

3RD QUARTER 2018



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QUALITY PRODUCTS AND SERVICE YOU CAN COUNT ON

FACILITY FEATURE



ROYSTER FARM
WAVERLY, KY

- GSI 60-26 Commercial Bin 178,000 bushels
- GSI 4036 Tower Dryer
- GSI 26x20 Receiving Conveyor 10,000 BPH
- GSI 42" x 140' Wet Elevator 10,000 BPH
- GSI 30" x 140' Dry Elevator 5,800 BPH
- 14' Steel Support Tower

Coming this winter/spring:

- GSI 60-26 Commercial Bin 178,000 bushels
- GSI 24-21 Commercial Hopper Tank 23,700 bu.

WINTER PROGRAM

Want to save on next year's expansion? Grain storage, handling and conditioning are on sale now. Place your order in fourth quarter for the best discount.

Buy a bin package by year's end for savings up to 20%! Package must include a bin (4002, 4004, 4024, Z-Series or TopDry) and all of the following accessories:

- Complete Fans, Transitions and Vents
- Floor and Floor Supports or Flexwave
- Unload or Chain Loop
- Outside Ladder or Stairs and Inside Ladder

Additional accessories, material handling, dryers and service parts are available with discounts up to 20%.

Bundle your order for additional savings! Bundle 2 product lines for 1% off, bundle 3 product lines for 2% off and 4 products lines for an additional 3% discount.

Discounts are good on quotes generated after 10/1/18. Product must ship after 11/15/18 at GSI lead time discretion.

Johnny and John Will are growing a gorgeous grain system at Royster Farm, perched on a hill top in western Kentucky. This fall's bright spot is the addition of a 4036 T-Series Tower Dryer.

After this unseasonably wet harvest, this tower dryer is like a promise to better days! But they won't stop there, they are adding dry and wet holding before they plant in 2019.

The T-series tower dryer ties into an existing 178K bu. grain bin and a strategically planned handling system serving both wet and dry grain.



SO MUCH IS OUT OF YOUR CONTROL. YOUR PROFIT SHOULDN'T BE.

TAKE CONTROL



CUSTOMER APPRECIATION DAY

Mark your calendar and plan to join us on December 7th, 2018 for our annual Customer Appreciation Day. Lunch is served at 11am, but the discounts last all day long, so don't miss this event that celebrates our best attribute, you.

AIR DRYING: LET US COUNT THE WAYS

"I want to put enough air on the new bin to take a couple points of moisture out of beans."

Today's larger bins make that unlikely. It is easier to understand if we define some air and grain issues.

There are three types of processes involving air in grain bins: Aeration, Cooling and Drying.

Aeration involves a relatively low amount of air, usually 1/10 to 1/4 cfm/bu., when the bin is full being pushed through grain already at safe storage moisture. This is the norm, but any amount of air pushed through already dry grain is really aeration. The primary goal with aeration is equalizing the moisture in the individual kernels which can take up to a week depending on airflow, stabilizing the grain and to bring the temperature of the grain down as outside temperatures decrease. This is normally taken at least down to 50° which is considered the safe storage temperature and at times down into the 30°s. Aeration can be used to bring the temperature of the grain back up in the spring.

Cooling is when grain at or very near safe storage moisture has been heated between 100° and 140° and more air than normal aeration is necessary to bring the temperature down quickly before the grain can go out of condition. Corn is the primary grain that is dried this way, beans and wheat usually have too low a kernel temperature after drying to gain much from this process and beans have issues with oil quality problems. It is also very difficult to get adequate airflow through wheat. Corn goes out of condition much quicker when hot and it is important that the grain is brought down to the outside temperature quickly. Cooling air rates normally fall between 1/3 cfm/bu. and 1 cfm/

bu. depending on how fast the bin is filled. Hot Grain out of a high temperature Grain Dryer is often over 130°. Cooling does remove a lot of heat, but it does not move much moisture through the bin. 17.5% at the back of a dryer at 130° is not accurate. Actual moisture is around 15.5%.

Drying grain is different. It involves grain above safe storage moisture. It causes the movement of a significant amount of moisture. It takes a lot longer and often flirts with the maximum safe storage time of grain at a particular moisture and temperature before the process is complete. You should never attempt to dry grain with less the 1 cfm of airflow. Using less airflow may seem to work, but unnoticed condition problems and damage almost always occur. The more moisture you try to remove, the poorer the conditions and the larger the bin the more likely you will fail, and the consequences are often serious and expensive.

To all of that you may say, *"But I am just trying to take a couple of points out of Soybeans early in the fall. My Father did it, heck I have done it, why can't I do it in the new larger bin I am building?"*

Several things have changed in today's farming practices. One is the earlier start time for harvest. In the past though, soybean harvest took place before corn harvest. It didn't start until the average outside temperatures were in the 60°s.

For more information, and charts to reference Maximum Allowable Storage Life for Corn and Equilibrium Moisture Chart for Soybeans please visit:

midwestagsystems.net

and click **RESOURCES, MAS BLOG.**

This is an excerpt from Gary Woodruff, GSI Group District Manager and experienced industry Veteran.

WINTER SERVICE TIPS

Before performing any work or service, de-energize (turn off) and disconnect, lockout and tag, or block off all mechanical, electrical, hydraulic and pneumatic equipment that presents a danger, particularly grain-moving equipment. Grain should not be emptied or moved into or out of the bin while workers are inside.

Following all instructions and using proper respiratory and safety equipment, spray and treat the exterior and the interior of the bin, including under a full or partial floor, to minimize insect infestations and mold. Every few years check for accumulations

under the floor and clean there, even if that means taking up the floor.



The grain should be cooled whenever the average outdoor temperature is 10 to 15 degrees cooler than the grain.

If leaving the grain cold, make sure the aeration fans and discharge augers are bagged off to prevent warm wet air from entering the bin. Do not keep cold grain past June 1st.

Check the condition of the aeration fan, transition, and entrance collar for damage and proper seal.

As soon as possible, pull the centers in

CELEBRATE!

Anniversaries:
Bob Birchler
Sales & Design
Hired August 12, 2015



Justin Bryant
Office Manager
Hired August 16, 2011



Patrick Mullican
Service Tech
Hired September 7, 2010



Shawn Chapman
Delivery
Hired September 12, 2011



SERVICE/INSPECTION PROGRAM

Enroll in the 2019 Service/Inspection Program now for savings that last all year! This annual offering from MAS covers pre-harvest grain handling, storage and drying equipment. Enroll early to receive the best value and priority service.

your grain down to the same depth as it is at the walls, to promote even aeration.

If your system includes a dryer or a drying bin, carefully check the gas supply lines, burner, vaporizer and burner gas train for leaks and make sure all are clean and free of debris, particularly the burner gun or exit. Have a qualified service technician repair any problems that are found. Make sure any rubber hoses are in good condition and replace them every 10 years or per local gas ordinances.

