

# Aeration Systems

# THE NEXT GENERATION ROCKET

Since 2007, our research and development team has been working to improve our Classic Rocket design. The result – an innovative, stronger, and even more reliable Rocket. We are pleased to present The Next Generation Rocket.

### New Design

- Smooth louvered surface allows for cleaner unloading
- 4% up to 8% more louvered surface area (depending on model) than the Classic Rocket
- Improved performance through re-design to provide more air delivery to the center of the hopper, where air is most difficult to move
- New re-designed side legs and internal support rings provide greater structural strength, up to 125% greater than the Classic Rocket
- Improved design results in increased vertical loading up to 30' in grain height, up to 40' on the commercial rocket
- 3 leg design provides better stability in the bin
- New design allows the installation of the Next Generation Rocket into commercial applications by simply adding extras legs, up to five on the 7000 series and up to eight on the 8000 series
- The Next Generation Rocket is a result of 5 years of field testing

### Next Generation Rocket Leg Design

- Extended legs reach up to top reinforcing rings (¾ up rocket length) to provide a much stronger structure
- Additional leg along with new design allows for increased stability during irregular grain flows while unloading the bin
- Shipped with new fold-up legs attached, thus eliminating difficult field assembly

### Laser Cut Internal Ring

- Designed for increased structural strength of the Next Generation Rocket
- More robust design withstands increased side loads due to irregular grain flow during unloading of the bin

GRAIN GUARD NEXT GENERATION ROCKET AERATION SPECIFICATIONS							
Part #	Description	Total Sq. Ft	Total Louvered Area (Sq. Ft)	Airflow Capacity @1200cfm/sq ft	Recommended Structural Capacity (bu)	Bin Wall Height (FT)	Weight LBS.
GGR-8736	6000 6' Next Gereration Rocket	23.50	19.80	3,000	2,500	15	226
GGR-8737	7000 4' Next Generation Rocket	52.30	49.30	6,000	3,500	30	298
GGR-8738	7000 6' Next Generation Rocket	78.50	73.60	7,000	5,000	30	356
GGR-8739	7000 8' Next Generation Rocket	104.60	97.90	9,000	6,000	30	428
GGR-8740	8000 4' Next Generation Rocket	78.50	72.78	9,000	7,000	30	426
GGR-8741	8000 6' Next Generation Rocket	117.70	110.28	11,000	8,000	30	565
GGR-8742	8000 8' Next Generation Rocket	156.90	145.21	13,500	10,000	30	699
GGR-8743	8000 4' Commercial Rocket	78.50	72.78	9,000	15,000	40	521
GGR-8744	8000 6' Commercial Rocket	117.70	110.28	11,000	20,000	40	671
GGR-8745	8000 8' Commercial Rocket	156.90	145.21	13,500	25,000	40	815







# THE RETRO ROCKET

### Hopper bottom bins without aeration? It's not too late to dry your grain!

The revolutionary Retro Rocket is the only do-it-yourself rocket system that allows you to retrofit existing hopper bottom and smooth-walled bins with farm proven Grain Guard aeration.

### The Retro Rocket Features:

- Easy, two person "do-it-yourself" installation
- Retro fits your existing smooth-walled or bolt together hopper bottom bin with the market's top performing aeration system
- Delivers air to the center core of the bin where desired the most
- Lightweight computer modeled, farm tested design
- Unique folding design allows unit to be placed inside bin with minimal effort
- Unit features simple detachable hinges, allowing it to come apart and fit through smaller bin openings one section at a time, as well as quick reassembly and installation once inside the bin
- The same performance and advantages of the Classic double walled Rocket
- A more robust three leg design for increased resistance to side loads resulting from uneven grain flow when unloading the bin







GRAIN GUARD RETRO ROCKET AERATION SPECIFICATIONS							
Part #	Description	Total Sq. Ft	Total Louvered Area (Sq. Ft)	Airflow Capacity @1200cfm/sq ft	Recommended Structural Capacity (bu)	Bin Wall Height (FT)	Weight LBS.
GRS-7004	7000 4' Retro Rocket	54.00	46.10	5000	5000	30	406
GRS-7006	7000 6' Retro Rocket	81.00	70.10	7000	7000	30	530

### **Horizontal Duct System**

Available in 18" and 24" diameters, the Grain Guard Next Generation Aeration Tube is ideal for conditioning and coolin grain. The new design includes laser-cut internal rings providing increased strength, as well as downward facing louvers that provide improved cleanout. The Next Generation Aeration Tube is also now available in 3', 4', 6', 7' and 8' sections that will adapt to more hopper bin diameters.

GRAIN GUARD HORIZONTAL AERATION TUBE SPECIFICATIONS					
System	Part #	Description	Total Sq. Ft	Total Louvered Area (Sq. Ft)	Airflow Capacity @1200cfm/sq ft
GG-9000 3'	GGR-8137	17.5" x 3' Louvered Duct	13.75	11.75	916
GG-9000 4'	GGR-8138	17.5" x 4' Louvered Duct	18.80	15.90	1240
GG-9000 6'	GGR-8139	17.5" x 6' Louvered Duct	27.50	23.50	1833
GG-9000 7'	GGR-8140	17.5" x 7' Louvered Duct	32.55	27.50	2152
GG-9000 8'	GGR-8141	17.5" x 8' Louvered Duct	37.60	31.80	2480
GG-10000 3'	GGR-8129	23.5" x 3' Louvered Duct	18.40	15.60	1216
GG-10000 4'	GGR-8130	23.5" x 4' Louvered Duct	25.00	21.20	1653
GG-10000 6'	GGR-8131	23.5" x 6' Louvered Duct	37.00	31.50	2457
GG-10000 7'	GGR-8132	23.5" x 7' Louvered Duct	43.40	36.80	2870
GG-10000 8'	GGR-8133	23.5" x 8' Louvered Duct	50	42.50	3315

\*Grain Height dependant on support framework \*Cradle and inlet are not included with Aeration Tubes

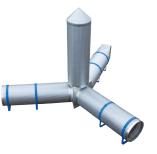
### 15" Full Round Duct System

The full round duct system is an aeration alternative for flat bottom storage.

- The Rocket penetrates the center of the bin to release air into the core
- Fan efficiency is increased by as much as 20%
- Static pressure is lowered
- Drying time is reduced by as much as 50%
- Floor ducts push air down towards the floor and out towards the bin walls

GRAIN GUARD FLAT FLOOR ROCKET 15" ROUND TUBE DUCT SYSTEM					
Part #	Description	Bin Size (Diameter)	Total Louvered Area (Sq. Ft)	Bin Wall Height (FT)	Weight LBS.
GGA-8400	Rocket Duct System	14	33	26	175
GGA-8403	Rocket Duct System	16	51	26	199
GGA-8409	Rocket Duct System	18	67	26	232
GGA-8406	Rocket Duct System	19	91	26	236
GGA-8412	Rocket Duct System	21	91	26	290
GGA-8418	Rocket Duct System	24	115	26	337
GGA-8421	Rocket Duct System	27	139	26	403
GGA-8424	Rocket Duct System	30	139	26	421

NOTE: All systems come standard with 9" x 14" inlet & 4' Rocket. Heavy-duty system to be used for grain depths greater than 26', up to 35'.

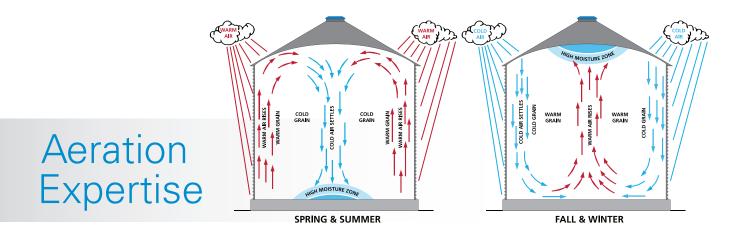


## INNOVATION IS OUR TRADITION

Farmers have trusted the dependable aeration expertise of Grain Guard for over 25 years. In that time, we have manufactured a premium range of fans and aeration products, with the goal of continual product improvement. The addition of Grain Guard's 4" wide corrugated bin line completes your grain storage system in one stop. Our latest aeration innovations include the revolutionary Retro Rocket, as well as the enhanced and stronger Next Generation Rocket. Both of these innovations allow farmers to effectively condition or natural air dry the grain in their new or existing hopper bins.

Grain Guard's state-of-the-art manufacturing and assembly facility employs the most advanced roll-forming equipment. Designed with end-user satisfaction in mind, our grain storage and conditioning equipment provide a complete grain storage management solution to farmers all over the world.





Conventional aeration systems only dry from the bottom up. Although effective in drying the bottom half, they often fall short of drying grain in the center and top half of the bin. As grain is augured into the bin, fines collect in the center resulting in a dense, packed core that is difficult for air to penetrate.

Grain Guard systems overcome this by:

- Forcing air into the center of the bin providing a drying front that conforms to pile of grain
- Reducing static pressure
- Increasing fan efficiency and reducing drying time

### **Quonset Systems**

- Custom designed to fit almost any size quonset
- Aeration and conditioning systems
- Cools hot grain to avoid spoilage

### **Wall Vents**

- Designed to enhance the aeration system by reducing static pressure in the bin
- Reduces drying time by removing moisture from the lower half of the bin
- Can be easily operated from the ground level with a unique rope system

### **Roof Vents**

- Round and Gooseneck Roof Vents available
- General Rule is 1 roof vent for every 1000 CFM of airflow provided by the fan

ROOF VENTS REQUIRED PER BIN				
Fan	Quantity			
3 HP	2			
5 HP	3			
7 HP	4			
10 HP	5			

### **Grain Guard Bins**

Grain Guard's line of 4" wide corrugated grain bins are manufactured using state-of-the-art technology and are available in diameters from 15' to 105' in flat bottom models, as well as 15' to 27' in hopper botom models. With an established catalog of aeration and conditioning equipment, high-quality grain storage bins are yet another solution provided by Grain Guard.Grain Guard bins stand up to the elements. Our wide corrugation bin line-up offers up to 684,000 bushels of flat bottom storage capacity and features a unique 1/2" corrugation depth and 3" high roof rib design, ensuring industry leading strength and stability.





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