# Fall Crop Upgrade

### ELEVATOR ADDS MORE STORAGE, DRYING CAPACITY AS FALL CROP VOLUME GROWS



#### Express Grain Terminal LLC Sidon, MS • 662-453-0800

#### **Founded:** 2007

Storage capacity: 3.1 million bushels at one location Number of employees: 12 Crops handled: Corn, soybeans, soft red winter wheat, sorghum Services: Grain handling and merchandising

#### Key personnel:

• Michael Coleman, CEO

- John Coleman, president
- David Lavender, general manager

## Rob Joiner, operations manager

#### Supplier List

Aeration fans.. Chief Agri/Industrial Division Bin sweeps ...... Springland Mfg. Bucket elevators ..... Chief Agri/ Industrial Division Catwalks ...... Chief Agri/Industrial Division Control system ..... Electric Machine Control Conveyors (belt) . Hi Roller Conveyors Conveyors (drag) .....Chief Agri/ Industrial Division Elevator buckets ....... Maxi-Lift Inc. Grain dryer .... Brock Grain Systems Grain temperature system ...... OPI Integris Level indicators..... BinMaster Level Controls Millwrights ... Greenville Metal Works, Hayes Mechanical Steel storage ... Chief Agri/Industrial Division Steel tank erection .. American Pride Construction

**Tower support system ...** Chief Agri/ Industrial Division, Greenville Metal Works



Express Grain Terminal LLC's 3.1-million-bushel rail terminal elevator at Sidon, MS features two new 775,000-bushel Chief Titan tanks at either end of the complex. Aerial photo by Greg Campbell, Madison, MS.

When Express Grain Terminals LLC first built a rail loading grain terminal near Sidon, MS in 2007, the main reason was to capture fall crop bushels as both Mississippi Delta and upland growers switched from traditional Delta crops like rice and cotton to grain crops like corn, soybeans, and sorghum. Those crops typically outyield crops like rice in terms of bushels per acre.

The terminal with its loop track became a particularly good destination for producers, allowing Express Grain to ship 100-car shuttles on the Canadian National with grain destined for export from Gulf terminals or domestically.

If anything, the trend has become more pronounced since 2007. "High prices have everyone planting fall-harvested grains, expecially corn," says John Coleman, who has been company president since its founding.

"Also, we'll start taking in milo (sorghum) for the first time this year," Coleman continues. "Milo is a great crop for non-irrigated land in this area, because we usually get dry every June or July, and it stands up to dry weather." With ever-increasing volume expected, Express Grain in 2013 added more than 1.5 million bushels worth of upright corrugated steel storage plus a new 10,000-bph grain dryer. In addition, the company added a pair of 54,000-bph steel hopper tanks to serve as short-term storage for wet corn and sorghum.

Express Grain acted as its own general contractor on the expansion project but brought in a number of subcontractors to perform the work:

• Greenville Metal Works, Greenville, MS (662-335-8510), constructed towers and



President John Coleman

Reprinted from GRAIN JOURNAL March/April 2014



A set of 40,000-bph Hi Roller enclosed belt conveyors empty out the new tanks. Also visible is one of four 40-hp Caldwell centrifugal fans per tank. Ground-level photos by Ed Zdrojewski.

catwalks, legs and conveyors, and did some of the spouting work.

• Hayes Mechanical Contractor, Eudora, AR (870-355-4577), performed more of the spouting work and constructed the second of two 55,000-bushel hopper tanks. The second of the two tanks was just getting started, when *Grain Journal* visited Express Grain in February 2014.

• American Pride Construction Services LLC, Park Hills, MO (573-518-1024), erected the two big steel tanks and the first of the two hopper tanks.

• Electric Machine Control Inc., Birmingham, AL (205-591-0402), installed electrical and automation systems.

Work on the upgrade got underway in January 2013, and the first of the two 775,000-bushel tanks was operational by July, in time for corn harvest. The second tank became operational at the end of January 2014. The cost of the project is confidential.

#### **Project Specifications**

The two big Chief Titan tanks, located at the north and south ends of the elevator, stand 105 feet in diameter, 95-1/2 feet tall at the eaves, and 124 feet 9 inches tall at the peaks.

Both tanks have flat concrete floors, outside stiffeners, 24-cable OPI grain temperature monitoring systems, and BinMaster SmartBob level indicatots, and 12-inch Springland sweep augers.

"They're one of our favorite parts of the project," Coleman comments. "They're the biggest Springland makes, and they're solidly built and easy to use."

A set of four 40-hp Caldwell centrifugal fans supply 1/10 cfm per bushel of aeration, with the assistance of four powered roof exhausters.

The two hopper tanks stand 36 feet

in diameter and a little under 71 feet tall on 45-degree steel hopper cones.

The two big tanks are loaded at 40,000 bph with a set of overhead Chief drag conveyors running out from existing grain handling equipment. The tanks empty onto a set of above-ground Hi Roller 40,000-bph enclosed belt conveyors running back to existing legs.

In addition to the storage, Express Grain added a 10,000-bph propanefired Brock tower dryer, the largest then available from the manufacturer. This is in addition to an existing 4,000-bph Brock dryer that was installed in 2010, and both will be used during harvest.

"We were very happy with our 4,000bph dryer, but during the big harvest we had in 2012, we just couldn't keep up," Coleman comments. "I wish we had a second 10,000-bph dryer. Even the new dryer was operating at capacity this harvest."

The new dryer is served by a Chief 20,000-bph drag conveyor and leg, which is equipped with two rows of Maxi-Lift 16x8 HD-MAX buckets mounted on a 34-inch belt.

#### **Electronic Upgrades**

Another set of proprietary upgrades in 2013 at Express Grain Terminal were developed largely in-house.

One is a new company website that allows producers to view all of the financial transactions on their account, as well as their contracts, pricing orders, and load-delivery information. Reports can be downloaded and printed in .pdf or Excel formats.

Another new system is e-ticketing, which e-mails or sends a text message when a load is delivered. As soon as the truck leaves the outbound scale, the load information is sent including weights, grades, hauler information, and pictures of the truck. The producer no longer must wait for the trucker to bring back a paper ticket. IF moisture or FM is too high, the producer can move to another field immediately or make adjustments to the combine.

The system also e-mails or texts Express Grain's daily bids.

The next step, Coleman says, is to add a monthly customer reporting system that auto-generates and sends out a report containing open contracts, open receipts, and open pricing orders, as well "We'll start taking in milo for the first time this year. Milo is a real good crop for non-irrigated land in this area, because we usually get dry every June or July, and it stands up to dry weather."

-John Coleman, Express Grain Terminal LLC

as account balance and loads received. *Ed Zdrojewski, editor* 



Two Brock tower dryers handle grain drying duties at Express Grain, the newer one at left rated at 10,000 bph at five points of removal and the dryer at right rated at 4,000 bph.