Tapping the Market

GARDEN CITY COOP ADDS FACILITY TO ACCESS CHANGING FEED GRAIN MARKET

KANSAS

★ Plymell

Garden City Cooperative, Inc. Garden City, KS • 800-794-9389

Founded: 1919 Storage capacity: 26.5 million bushels at 19 locations Annual volume: 20-37 million bushels Annual revenues: \$311 million Number of members: 1,800 Number of employees: 127 Crops handled: Hard red winter wheat, corn, sorghum, soybeans Services: Grain handling and merchandising, agronomy, petroleum products

Key personnel:

- John McClelland, general manager
- Ken Jameson, vice president, grain division
- Toby Wilson, chief operations officer
- Kurt Strasser, Plymell location mgr.
- Joey Kraft, Plymell assistant location manager

Supplier List

Concrete tank builder.. McPherson Concrete Storage Systems

Conveyors Intersystems Distributor .. Hayes & Stolz Ind. Mfg. Co. Inc.

Dust filters......Donaldson Torit Elevator bucketsMaxi-Lift-Inc. Grain dryerZimmerman Grain Dryers

Grain temp system...Rolfes@Boone Level indicators.....Monitor Technologies, LLC

Loadout tanks...Meridian Mfg. Inc. Manlift.....Sidney Mfg. Co. Tower support system..HABCO Inc. Truck probeGamet/JaHam Truck scale..METTLER TOLEDO



New 1-million-bushel elevator for Garden City Cooperative at Plymell, KS was open for the 2013 harvest. Photos by Alex Lord.

When more producers started taking corn for grain to country elevators instead of hauling high moisture corn and silage to feedlots in the area that Garden City Coop serviced, John McClelland, general manager for the cooperative, says that there was a need to expand storage capacity.

"With fewer producers taking grain to feedlots for silage and high moisture corn," McClelland says, "there was an increase in demand for taking more bushels at country elevators."

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The 19-location coop in southwest Kansas met this need by building a new 1-million-bushel elevator at Plymell, 12 miles south of Garden City, KS on U.S. Highway 83.

He adds that the area around the Garden City Coop's new elevator is in a highly productive area with sufficient water levels for irrigation. The new elevator can tap this area of irrigated production for increased grain originations.

The Plymell project was awarded to HABCO, Inc., Salina, KS (785-823-0440), and was started in December 2012 and was completed Sept. 1, 2013.

The new elevator is one of many projects that HABCO has performed for Garden City in the last three years, McClelland says.

"We have added 3.4 million bushels of

storage in the last three years," McClelland says, "and HABCO has been the contractor on all but 800,000 bushels of it."

HABCO is currently adding concrete storage to the coop's Lowe elevator near Holcomb, KS and is building a new concrete elevator for Garden City Coop near Ulysses, KS.



From left: John McClelland, general manager; Toby Wilson, chief operations officer; and Ken Jameson, grain division vice president.

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The jumpform tanks are filled via overhead 20,000-bph Intersystems drag conveyors.

Elevator Specifications

Upright storage at the Plymell elevator consists of five 200,000-bushel McPherson Concrete jumpform tanks standing 50 feet in diameter and 116 feet tall. The tanks are outfitted with a 36-degree concrete hopper bottom, sidedraw spouts, Monitor level indicators, and each sits on 42 concrete pilings. A Rolfes@Boone seven-cable system monitors grain temperatures in each tank. A set of five 25-hp Rolfes@ Boone centrifugal fans per tank provide 1/8 cfm per bushel of aeration, with the assistance of three 2-hp roof exhausters.

Incoming trucks are routed to a

14-x-80-foot METTLER TOLEDO pitless scale adjacent to a scalehouse, where they are sampled with a JaHam truck probe.

From there, trucks are routed to one of two 500-bushel mechanical receiving pits. The pits feed two Intersystems receiving legs. One runs at 20,000 bph and is equipped with a single row of 20x8 Maxi-Lift CC-MAX buckets, and the other runs at 10,000 bph, with a single row of 12x8 Maxi-Lift CC-MAX buckets mounted on a 13-inch belt. The legs are enclosed by a 12-foot-by-12foot-by-150-foot HABCO tower support system. A Sidney manlift provides access to the top of the elevator.

The 20,000-bph receiving leg empties grain onto a 20,000-bph Intersystems drag conveyor going to storage. The 10,000bph receiving leg empties grain into a six-duct Hayes and Stolz rotary distributor which delivers grain to one concrete tank or the two Meridian 5,000-bushel overhead truck loadout bins.

Each tank can be emptied either via a sidedraw spout or by a cone-bottom unloading auger into a 10,000-bph above-



The hopper bottom concretee tanks empty via gravity or via an auger onto a 10,000bph Intersystems drag conveyor.

ground Intersystems drag conveyor that runs back to the 10,000-bph leg.

From the leg, grain can be loaded into trucks via one of the two loadout bins. From there, trucks are weighed on an 11-1/2-x-80-foot METTLER TO-LEDO outbound pitless scale.

The project included a natural gasfired Zimmerman Model Z5046 tower dryer rated at 5,000 bph for five points of moisture removal. The dryer is loaded and unloaded by two 10,000-bph Intersystems legs. As of October, the dryer had not yet been used.

Alex Lord, associate editor