

A Light Harvest Year

LOW VOLUME PROVIDES OPPORTUNITY TO UPGRADE AN ELEVATOR



Kokomo Grain Inc.

Kokomo, IN • 765-457-7536

Founded: 1950
Storage capacity: 27 million bushels at 10 locations
Annual volume: 46.5 million bushels
Annual revenues: \$135 million
Number of employees: 50
Crops handled: Corn, soybeans, soft red winter wheat
Services: Grain handling and merchandising

Key personnel:

- Jeff Ortmann, plant manager
- Greg Simpson, merchandiser
- Dan Exmeyer, foreman

Supplier List

Bearing sensors ... The Rolfes Co.
Bucket elevators ... The GSI Group
Bulk weigh scale .. CompuWeigh Corp.
Contractor ... B-P Construction Inc.
Conveyors The GSI Group, Riley Equipment Inc.
Conveyor belting .. Scandura Inc.
Distributor Rapat Corp.
Elevator buckets Tapco Inc.
Engineering consultant Doug Graham
Grain probe Gamet Mfg. Co.
Leg belting Scandura
Liner Tandem Products Inc.
Manlift ... Schumacher Elevator Co.
Millwright B-P Construction Inc., Richard Myers & Son
Motors .. WorldWide Electric Corp.
Samplers Gustafson LLC
Speed reducers Dodge
Truck scale Brechbuhler Scales Inc.



Kokomo Grain Inc.'s rail terminal in Amboy, IN, which was upgraded extensively in 2003.

Photos by Ed Zdrojewski.

Kokomo Grain Inc. in 2002 added 1.1 million bushels of storage space at its Amboy, IN rail loading terminal, in order to accommodate ever-larger harvests without having to pile grain on the ground (covered in the March/April 2003 issue of *Grain Journal*).

It was a good idea at the time, but Mother Nature had other plans. Dry weather that summer resulted in a smaller-than-normal crop in central Indiana.

Faced with relatively low volumes for 2003, the cooperative decided to take advantage of the "downtime" to perform some major upgrades at Amboy, says Plant Manager Jeff Ortmann. "It was the best time to upgrade with a minimum of disruption" he notes. "So the last weekend in March, we disconnected the motors and started pulling belts out of the legs."

The upgrade involved installing an automation system, boosting leg capacity, installing a higher-capacity bulk weigh loadout scale, and building a new office and truck scale.

Kokomo Grain did its own engineering on these upgrades and supplied much of the labor on the \$1-million-plus project. B-P Construction, Sheridan, IN (317-758-6126) served as general contractor on construction work, and Richard Myers & Son, Russiaville, IN (765-883-8177), per-

formed millwright work. Dever Electric, Livermore, KY (270-278-2116) served as electrical and automation contractor.

During the course of construction, workers utilized a permanent 15-ton crane Kokomo Grain had installed on the roof of the elevator in 2002.

Work was completed in time for the 2003 harvest.

The Project

Major components of the work done in 2003 at Amboy include:

- Installing a new PLC-based control system incorporating receiving operations and monitoring functions such as grain temperature and bearing temperature. The system tracks bin inventories and automatically routes incoming grain to the appropriate bin via the appropriate equipment.
- Built a new power room above the grain receiving station to house the motor control center for the new automation system.
- Replaced two old receiving legs with new 22,500-bph GSI legs, outfitted with 14x8 Tapco HD-CC low profile buckets on a 16-inch Scandura belt.
- Replaced an old seven-hole distributor with a new Rapat eight-hole double distributor. Replacing the distributor also required the installation of new spouting with Tandem Rhino-Hyde lining at criti-

cal wear points.

- Replaced old 7,500-bph wet and dry legs serving the facility's grain dryer with new, much larger legs that double for both dryer service and as loadout legs. The wet/loadout leg is rated at 18,000 bph with 16x8 Tapco HD-CC low-profile buckets on a 20-inch Scandura belt. The dry/loadout leg is rated at 36,000 bph and features two rows of the buckets on a 35-inch Scandura belt. Both legs are powered by 200-hp WorldWide motors with dual Dodge drives.

"Before this upgrade, we had to use every leg in the facility to load railcars," Ortmann comments. "If a truck brought in a second commodity during rail loading, we would have to shut something down before the driver could dump."

- Installed a 40,000-bph GSI enclosed belt conveyor to carry grain to the bulk weigh loadout scale.

- Replaced an old 30,000-bph bulk weigh loadout scale with a new 60,000-bph **CompuWeigh** scale. The scale's Grain Management System



New 60,000-bph CompuWeigh bulk weigh loadout scale allows Kokomo Grain to load 85-car unit trains on the Norfolk Southern.

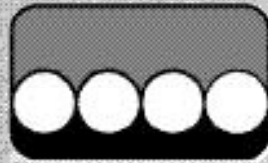
software controls the scale via a CD 4000 controller. The controls include **CompuWeigh's** SmartLOAD option, which allows the scale to line up accurate drafts before the railcar is in position. Ortmann comments that the new bulk weigh loadout system will allow Kokomo Grain to load 85-car shuttle trains for the Norfolk Southern (NS). (The elevator is located on the Central Railroad of Indiana, a short-line connecting to the NS near Marion, IN.)

- Replaced an old office building with a new two-story brick structure. The second-story scalehouse allows operators to see down inside of incoming trucks. Ortmann says the old office building was prone to basement flooding.

- Installed a new 70-foot Brechbuhler B-Tek pitless truck scale with a Gamet truck probe.

"We're still working out a few bugs, but overall, everything is working pretty well," Ortmann comments. "Harvest went more smoothly than we expected."

Ed Zdrojewski, editor



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