

Upgrade from Seasonal

IOWA COOPERATIVE ADDS FOUR TANKS, RECEIVING PIT, DRYER TO GO FULL TIME



Five Star Cooperative
New Hampton, IA • 641-394-3052

Founded: 1916
Storage capacity: 25 million bushels at 20 locations
Annual volume: 50-60 million bushels
Annual revenues: \$350 million
Number of members: 1,979
Number of employees: 133
Crops handled: Corn, soybeans, oats
Services: Grain handling and merchandising, agronomy, refined fuels, LP gas, full-service hardware store, service station.

Key personnel in Hanlontown:

- Wayne Steven, operations manager
- Heather Hill, office manager
- Rusty Wall, superintendent
- Adam Purchase, outside labor
- Mike Orlovski, outside labor

Supplier List

- Aeration fans**..... Sukup Mfg. Co.
- Bin sweeps** Sukup Mfg. Co.
- Bucket elevators**.... Sukup Mfg. Co.
- Catwalk**..... LeMar Industries Corp.
- Contractor**... North Central Millwright/
Buresh Building Systems Inc.
- Conveyors** Sukup Mfg. Co.
- Distributor**.....Schlagel Inc.
- Elevator buckets**Maxi-Lift Inc.,
Tapco Inc.
- Grain dryer** Sukup Mfg. Co.
- Grain temperature system**.. TSGC Inc.
- Leg belting**..... Fenner Dunlop
- Millwright**..North Central Millwright/
Buresh Building Systems Inc.
- Motors**Baldor Motors
- Speed reducers** Dodge
- Steel storage**..... Sukup Mfg. Co.
- Steel tank erection** Bruce Allen
Construction
- Tower support system**LeMar
Industries Corp.



Five Star Cooperative's new steel annex in Hanlontown, IA includes more than 1 million bushels worth of steel storage plus drying capacity at 4,700 bph. Photos by Ed Zdrojewski.

As farmers around north central Iowa, near the Minnesota state line, scurried to get the 2009 crop planted, the board of directors at Five Star Cooperative faced a serious question about their tiny steel elevator in Hanlontown (641-896-2610). Should the in-town facility remain a seasonal elevator open for harvest only, or should it expand to become a full-time elevator capable of long-term storage to take advantage of basis and spread movements?

With some of the best farmland in the state and soaring yields in recent years, the obvious answer was to expand, says Five Star Operations Manager Wayne Steven, who also serves as the



Wayne Steven

cooperative's grain operations manager and safety director. He came to Five Star seven years ago from a cooperative in Wisconsin.

After meetings with coop members and town officials, the coop board decided to tear down an aging fertilizer plant and flat storage along Main Street and replace it with a shiny new 1-million-bushel-plus steel annex, with four tanks, a receiving pit, and 4,700-bph tower dryer.

To construct the annex, the coop hired North Central Millwright/Buresh Building Systems Inc., Hampton, IA (641-456-5242). "They've been doing work for us for 10 years, and they do a good job," says Steven. "They're

also a dealer for Sukup Mfg. Co., which is another local company.”

Demolition began in July 2009, and the final tank in the \$3.3 million project was completed in September 2010.

The Annex

Grain storage at the annex includes three 320,000-bushel Sukup steel dry tanks and a 100,000-bushel wet tank. Two of the three dry tanks were built in 2009, with the third added on in 2010.

The dry tanks stand 75 feet in diameter, 88 feet tall at the eaves, and 110 feet tall at the peaks. They are outfitted with flat bottoms, outside stiffeners, 12-inch Sukup sweep augers, and 18-cable TSGC grain temperature monitoring system. A set of four 30-hp Sukup centrifugal fans provide 1/8 cfm per bushel worth of aeration.

The wet tank has the same height dimensions as the dry tank but is only 42 feet in diameter. This tank has two 50-hp centrifugal fans to provide 1/5 cfm per bushel, enough to allow the storage of wet-

New Sukup 4,700-bph propane-fired tower dryer adjacent to three Sukup legs encased in a LeMar tower with wraparound staircase.



ter grain awaiting a trip through the dryer.

The annex also includes a 600-bushel enclosed mechanical receiving pit that feeds a 15,000-bph Sukup receiving leg. The leg is outfitted with 18x8 Maxi-Lift CC-MAX buckets mounted on a 20-inch Fenner Dunlop belt. This leg plus a pair of 8,000-bph wet and dry legs are encased in a 16-x-16-foot LeMar tower with switchback-type staircase.

The receiving leg feeds grain into a five-hole Schlagel Swingset electronic distributor, which in turn, deposits grain onto 15,000-bph overhead Sukup drag conveyors running out to storage. Tanks empty onto 15,000-bph Sukup reclaim drags in above-ground tunnels running back to the receiving leg.

The annex also includes a 4,700-bph Sukup propane-fired tower dryer. Steven notes that Hanlontown has natural gas service, but it would have cost an extra \$500,000 to put in a large enough line to service the dryer without affecting residential service. The dryer is serviced by a pair of 8,000-bph Sukup legs outfitted with 14x7 Tapco CC-HD heavy-duty buckets mounted on a 16-inch Fenner Dunlop belt.

Ed Zdrojewski, editor