in Ulen.

Beltrami, MN

New upright storage at the Beltrami branch consists of a pair of 800,000-bushel Brock corrugated steel tanks. These tanks stand 101-1/2 feet tall at the eaves and 129 feet tall at the peaks.

These tanks have flat floors, outside stiffeners, 16-inch Springland sweep augers, radar-type level indicators, but no grain temperature monitoring cables for now. A set of six Brock 50-hp centrifugal fans supply 1/5 cfm per bushel of aeration through in-floor ducting.

New storage also includes a 2.6-million-bushel temporary storage system. It consists of a 330-foot-diameter ring with Hanson 16-foot precast concrete walls, safety catwalk, and screens built into the walls to admit air; ag lime floor; and a Warrior center fill tower equipped with four Rolfes@Boone 60-hp centrifugal fans.

A 30,000-bph overhead Hi Roller enclosed belt conveyor carries grain out to the pile, which is emptied using a portable open belt conveyor. When *Grain Journal* visited in mid-April, the tarp had been removed for reclaiming the corn that had been stored there, which appeared to be very clean.

West Central also installed a pair of Rice Lake pit-type 80-foot truck scales, one for inbound traffic and one for outbound. Trucks are routed through the property using a CompuWeigh SmartTruck automation system. (For more detail on the SmartTruck system, see page 66.)

In addition to the scales, West Central installed two new 800-bushel mechanical receiving pits. These feed a pair of 20,000-bph GSI receiving legs outfitted with a single row of Maxi-Lift 20x8 gray CC-MAX elevator buckets mounted on a 22-inch belt.

The legs deposit grain into a Schlagel 5-hole rotary double distributor. From there, a set of 30,000-bph overhead Hi Roller enclosed belt conveyors take grain out to the new storage or to the temporary storage pile.

The new tanks empty onto 60,000bph Hi Roller enclosed belt conveyors in above-ground tunnels. These carry grain back to existing handling equipment.

Ulen, MN

At the Ulen site, Braseth Sales installed two more 105-foot-diameter Brock tanks the same size and similarly equipped to the new Brock tanks at Beltrami.

Mueller says West Central would have added a third 105-foot tank, but space limitations held the diameter on the third tank to 72 feet. This smaller tank holds approximately 400,000 bushels and stands 93-1/2 feet tall at the eave and 113-1/2 feet tall at the peak.

The tank also has outside stiffeners, flat floor, Springland sweep auger, level indicator, and no grain temperature cables. Like the other steel tanks built in 2017, this one is set up for 1/5 cfm per bushel of aeration using a pair of ▶ 60-hp Brock centrifugal fans. All aeration fans installed at Ulen are equipped with silencers to help with noise at the in-town location.

Grain reaches the new tanks via Hi Roller enclosed belt conveyors from three existing pits and legs, a 30,000-bph conveyor from a leg to the south and a 60,000-bph reversing conveyor from two pits in the existing concrete house. Sets of 30,000-bph and 40,000-bph

Approximately 2 million bushels of new upright steel storage plus enclosed belt conveyors at Ulen, MN. Ground-level photos by Ed Zdrojewski.

enclosed belt conveyors are mounted atop the new tanks to allow all three of the existing pits to transfer grain to the new storage at once.

The tanks empty onto a set of 60,000-bph above-ground Hi Rollers running back to existing legs. Once elevated, grain may be run through a pair of 50,000-bph J&D gravity screeners with external bypasses before being transferred via a reversing 60,000-bph Hi Roller enclosed belt conveyor to an existing bulkweigher for loadout.

Directly across Washington Avenue from the new storage, Greystone Construction constructed a flat storage building over an existing temporary storage bunker. The newly enclosed structure measures 292 feet wide by 465 feet long and is 98-1/2 feet tall at the peak.



New 20,000-bph GSI receiving leg (left) enclosed in a Warrior tower outfitted with switchback stairs.

The new building currently holds 3 million bushels using an existing overhead conveyor that filled the original temporary pile, and with the addition of more spouting, will hold a planned 3.5 million bushels.

The upgraded flat storage has an asphalt floor and a set of 30 10-hp AIRLANCO axial aeration fans. The building is set up with doors to admit front-end loaders and semi-trucks for unloading.

Ed Zdrojewski, editor



New flat storage building at Ulen, MN was constructed directly over an existing temporary storage pile. It currently can hold 3 million bushels and, with modifications, could hold 3.5 million.



Two West Central Ag Services elevators were upgraded in 2017. Above, ground-level view of the branch elevator at Beltrami, MN, now with 3 million bushels of storage.



Ground-level view of the cooperative's headquarters elevator in Ulen, MN, now with over 7 million bushels of storage.



A new 2.6-million-bushel temporary storage system in Beltrami with 16-foot precast concrete walls constructed by Hanson Silo.

Right, Warrior center fill tower at the Beltrami temporary storage pile features four Rolfes@Boone 60-hp centrifugal fans.

