# Grain Handling Efficiency

### VENTURE ADDS STORAGE, HANDLING, AND WEIGHING CAPACITY IN INDIANA



Co-Alliance LLP Avon, IN • 317-745-4491

Founded: 2006 as a partnership of five locally-owned coops dating back indivdually to the 1920s

Storage capacity: 35 million bushels at 15 locations

Annual volume: 60 million bushels Annual revenues: \$1.012 billion Number of members: 7,000 Number of employees: 500 Crops handled: Corn, soybeans, soft red winter wheat, sorghum Services: Grain handling and merchandising, seed processing

# Key personnel at Goodland:

- Doug Hartman, manager
- Bryan Brown, foreman
- Jamie Spencer, originator
- Ashley Macy, originator

# Supplier List

Aeration fans......The GSI Group Bearing sensors..4B Components Ltd. Bin sweeps ......The GSI Group Bucket elevators.....The GSI Group Contractor/engineering...... Carroll Construction Co. Control system......Cultura Technologies Inc. Conveyors ......The GSI Group Distributor.....Schlagel Inc. Elevator buckets ..... Maxi-Lift Inc. Grain temp system ... Rolfes@Boone Insurance .. Farm Bureau Insurance Co. Leg belting...... Goodyear Tire Liner ...... Argonics Inc. Millwright... Carroll Construction Co. Motion sensors....4B Components Ltd. Steel storage......The GSI Group Steel tank erection .. Hershberger Bin Jackers Inc. Tower support system ... Sweet Mfg.

Truck scale......Rice Lake Weighing Systems



Co-Alliance LLP's 4.1-million-bushel elevator near Goodland, IN, with two new 750,000-bushel GSI corrugated steel tanks in foreground. Photos by Ed Zdrojewski.



Truck scale installation at Goodland includes a new 70-foot Rice Lake pit-type inbound scale. A second Rice Lake scale is expected to be added after the 2012 harvest.

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Soon after Co-Alliance LLP was created through the partnershp of successful local coops in 2006, the company purchased a rail-loading elevator just west of Goodland, IN (219-297-3108), from Archer Daniels Midland Co. Doug Hartman had been working at the Goodland facility for a year at the time, and he continues on today as general manager.

"We had three big flat storage buildings here, and two of them were not being used," Hartman says. "We wanted to replace them with something more efficient."

That replacement came in 2012 in the form of two 750,000-bushel GSI steel tanks. Also as part of the project, started in March and completed in September for a confidential cost, the company also installed a new receiving pit and 25,000-bph GSI leg to service the new tanks and added a 70-foot Rice Lake Survivor pit-type scale.

To construct the project, Co-Alliance turned to its long-time construction partner, Carroll Construction Co., Sears, MI (989-382-5650), for engineering, construction, and millwright services. Also active on the site was Hershberger Bin Jackers LLC, Clare, MI (989-429-5606), which performed the bin jacking.

# **Project Specifications**

The two new GSI tanks stand 105 feet in diameter, 93 feet 6 inches tall at the eaves, and 122 feet 6 inches tall at the peaks. These flat-bottom tanks are equipped with outside stiffeners; 16-inch, 10,000-bph GSI Series II sweep augers; and 24-cable Rolfes@Boone grain temperature monitoring systems.

# Four Generations on the Job

The goal of most family businesses is to keep the business in the family. Carroll Construction Co., the general contractor and mill-wright on the Co-Alliance project at Goodland, IN, may be more successful than most at doing that.

According to Goodland General Manager Doug Hartman, four generations of the Carroll family were on the job site at various times during the project. They include Owner Marshall Carroll; his son, Gabe, who is head millwright; grandsons Jake and Jeff Norman, laborers on the crew; and father, Noble, 85, who still comes out of retirement to help out.

A set of four 30-hp GSI centrifugal fans deliver 1/10 cfm per bushel of aeration through in-floor ducting, with the assistance of eleven 2-hp roof exhausters.

The new enclosed receiving pit, the facility's third, is located just north of the new tanks. The 500-bushel mechanical receiving pit feeds a 25,000-bph GSI leg equipped with a two rows of 14x8 Maxi-Lift CC-MAX buckets mounted on a 31-inch belt. The leg is encased in a 18-foot-x-18-foot-x-200-foot Sweet Mfg. Goliath® tower.

The leg deposits grain into a fourhole Schlagel rotary distributor, which in turn, feeds the new tanks via 24-inch gravity spouts.

The new tanks are equipped with sidedraw spouts, and they are emptied onto 15,000-bph above-ground GSI drag conveyors that run to existing legs.

A new 70-foot Rice Lake scale was installed adjacent to an existing truckscale and will serve inbound trucks, with an existing scale to be replaced by a Rice Lake outbound scale after the 2012 harvest. The scales have been automated by a oneWeigh™ system from Cultura Technologies.

Ed Zdrojewski, editor