

# Railyard Opportunity

OHIO GRAIN HANDLER USES SITE FOR LOADING CONTAINERS, RAILCARS



Deerfield Ag Services' new 520,000-bushel rail terminal in Massillon, OH so far has been used for loading 40-foot containers but soon will begin loading Norfolk Southern and CSX unit trains. Aerial photo by Focal Plane, South Euclid, OH.



## Deerfield Ag Services Deerfield, OH • 330-584-4715

**Founded:** 1959  
**Storage capacity:** 5.6 million bushels at five locations  
**Annual volume:** 6.5 million bushels  
**Number of employees:** 63  
**Crops handled:** Corn, soybeans, soft red winter wheat  
**Services:** Grain handling and merchandising, agronomy, equipment sales and installation

**Key personnel:**

- Nate Russo, COO
- Steve Ramseyer, western region grain manager
- Jenifer Pemberton, merchandiser
- Adam Moodt, location manager

## Supplier List

**Aeration fans**.....Brock Grain Systems  
**Bearing sensors** .....CMC Industrial Electronics  
**Bin sweeps** ..... GSI  
**Bucket elevator** ..... GSI  
**Bulk scale system**...CompuWeigh Corp.  
**Catwalk**.....GSI  
**Contractor** ..... in house  
**Control system**.. CompuWeigh Corp.  
**Conveyors** .....GSI  
**Distributor**.....InterSystems  
**Electrical contractor**.....Graff Electric  
**Elevator buckets** .....Maxi-Lift Inc.  
**Engineering** ..... in house  
**Facility automation**.....CompuWeigh Corp.

**Level indicators**.....BinMaster Level Controls  
**Millwright**..... in house  
**Moisture meter** ..DICKEY-john Corp.  
**Motion sensors** .....CMC Industrial Electronics  
**Motors** ..... Baldor Motors, Weg  
**Sampler**.....Gamet Mfg. Inc.  
**Steel storage**.....Brock Grain Systems  
**Steel tank erection** ....M&M Builders  
**Tower support system** .....GSI  
**Truck probe** .....Gamet Mfg. Inc.  
**Truck scale automation**..... CompuWeigh Corp.  
**Truck scales**... Brechbuhler Scales Inc.

One last overhead drag conveyor remained to be installed at the new Deerfield Ag Services rail terminal in Massillon, OH (330-584-4715), when *Grain Journal* visited in early November. But the elevator was already in operation, receiving grain and loading and shipping out containers (TEUs – 40-foot-equivalent units) of soybeans.

“We’ve loaded about 100 to 120 containers through our bulk weigh scale,” says Chief Operating Officer Nate Russo. “So far, it’s just been commercial soybeans, but we plan to load other commodities, as well, including specialty items like soymeal and distillers grains. Mostly, they’re for export, but some will go to the southeastern states.”

Until recently, a rail terminal hadn’t been in Deerfield Ag’s near-term plans, but the opportunity arose at a 400-acre industrial site near State Highway 21 at Oberlin Avenue.

The location was the site of a huge steel mill operated by Republic Steel. That mill was shuttered around 2007 and torn down (although Republic Steel still has steel bar manufacturing operations elsewhere in Massillon). The property owner, RSL (Republic Short Line) Inc., still operates a short-line railroad that served the old mill and has been developing the property into an industrial park with rail connections to the Norfolk Southern and CSX Transportation railroads.

“They’ll be doing all of our rail movement for us,” Russo says.



Portable auger system has been loading grain from the facility bulkweigher directly into 40-foot shipping containers.



Inbound truck is weighed on a 72-foot Brechbuhler scale while the driver awaits instructions via a CompuWeigh SmartView digital message board. Ground-level photos by Ed Zdrojewski.

### Building the Elevator

Gearing up to build a rail terminal was a natural for Deerfield Ag Services. In addition to operating grain elevators, the company has its own construction division and is a dealer for GSI and Brock equipment. At Massillon, Deerfield Ag was its own general contractor and also did all of the engineering and most of the millwright work.

Also working on the project, M&M Builders, Inc., Bessemer, AL (205-428-7325), constructed the steel tanks, and Graff Electric, Toledo, OH (419-472-7800), was the electrical contractor. CompuWeigh Corp., Woodbury, CT (203-262-9400), automated the entire facility, including a SmartTruck scale automation and truck routing system, and supplied a 50,000-bph bulkweigher

with CD-4000 automation controls.

Construction on the 520,000-bushel terminal began early in 2017 and was just finishing up in November 2017.

### Facility Specs

Grain storage consists of two Brock flat-bottom and two Brock hopper tanks, one each for wet grain and grain ready for shipping.

The flat-bottom tanks stand 60 feet in diameter, 88 feet tall at the eaves,



New 50,000-bph CompuWeigh bulk weigh loadout scale is designed for loading both containers and covered hopper railcars. Brock 40,000-bushel hopper tank is visible to the left of the bulkweigher.

## A Brief History of Deerfield Ag Services

At first, the Wallbrown family operated a 94-acre hog farm outside of Deerfield, OH. Then, in 1959, Boyd and Joan Wallbrown took a step that transformed the business forever.

The sort of farmer often called an “early adopter,” Boyd built some Brock tanks to store grain on his farm, then started to build storage tanks for his neighbors. Soon, he was taking in neighbors’ grain to market for them as a commercial grain dealer in Deerfield plus selling and building grain storage and handling equipment for others.

The Deerfield elevator, today with nearly 1.5 million bushels of capacity, was just the first. Deerfield Ag Services added an elevator in Louisville, OH, in the mid-1990s; at Kinsman, OH, in 2001; and Volant, PA, in 2008. The new rail terminal in Massillon, OH, built in 2017, is the fifth.

In addition, the Wallbrowns operate a construction business and are dealers in Brock and GSI equipment. They still farm, too, but the hogs are gone; they produce about 4,000 acres of corn, soybeans, and soft red winter wheat in east central Ohio.

Three of Wallbrown’s four children are involved in the business: Bill, as president; John, as vice president and director of new markets; and Beth (Wallbrown) Padiak as co-owner.

and 104 feet tall at the peaks and hold 222,000 bushels each. They are equipped with outside stiffeners, GSI X-Series zero-entry sweep augers, and BinMaster laser-type level monitors, but no grain temperature systems. A pair of Brock 10-hp centrifugal fans provide 1/7 cfm per bushel of aeration through in-floor ducting in a double-H pattern.

The hopper tanks, holding 40,000 bushels each, stand 30 feet in diameter, 76 feet tall at the eaves, 84 feet tall at the peaks, and 40-degree steel hoppers. Steve Ramseyer, western region grain manager, notes that these tanks are engineered to handle difficult materials such as distillers grains or soy meal, though they’ve handled primarily soybeans so far.

Incoming trucks are routed to a Gamet Apollo truck probe, where they are sampled and the grain delivered to a dickey-JOHN GAC2500 moisture meter in an adjacent two-story scalehouse for testing. From there, they continue onto a 72-foot Brechbuhler pit-type inbound scale for weighing. Trucks continue to a 1,000-bushel mechanical receiving pit to deposit grain, then move on to a second Brechbuhler outbound scale for tare weight and automatically printed scale ticket.

A 20,000-bph GSI drag conveyor carries grain beneath a driveway to a 174-foot-tall 25,000-bph GSI leg equipped with two rows of Maxi-Lift

TIGER-TUFF orange 14x8 buckets mounted on a 30-inch belt.

The leg lifts grain to a seven-hole InterSystems SwingFlow triple distributor. The distributor sends grain to storage via gravity spout into the hopper tanks or 20,000-bph GSI overhead drag conveyors to the flat-bottom tanks.

The storage tanks empty grain onto a series of GSI 20,000-bph reclaim conveyors running back to the receiving leg and distributor.

One distributor outlet sends the grain via 50,000-bph overhead GSI enclosed belt conveyor to a 50,000-bph Compu-Weigh bulkweigher with a CD-4000 controller. There is no cleaner atop the bulkweigher, though there is space to add one if needed, but the bulkweigher spout is equipped with a Gamet sampler for grain inspection.

The bulk weigh scale so far has been used to load containers via a portable auger. The ability to generate accurate origin weights helps with this process, since the containers must be loaded to within 500 pounds of maximum rated capacity. Russo says the facility is expected to begin loading unit trains on the NS and CSX early in 2018.

He adds that the current facility is only the beginning in Massillon. The site has enough space to build up to 4 million bushels worth of steel storage.

*Ed Zdrojewski, editor*