Columbia's Newest Terminal

SIX YEARS IN THE MAKING, EGT AT LONGVIEW, WA FINALLY LOADING SHIPS



EGT, LLC Longview, WA • 360-747-5000

Founded: 2006

Storage capacity: 4.5 million bushels at one location Annual volume: To be determined Annual sales: To be determined Number of employees: 20 Crops handled: Grain, oilseeds, meals, DDGs Services: Grain export operations

Key personnel:

• Jerry Gibson, vice president-operations/facility manager

- Brad Hansen, operations manager
- Randy Cooper, asst. operations mgr.Mike Shafer, maintenance manager
- Steve Burger, electrical maint. mgr.

Supplier List

Automation systems..... Wunderlich Malec Engineering

Bucket elevator Screw Conveyor Corp.

Bulk weigh scale Waconia Mfg. Cleaners...Carter Day International, Rotex Inc.

ContractorT.E. Ibberson Co. Conveyors (belt) ... Megatech Engineering Conveyors (drag and screw) ... Screw Conveyor Corp.

Distributor., Hayes & Stolz Ind. Mfg. Dust collection Donaldson Torit Electrical contractor... The Interstates Companies

Elevator buckets Maxi-Lift Inc. Engineering...River Consulting, T.E. Ibberson Co.

Level indicators...... Ohmart Vega Manlift......Sidney Mfg. Co. Millwright......TE. Ibberson Co. Motion sensors4B Components Railcar gate openers...Calbrandt Inc. SamplersAgrico Sales Inc. Truck scales.....Mettler Toledo Inc.,

Cultura Technologies Inc. Unloading equipment..Laidig Systems



EGT, LLC's new export terminal on the Columbia River at the Port of Longview, WA, which began receiving grain in July 2011 and loading oceangoing ships in February 2012, includes 4.5 million bushels of upright slipform concrete storage in 36 tanks. Photo by Ed Zdrojewski.

EGT, LLC made history Feb. 7 when a 738-foot Panamax oceangoing vessel pulled up to the new dock at its new \$200 million, 4.5-million-bushel port terminal elevator on the Columbia River in Longview, WA.

The Longview terminal opened for ship-

loading immediately following the settlement of a sometimes violent labor dispute with the International Longshore and Warehouse Union (ILWU) Local 21, and the longshoremen went right to work.

But perhaps more importantly, the load



EGT employees discuss the day's activities in the Longview control room, where all facility operations are consolidated.

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Aerial view of the EGT export complex at the Port of Longview includes roughly 11 miles of track, which has enough space to park four fully-loaded 110-car shuttle trains plus two empty trains awaiting departure. Aerial photo courtesy of EGT, LLC.

of Washington State soft white wheat bound for South Korea was the first grain shipped from the Port of Longview since 1989.

With six years of planning and construction behind them, the number one job for the EGT terminal will be getting up to speed. As of Feb. 28, when *Grain Journal* visited, operators were in the process of loading their third vessel.

"We eventually expect to be loading 15 to 20 ships per month," says Jerry Gibson, vice president-operations and facility manager for EGT. Gibson came to Longview in 2010 after operating the Bunge North America (NA) export terminal at Destrehan, LA.

Six Years in the Making

Bunge NA, St. Louis, MO, was one of three partners that formed EGT in 2006; the others were Itochu, the Japanese trading company, and STX Pan Ocean, the South Korean shipping line.

"Right from the start, EGT was formed with the purpose of building and operating an export terminal on the West Coast," Gibson says. "We anticipated providing the originations, and our partners wanted to be able to control their own supply line of grain to Asia."

After a search, the partners settled on the Port of Longview, operated by a local port authority, as the best site of the Pacific Northwest's 11th grain export terminal.

As Gibson explains, the Columbia River is 43 feet deep at Longview, plenty deep enough for a Panamax vessel. Also, the site has access to both the Burlington Northern Santa Fe and Union Pacific railroads and to barges coming down the Columbia and Snake rivers.

To build the huge project, EGT



Jerry Gibson

hired T.E. Ibberson Co., Hopkins, MN (952-938-7007), as general contractor. "Bunge had worked with Ibberson before, and we had a certain comfort level," Gibson says.

River Consulting, Metairie, LA (504-293-3900), performed conceptual and preliminary engineering design; probable cost estimates for equipment, material, and construction; and bid document preparation. Later, Ibberson brought the firm in to perform final engineering support on various items. River Consulting also provided consulting to EGT on final design and construction items. Ibberson also brought in Interstates

Ibberson also brought in Interstates Companies, Sioux Center, IA (712-722-1662), to design and install the electrical systems.

Construction got underway in June 2009, and the facility began taking in grain in July 2011.

Storage Structure

Grain storage at Longview consists entirely of slipform concrete in the form

The first ship to be loaded at the Longview elevator, a 738-foot Panamax vessel, is loaded Feb. 7 with Washington soft white wheat for export to South Korea. Photo purchased from The Oregonian newspaper.



of 36 tanks standing 45 feet in diameter and 140 feet tall. There are no interstices.

The tanks are outfitted with 45-degree steel hopper bottoms, which eliminate the need for sweep augers or for workers to enter the tanks.

Unlike most interior elevators, the storage tanks at Longview have no grain temperature monitoring or aeration system. "We plan never to keep grain here for more than a few weeks," Gibson explains.

Handling Operations

Virtually all of the grain coming to the Longview terminal arrives by 110car unit train, although the facility can

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receive grain from barges using a 40,000bph Waconia dockside marine leg.

The facility has more than 60,000 feet of track snaking around the property, with enough space to hold four fullyloaded shuttle trains and their locomotives. (EGT crews operate locomotives that arrive with the trains.) "We're set up so that we can have trains arriving, waiting to unload, unloading, and departing simultaneously," Gibson says.

One or two trains can be unloaded at once in an enclosed receiving shed, into a pair of 60,000-bph mechanical receiving pits. One of those two trains are served by a pair of Calbrandt automated, vision-guided railcar gate openers - the use of two allow continuous opening and closing of gates without stopping the train. These trackmounted gate openers utilize a hydraulic motion controller and 3-D vision system to identify a capstan on the railcar and gauge its height, depth, and degree of rotation for



Two robotic Calbrandt railcar gate openers service trains inside the facility receiving shed, which includes a pair of 60,000-bph merchanical receiving pits.

use without an operator present.

From receiving, grain moves around the facility almost entirely on 60,000- or 120,000-bph Megatech incline enclosed belt conveyors. Two 204-foot-tall 60,000-bph custom-designed Screw Conveyor Corp. legs serve the cleaning house or as transfer legs to storage. These legs are outfitted with three rows of Maxi-Lift Tiger Tuff 20x10 buckets mounted on a 67-inch Goodyear belt.

From rail receiving, grain is carried to a sampling/bulkweighing building, housing three Waconia bulkweighing scales for destination weights. The system includes three Intersystems samplers, which can send samples to a crew from the Washington Department of Agriculture, the designated official grading agency in the state.

From the bulkweigher, grain can be sent to storage or shipping bins for shiploading, or to a slipform concrete cleaning tower adjacent to storage. The tower includes a series of Rotex screeners and aspirators and Carter-Day indent separators to clean grain to export standards, currently 0.3% dockage in Asia. Two pairs of Screw Conveyor jump legs, one pair rated at 3,000 bph and the other at 4,000 bph handle screenings from the cleaning process.

Atop the slipform storage structure, grain passes through a six-hole Hayes & Stolz distributor to one of two Megatech shuttle systems, each serving two rows of storage tanks.

Tanks empty onto a series of 120,000bph Megatech grade-level conveyors. From there, a series of incline belt conveyors take grain out to three Agrico dockside shiploaders. "They can cover an entire Panamax vessel without repo-





Carter-Day indent cylinder separator (top) and Rotex vibratory screener (bottom) are among the cleaners used to clean grain to export standards.

sitioning," says Gibson.

When the system is up to speed, it is expected to take about a day and a half to load a Panamax-sized vessel.

Ed Zdrojewski, editor