

Three Kinds of Storage

NEW SOUTH DAKOTA RAIL TERMINAL COMBINES CONCRETE, STEEL, TEMPORARY PILES

SOUTH DAKOTA

Lyons *

Fremar LLC
Marion, SD • 605-648-3941

Founded: 1998

Storage capacity: 17.4 million bushels at six locations

Number of employees: 64

Crops handled: Corn, soybeans, hard red winter wheat, sorghum

Services: Grain handling and merchandising, agronomy

Key personnel at Lyons:

• Troy Woitzel, Fremar Lyons location manager

Supplier List

Aeration fans....AIRLANCO, Sukup Mfg.

Aeration installationDrake Inc.

Bearing sensorsCMC Industrial

Bin sweepsSpringland Mfg.

Bucket elevators.....Intersystems

Bulk weigh scaleIntersystems

Bulk weigh scale automation.....

Cultura Technologies

CatwalksLeMar Industries Corp.

Civil work.....Mathiowetz Const.

Contractor/millwrightAdams Building Contractors

Conveyors (belt)....Hi Roller Conveyors

Conveyors (drag)Intersystems

Conveyors (screw)WAM Inc.

DistributorsSchlagel Inc.

Dust collection systemAircon

Elevator bucketsMaxi-Lift Inc.

EngineeringVAA LLC

Fall protection....Fall Protection Systems

Grain dryerSukup Mfg. Co.

Grain temp system.....OPI-Integrис

Magnets ...Industrial Magnetics Inc.

Manlift.....Liftco

Motion sensorsCMC Industrial

Natural gas.....EMCS

Rail constructionRailworks

SamplersIntersystems

Steel storage.....Sukup Mfg. Co.

ScalperHayes & Stoltz Ind. Mfg.

Screener.....Intersystems

Spouting..Premier Components Inc.

Temporary storage....LeMar Industries

Truck probeGamet Mfg. Co.

Truck scales.....Mettler-Toledo



Fremar LLC's new 6-million-bushel rail terminal ready for startup in late August 2012 on the western edge of Lyons, SD. Aerial photo by JH Photography, Spencer, IA.

Outside of the Sioux Falls metro area, Minnehaha County boasts some of the most productive farmland in South Dakota. However, what the region lacked was a high-speed rail terminal despite service from the Burlington Northern Santa Fe (BNSF).

"Our site offers enough available flat land for an elevator and loop track, rail access to the BNSF, and easy truck access to Interstates 29 and 90," says Troy Woitzel, Lyons location manager for Fremar LLC, which in September 2012 completed a nearly 6-million-bushel rail terminal at the western edge of Lyons, SD (605-543-5400).

Fremar is a joint venture dating back to 1998, originally formed by Fremar Farmers Cooperative and Archer Daniels Midland Co. (ADM) to build a rail terminal at Marion, SD, more than 40 miles to the southwest of Lyons. Woitzel joined the LLC in 2007.

In 2010, Fremar worked with Adams Building Contractors (ABC), Jackson, MI (517-748-9099), to design the facility and with VAA LLC, Plymouth, MN (888-583-



Troy Woitzel

3527), to design the site layout. The design of the elevator combines slipform concrete, corrugated steel, and temporary ground storage.

"The concrete gives us a workhouse, including two wet bins, with blending capabilities. The two big steel tanks let us hold large



New 7,000-bph Sukup tower dryer, with Aircon baghouse dust system visible behind it.

amounts of clean, dry grain for loading shuttle trains. The temporary bunkers provide a large amount of inexpensive storage," Woitzel explains.

ABC continued on the project as millwright. Mathiowetz Construction, Sleepy Eye, MN (507-794-6953), did civil work on the project.

Other major players on the project included Muth Electric, Mitchell, SD (605-299-2471), which installed electrical controls, and Railworks, Lakeville, MN (952-469-4906), which built a 7,500-foot loop track.

Construction began in June 2011 and was completed in time for fall harvest in 2012.

Grain Storage

At the center of the complex is a four-pack of 130,000-bushel slipform concrete tanks standing 42 feet in diameter and 120 feet tall plus two interstices.

The four big tanks have sloped floors and five-cable OPI-Integris grain temperature monitoring systems. Each tank is outfitted with an AIRLANCO AIRAUGER™ unloading and aeration system powered by 50-hp centrifugal fans delivering 1/7 cfm per bushel of aeration.

To either side of the four-pack stand 700,000-bushel Sukup corrugated steel tanks that are 105 feet in diameter, 80 feet tall at the eaves, and 112 feet tall at the peaks. These flat-bottom tanks have outside stiffeners and are outfitted

with 12-inch Springland bin sweeps and 24-cable OPI-Integris grain temperature monitoring. Each tank has four 50-hp Sukup centrifugal fans delivering 1/7 cfm per bushel.

The complex also has a pair of 305-foot-diameter LeMar center air system temporary storage piles holding 1.5 million bushels each. The piles have asphalt floors and six-foot LeMar perforated steel sidewalls. A set of four 50-hp AIRLANCO centrifugal fans are mounted atop the center air system ►