

Capacity Boost

CENTRAL STATES ADDS STORAGE FIRST YEAR, HANDLING EQUIPMENT THE SECOND



Central States Enterprises Inc.
Lake Mary, FL • 407-333-3503

Founded: 1974

Storage capacity: 33 million bushels at three locations

Number of employees: 26 at New Haven, IN

Crops handled: Corn, soybeans, soft red winter wheat

Key personnel at New Haven:

- Larry Shepherd, vice president-Indiana operations
- Mel Spaulding, general manager-facilities
- Mike Kaiser, superintendent
- Tracie Brunson, maintenance mgr.

Supplier List

Aeration fans.....Chicago Blower

Bearing sensors....Maxi-Tronic Inc.

Bucket elevators..Riley Equipment, InterSystems

CatwalksAlmet, Inc.

Concrete supplier..Manor Bros. Inc.

Concrete silosHoffmann Inc.

Control system.....TN Solutions

Conveyors (belt).....Hi Roller Conveyors

Conveyors (drag) .Riley Equipment

Electrical contractorsVotaw

Electric, Rex Collins Electric

Electrical engineerInterstates

Engineering

Elevator bucketsMaxi-Lift Inc.

Grain dryer..Zimmerman Grain Dryers

Grain temp. system ..Safe-Grain Inc.

Millwright..Schust Engineering Inc.

Motion sensorsMaxi-Tronic Inc.

Roof exhaustersSafe-Grain Inc.

Speed switches..4B Components Ltd.

Tower support system.....LeMar Industries Corp., Warrior Mfg. LLC



New 10,000-bph Zimmerman tower dryer is nearly completed in September 2015 adjacent to a LeMar tower encasing new InterSystems bucket elevators. Photo by Ed Zdrojewski.

Central States Enterprises' flagship rail-loading elevator at New Haven, IN has expanded nearly every year for several decades. The years 2014 and 2015, however, were particularly active, as the major regional grain handler added storage and a receiving pit the first year and a new dryer the second.

"This project increases our receiving capacity by 50%," says Mel Spaulding, general manager of facilities. "Our feeling is that as farmers continue to increase in size, we have to be able to service them. We've been doing that at our other rail-loading site in Indiana (at Montpelier), where we now have three receiving pits."

Work over the two-year period in New

Haven has included the addition of about 2 million bushels of upright jumpform concrete storage in 2014 and the addition of a 25,000-bph receiving system (New Haven's fifth pit) and a GSI 10,000-bph tower dryer with related handling equipment in 2015.

In keeping with its usual practices, Central States served as its own general contractor for the latest projects in New Haven. Among the major subcontractors:

- Hoffmann Inc., Muscatine, IA (563-263-4733), constructed two new jumpform concrete silos. Since 1987, Hoffmann has built 20 silos providing 12.6 million bushels of storage at New Haven.

- Interstates Engineering, Sioux Center, IA (712-722-1622), performed the electrical design.

- Schust Engineering Inc., Auburn, IN (800-686-9297), performed some millwright work.

- Manor Bros. Concrete, Eaton, IN (765-396-3875), supplied construction concrete.

Project Specifications

The two new Hoffmann silos constructed in 2014 are both 110 feet in diameter. One is 124 feet tall holding slightly less than 1 million bushels, and the other is 132 feet tall holding slightly more than 1 million.

Otherwise, they have identical equipment, including flat floors, 24-cable Safe-Grain wireless temperature monitoring systems, and Bobcat doors to admit a skid loader for cleanout. A set of four 125-hp Chicago Blower centrifugal fans supply 1/9 cfm per bushel of aeration.

The silos are filled by a set of overhead Riley 20,000-bph drag conveyors through nine drops. They empty onto Hi Roller 18,000-bph enclosed belt conveyors running back to a new leg.

That new leg is fed from a new 1,500-bushel enclosed mechanical receiving pit. The 25,000-bph Riley leg is equipped with two rows of 16x8 Maxi-Lift Tiger-Tuff buckets mounted on a 36-inch belt.

The leg feeds grain into a two-way InterSystems valve onto overhead drag conveyors that can reach a total of 7.2 million bushels of storage including the new silos.



In addition, Central States added a natural gas-fired Zimmerman tower dryer rated at 10,000-bph, the facility's third dryer, bringing total drying capacity to 18,000 bph. The dryer is serviced by 15,000-bph InterSystems wet and dry legs equipped with single rows of 16x8 Tiger-Tuff buckets on 18-inch belts. The dryer

had not been used as of *Grain Journal's* visit early in September 2015 but was expected to be fired up for the fall harvest.

The two new legs are enclosed in a 20-foot-x-20-foot LeMar support tower. The tower is outfitted with switchback stairs above the bin deck level.

Ed Zdrojewski, editor

Central States Enterprises' flagship terminal elevator in New Haven, IN, with arrows showing two new jumpform concrete silos holding roughly 1 million bushels each. Total storage capacity at New Haven now stands at 14.7 million bushels. Aerial photo by Advantage Aerial, Fort Wayne, IN.