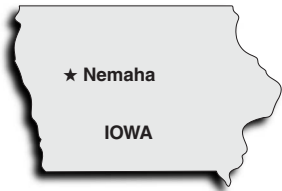


# Receiving/Drying Upgrade

DFS ADDS DRYER, WET TANK, LEGS AT RECENTLY ACQUIRED FACILITY



## DFS Inc.

Newell, IA • 712-272-3396

**Founded:** 1970

**Storage capacity:** 9.7 million bushels at three locations

**Annual volume:** 25 million bushels

**Number of employees:** 125

**Crops handled:** Corn, soybeans

**Services:** Feed, grain handling and merchandising, risk management

## Key personnel:

- Dave Kier, president/owner
- Nathan Kier, president-Market 1 risk management service
- Mike Kinley, COO
- Brian Hansen, Nemaha location lead
- Nick Koster, superintendent

## Supplier List

**Aeration fans**.....The GSI Group

**Bin sweep**.....The GSI Group

**Bucket elevators** ..... Union Iron

**Catwalk**..... Union Iron

**Contractor** ..... Jensen Builders Ltd.

**Control system**...Venteicher Electric Inc.

**Conveyors** ..... Union Iron

**Distributor**.....Schlagel Inc.

**Elevator buckets** ..... Maxi-Lift Inc.

**Grain dryer** ..... Zimmerman Grain Dryers

**Grain temperature system** .. Tri-States Grain Conditioning Inc.

**Level indicators**.....Bindicator

**Millwright**..... PMI Iowa LLC

**Motion sensors** ..... 4B Components Ltd.

**Motors** ..... Baldor Motors

**Speed reducers** ..... Dodge

**Steel storage**..... The GSI Group, Meridian Mfg. Inc.

**Tower support system** ...Union Iron

**Truck probe** ..... Gamet/JaHam



*New construction at the DFS grain elevator in Nemaha, IA, from left: Zimmerman 4,500-bph tower dryer; Union Iron support tower housing three new Union Iron legs; 100,000-bushel GSI wet tank; new enclosed 900-bushel mechanical receiving pit; and 5,000-bph Meridian surge tank. Photos by Ed Zdrojewski.*

When DFS Inc. (formerly Don's Farm Supply) acquired the Nemaha Milling feed mill and its adjacent 1-million-bushel grain elevator in Nemaha, IA (712-636-4458), in 2012, the new owner quickly targeted the elevator portion of the site for some upgrades.

"Portions of the grain facility were old and

outdated," says Plant Manager Brian Hansen, who came to Nemaha 4-1/2 years ago from an FC Coop location in Yetter, IA. "DFS wanted to invest some capital in order to capture more grain receipts from producers in the area."

In 2013, DFS completed a \$3 million upgrade at Nemaha, which included a new dryer,

wet tank, an additional receiving pit, and three new legs. The privately-held company took bids on the project and awarded the contract to Jensen Builders Ltd., Fort Dodge, IA (515-573-3292).

“We looked at a project Jensen Builders did previously, and we were very impressed with their work,” says Hansen.

Also heavily involved in the project was PMI Iowa LLC, Ames (515-232-2595), the millwright on the project, and Venteicher Electric Inc., Coon Rapids, IA (712-684-5703), which did the electrical wiring and control systems.

Construction at Nemaha began in May 2013 and completed by mid-September.

### Dryer Complex

Jensen Builders installed a new Zimmerman tower dryer rated at 4,500 bph at five points of moisture removal. The new propane-fueled dryer replaced an old 1970s-era dryer that was on its last legs. Hansen says DFS specified a Zimmerman because of its good reputation among area elevator managers.

Hansen adds that the new dryer received a serious workout during the 2013



*From left: Nick Koster, superintendent, and Brian Hansen, location lead.*

harvest, with most corn being delivered at 17% to 23% moisture. “It worked very well, and it seems very efficient,” he says, although the company had not yet compiled any fuel consumption numbers.

The new dryer is loaded and unloaded by Union Iron 8,500-bph wet and dry legs, which are outfitted with single rows of Maxi-Lift 14x7 CC-MAX buckets mounted on 16-inch belts.

To hold grain for drying is a new GSI 100,000-bushel corrugated steel wet tank standing 42 feet in diameter, 83 feet tall at the eaves, and 94 feet tall at the peak. The flat-bottom tank has outside stiffeners, 16-inch GSI sweep auger, and five-cable

TSGC grain temperature monitoring system. A pair of 15-hp GSI centrifugal fans supply 1/7 cfm per bushel of aeration.

### Grain Handling Equipment

Jensen Builders also installed a new 900-bushel enclosed mechanical receiving pit, the facility’s fifth. The pit feeds a 20,000-bph Union Iron receiving leg, which is equipped with a single row of Maxi-Lift 20x8 CC-MAX buckets mounted on a 22-inch belt. All three new legs are housed in a 18-x-18-foot Union Iron support tower with switchback staircase.

The leg empties into a five-duct Schlegel swing-type distributor, which can send grain via gravity spout to the dryer, wet tank, or a 5,000-bph Meridian loadout surge tank, or via 25,000-bph Union Iron overhead conveyors to existing storage.

The wet tank empties onto an above-ground Union Iron 8,500-bph drag conveyor that inclines upward before emptying into the new receiving leg.

Hansen comments that the Nemaha site has space to add up to three 750,000-bushel steel storage tanks.

*Ed Zdrojewski, editor*