

GSI AGRIDRY & BULLSEYE GRAIN QUALITY SYSTEM

# SPREADERS & CONTROLLER



AgriDry  Bullseye

Grain Temperature / Moisture Controller

Edit Line ▶

HUMIDITY	:	43
EMC	:	10.6
CEMC	:	10.6
GRAIN TEMP	[+]	76



**Fans**

Manual Automatic	Manual Automatic	Manual Automatic	Manual Automatic
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**Auxiliary**

Manual Automatic	Manual Automatic	Manual Automatic	Manual Automatic
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**Danger!!!** Turn off and lockout power before inspection or service. Hazardous voltage may cause serious injury or death!



**PROVEN & DEPENDABLE™**

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# AGRIDRY GRAVITY SPREADERS

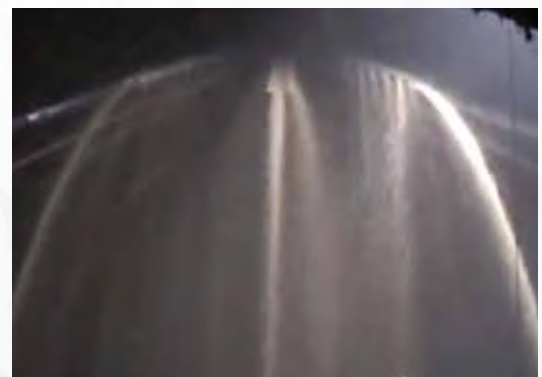
## CHOOSING THE RIGHT SPREADER FOR YOUR APPLICATION

AgriDry spreaders are customized to fit your operation. Each is rated for a specific fill capacity. No matter the bin size, our network of experienced, knowledgeable dealers ensure your grain handling system is matched with the spreader that is right for you.



## UNIFORM DISTRIBUTION OF FINES

AgriDry gravity spreaders distribute grain fines without compromising quality. They are gentle on grain and tough enough to handle fill rates up to 40,000 BPH. Uniformly distributed fines eliminate the time and expense of coring and create a better environment for storage. Improve fan efficiency, increase storage time, and gain marketing flexibility.



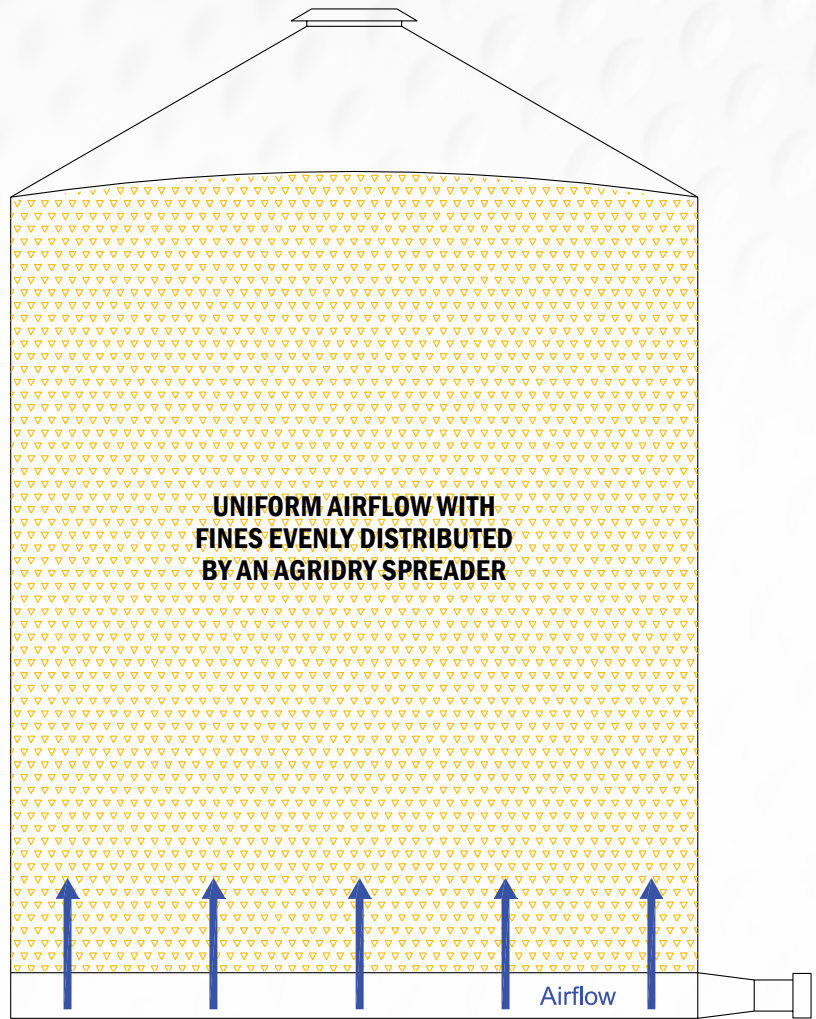
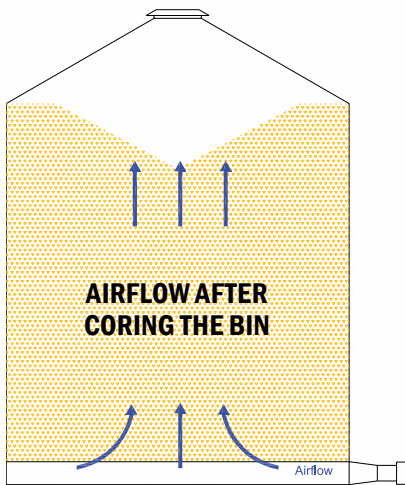
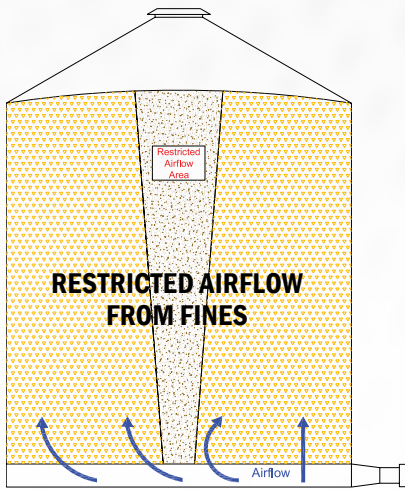
## HIGH VOLUME APPLICATION

AgriDry commercial spreaders have 16 chutes to meet the needs of high volume and variable fill rates coming from a dryer.

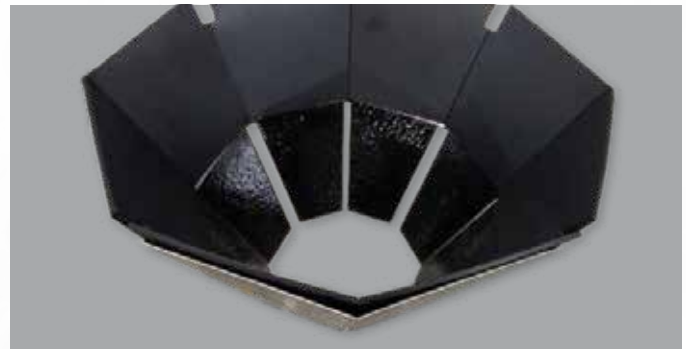
### Extension Chutes

When filling a bin with hot or wet grain, optional extension chutes disperse the grain out to the bin's side walls.

# AGRIDRY GRAVITY SPREADERS



- PROMOTES SAFETY - ZERO BIN ENTRY
- ELIMINATES CORING, CRUSTING & BRIDGING
- ALL FM EVENLY DISTRIBUTED
- IMPROVES QUALITY & AIRFLOW
- ELIMINATES THE NEED TO BLEND
- REDUCES THE RISK OF HOT SPOTS



## TIVAR LINER PACKAGE

Designed to protect high impact areas (the cone and the top few feet of the chutes) from premature wear.

# BULLSEYE CONTROLLER



The Bullseye Controller monitors EMC (Equilibrium Moisture Content of the outside air) and CEMC (Corrected EMC of the air in the bin) to run fans during storage. It effectively manages moisture content to eliminate shrink and maintain condition of the grain in storage, adding valuable shelf life and improving margins. And, with less need to enter the bin, on-site safety is increased.

## MAINTAIN TEMPERATURES

The key to successful storage is maintaining correct grain temperatures, a job made easy with the Bullseye Controller. It reduces the risk of common storage problems like sprouting, bridging, crusting, hot spots, spoilage, shrinkage, condensation and others that occur with moisture migration while maximizing the shelf life of your grain. No matter the season, the Bullseye Controller helps maintain proper temperatures inside your bin and gives you the best possible grain quality.

## MINIMIZE SHRINK

It's not uncommon for commercial facilities to over-dry the bottom third of a bin to manage temperatures. This is especially harmful to soybeans which are susceptible to shrink. Bullseye Controllers alleviate this problem by helping you maintain the right temperature for your bin.

## CORN EMC (EQUILIBRIUM MOISTURE CONTENT)

OUTSIDE AIR TEMP	OUTSIDE AIR RELATIVE HUMIDITY								
	46%	52%	58%	65%	72%	78%	85%	92%	99%
30	13.4	14.2	15.0	15.9	17.1	18.2	19.8	22.3	29.1
35	13.0	13.8	14.6	15.6	16.7	17.8	19.5	21.9	28.9
40	12.6	13.4	14.2	15.2	16.3	17.5	19.1	21.6	28.6
45	12.3	13.1	13.9	14.9	16.0	17.2	18.8	21.4	28.4
50	12.0	12.7	13.5	14.6	15.7	16.9	18.6	21.1	28.2
55	11.6	12.4	13.3	14.3	15.4	16.6	18.3	20.9	28.0
60	11.4	12.1	13.0	14.0	15.2	16.3	18.1	20.6	27.8
65	11.1	11.9	12.7	13.8	14.9	16.1	17.8	20.4	27.6
70	10.8	11.6	12.5	13.5	14.7	15.9	17.6	20.2	27.4
75	10.6	11.4	12.2	13.3	14.5	15.6	17.4	20.0	27.3
80	10.3	11.1	12.0	13.1	14.2	15.4	17.2	19.8	27.1
85	10.1	10.9	11.8	12.8	14.0	15.2	17.0	19.6	26.9
90	9.9	10.7	11.6	12.6	13.8	15.0	16.8	19.4	26.8
95	9.7	10.5	11.4	12.4	13.6	14.9	16.6	19.3	26.7
100	9.5	10.3	11.2	12.2	13.5	14.7	16.5	19.1	26.5
110	9.1	9.9	10.8	11.9	13.1	14.3	16.1	18.8	26.3

# BULLSEYE CONTROLLER

## OPTIONS



### CO<sub>2</sub> SENSOR

CO<sub>2</sub> levels will spike before temperature rises when grain begins to deteriorate or insect activity is present.

The optional AgriDry CO<sub>2</sub> Sensor is mounted on the inside of the bin rooftop. The sensor monitors CO<sub>2</sub> levels, head-space temperatures and relative humidity inside a bin, and is available for new controllers or as an upgrade to existing units.



### ON BOARD STATIC PRESSURE

To graph and view a bin's static pressure online, this option is available for new Controllers or as an upgrade to an existing unit. Use it through ADLink or through the controller's screen at the bin site. Highly recommended for ADLink users.

Also available is an analog static pressure gauge option, which can be used to manually check static pressure readings at the bin site.

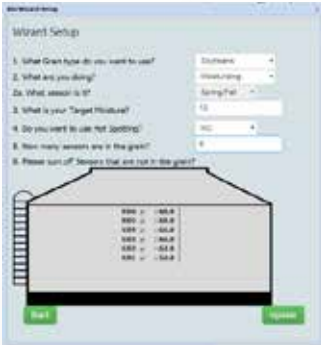
- MANAGE SHRINK
- MAINTAIN QUALITY
- PROMOTE ZERO BIN ENTRY
- DETECT HOT SPOTS
- MONITOR HEAD SPACE TEMPERATURE
- OPERATE POWER ROOF EXHAUSTER FANS TO KEEP HEAD SPACE DRY
- IMPROVE SHELF LIFE
- INCREASE PROFITS
- ACCESS REMOTELY WITH ADLINK

### ADLINK

Remote communication with the Bullseye Controller is possible with ADLink. This standard feature of new Controller units allows you to view the status, change settings, graph historical data, and monitor status changes. ADLink is also available as an upgrade for all existing Bullseye Controllers.



View Grain Data



Wizard Setup



Set Alerts



Graph History

# RETURN ON INVESTMENT

## CORN

BULLSEYE CONTROLLER									GRAIN SPREADER	
MOISTURE PERCENTAGE	56 LBS. @ 15.5% MOISTURE	LBS. PER BUSHEL LOST	% LOSS PER BUSHEL	\$ LOSS BASED ON \$3.50/BU.	\$ LOSS BASED ON \$6.00/BU.	LOW TEST WEIGHT DOCKAGE	EXCESS MOISTURE SHRINK %	DISCOUNT PER BU. DRYING COST	FM %	DISCOUNT PER BUSHEL
10.0%	52.56	3.44	6.1%	\$0.21	\$0.37	\$0.02			3.1-4	\$0.02
10.5%	52.87	3.13	5.6%	\$0.20	\$0.34	\$0.02			4.1-5	\$0.04
11.0%	3.16	2.84	5.1%	\$0.18	\$0.31	\$0.01			5.1-6	\$0.07
11.5%	53.46	2.54	4.5%	\$0.16	\$0.27	\$0.01			6.1-7	\$0.10
12.0%	53.77	2.23	4.0%	\$0.14	\$0.24				7.1-8	\$0.13
12.5%	54.08	1.92	3.4%	\$0.12	\$0.20				8.1-9	\$0.16
13.0%	54.39	1.61	2.9%	\$0.10	\$0.17				9.1-10	\$0.19
13.5%	54.70	1.00	2.3%	\$0.08	\$0.14					
14.0%	55.02	0.98	1.8%	\$0.06	\$0.11					
14.5%	55.34	0.66	1.2%	\$0.04	\$0.07					
15.0%	55.67	0.33	0.6%	\$0.02	\$0.04					
15.5%	56.00						0.14	\$0.08		
16.0%	56.33						1.4	\$0.09		
16.5%	56.67						1.4	\$0.10		
17.0%	57.01						2.8	\$0.11		
17.5%	57.35						2.8	\$0.12		
18.0%	57.70						4.2	\$0.13		
18.5%	58.06						4.2	\$0.14		
19.0%	58.41						5.6	\$0.15		
19.5%	58.78						5.6	\$0.17		
									DAMAGED %	DISCOUNT PER BUSHEL
									5.1-6	\$0.01
									6.1-7	\$0.02
									7.1-8	\$0.04
									8.1-9	\$0.06
									9.1-10	\$0.08
									10.1-11	\$0.13
									11.1-12	\$0.18
									12.1-13	\$0.23
									13.1-14	\$0.28
									SOUR LOADS	\$0.05/BUSHEL

## SOYBEANS

BULLSEYE CONTROLLER								GRAIN SPREADER					
MOISTURE PERCENTAGE	60 LBS. @ 13.0% MOISTURE	LBS. PER BUSHEL LOST	% LOSS PER BUSHEL	\$ LOSS BASED ON \$10/BU.	\$ LOSS BASED ON \$13/BU.	EXCESS MOISTURE SHRINK %	DISCOUNT PER BU. DRYING COST	FM %	DISCOUNT PER BUSHEL	DAMAGE %	COST PER BU.	HEAT DAMAGE	
6.0%	55.53	4.47	7.5%	\$0.75	\$0.97			1	\$0.01	2-2.5	\$0.02	%	\$ per bu.
7.0%	56.13	3.87	6.5%	\$0.65	\$0.84			2	\$0.13	2.5-3	\$0.04	1	\$0.04
8.0%	56.74	3.26	5.4%	\$0.54	\$0.71			2.5	\$0.20	3.5-4	\$0.06	2	\$0.08
9.0%	57.36	2.64	4.4%	\$0.44	\$0.57			3	\$0.26	4.5-5	\$0.08	3	\$0.12
10.0%	58.00	2.00	3.3%	\$0.33	\$0.43			3.5	\$0.35	5.5-6	\$0.10	4	\$0.16
11.0%	58.65	1.35	2.3%	\$0.23	\$0.29			4	\$0.39	6.5-7	\$0.12	5	\$0.20
12.0%	59.32	0.68	1.1%	\$0.11	\$0.15			4.5	\$0.46	7.5-8	\$0.14	6	\$0.24
13.0%	60.00					1.5	\$0.20	5	\$0.52	8.5-9	\$0.16	7	\$0.28
14.0%	60.70					3.0	\$0.39	5.5	\$0.59	9.5-10	\$0.18	8	\$0.32
15.0%	61.41					9.0	\$1.17	6	\$0.65	10.5-11	\$0.20		

### COST TO OVER DRY SOYBEANS

<b>GRAIN INPUTS</b> COMMODITY <b>SOYBEANS</b> TARGET MOISTURE <b>13.0</b> OVER DRIED TO <b>10.0</b> AMOUNT OF GRAIN <b>50000</b> CURRENT PRICE <b>\$10.00</b>	<b>ELECTRICITY INPUTS</b> TOTAL FAN HP <b>50</b> FAN MOTOR EFFICIENCY <b>90%</b> ESTIMATED TIME FAN IS ON WHEN IT SHOULDN'T BE <b>300 HOURS</b> ELECTRICITY COST PER KILOWATT HOUR <b>0.1</b>	<b>SHRINK LOSS</b> SOYBEANS SHRINK FACTOR 1.00% PER POINT PERCENT LOSS <b>3.00%</b> <b>50000 X</b> LOSS IN BUSHEL <b>1500.0</b> <b>\$10.00 X</b> <b>\$15,000.00</b>	<b>ELECTRICITY COSTS</b> <b>12433.3</b> KW/HRS <b>0.10 X</b> <b>\$1,243.00</b>	<b>TOTAL COST OF SHRINK AND ELECTRICITY</b> <b>= \$16,243.33</b> COST OF AGRIDRY EQUIPMENT = \$8500.00 YEARS TO ROI = 0.5 5 YEAR ROI = \$72,716.67 10 YEAR ROI = 153,933.33
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### AGRIDRY GRAVITY GRAIN SPREADERS

MODEL	APPLICATION (BIN DIAMETER)	CAPACITY	# OF CHUTES	APPROXIMATE WEIGHT	LEVELING BAND DIA.	HOPPER SIZE	CHUTE SIZE
<b>4-3000</b>	15' - 21'	Up to 4,000 BPH	8	138 lbs.	10"	18" x 11"	6"
<b>8-3000</b>	24' - 27'	Up to 4,000 BPH	8	230 lbs.	10"	18" x 11"	6"
<b>10-3000</b>	30' - 33'	Up to 4,000 BPH	8	319 lbs.	10"	18" x 11"	6"
<b>12-3000</b>	36' - 41'	Up to 4,000 BPH	8	363 lbs.	10"	18" x 11"	6"
<b>16-3000 *</b>	42' - 120'	Up to 4,000 BPH	8	491 lbs.	10"	18" x 11"	6"
<b>4-5000</b>	15' - 21'	Up to 8,000 BPH	8	266 lbs.	12"	18" x 11"	8"
<b>8-5000</b>	24' - 27'	Up to 8,000 BPH	8	360 lbs.	12"	18" x 11"	8"
<b>10-5000</b>	30' - 33'	Up to 8,000 BPH	8	420 lbs.	12"	18" x 11"	8"
<b>12-5000</b>	36' - 41'	Up to 8,000 BPH	8	454 lbs.	12"	18" x 11"	8"
<b>16-5000 *</b>	42' - 120'	Up to 8,000 BPH	8	638 lbs.	12"	18" x 11"	8"
<b>4-12000</b>	15' - 21'	Up to 12,000 BPH	8	271 lbs.	12"	24" x 15"	8"
<b>8-12000</b>	24' - 27'	Up to 12,000 BPH	8	365 lbs.	12"	24" x 15"	8"
<b>10-12000</b>	30' - 33'	Up to 12,000 BPH	8	425 lbs.	12"	24" x 15"	8"
<b>12-12000</b>	36' - 41'	Up to 12,000 BPH	8	459 lbs.	12"	24" x 15"	8"
<b>16-12000 *</b>	42' - 120'	Up to 12,000 BPH	8	643 lbs.	12"	24" x 15"	8"
<b>16-2-10000</b>	90' - 135'	Up to 8,000 BPH	2 Levels of 8	1,245 lbs.	12"	18" x 11"	8"
<b>16-2-12000</b>	90' - 135'	Up to 12,000 BPH	2 Levels of 8	1,245 lbs.	12"	24" x 15"	8"
<b>16-2-20000</b>	90' - 135'	Up to 24,000 BPH	2 Levels of 8	1,275 lbs.	16"	24" x 15"	8"
<b>16-2-40000</b>	90' - 135'	Up to 40,000 BPH	2 Levels of 8	2,750 lbs.	26"	36" x 24"	10"

\* Extension chutes may be added for hot or wet grain to assist with spreading to the eave.

# COMPLETE YOUR GSI SYSTEM

WWW.GRAINSYSTEMS.COM



## 40-SERIES™ GRAIN BINS

When determining the best system for your operation, we know that what is protected inside the bin is what counts the most. Every product we design, engineer and build is based on this foundation.



## TOPDRY

Grain in the overhead chamber is dried by a large fan and heater then dumped to a holding area below. An aeration fan below captures heat from this previously dried grain, and pushes it upward to help dry the next load. This recycling of heat increases efficiency, which greatly reduces drying costs.



## MATERIAL HANDLING

GSI's material handling line includes bucket elevators, chain conveyors, belt conveyors, bin unloads, and chain loops. Also available are towers, catwalks, and support structures.



## GLOBAL SOLUTIONS. LOCAL SUPPORT.

GSI and AgriDry Dealers alike share the same passion and commitment to our customers. AgriDry Dealers understand down time is not an option, construction schedules must be met. From site planning to installation and service, AgriDry Dealers are the proven partners for your operation. When you buy GSI, you get the quality product of a worldwide leader and the dependable service of your local Dealership.

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