

Cost Effective, Versatile and Durable  
The Industry's Best Value



# FLOWMASTER

## BIN AND SILO SYSTEMS



# FLOWMASTER DRY MATERIAL HOPPER BINS

**Multiple Top-Opening** options in sizes up to 22" or a complete open-top.

**Lifting/Stacking Alignment Lugs** provide top lifting capability and enables containers to be stacked easily and safely.

**Proprietary Company Logo or Product Information** can be permanently embossed within the container sidewall.

**1/2" Nominal Wall Thickness** in tank and base provides superior resistance to impacts and environmental stress cracking.

**45° or 60° Standard Hopper Angles** other hopper angles available upon request.



One piece SEALED sanitary base design is 2-way forklift and pallet jack accessible and comes in a variety of colors to help designate specific applications.



U.S. Patent #7,475,796

**Translucent Polyethylene Bottle** allows users to view material usage through tank wall without using level indicator.

Dimension "A" 45° Hopper  
Dimension "B" 60° Hopper

**HDPE Material Construction**

- Eliminates corrosion and the associated maintenance costs.
- Complies with applicable FDA, NSF, and USDA standards.

**UN/DOT Certified IBCs** (pending) for use in the transportation of hazardous materials.

**Multiple Discharge Openings** - 4", 8" 10" 12" and other custom sizes.

**Multiple Valve Options**

- Butterfly valve
- Sanitary butterfly valve
- Iris valve
- Slide gate
- Other



No top lift design with 22" sanitary lid.

Bin Size	Dimension A 45°	Bin Size	Dimension B 60°
25 Cubic Feet	56.00"	30 Cubic Feet	70.25"
40 Cubic Feet	68.50"	48 Cubic Feet	82.75"
50 Cubic Feet	77.25"	58 Cubic Feet	91.50"
60 Cubic Feet	85.75"	68 Cubic Feet	100.00"
80 Cubic Feet	101.75"	-	-

**Notes:** All dimensions & capacities are approximate. Bin capacities are based on water-filled capacity. Other custom sizes, hopper angles, and dimensions available upon request.



Standard Closed Top Design

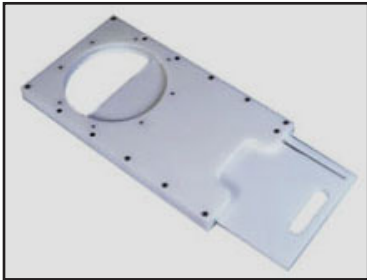


Sanitary Closed Top Design



Open Top Design

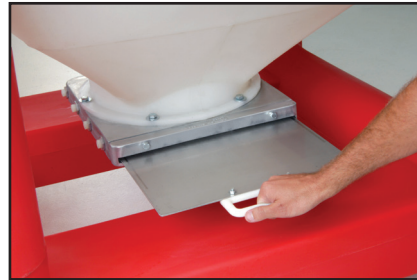
# OPTIONS & ACCESSORIES



All Poly Slide Gates



Butterfly Valves



Aluminum Slide Gate



Iris Valves



**Open and Closed Top Designs**

Multiple top opening configurations are available to meet specific application requirements.



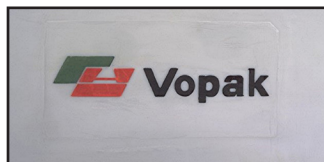
**Discharge Stations**

are designed to provide dust free transfer of dry materials. Options include screw conveyors and vibratory feeders.



**Optional Base Colors**

Thick walled, all-plastic base is available in a variety of colors to help designate specific application.



**Molded-in Company or Product Information** can be permanently embossed with proprietary company information.



Sanitary Base Design



Multiple Top Lid Options and Accessories



# FLOWMASTER SEMI-BULK STORAGE SILOS

**Top Lifting Ears** for crane and hoist hook attachments. In addition to reducing installation costs and increasing safety, lifting lugs allow you to off load the tank and put it into place with ease and without damage to the tank.

**Sanitary Tie Down Lugs** available with seismic UBC2006/CBC2007 150 mph wind restraint tie down systems.

**Minimum 1/2" Wall Thickness** for superior resistance to impacts and environmental stress cracking.

**Multiple Discharge Size Opening** to accommodate your discharge fitting choices.

**Large Molded Flat Areas** are designed to accommodate a variety of top mounted fittings and accessories.

**One Piece, Seamless Tank Construction** provides uniformity and reduces potential stress points.



**"Ultra Smooth" and Durable Interior Surface** provides a long-life vessel with excellent material flowability.

**A Variety of Diameters and Sizes** available up to 1,000 cubic feet.

**Standard Cone Slopes of 30°, 45°, and 60°** provide excellent material discharge.

**100% HDPE Material Construction** complies with FDA Reg. 177.1520, NSF Standard 61, and USDA standards and eliminates corrosion concerns and associated maintenance costs.

**OSHA-Approved Ladder Assembly (option)**  
- FRP and steel assemblies with hand rails and cages available.

**Manyways - 18" to 24"**, vented and sealed options.



Tank - 45°	Diameter	Height
130 Cubic Feet	64"	102.75"
200 Cubic Feet	64"	140.75"
500 Cubic Feet	90"	213.30"
750 Cubic Feet	90"	286.90"
950 Cubic Feet	90"	314.90"
1000 Cubic Feet	90"	376.50"

**Notes:** All dimensions & capacities are approximate. Silo capacities are based on water-filled capacity. Other custom sizes available upon request.

# DRY HANDLING BINS

Steel and plastic bin designs are available with a variety of options and sizes to meet the unique handling requirements of dry powder and granular materials. Bins can be configured with different slopes, discharge/fill openings, and valves. A full line of accessories, discharge stand, tumblers and filling stations is also offered to optimize material flow.



## SUPERIOR PRODUCT DURABILITY AT THE LOWEST POSSIBLE COST

As a recognized leader in the design and manufacturing of material handling vessels, Bonar Plastics has perfected their rotational molding process technology to build **extra thick (.500"+) walled HDPE** containers with optimum physical property performance, which translates into longer lasting, more durable containers.

Bonar Plastics unique processing techniques have resulted in container service lives extending beyond 20 years in some cases. Most importantly, Flowmaster bins and silos deliver many performance advantages over other alternative material constructions, at a price that makes sense.

## STEEL MATERIAL HANDLING HOPPER BINS

Available in both Carbon and Stainless, we offer steel hopper bins that are the perfect bulk handling solution for a variety of applications. Our steel IBC hopper bins are fabricated with some of the most sophisticated manufacturing automation available. This state-of-the-art robotic manufacturing process ensures consistent high weld quality and assurance of container integrity. Steel bins can be configured to meet the most stringent design requirements.



Capacity	Overall Height	Hopper Angle
30 Cubic Feet	47.50"	45°
45 Cubic Feet	62.25"	45°
62 Cubic Feet	75.00"	45°
78 Cubic Feet	88.50"	45°

*Notes: All dimensions in inches and based on 45° hopper with 8" Valve*

## UNPARALLELED DESIGN FLEXIBILITY AND ENGINEERING SUPPORT

As a dry materials processor, Bonar Plastics understands the importance of design flexibility and engineering support to ensure a dry handling material system integration meets specific application requirements. Flowmaster bins and silos are manufactured and marketed with a variety of different design, accessory, and ancillary equipment options, so that engineers, contractors and end users have a broad range of choices in making their final dry handling system feature decisions. In an effort to help guarantee the final solution choices are optimized, our sales representatives and engineering personnel supplement the whole project process, which culminates in the creation of the final dry approval drawing(s).

# FLOWMASTER VISCOUS LIQUID HOPPER BINS

Specifically designed for viscous liquids used in a variety of industry, Flowmaster's 45° cone bottom slope helps facilitate faster, more complete flow in the most stubborn viscous liquid applications.

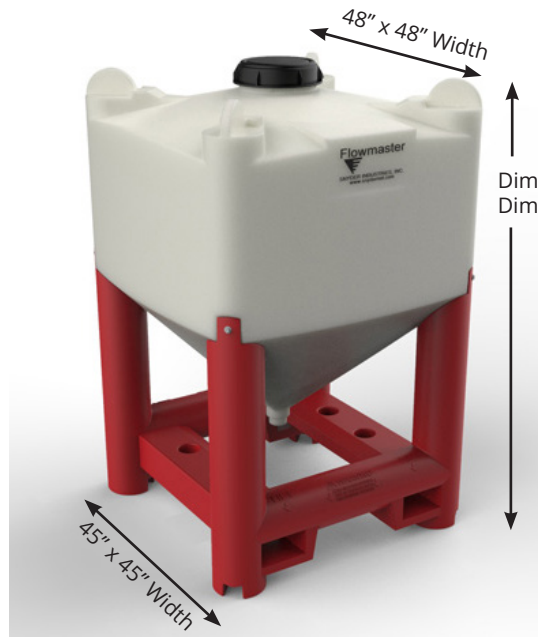
**All Plastic, HDLPE construction** complies with FDA, NSF and USDA standards.

**Translucent bottle** allows viewing of material levels with level indicators.

**Seamless, smooth interior surface** offers excellent flow characteristics and is easy to clean.

**Eliminates corrosion concerns and associated maintenance costs.**

**Heavy duty plastic stands are forklift and pallet jack accessible** and come in a variety of colors to help designate specific applications.



**12\" screw on cap** secures container contents.

**Molded 2\" and 3\" threaded outlet** for camlock type outlet fitting.

Dimension "A" 45° Hopper  
Dimension "B" 60° Hopper

**Stackable 2-3 units high** depending on size, weight and temperature exposure.

**Ball valve** can be positioned vertically or horizontally.

**Horizontal ball valve** requires a 3\" Taller base. Add 3\" to all height dimensions shown below.



Horizontal 2\" Valve Configuration

Bin Capacity	Overall Tank Height 45° Slope (Dimension A)	Stacked Nesting Height 45° Slope (Dimension B)
190 Gallons (25 CuFt)	56.9"	51.6"
299 Gallons (40 CuFt)	69.5"	64.2"
375 Gallons (50 CuFt)	76.5"	71.2"
449 Gallons (60 CuFt)	86.6"	81.3"
524 Gallons (70 CuFt)	93.5"	88.2"
598 Gallons (80 CuFt)	102.7"	97.4"

**Notes:** All dimensions and capacities are approximate.  
For use with viscous liquids up to 1.6 Specific Gravity.  
Viscous liquids defined as greater than 1000 cP (centipoise).

# FLOWMASTER SANITARY VISCOUS HOPPER BINS

Portable all plastic hopper bin with a seamless smooth interior surface that facilitates the flow of viscous materials through a sanitary flange valve outlet.

**All Plastic HDPE construction**

**Complies with applicable FDA, NSF and USDA standards.**

**Seamless, smooth interior surface** provides excellent flow characteristics and is easy to clean.

**Large, non-threaded 22" opening** for container access.

**HDPE cover** with lever lock clamp ring design and full food grade gasket.



**Translucent bin** enables users to monitor material usage through the tank wall without ancillary equipment.

Dimension "A" 45° Hopper  
Dimension "B" 60° Hopper

**Unique sanitary seamless discharge bottom outlet** is compatible with a variety of sanitary valves.

**Ideal for food products, lotions, cremes, pigments, flavorings, toothpastes, and much more.**

**Two (2) way fork lift only and stackable design.**

VISCOUS HANDLING

Bin Capacity	Overall Tank Height 45° Slope (Dimension A)	Stacked Nesting Height 45° Slope (Dimension B)
190 Gallons (25 CuFt)	56.9"	51.6"
299 Gallons (40 CuFt)	69.5"	64.2"
375 Gallons (50 CuFt)	76.5"	71.2"
449 Gallons (60 CuFt)	86.6"	81.3"
524 Gallons (70 CuFt)	93.5"	88.2"
598 Gallons (80 CuFt)	102.7"	97.4"

**Notes:** All dimensions and capacities are approximate.  
For use with viscous liquids up to 1.6 Specific Gravity.  
Viscous liquids defined as greater than 1000 cP (centipoise).

# Additional Solutions in Bulk Handling



## POLY COMBO BINS

Economical bulk bins are ideal for handling both durable and perishable goods. Available in single and double wall construction, that can be stacked up to three units high to save space in storage and transportation.



## HEAVY LIFT BIN

Heavy duty top lift hopper lid designed specifically where lifting of heavy materials is critical, such as off-shore and catalyst markets.



## VISCOUS LIQUID HANDLING SOLUTIONS

Specifically designed for viscous liquids used in a variety of industry. Bonar has a wide array of designs to promote better drain flow of materials with varying levels of viscosity.

## One Source Does It All

Whether you are a manufacturer or distributor, Bonar Plastics can help you improve the function, economics and performance of your company's bulk handling systems.

