

Eastern Washington Shuttle Loader

REGIONAL COOPERATIVE BUILDS A SLIPFORM CONCRETE RAIL TERMINAL



Ritzville Warehouse Co.
Ritzville, WA • 509-659-0130

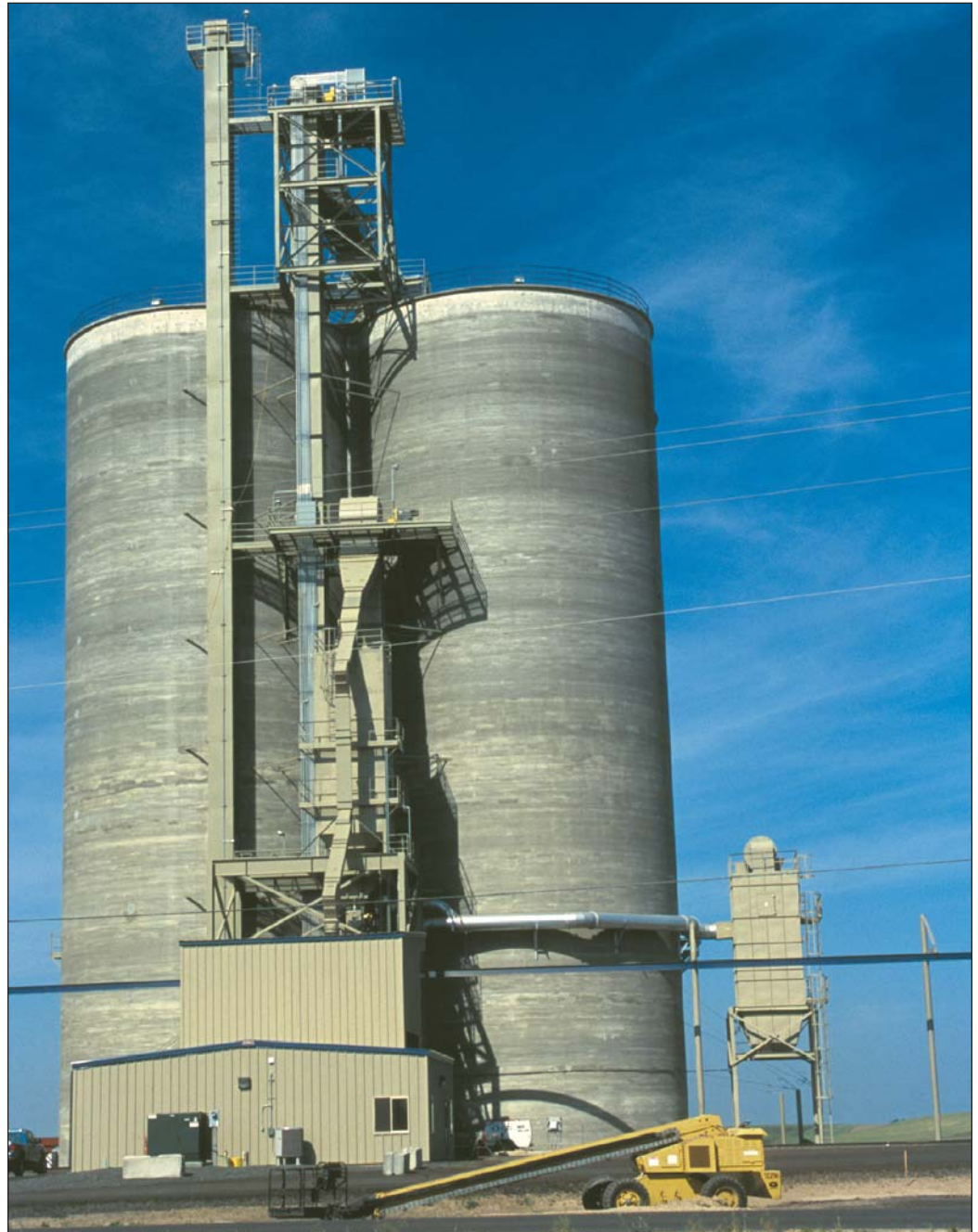
Founded: 1893
Storage capacity: 18 million bushels at 30 locations
Number of members: 1,500
Number of employees: 56
Crops handled: Wheat, barley, canola, triticale, mustard
Services: Grain handling and merchandising, Case-IH farm equipment dealership

Key personnel:

- John Anderson, CEO
- Jeff Milner, chief financial officer
- Brian Gordon, grain marketing manager
- Jim Kelly, grain operations manager

Supplier List

Actuators Andco Actuators
Bearing sensors The Rolfes Co.
Bucket elevators..... Schlager Inc.
Bulk weigh scale... CompuWeigh Corp.
Concrete tank builder The Haskins Co.
Contractor The Haskins Co.
Control system Applied Solutions LLC
Conveyors ... Hi Roller Conveyors
Distributor Hayes & Stolz Ind.
Dust collection system ... Keigley & Co.
Dust filters . Murphy-Rodgers Inc.
Elevator buckets Tapco Inc.
Gates Keigley & Co.
Grain probe InterSystems Inc.
Level indicators ... 4B Components Ltd.
Liner Tandem Products Inc.
Manlift Sidney Mfg. Co.
Motion sensors 4B Components
Rail gate opener Calbrandt
Samplers InterSystems Inc.
Truck scale ... Cardinal Scale Mfg.



New 2.5-million-bushel rail terminal for Ritzville Warehouse Co. two miles east of Ritzville, WA, including a 760,000-bushel slipform concrete elevator. Photo by Bruce Selyem, Bozeman, MT.

With 30 locations and 18 million bushels worth of storage capacity around eastern Washington, Ritzville Warehouse Co. is one of the major players in the region's

grain industry.

But for all its origination power, the farmer-owned cooperative lacked the ability to load 110-car shuttle trains on

the Burlington Northern Santa Fe main line to Portland, OR, and Kalama, WA, says CEO John Anderson.

The 25-plus-year grain industry veteran, who served in 2000-02 as chairman of the National Grain and Feed Association's Country Elevator Council, joined the company as CEO about a year ago, having previously been with Central Washington Grain Growers.

At that time, construction of the new 2.5-million-bushel slipform concrete rail terminal had just broken ground, about two miles east of Ritzville, WA. Anderson oversaw completion of the project in April 2002, and the facility began shipping grain shortly thereafter.

The Haskins Co., Spokane, WA (509-535-2978), a veteran of past projects for Ritzville Warehouse, served as the design-build contractor on the project. Keigley & Co., Spokane (800-333-4889), did the conveying system design work.

The Terminal

The elevator consists of four 178,000-bushel slipform concrete tanks standing 48 feet in diameter and 134 feet tall. Grain sits atop above-ground, 37-degree concrete hopper bottoms, which eliminates the need for a sweep auger. Because of fast turnover, the tanks have no aeration or grain temperature monitoring systems. The complex also includes a 50,000-bushel interstice bin.

In addition, the facility includes a 330-foot-diameter, 1.7-million-bushel ground pile. A 15,000-bph InterSystems drag conveyor carries grain out to the pile.

Incoming grain arrives by truck at a roughly 1,000-bushel mechanical receiving pit, which feeds a 40,000-bushel, 187-foot-tall Schlagel leg. This leg is equipped with a double row of 20x8 Tapco low profile buckets on 7-1/2-inch centers, mounted on a 42-inch Good-year belt. All legs in the facility also are equipped with Rolfes bearing sensors, 4B boot motion sensors, and misalignment rub bars.

The leg delivers grain via a 40,000-bph Hi Roller enclosed belt conveyor to a six-hole Hayes & Stolz distributor, which can reach all of the big tanks via gravity spouting lined with Tandem Rhino-Hyde urethane/ceramic chip liner.

The storage tanks empty onto a 50,000-bph, 48-inch Hi Roller (Hi-Life) reclaim conveyor in a below-ground tunnel. Andco actuators allow the operator to blend grain on the go.

The reclaim conveyor delivers grain to a 50,000-bph Schlagel shipping leg, outfitted with three rows of 20x8 Tapco low-profile buckets on 8-1/2-inch centers on a 63-inch Goodyear belt.

Crews load shuttle trains with a 50,000-bph CompuWeigh bulk weigh scale, outfitted with a 50,000-bph InterSystems electric cross-cut sampler. Loading proceeds quickly, since the facility has a 7,548-foot loop track equipped with heavy-duty 115-lb. rail and concrete ties.

Ed Zdrojewski, editor

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