



## Top Dry Systems

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# Limited Warranty

The GSI Group, LLC. ("GSI") warrants products which it manufactures to be free of defects in materials and workmanship under normal usage and conditions for a period of 12 months after sale to the original end-user or if a foreign sale, 14 months from arrival at port of discharge, whichever is earlier. The end-user's sole remedy (and GSI's only obligation) is to repair or replace, at GSI's option and expense, products that in GSI's judgment, contain a material defect in materials or workmanship. Expenses incurred by or on behalf of the end-user without prior written authorization from the GSI Warranty Group shall be the sole responsibility of the end-user.

**Warranty Extensions:** The Limited Warranty period is extended for the following products:

	Product	Warranty Period
<b>AP Fans and Flooring</b>	Performer Series Direct Drive Fan Motor	3 Years
	All Fiberglass Housings	Lifetime
	All Fiberglass Propellers	Lifetime
<b>Cumberland Feeding/Watering Systems</b>	Feeder System Pan Assemblies	5 Years **
	Feed Tubes (1.75" & 2.00")	10 Years *
	Centerless Augers	10 Years *
	Watering Nipples	10 Years *
<b>Grain Systems</b>	Grain Bin Structural Design	5 Years
<b>Grain Systems Farm Fans Zimmerman</b>	Portable & Tower Dryers	2 Years
	Portable & Tower Dryer Frames and Internal Infrastructure †	5 Years

\* Warranty prorated from list price:  
 0 to 3 years – no cost to end-user  
 3 to 5 years – end-user pays 25%  
 5 to 7 years – end-user pays 50%  
 7 to 10 years – end user pays 75%

\*\* Warranty prorated from list price:  
 0 to 3 years – no cost to end-user  
 3 to 5 years – end-user pays 50%

† Motors, burner components and moving parts not included. Portable Dryer screens included. Tower Dryer screens not included.

GSI further warrants that the portable and tower dryer frame and basket, excluding all auger and auger drive components, shall be free from defects in materials for a period of time beginning on the twelfth (12<sup>th</sup>) month from the date of purchase and continuing until the sixtieth (60<sup>th</sup>) month from the date of purchase (extended warranty period). During the extended warranty period, GSI will replace the frame or basket components that prove to be defective under normal conditions of use without charge, excluding the labor, transportation, and/or shipping costs incurred in the performance of this extended warranty.

### Conditions and Limitations:

THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE LIMITED WARRANTY DESCRIPTION SET FORTH ABOVE. SPECIFICALLY, GSI MAKES NO FURTHER WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE IN CONNECTION WITH: (i) PRODUCT MANUFACTURED OR SOLD BY GSI OR (ii) ANY ADVICE, INSTRUCTION, RECOMMENDATION OR SUGGESTION PROVIDED BY AN AGENT, REPRESENTATIVE OR EMPLOYEE OF GSI REGARDING OR RELATED TO THE CONFIGURATION, INSTALLATION, LAYOUT, SUITABILITY FOR A PARTICULAR PURPOSE, OR DESIGN OF SUCH PRODUCTS.

GSI shall not be liable for any direct, indirect, incidental or consequential damages, including, without limitation, loss of anticipated profits or benefits. The sole and exclusive remedy is set forth in the Limited Warranty, which shall not exceed the amount paid for the product purchased. This warranty is not transferable and applies only to the original end-user. GSI shall have no obligation or responsibility for any representations or warranties made by or on behalf of any dealer, agent or distributor.

GSI assumes no responsibility for claims resulting from construction defects or unauthorized modifications to products which it manufactured. Modifications to products not specifically delineated in the manual accompanying the equipment at initial sale will void the Limited Warranty.

This Limited Warranty shall not extend to products or parts which have been damaged by negligent use, misuse, alteration, accident or which have been improperly/inadequately maintained. This Limited Warranty extends solely to products manufactured by GSI.

Prior to installation, the end-user has the responsibility to comply with federal, state and local codes which apply to the location and installation of products manufactured or sold by GSI.

# Specifications & Drying Rates

**U.S Measurements (Shelled Corn)**

Bin Diameter	Batch		Autoflow			Rings	Eave Height	Peak Height	Batch	
	Batch Size (BU)	Grain in Process (BU)	Dump Size (BU)	Maximum Storage (BU)	Maximum Storage (BU)					
24'	1,000	560	187	5	18'-5"	25'-0"	4,813	4,373		
				6	22'-1"	28'-8"	6,198	5,758		
				7	25'-9"	32'-4"	7,583	7,143		
				8	29'-5"	36'-0"	8,968	8,528		
				9	33'-1"	39'-8"	10,353	9,913		
				10	36'-9"	43'-4"	11,738	11,298		
30'	1,500	845	282	5	18'-5"	26'-9"	7,459	6,804		
				6	22'-1"	30'-5"	9,623	8,968		
				7	25'-9"	34'-1"	11,787	11,132		
				8	29'-5"	37'-9"	13,951	13,296		
				9	33'-1"	41'-5"	16,115	15,460		
				10	36'-9"	45'-1"	18,279	17,624		
36'	2,160	1,215	405	6	22'-1"	32'-6"	13,859	12,914		
				7	25'-9"	36'-2"	16,974	16,029		
				8	29'-5"	39'-10"	20,089	19,144		
				9	33'-1"	43'-6"	23,204	22,259		
				10	36'-9"	47'-2"	26,319	25,374		
				11	40'-5"	50'-10"	29,434	28,489		

Note: Maximum storage is estimated with 12" aeration floor, level to bottom of fan entrance, with upper batch filled.

**Metric Measurements (Shelled Corn)**

Bin Diameter	Batch		Autoflow			Rings	Eave Height	Peak Height	Batch	
	Batch Size (MT)	Grain in Process (MT)	Dump Size (MT)	Maximum Storage (MT)	Maximum Storage (MT)					
7.32 m (24')	25.4	14.22	4.75	5	5.61 m	7.62 m	122.25	111.07		
				6	6.73 m	8.74 m	157.43	146.25		
				7	7.85 m	9.86 m	192.61	181.43		
				8	8.97 m	10.97 m	227.79	216.61		
				9	10.08 m	12.09 m	262.97	251.79		
				10	11.20 m	13.21 m	298.15	286.97		
9.14 m (30')	38.1	21.46	7.16	5	5.61 m	8.15 m	189.46	172.82		
				6	6.73 m	9.27 m	244.42	227.79		
				7	7.85 m	10.39 m	299.39	282.75		
				8	8.97 m	11.51 m	354.36	337.72		
				9	10.08 m	12.62 m	409.32	392.68		
				10	11.20 m	13.74 m	464.28	447.65		
10.97 m (36')	54.86	30.86	10.29	6	6.73 m	9.91 m	352.02	328.02		
				7	7.85 m	11.02 m	431.14	407.14		
				8	8.97 m	12.14 m	510.26	486.26		
				9	10.08 m	13.26 m	589.38	565.38		
				10	11.20 m	14.38 m	668.50	644.50		
				11	12.32 m	15.49 m	747.63	723.62		

Note: Maximum storage is estimated with 12" aeration floor, level to bottom of fan entrance, with upper batch filled.

April 4, 2011

**Batch Series - Shelled Corn  
(U.S. Measurements)**

Batch Series			24' Dia. 1-Fan		30' Dia. 1-Fan		30' Dia. 2-Fan		36' Dia. 1-Fan		36' Dia. 2-Fan	
Fan & Heater Unit(s)	Plenum Temperature F°	Moisture Content Wet Basis	Bu/Hr	Batch Time Hours	Bu/Hr	Batch Time Hours	Bu/Hr	Batch Time Hours	Bu/Hr	Batch Time Hours	Bu/Hr	Batch Time Hours
15 H.P. 36" Fan  3.5 Million BTU	140	20%	398	2.5	4.61	3.3	728	1.9	521	4.1	841	2.6
		25%	252	3.8	292	5.1	461	3.3	330	6.5	533	4.0
		30%	157	6.1	182	8.2	288	5.2	206	10.4	333	6.5
	160	20%	474	2.0	550	2.8	869	1.8	622	3.4	1004	2.1
		25%	300	3.2	348	4.4	550	2.7	394	5.4	636	3.4
		30%	178	5.2	218	6.8	344	4.4	246	8.7	397	5.4
		20%	607	1.6	677*	2.4*	1,112	1.4	694*	3.4*	1,284	1.6
		25%	384	2.6	429*	3.7*	704	2.1	440*	5.2*	814	2.7
		30%	240	4.0	268*	6.0*	440	3.4	274*	8.3*	508	4.2
15 H.P. 40" Fan  6.25 Million BTU	140	20%	486	2.0	562	2.7			650	3.3	1,022	2.1
		25%	308	3.1	356	4.2			411	5.2	647	3.3
		30%	192	4.9	222	6.7			257	8.4	404	5.3
	160	20%	580	1.6	670	2.2			775	2.8	1,219	1.8
		25%	367	2.6	425	3.5			491	4.4	772	2.8
		30%	230	4.2	265	5.6			306	7.1	482	4.5
		20%	742	1.3	858	1.8			890*	2.6*	1,560	1.4
		25%	470	2.0	543	2.7			564*	4.1*	988	2.2
		30%	294	3.3	339	4.4			352*	6.5*	617	3.5
30 H.P. Fan  10.25 Million BTU	140	20%			638	2.4			717	2.9	1,142	1.9
		25%			405	3.6			454	4.7	723	2.9
		30%			253	5.9			284	7.5	452	4.7
	160	20%			762	2.0			856	2.5	1,363	1.5
		25%			482	3.1			542	4.0	863	2.5
		30%			302	4.9			338	6.4	539	4.0
		20%			975	1.5			1,095	2.0	1,744	1.3
		25%			618	2.4			694	3.1	1,105	2.0
		30%			386	3.9			433	4.9	690	3.2
40 H.P. 42" Fan  10.25 Million BTU	140	20%			726	2.1			810	2.7		
		25%			460	3.3			513	4.2		
		30%			287	5.2			320	6.7		
	160	20%			867	1.8			966	2.2		
		25%			549	2.7			612	3.5		
		30%			343	4.4			382	5.6		
		20%			1,110	1.4			1,236	1.8		
		25%			702	2.1			783	2.7		
		30%			439	3.4			489	4.4		

\* Insufficient burner BTUs for 45 deg. ambient temp rating exclude loading time.

Est. at temp 45 deg. F, rel. humidity 65%  
Use only as a guide, conditions will vary capacities.

1/3 CFM/bu cooling rate



### Autoflow Series - Shelled Corn (U.S. Measurements)

Autoflow Series			24' Dia. 1-Fan		30' Dia. 1-Fan		30' Dia. 2-Fan		36' Dia. 1-Fan		36' Dia. 2-Fan	
Fan & Heater Unit(s)	Plenum Temperature F°	Moisture Content Wet Basis	Bu/Hr	Dump Interval Min	Bu/Hr	Dump Interval Min	Bu/Hr	Dump Interval Min	Bu/Hr	Dump Interval Min	Bu/Hr	Dump Interval Min
15 H.P. 36" Fan  3.5 Million BTU	160	20%	528	21.6	557	31.9	939	18.9			993	25.8
		25%	334	34.1	353	50.4	595	29.9			629	40.7
		30%	209	54.6	220	80.8	371	47.9			393	65.2
	180	20%	675*	16.8*	713*	24.9*	1,202	14.8			1,271	20.1
		25%	428*	26.6*	451*	39.4*	761	23.4			805	31.8
		30%	267*	42.6*	282*	63.1*	475	37.4			503	51.0
	200	20%	791*	14.4*	835*	21.3*	1,407*	12.6*			1,488*	17.2*
		25%	501*	22.7*	529*	33.6*	891*	19.9*			943*	27.2*
		30%	313*	36.4*	330*	53.9*	557*	32.0*			589*	43.5*
15 H.P. 40" Fan  6.25 Million BTU	160	20%	648	17.5	711	25.0	1,154	15.4			1,269	20.2
		25%	411	27.7	450	39.5	731	24.3			803	31.9
		30%	256	44.4	281	63.3	457	39.0			502	51.1
	180	20%	830*	13.7*	909*	19.5*	1,477	12.0			1,623	15.8
		25%	525*	21.6*	576*	30.9*	936	19.0			1,028	24.9
		30%	328*	34.7*	360*	49.5*	584	30.4			642	39.9
	200	20%	971*	11.7*	1,065*	16.7*	1,730*	10.2*			1,901*	13.4*
		25%	615*	18.5*	674*	26.4*	1,096*	16.2*			1,204*	21.3*
		30%	384*	29.6*	421*	42.2*	684*	26.0*			752*	34.1*
30 H.P. 42" Fan  10.25 Million BTU	160	20%	740	15.4	806	22.0			819	31.3	1,452	17.6
		25%	469	24.3	511	34.8			519	49.4	920	27.8
		30%	293	38.9	319	55.8			324	79.1	574	44.6
	180	20%	947	12.0	1,032	17.2			1,048	24.4	1,858	13.8
		25%	600	19.0	653	27.2			664	38.6	1,177	21.7
		30%	375	30.4	408	43.6			415	61.8	735	34.8
	200	20%	1,109	10.2	1,208	14.7			1,227	20.8	2,176	11.7
		25%	702	16.2	765	23.2			777	32.9	1,378	18.6
		30%	439	25.9	478	37.2			486	52.8	861	29.8
40 H.P. 42" Fan  10.25 Million BTU	160	20%			920	19.3			950	26.9		
		25%			583	30.5			602	42.6		
		30%			364	48.9			376	68.2		
	180	20%			1,178	15.1			1,216	21.0		
		25%			746	23.8			770	33.3		
		30%			466	38.2			481	53.3		
	200	20%			1,379	12.9			1,424	18.0		
		25%			873	20.3			902	28.4		
		30%			545	32.6			563	45.5		

\* Insufficient burner BTUs for 45 deg. ambient temp rating exclude loading time.

Est. at temp 45 deg. F, rel. humidity 65%  
Use only as a guide, conditions will vary capacities.

1/3 CFM/bu cooling rate



**Batch Series - Shelled Corn  
(Metric Measurements)**

Batch Series			7.32m Dia. 1-Fan		9.14m Dia. 1-Fan		9.14m Dia. 2-Fan		10.97 Dia. 1-Fan		10.97 Dia. 2-Fan		
Fan & Heater Unit(s)	Plenum Temperature C°	Moisture Content Wet Basis	Bu/Hr	Batch Time Hours	Bu/Hr	Batch Time Hours	Bu/Hr	Batch Time Hours	Bu/Hr	Batch Time Hours	Bu/Hr	Batch Time Hours	
11.19 kW 91.44 cm  1.125 Million kCal	60	20%	10.1	2.5	11.7	3.3	18.5	1.9	13.2	4.1	21.4	2.6	
		25%	6.4	3.8	7.4	5.1	11.7	3.3	8.2	6.5	13.5	4.0	
		30%	4.0	6.1	4.6	8.2	7.2	5.2	5.2	10.4	8.5	6.5	
	71	20%	12.0	2.0	14.0	2.8	22.1	1.8	15.8	3.4	25.5	2.1	
		25%	7.6	3.2	8.8	4.4	14.0	2.7	10.0	5.4	16.2	3.4	
		30%	4.8	5.2	5.5	6.8	8.7	4.4	6.2	8.7	10.1	5.4	
		82	20%	15.4	1.6	17.2	2.4*	28.2	1.4	17.6	3.4*	32.6	1.6
			25%	9.8	2.6	10.9	3.7*	17.9	2.1	11.2	5.2*	20.7	2.7
			30%	6.1	4.0	6.8	6.0*	11.2	3.4	7.0	8.3*	12.9	4.2
11.19 kW 101.6 cm  1.125 Million kCal	140	20%	12.3	2.0	14.3	2.4			16.5	3.3	25.9	2.1	
		25%	7.8	3.1	9.0	4.2			10.4	5.2	16.4	3.3	
		30%	4.9	4.9	5.6	6.7			6.5	8.4	10.3	5.3	
	160	20%	14.7	1.6	17.0	2.2			19.7	2.8	31.0	1.8	
		25%	9.3	2.6	10.8	3.5			12.5	4.4	19.6	2.8	
		30%	5.8	4.2	6.7	5.6			7.8	7.1	12.3	4.5	
		180	20%	18.9	1.3	21.8	1.8			22.6*	2.6*	39.6	1.4
			25%	11.9	2.0	13.8	2.7			14.3*	4.1*	25.1	2.2
			30%	7.5	3.3	8.6	4.4			8.9*	6.5*	15.7	3.5
22.37 kW 106.6 cm  1.125 Million kCal	140	20%			16.2	2.4			18.2	2.9	29.0	1.9	
		25%			10.3	3.6			11.5	4.7	18.4	2.9	
		30%			6.4	5.9			7.2	7.5	11.5	4.7	
	160	20%			19.4	2.0			21.7	2.5	34.6	1.5	
		25%			12.3	3.1			13.8	4.0	21.9	2.5	
		30%			7.7	4.9			8.6	6.4	13.7	4.0	
		180	20%			24.8	1.5			27.2	2.0	44.3	1.3
			25%			15.7	2.4			17.6	3.1	28.1	2.0
			30%			9.8	3.9			11.0	4.9	17.5	3.2
29.83 kW 106.6 cm  2.5 Million kCal	140	20%			18.5	2.1			20.6	2.7			
		25%			11.7	3.3			13.0	4.2			
		30%			7.3	5.2			8.1	6.7			
	160	20%			22.0	1.8			24.5	2.2			
		25%			13.9	2.7			15.5	3.5			
		30%			8.7	4.4			9.7	5.6			
		180	20%			28.2	1.4			31.4	1.8		
			25%			17.8	2.1			19.9	2.7		
			30%			11.2	3.4			12.4	4.4		

\* Insufficient burner BTUs for 45 deg. ambient temp rating exclude loading time.

Est. at temp 45 deg. F, rel. humidity 65%  
Use only as a guide, conditions will vary capacities.

1/3 CFM/bu cooling rate



### Autoflow Series - Shelled Corn (Metric Measurements)

Autoflow Series			7.32m Dia. 1-Fan		9.14m Dia. 1-Fan		9.14 Dia. 2-Fan		10.97 Dia. 1-Fan		10.97m Dia. 2-Fan	
Fan & Heater Unit(s)	Plenum Temperature C°	Moisture Content Wet Basis	Bu/Hr	Dump Interval Min	Bu/Hr	Batch Time Hours	Bu/Hr	Batch Time Hours	Bu/Hr	Batch Time Hours	Bu/Hr	Batch Time Hours
11.19 kW 91.44 cm  1.125 Million kCal	60	20%	13.4	21.6	14.1	31.9	23.9	18.9			25.2	25.8
		25%	8.5	34.1	9.0	50.4	15.1	29.9			16.0	40.7
		30%	5.3	54.6	5.6	80.8	9.4	47.9			10.0	65.2
	71	20%	17.1	16.8*	18.1	24.9*	30.5	14.8			32.3	20.1
		25%	10.9	26.6*	11.5	39.4*	19.3	23.4			20.4	31.8
		30%	6.8	42.6*	7.2	63.1*	12.1	37.4			12.8	51.0
	82	20%	20.1	14.4*	21.2	21.3*	35.7	12.6*			37.8	17.2*
		25%	12.7	22.7*	13.4	33.6*	22.6	19.9*			24.0	27.2*
		30%	8.0	36.4*	8.4	53.9*	14.1	32.0*			15.0	43.5*
11.19 kW 101.6 cm  1.125 Million kCal	140	20%	16.5	17.5	18.1	25.0	29.3	15.4			32.2	20.2
		25%	10.4	27.7	11.4	39.5	18.6	24.3			20.4	31.9
		30%	6.5	44.4	7.1	63.3	11.6	39.0			12.8	51.1
	160	20%	21.1*	13.7*	23.1*	19.5*	37.5	12.0			41.2	15.8
		25%	13.3*	21.6*	14.6*	30.9*	23.8	19.0			26.1	24.9
		30%	8.3*	34.7*	9.1*	49.5*	17.8	30.4			16.3	39.9
	180	20%	24.7*	11.7*	27.1*	16.7*	43.9*	10.2*			48.3*	13.4*
		25%	15.6*	18.5*	17.1*	26.4*	27.8*	16.2*			30.6*	21.3*
		30%	9.8*	29.6*	10.7*	42.2*	17.4*	26.0*			19.1*	34.1*
22.37 kW 106.6 cm  1.125 Million kCal	140	20%	18.8	15.4	20.5	22.0			20.8	31.3	36.9	17.6
		25%	11.9	24.3	13.0	34.8			13.2	49.4	23.4	27.8
		30%	7.4	38.9	8.1	55.8			8.2	79.1	14.6	44.6
	160	20%	21.1	12.0	26.2	17.2			26.6	24.4	47.2	13.8
		25%	15.2	19.0	16.6	27.2			16.9	38.6	29.9	21.7
		30%	9.5	30.4	10.4	43.6			10.5	61.8	18.7	34.8
	180	20%	28.2	10.2	30.7	14.7			31.2	20.8	55.3	11.7
		25%	17.8	16.2	19.4	23.2			19.7	32.9	35.0	18.6
		30%	11.2	25.9	12.1	37.2			12.3	52.8	21.9	29.8
29.83 kW 106.6 cm  2.5 Million kCal	140	20%			23.4	19.3			24.1	26.9		
		25%			14.8	30.5			15.3	42.6		
		30%			9.2	48.9			9.6	68.2		
	160	20%			29.9	15.1			30.9	21.0		
		25%			18.9	23.8			19.6	33.3		
		30%			11.8	38.2			12.2	53.3		
	180	20%			35.0	12.9			36.2	18.0		
		25%			22.2	20.3			36.2	18.0		
		30%			13.8	32.6			14.3	45.5		

\* Insufficient burner BTUs for 45 deg. ambient temp rating exclude loading time.

Est. at temp 45 deg. F, rel. humidity 65%  
Use only as a guide, conditions will vary capacities.

1/3 CFM/bu cooling rate

## Conversion Rates (All Series)

Crop (Common Types)	Plenum Temperature Recommended	Conversion Formula (time) New Production Rate	Conversion Formula (bu) New Production Rate
Canola	140° F	(corn dry time) x 1.60	(corn drying capacity) x 0.60
Corn	180° F	dry time given in specs.	drying capacity given in specs.
White Corn	140° F	(corn dry time) x 1.45	(corn drying capacity) x 0.45
Milo / Sorghum	140° F	(corn dry time) x 1.60	(corn drying capacity) x 0.60
Soybean	150° F	(corn dry time) x 1.55	(corn drying capacity) x 0.55
Sunflower	140° F	(corn dry time) x 0.75	(corn drying capacity) x 1.75
Wheat	160° F	(corn dry time) x 1.60	(corn drying capacity) x 0.60

Crop (Common Types)	Conversion to Metric Tons Conversion from bushels to Metric Tons
Canola	1 Metric Ton (@ 56 lb / bu) = 39 bu
Corn	1 Metric Ton (@ 56 lb / bu) = 39 bu
White Corn	1 Metric Ton (@ 56 lb / bu) = 39 bu
Milo / Sorghum	1 Metric Ton (@ 56 lb / bu) = 39 bu
Soybean	1 Metric Ton (@ 60 lb / bu) = 36.75 bu
Sunflower	1 Metric Ton (@ 32 lb / bu) = 68.9 bu
Wheat	1 Metric Ton (@ 60 lb / bu) = 36.75 bu