

The Andersons Heads West

REGIONAL GRAIN HANDLER OPENS RAIL TERMINAL IN THE NEBRASKA SAND HILLS



The Andersons, Inc.
Maumee, OH • 419-893-5050

Founded: 1947
Storage capacity: 145 million bushels at nearly 40 locations
Annual volume: 400 million+ bushels
Annual sales: \$4.6 billion
Number of employees: 3,000+
Crops handled: Corn, soybeans, soft and hard red winter wheat, sorghum, oats, distillers dried grains, corn screenings, soybean hulls
Services: Grain handling and merchandising, agronomy, ethanol

Key personnel at Anselmo:

- Dawn Betancourt, vice president-western region
- Chris Reed, regional operations mgr.
- Jared Peters, facility supervisor
- Brandon Bruggeman, sales mgr.
- Erin Lampe, senior account rep

Supplier List

Aeration fans.....Chief Agri/Industrial Division, AIRLANCO
Bearing sensors..... CMC Industrial Electronics
Bin sweepsSpringland Mfg.
Bucket elevators..... Intersystems
Bulk weigh scale Intersystems
Catwalk.....Warrior Mfg. LLC
Construction manager Adams Building Contractors
Control system..... Interstates Companies
Conveyors (belt).....Hi Roller Conveyors
Conveyors (drag) Union Iron
Distributor.....Hayes & Stolz Ind. Mfg. Co. Inc.
Dust collection system Aircon Corp.
Elevator buckets Maxi-Lift Inc.
EngineeringClear Creek & Associates, SKS Engineers Inc.
Fall protectionFall Protection Systems Corp.
Grain dryer Zimmerman Grain Dryers
Grain temp system ...Rolfes@Boone



The Andersons' new 4-million-bushel rail terminal outside of Anselmo, NE features 2 million bushels of upright storage, a 2-million-bushel ground pile, and 8,000-foot loop track running off of a Burlington Northern Santa Fe main line. Photos by Ed Zdrojewski.

The Andersons, Inc. is one of the biggest and best know regional grain handlers serving the eastern Corn Belt. But it's not so well-known out in the Sand Hills of central Nebraska.

So in 2012, as the company was completing its new \$25 million, 4-million-bushel rail terminal at Anselmo, NE. The Andersons purchased a billboard in the nearby county seat of Broken Bow. "We Grow Relationships" it reads.

The Ohio-based company has had a presence in Nebraska since 2010, when it purchased two country elevators from B4 Grain Group and set up a western regional office in Kearney.

To be competitive, however, The Andersons needed to be able to offer shuttle load-



Dawn Betancourt, vice president-western region for The Andersons Grain Group, and Chris Reed, regional operations manager.

ing services to the region's producers, says Dawn Betancourt, a 26-year career veteran and currently vice president-western region of The Andersons Grain Group.

There are a lot of competing shuttle loaders along the Union Pacific main line through the Platte Valley, she says, but not so much along the Burlington Northern Santa Fe (BNSF) main line farther north. The company found a suitably flat site for a terminal elevator and 8,000-foot loop track along the BNSF outside of Anselmo.

At first glance, the country around Anselmo seems an odd place for an elevator, with steep



Propane-fired Zimmerman tower dryer is rated to dry 7,500 bph at five points of moisture removal.



The facility office building sits adjacent to a 90-foot Rice Lake inbound truck scale and Intersystems grain probe. Scales are under control of CompuWeigh software modified by The Andersons.



A series of 32,000-bph Hi Roller enclosed belt conveyors, encased in a 9-foot-wide Warrior box truss, carry grain from the distributor out to upright storage or a temporary storage pile.



New 2-million-bushel LeMar temporary storage pile features six-foot perforated steel sidewalls, compacted fly ash floor, and aerated center-fill tower system.

sandy hills used primarily for cattle production. “There was virtually no dryland crop production here in 2012,” Betancourtsays,

“but with irrigation and the newer hybrids, we’re getting a lot of bushels, especially to the north and west of here.”

However, the site had its challenges. One of the biggest was that the BNSF tracks run parallel to State Highway 2 at a distance less than the length of a semi-truck. The Nebraska Department of Roads would not allow an entrance directly into the site across the tracks as it would cause trucks to back up onto Highway 2. As a result, The Andersons paid for construction of a 1.1-mile black-top road from the town of Anselmo to the elevator that does not cross the BNSF.

Another challenge was the weather, primarily from frequent high winds and blowing dust, which hampered ▶

jacking of the facility's steel tanks. The elevator was open to take grain in time for the 2012 harvest after a November 2011 groundbreaking.

Serving as construction manager on the project was Adams Building Contractors (ABC), Jackson, MI (517-748-9099). ABC has completed several projects for The Andersons in the grain and ethanol portions of the business.

Splitting millwright duties on various portions of the project were Midwest Mechanical Contractor Inc., Logan, IA (712-644-2711), and Central States Mechanical Inc., Ulysses, KS (620-353-1797). Engineering duties were handled by Clear Creek & Associates, Goshen, IN (574-537-9060), and SKS Engineers LLC, Decatur, IL (217-877-2100). Steel tanks were constructed by Mogenson Construction, Cleghorn, IA (712-496-2294).

Grain Storage

Primary storage at Anselmo consists of four Chief Titan 513,227-bushel corrugated steel tanks standing 105 feet in diameter, 60 feet tall at the eaves, and 90 feet tall at the peak.

Each of the four flat-bottom tanks is outfitted with outside stiffeners, 16-inch Springland sweep augers, and 24-cable Rolfes@Boone grain temperature monitoring systems. A set of four 15-hp Caldwell centrifugal fans per tank deliver an estimated 1/10 cfm per bushel through in-floor ducting in a quadruple F pattern.

Upright storage also includes a 105,000-bushel wet tank standing 55 feet in diameter, 46 feet tall at the eave, and 61 feet tall at the peak. This tank is outfitted similarly to the larger tanks but with a 6-cable Rolfes@Boone system and two 15-hp Caldwell fans delivering 1/10 cfm per bushel.

The facility also features a 2-million-bushel LeMar center-fill covered ground pile. The round 305-foot-diameter storage pile has a compacted fly ash floor, 6-foot perforated steel sidewalls, and a center-fill tower topped by four 50-hp AIRLANCO centrifugal fans that draw air up through the pile and hold the tarp in place.

Grain Flow

Incoming grain trucks are weighed on a 90-foot Rice Lake inbound scale

under the control of an Andeweigh scale automation system modified from CompuWeigh software. While on the scale, adjacent to a two-story office building, trucks are sampled with an Intersystems truck probe.

Trucks then deliver grain to a pair of 1,000-bushel enclosed receiving pits. The route through the facility is completed as the empty truck is weighed on an outbound 90-foot Rice Lake scale, as the driver receives a scale ticket via a CompuWeigh OTP-4600 outdoor ticket printer, which also features an intercom system with noise cancellation.

The mechanical pits feed a pair of Intersystems legs, one rated at 20,000 bph and the other at 32,000 bph, both encased in a Warrior 20-x-20-foot tower outfitted with a switchback staircase. The larger leg is equipped with a double row of Maxi-Lift 18x8 Tiger Tuff buckets mounted on a 38-1/2-inch belt, while the smaller of the two has a single row of 20x8 Tiger Tuff buckets.

The legs lift grain to a six-hole Hayes & Stolz swing-type triple distributor, which can send grain onto a set of 32,000-bph Hi Roller enclosed belt conveyors running out to storage, to the grain dryer, or direct to the bulkweigher.

The 7,500-bph Zimmerman tower dryer is fed from the wet tank via a 7,500-bph Intersystems wet leg and is fired by propane. The dryer empties onto a 12,000-bph Union Iron drag conveyor, which runs to a 32,000-bph Intersystems dry/receiving leg that returns grain to the distributor.

Storage tanks empty onto a series of above-ground Hi Roller 30,000-bph belt conveyors running to a 60,000-bph Intersystems shipping leg.

The operator can run grain through a 40,000-bph Intersystems gravity screener mounted directly above a 60,000-bph Intersystems triple-garner bulk weigh loadout system, which is under the control of CompuWeigh software. The system includes a railcar tag reader and wheel sensors to ensure the car is properly positioned. Workers atop railcars are protected by a six-railcar-length Fall Protection Systems trolley system.

"The system is very efficient," comments Chris Reed, regional operations

manager for the Grain Group's western region. "We can run a truck through the facility in six to seven minutes."

The Anselmo terminal was expected to begin loading BNSF shuttle trains in December 2012.

*Ed Zdrojewski, editor
@GrainJournal*



Shuttle trains are loaded by a 60,000-bph Intersystems bulk weigh system topped by a 40,000-bph Intersystems gravity screener all enclosed in an 18-foot-x-18-foot Warrior support tower.