

MERIDIAN

**SMOOTHWALL BINS
WESTERN**

SMOOTHWALL BINS



MERIDIAN

meridianmfg.com



Meridian sets the standard of excellence in the storage and handling industry. We continuously incorporate the latest technological innovations to meet our customers' ever-changing needs. Meticulous attention to quality and detail reflect the attitude and dedication of our highly skilled craftsmen, lending confidence to each Meridian customer of a superior and dependable product. Meridian's best references are the thousands of farmers and commercial customers who have experienced the quality and value of the Meridian family of products.

Meridian and many Meridian dealers have trucks and trailers specifically designed to deliver and setup bins on each customer's yard. Our experienced drivers and dealers ensure each bin is positioned just right and ready to use.

Meridian is continually investing in the latest technology, equipment and training programs in an ongoing effort to carefully design and develop a most efficient and durable product. Robots are utilized in highly repetitive and tight welding spots to ensure unsurpassed welding procedures.





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DEPENDABLE STORAGE

Our products are backed with a 10 year structural and 5 year paint warranty.



All our steel components and materials are designed and selected utilizing our suppliers' latest technology to ensure the best quality bin for each application. HSS (Hollow Structural Steel) tubing, leg bands, leg rings, bracing and sheeting are carefully selected for strength and milling, followed by rigorous cleaning and storage standards.



HIGHLIGHTS

- ▶ Twice the “salt spray rating” of regular powders
- ▶ Best in industry edge coverage on sharp surfaces
- ▶ Superior adhesion to all steel including seams and smooth surfaces
- ▶ Extra abrasion resistance
- ▶ Additional slip factor for improved product flow and cleanliness
- ▶ 10 year on structural integrity on SmoothWall hopper bins
- ▶ One year paint warranty for liquid and commercial SmoothWall hopper bins
- ▶ **Five year paint warranty on all other SmoothWall bins!**



DURABLE FINISH

All paints are not created equal. Our bins utilize a premium powder coating for maximum durability.

MULTI-PURPOSE BINS



MEETS ALL YOUR NEEDS

Meridian multi-purpose bins are the #1 choice for fertilizer storage in Agribusiness and On-farm.



VERSATILITY.

Used to handle and store fertilizer, grain, feed and seed and extends to coal and any other free-flowing, dry granular commodity. Meridian offers a variety of powder chemistry options including zinc and epoxies to ensure years of trouble free storage. Contact Meridian's sales team for any questions regarding our bins, including Series II, powder coating options and custom build requirements.

GREAT FEATURES. GREAT QUALITY

- ▶ HSS (hollow structural steel) legs and bracing
- ▶ Premium Rack-n-Pinion slide gate assembly with crank
- ▶ Complete sidewall and roof ladder
- ▶ 25" top opening
- ▶ Vented top lid – spring loaded and ground operated
- ▶ Min. 40 degree bottom cone and 35 degree roof cone
- ▶ 24" clearance under the slide gate
- ▶ Interior powder coat finish
- ▶ Stainless steel slide plate
- ▶ Retractable ladder

GRAINMAX BINS



SUPERIOR SELF CLEANING

Completely self-cleaning with no obstructions.



HIGH LEVEL PROTECTION.

GrainMax hopper bins offer top quality grain and seed storage at prices comparable to corrugated hopper combos. Without bolts and ribs, the GrainMax seamless interior allows for safe and easy unloading, while ensuring no seed or contaminants are trapped on the walls or joints.

Completely self-cleaning with no obstructions, GrainMax hopper bins are the safest and most efficient grain bins available. You and your family will appreciate the quality and safety of GrainMax, and the time and energy saved handling grain in a smooth-wall bin.

GREAT FEATURES. GREAT QUALITY

- ▶ HSS (hollow structural steel) legs and bracing
- ▶ Premium Rack-n-Pinion slide gate assembly with crank
- ▶ Complete sidewall and roof ladder
- ▶ 25" top opening
- ▶ Vented top lid – spring loaded and ground operated
- ▶ Min. 40 degree bottom cone and 35 degree roof cone
- ▶ 24" clearance under the slide gate
- ▶ Retractable ladder

FEED BINS





SAFETY FIRST. SIZED RIGHT.

Meridian feed bins are the perfect size to protect feed quality.

QUALITY & MANAGEMENT.

Meridian's SmoothWall Feed bins are designed with feed quality and management in mind. The advantage of Meridian's SmoothWall design is very evident in feed storage. Smooth cone and side-wall surfaces, without bolts or ribs, a bottom cone of 55 or 60 degrees, and our exclusive interior high slip factor powder coating, ensure feed discharge without hang ups and entrapments, thus reducing spoilage and unnecessary expenses.

GREAT FEATURES. GREAT QUALITY

- ▶ HSS (hollow structural steel) legs and bracing
- ▶ Complete sidewall and roof ladder
- ▶ Retractable ladder
- ▶ 25" top opening
- ▶ Vented top lid – spring loaded and ground operated
- ▶ Minimum 30" clearance under discharge ring
- ▶ Interior powder coat finish
- ▶ Premium Rack-n-Pinion slide gate assembly with crank

STEEP-CONE BINS





ELIMINATE HANG UPS.

The variance of flow characteristics may result in some products bridging inside a bin. For commodities requiring a steeper cone and more capacity than a feed bin, the solution is a Meridian Steep Cone series. These bins are built with the same standards as the fertilizer series, but feature a 55 or 60 degree bottom cone in capacities up to 150 MT.

GREAT FEATURES. GREAT QUALITY.

- ▶ HSS (hollow structural steel) legs and bracing
- ▶ Premium Rack-n-Pinion slide gate with crank
- ▶ Complete sidewall and roof ladder
- ▶ 25" top opening
- ▶ Vented top lid – spring loaded and ground operated
- ▶ 55 degree or 60 degree bottom cone depending on model
- ▶ 35 degree roof cone
- ▶ 24" clearance under the slide gate
- ▶ Interior powder coat finish
- ▶ Retractable ladder



LIQUID HOPPER BINS



Optional bolt on slide gate assembly for use with dry flowable products



Heavy duty flanged bottom opening with stainless steel bottom plate assembly.

ULTIMATE STORAGE.

Meridian's Liquid hopper bins are the ultimate storage bins, taking versatility and multi-purpose to the extreme. In addition to storing all the dry flowable products of the fertilizer series, these bins are designed, engineered and painted to store a whole range of liquid products such as liquid fertilizer, liquid feed supplements. With the exception of the bottom flange plate assembly, these bins look identical to the fertilizer bins, differing significantly however, in heavier gauge steel, welded inside and out, four coats of powder and other standard features.

GREAT FEATURES. GREAT QUALITY

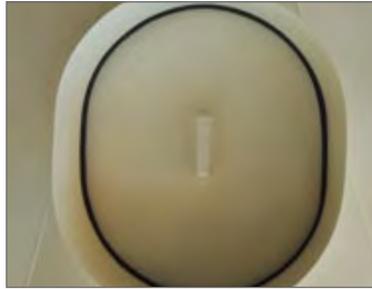
- ▶ HSS (hollow structural steel) legs and bracing
- ▶ Minimum 12 gauge construction
- ▶ Welded - Inside and outside
- ▶ Interior has 2 coats of Meridian's epoxy powder
- ▶ Exterior has 2 coats : Meridian's exclusive premium powder finish and a Zinc undercoat
- ▶ Complete sidewall and roof ladder
- ▶ Heavy Duty flanged bottom opening with stainless steel bottom plate
- ▶ 25" top opening
- ▶ Vented top lid – spring loaded and ground operated
- ▶ Retractable ladder

SMOOTHWALL

OPTIONS



Top Lid Lever Assembly
Easy opening of roof lid.



Bottom Manway
Access hole in bottom cone.



Fan Mounting Bracket
Support bracket mounted under fan.



Auger Boot
Fastens under slide gate. Available in Flanged, Non-Flanged and Flex Boot. (Non-Flanged shown).



Ladder Cage & Handrails
Safety enclosure for added security.



LevAlert
Level indicator on sidewall.



Liquid Site Gauge Valve
Safety enclosure for added security.



Pale Spout
For spot feeding or sampling.



Poke Hole
8" x 8" access to discharge just above gate.



Bean Ladder
Helps maintain seed quality with bean-on-bean flow.



Roof Manhole
Access hole in top cone.



Skid Foundation
Skid foundations are available for most bins.



Rack-n-Pinion slide gate assembly
Premium Rack-n-Pinion slide gate assembly with crank; also available in stainless steel.



Slide Gate to Chore Time Adaptor
Easy transition to Chore Time boot.



View Glass
4" round window on sidewall.

AIRMAX

The **Meridian AirMax™** Aeration System cools and dries grain, minimizes the risk of bugs, allows farmers to start harvesting earlier and significantly decreases the chance of spoilage in the bin.

VERTICAL ONE-PIECE AERATION

- ▶ Aeration system design enables natural air grain drying as conditions permit
- ▶ Continuous screen from top to bottom
- ▶ Angle rib construction distributes point load pressures
- ▶ 24" rib spacing maximizes aeration area
- ▶ **FULL LEG SUPPORT 4" UP AERATION**
- ▶ Complete interior screen perforated to lid
- ▶ Duct clean out shroud
- ▶ Factory installed in 40 & 45 degree Meridian bins at time of manufacture
- ▶ 3 leg design



VERTICAL (SECTIONAL) AERATION

- ▶ Designed for installation into existing hopper bins
- ▶ Sectional pieces fit through a standard Meridian man-way for installation inside the hopper bin
- ▶ Aeration system design enables natural air grain drying as conditions permit
- ▶ Continuous screen from top to bottom
- ▶ Engineered honeycomb frame sections
- ▶ 24" rib spacing maximizes aeration area
- ▶ Full leg support 4" up aeration
- ▶ Duct clean out shroud
- ▶ **SUITABLE FOR HIGH-FLOW APPLICATIONS, EXTRA SUPPORT LEGS OPTIONAL**
- ▶ Fits 35,40,45,55 and 60 degree cones
- ▶ 4 leg design



HORIZONTAL AERATION

- ▶ Aeration design enables easy removal of aeration tube for cleaning or fertilizer storage
- ▶ Continuous screen from end to end
- ▶ Angle rib construction distributes point load pressures
- ▶ 24" rib spacing maximizes aeration area
- ▶ **FITS 40 & 45 DEGREE CONES**
- ▶ Bolt-in version is available for installation into existing hopper bins. Duct is removable



UNIQUE FEATURES

VERTICAL NATURAL AIR DRYING SYSTEM:

- Designed to easily retrofit your existing hoppers bins.
- Retro system is designed and approved for installation in steeper cones and use in high moisture grain.
- Larger screen surface area maximizes the effectiveness of your drying, cooling and aeration efforts.
- Optional extra support leg increases stability in high-flow applications.
- Full support legs ensure a durable, problem free system.

HORIZONTAL AERATION SYSTEM:

- Easily removed for quick cleaning or when storing fertilizer.
- Larger screen surface area maximizes the effectiveness for cooling and aerating grain.
- Available bolt-in kit for installation in existing hopper bins.

MODELS	MAX BIN SIZE (BUSHELS) ¹	RECOMMENDED HOPPER BIN SIZE ²	DIMENSIONS	DIA. I.D	WEIGHT (LBS)	SCREEN SURFACE (INCHES)	INLET SIZE AND TYPE	HEIGHT INTO GRAIN CAVITY 35° CONE ³	HEIGHT INTO GRAIN CAVITY 40° CONE ³	HEIGHT INTO GRAIN CAVITY 55° CONE ³
VERTICAL AERATION – ONE PIECE										
V3004	3500	14' & 16' bins up to 3500 bushels. Models 1615. GM3 and smaller	30" x 4'	20"	385	6299	9" x 14" Rect	n/a	86"	n/a
V3006	5000	14' & 16' bins up to 5000 bushels. Models 1625. GM5 and smaller	30" x 6'	20"	440	9656	9" x 14" Rect	n/a	110"	n/a
V3008	6000	14' & 16' bins up to 6000 bushels. Models 1630. GM6 and smaller	30" x 8'	20"	525	13132	9" x 14" Rect	n/a	134"	n/a
V4504	7000	14', 16' & 18" bins up to 7000 bushels. Models 1825. GM64 and smaller	45" x 4'	30"	580	9301	14" x 17" Rect	n/a	95"	n/a
VERTICAL AERATION – SECTIONAL (DESIGNED FOR RETROFITTING EXISTING HOPPER BINS AND HIGH-FLOW APPLICATIONS) ⁴										
VS3004	5000	All bins up to 5000 bushels	30" x 4'	20"	420	5245	9" x 14" Rect	80"	86"	99"
VS3006	8000	All bins up to 8000 bushels	30" x 6'	20"	500	7990	9" x 14" Rect	104"	110"	123"
VS4504	15000	All bins up to 15000 bushels	45" x 4'	30"	600	7925	14" x 17" Rect	88"	95"	116"
VS4506	20000	All bins up to 20000 bushels	45" x 6'	30"	745	12100	14" x 17" Rect	112"	119"	140"
HORIZONTAL AERATION (REMOVABLE FOR FERTILIZER STORAGE AND AVAILABLE FOR RETROFITTING EXISTING BINS)										
H1808	5000	14' & 16' bins up to 3300 bushels. Models 1615. GM3 and smaller	18" x 8'	n/a	155	3478	18" Rnd	38"	44"	n/a
H2408	6500	14', 16' & 18' bins up to 5000 bushels. Models 1625, 1820, GM500 and smaller	24" x 8'	n/a	235	4660	24" Rnd	44"	50"	n/a
H2410	6500	14', 16' & 18' bins up to 6500 bushels. Models 1630, 1825, GM6, GM64 and smaller	24" x 10'	n/a	285	6284	24" Rnd	51"	59"	n/a
H2410-HD	8,500	Up to 18' diameter	24" x 10'	24"	360	6284	24" Rnd	51"	59"	n/a
H2412-HD	11,000	Up to 20' diameter	24" x 12'	24"	425	7908	24" Rnd	58"	68"	n/a

1. Recommended bushel capacities for Meridian AirMax™ system.

2. Recommended bin model(s) for maximum grain drying and aeration results.

3. Distance from gate to top of aeration mechanism.

4. Meridian AirMax™ Sectional system is an exclusive and unique aeration product allowing installation of vertical aeration in existing hopper bins. This unit is built heavier than the one-piece Meridian AirMax™, withstanding weights up to 20,000 bushels.

MULTI-PURPOSE BIN SERIES

Model Number	Approx. Bushels	Cubic Feet	Imp. Tons	Metric	Bin Height	Recommended Auger
12' Diameter Multi-Purpose - 45 Degree Bottom Cone						
1205	806	949	29	27	16'-8"	33'
1208	1095	1288	40	36	19'-8"	39'
1210	1287	1514	47	43	21'-8"	39'
1212	1479	1740	54	49	23'-8"	46'
1215	1768	2080	64	58	26'-9"	46'
14'-0" Diameter Multi-Purpose - 45 Degree Bottom Cone						
1410	1801	2146	67	60	23'-4"	46'
1412	2060	2454	76	69	25'-4"	46'
1415	2449	2914	90	82	28'-4"	53'
1417	2708	3222	100	91	30'-4"	53'
1420	3097	3683	114	104	33'-4"	59'
15.5' Diameter Multi-Purpose - 40 Degree Bottom Cone						
15610	2241	2636	82	74	23'-9"	41'
15612	2526	3010	93	85	25'-9"	46'
15615	3003	3575	111	101	28'-9"	53'
15617	3320	3952	123	111	30'-9"	59'
15620	3796	4515	140	127	33'-9"	66'
15625	4589	5455	169	153	38'-9"	66'
15630	5383	6396	198	180	43'-9"	72'
16' Diameter Multi-Purpose - 40 Degree Bottom Cone						
1610	2410	2831	88	80	23'-11"	46'
1612	2751	3233	100	91	25'-11"	46'
1615	3264	3835	119	108	28'-11"	53'
1617	3606	4237	131	119	30'-11"	59'
1620	4119	4837	150	136	33'-11"	66'
1625	4973	5839	181	164	38'-11"	66'
1630	5828	6842	212	192	43'-11"	72'
18' Diameter Multi-Purpose - 40 Degree Bottom Cone						
1810	3161	3719	115	105	25'-6"	46'
1815	4242	4991	155	140	30'-6"	53'
1820	5324	6263	194	176	35'-6"	66'
1825	6405	7536	234	212	40'-6"	66'
1830	7488	8809	273	248	45'-6"	79'

To select the most appropriate bin size for your storage, please follow these steps:

- Determine product density (lbs/ft³).
- Convert the total tonnage being stored to lbs, then divide by the density. The result is the cubic foot capacity you require.
Ex. You need to store 100 MT of urea fertilizer with a density of 48 lbs. 100 x 2204 = 220,400 / 48 = 4592 (Min. ft³ required).

To calculate a bins holding capacity of a specific product, follow these steps:

- Determine product density (lbs/ft³).
- Multiply the bins cubic foot capacity by the product density, then divide by 2204.
Ex. Fertilizer blend weighs 57 lbs./ft³ & you are purchasing a model 1620 fertilizer bin. Model 1620 = 4837 ft³ x 57 lbs. = 275,709/2204 = 125 MT. Your new 1620 will hold approx. 125 MT of your specific fertilizer blend.

GRAINMAX SERIES

Model Number	Approx. Bushels	Cubic Feet	Imp. Tons	Metric Tonnes	Bin Height	Recommended Auger
14' Diameter GrainMax - 40 Degree Bottom Cone						
GM2300	2301	2707	69	63	26'-3"	46'
15.5' Diameter GrainMax - 40 Degree Bottom Cone						
GM3000	3003	3575	90	82	28'-9"	53'
GM4000	3796	4515	114	103	33'-9"	66'
GM5000	4591	5457	138	125	38'-9"	66'
GM6000	5385	6399	162	147	43'-9"	72'
16' Diameter GrainMax - 40 Degree Bottom Cone						
GM3000	3264	3840	98	89	28'-11"	53'
GM4000	4118	4845	124	112	33'-11"	66'
GM5000	4973	5851	149	135	38'-11"	66'
GM6000	5828	6856	175	159	43'-11"	72'
18' Diameter GrainMax - 40 Degree Bottom Cone						
GM5300	5324	6263	160	145	35'-6"	66'
GM6400	6405	7536	192	174	40'-6"	66'
GM7500	7488	8809	225	204	45'-6"	79'
20' Diameter - 40 Degree Bottom Cone						
2035	10589	12585	318	288	51'-10"	85'

FEED BIN SERIES

Model Number	Approx. Bushels	Cubic Feet	Imp. Tons	Metric Tonnes	Bin Height	Recommended Auger
7' Diameter Feed Bins - 60 Degree Bottom Cone						
705	252	301	6.3	5.7	14'-9"	33'
708	349	416	8.7	7.9	17'-9"	33'
710	414	492	10.3	9.3	19'-9"	39'
8' Diameter Feed Bins - 55 Degree Bottom Cone						
808	456	543	11.4	10.3	18'	39'
810	541	643	13.5	12.2	20'	39'
812	625	744	15.6	14.1	22'	39'
9' Diameter Feed Bins - 55 Degree Bottom Cone						
910	703	837	17.5	15.9	21'	39'
912	811	964	20.2	18.3	23'	46'
915	971	1154	24.2	21.9	26'	46'
10' Diameter Feed Bins - 55 Degree Bottom Cone						
1010	892	1061	22.2	20.1	22'-2"	39'
1012	1024	1218	25.5	23.1	24'-2"	46'
1015	1222	1453	30.4	27.6	27'-2"	53'

CALCULATIONS

Bushel capacities are approximate.

Feed bin capacities are based on 40 lbs/ft³.

All fertilizer bins, steep cone bins and liquid bins capacities are based on 62 lbs/ft³.

STEEP CONE SERIES

Model Number	Approx. Bushels	Cubic Feet	Imp. Tons	Metric Tonnes	Bin Height	Recommended Auger
12' Diameter Steep Cone Series - 55 Degree Bottom Cone						
1208-55	1178	1382	39	25	22'	46'
1210-55	1371	1607	45	29	24'	46'
1212-55	1563	1833	52	33	26'	46'
1215-55	1851	2171	61	39	29'	53'
14' Diameter Steep Cone Series - 55 Degree Bottom Cone						
1410-55	1928	2297	65	42	26'	46'
1412-55	2187	2605	73	47	28'	53'
1415-55	2576	3065	86	56	31'	59'
1417-55	2835	3372	95	61	33'	66'
1420-55	3224	3833	108	70	36'	66'
15.5' Diameter Steep Cone Series - 55 Degree Bottom Cone						
15.510-55	2447	2917	82	53	28'	53'
15.512-55	2765	3293	93	60	30'	59'
15.515-55	3242	3858	109	70	33'	66'
15.517-55	3559	4235	119	77	35'	66'
15.520-55	4036	4800	135	87	38'	66'
15.525-55	4830	5741	161	104	43'	72'
15.530-55	5621	6678	188	121	48'	85'
16' Diameter Steep Cone Series - 55 Degree Bottom Cone						
1610-55	2638	3144	88	57	28'	53'
1612-55	2976	3545	100	64	30'	59'
1615-55	3484	4147	117	75	33'	66'
1617-55	3823	4548	128	83	35'	66'
1620-55	4330	5150	145	93	38'	66'
1625-55	5177	6153	173	112	43'	72'
1630-55	6019	7152	201	130	48'	85'

LIQUID BIN SERIES

Model Number	Cubic Feet	US Gallon	Imp. Gallon	Imp. Tons	Metric Tonnes	Bin Height
12' Diameter Liquid Bins - 45 Degree Bottom Cone						
1212L	1740	13,074	10,878	71	64	23'-8"
14' Diameter Liquid Bins - 45 Degree Bottom Cone						
1412L	2452	18,339	15,270	99	90	25'-4"
15.5' Diameter Liquid Bins - 40 Degree Bottom Cone						
15.512L	3008	22,498	18,734	122	110	24'-6"
15.515L	3572	26,723	22,252	145	131	27'-6"
15.517L	3949	29,540	24,597	160	145	29'-6"
15.520L	4514	33,765	28,115	183	166	32'-6"
16' Diameter Liquid Bins - 40 Degree Bottom Cone						
1612L	3231	24,167	20,123	131	119	25'-11"
1615L	3833	28,669	23,872	155	141	28'-11"
1617L	4234	31,671	26,371	171	156	30'-11"
1620L	4836	36,173	30,120	196	178	33'-11"

Liquid tonnage calculated at 13 lbs/gal.

World Class Quality. Locally Made Relationships.



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