

Rail-Loading Annex

NEW SHUTTLE TRAIN LOADER WAS A DOZEN YEARS IN THE MAKING



Farmers Coop of Eldorado
Eldorado, OK • 580-633-2274

Founded: 1920

Storage capacity: 3 million bushels at three locations

Annual volume: 9.2 million bushels

Annual revenues: \$20 million

Number of members: 1,500

Number of employees: 20

Crops handled: Hard red winter wheat, sorghum, cotton, guar

Services: Grain handling and merchandising, cotton gin, liquid fertilizer

Key personnel:

- Barney Trammell, general manager
- Rusty Reese, assistant manager
- Randy Rice, Texas branch manager

Supplier List

Bucket elevators.....Pitcock Supply Inc.
Bulk weigh scale..... Intersystems
Catwalk..... Pitcock Supply Inc.
Concrete.....WT Concrete
Contractor..... Pitcock Supply Inc.
Conveyors.....Schlagel Inc.
Conveyor belting..... Goodyear
Conveyor Belting
Distributor..... Pitcock Supply Inc.
Elevator buckets..... Maxi-Lift Inc.
Fall protection..... Fall Protection
Systems
Leg belting.....D.E. Shipp
Level indicators..... BinMaster Level
Controls
Millwright..... Pitcock Supply Inc.
Motors..... Worldwide Electric Corp.
Samplers..... Gamet Mfg. Inc.
Speed reducers..... Dodge
Steel storage..... Behlen Mfg. Co.
Tower support system.....Pitcock
Supply Inc.
Unloading augers..... Pitcock Supply
Inc.



Farmers Cooperative of Eldorado's new 1-million-bushel rail-loading steel annex east of Eldorado, OK has loaded a dozen and a half unit trains since opening in May 2010. Ground level photos by Ed Zdrojewski.

Since its new million-bushel steel annex opened for business in May 2010, Farmers Cooperative of Eldorado, OK has loaded 18 shuttle trains bound for export terminals on the Texas Gulf Coast. But it took a dozen years for the cooperative to get to that point.

"The BNSF (Burlington Northern Santa Fe Railway) approached me back in 1998 with the idea of building a shuttle-loading facility here in Eldorado," says long-time General Manager Barney Trammell. "We started looking for land, and the board was interested in some ground east of town."

Then, the BNSF decided it wanted to run the shuttles across the Red River in northern Texas, instead. That wasn't a problem for the cooperative, which operates a branch elevator in Quanah, TX.

Next, in 2001, Mother Nature intervened, with an outbreak of karnal bunt in that part of Texas. The federal government quarantined wheat shipments from a four-county area for five years. BNSF put the plans on the shelf.

Eventually, in the mid-2000s, the coop and the railroad revived planning for the project, first looking at a site near Altus, OK, in partnership with another cooperative in the area. When that partner backed out, Farmers



Aerial view of the 7,500-foot loop track serving the new rail-loading facility. Photo by Thomas Ag Aerial Inc., Thomas, OK.

Cooperative was back to its original plans and purchased a 208-acre site east of Eldorado.

Trammell says BNSF looked at several proposals from contractors, before awarding a \$6.3 million contract to Pitcock Supply Co., Lubbock, TX (806-762-3484), which served both as general contractor and millwright, as well as Hudson Dirt Move and Lone Star Railroad. "We thought they had the best plans, and they've worked with us on other projects," he notes.

Construction on the steel elevator at 120-car loop track began in January 2010.

The Facility

The new elevator includes two 502,000-bushel Behlen steel tanks standing 105 feet in diameter, 49 feet 4 inches tall at the eaves, and 77 feet 11 inches tall at the peak. Tank capacity is boosted by about 69,445



A pair of Pitcock telescoping augers per tank empty the two Behlen steel tanks, which have 40-degree concrete hopper floors.

bushels with a 40-degree concrete hopper floor, each tank emptied by a pair of telescoping augers.

Each tank is outfitted with outside stiffeners and BinMaster level indicators, but there are no grain temperature cables or aeration fans. “The facility holds 2-1/2 trainloads, and we load 110 cars in 8-1/2 hours,” Trammell says. “We’re not holding grain around that long.”

Incoming trucks deposit grain into a

pair of 1,000-bushel mechanical receiving pits in a covered shed. These pits feed a pair of 25,000-bph Pitcock legs, with their signature round casings. The legs are outfitted with Maxi-Lift 20x10 heavy-duty Tiger-Tuff buckets mounted on a 22-inch belt.

The legs route grain through a series of Pitcock two-way valves onto a Schlager 50,000-bph belt conveyor running out to the storage tanks or

directly to the bulkweigher.

The telescoping augers, in turn, empty the tanks and deliver grain via 50,000-bph, 54-inch Schlager E-Z Roll enclosed belt conveyors back to the receiving legs.

Outgoing grain is run through a 50,000-bph Intersystems bulk weigh loadout scale, which is under the control of the manufacturer’s proprietary Millennium software. The bulkweigher is equipped with a Gamet sampler for ongoing grain inspection during train loading.

Railcars move around a 7,500-foot loop track consisting of 136-lb. rail and heavy-duty wood ties. Workers atop railcars are protected by a rigid rail and trolley system from Fall Protection Systems Corp running the length of four railcars.

In addition to the new annex and loop track, the cooperative built a new single-story, steel-sided office building about a quarter mile away. The installation includes a pair of 80-foot Fairbanks pitless inbound and outbound truck scales and a Gamet truck probe.

Ed Zdrojewski, editor