

STORE

# MOBILE STORAGE HOPPERS



**NATIONAL BULK  
EQUIPMENT**<sup>®</sup>  
AN **NBE** COMPANY

FORWARD THINKING | **REAL RESULTS**<sup>®</sup>

# PORTABLE STORAGE FOR VARIABLE PROCESS REQUIREMENTS

Whether staging material ahead of a high-volume run, leveraging supply chain variables, or optimizing valuable floorspace; National Bulk Equipment mobile storage hoppers are a versatile alternative to fixed-location conveying systems or high-capacity storage silos.

## **The Basics of Bulk Material Handling: Reliable, Repeatable, Durable Performance**

National Bulk Equipment mobile storage hoppers are designed and built to provide process-critical contributions to processing and production operations dependent on bulk material storage and handling. NBE mobile storage hoppers are an efficient and durable bulk material storage alternative to unstable, non-stacking, irregular-shaped bags, totes, and gaylords. NBE mobile storage hoppers stack easily to conserve floorspace, and are available with a variety of process features, including standard, 4-way wand openings to ensure simple interfacing and reliable material supply to low- and medium-capacity lines.



# Performance-proven Design & Construction

The Standard Build Details of a National Bulk Equipment mobile storage hopper have the right combination of features for reliable performance across a wide range of bulk storage and handling requirements. For even more demanding requirements, the NBE Standard Build Details work as a versatile basis on which to configure optional or custom features.



## 60-DEGREE HOPPER CONE SLOPE:

For storage of non free-flowing materials; the steep, 60-degree angle of the hopper cone improves material flow from the hopper during discharge. NBE storage hoppers are available with internal surface coatings, discharge gates, and valves to aid in efficient discharge of sluggish materials.



## 45-DEGREE HOPPER CONE SLOPE:

For efficient storage of free-flowing materials; a gradual, 45-degree angle of the hopper cone provides a controlled flow of material to the hopper discharge. Internal surface coatings on the hopper sidewalls, and various discharge gates and valves are available to improve discharge efficiency of less free-flowing materials.

## Storage Hopper Capacities & Dimensions

TOTAL AIR VOLUME (CU FT)	USABLE VOLUME (LBS) <sup>1</sup>	BASE DIMENSION (IN)	HOPPER SLOPE (DEG)	TOTAL HEIGHT (IN) <sup>2,3,4</sup>	WAND OPENINGS STANDARD	MODEL NO.
20	700	44 x 44	45	39.50	Yes	22-050-45A
				33.37	No	22-250-45A
			60	46.37	Yes	22-050-60A
				46.37	No	22-250-60A
30	1,050	44 x 44	45	49.37	Yes	22-100-45A
				43.37	No	22-200-45A
			60	56.37	Yes	22-100-60A
				56.37	No	22-200-60A
40	1,400	44 x 44	45	59.37	Yes	22-110-45A
				53.37	No	22-210-45A
			60	66.37	Yes	22-110-60A
				66.37	No	22-210-60A
50	1,750	44 x 44	45	69.37	Yes	22-120-45A
				63.37	No	22-220-45A
			60	76.37	Yes	22-120-60A
				76.37	No	22-220-60A
60	2,100	44 x 44	45	79.37	Yes	22-130-45A
				73.37	No	22-230-45A
			60	86.37	Yes	22-130-60A
				86.37	No	22-230-60A

<sup>1</sup> Based on 35 pounds per cubic foot of material at level fill.

<sup>2</sup> Nominal dimensions

<sup>3</sup> Optional Caster Package adds 1.50 inches to Total Height.

<sup>4</sup> Optional Four-way Fork Pockets with Caster Package adds 2.00 inches to Total Height.

## Storage Hopper Top Cover Options:



STEEL-BAR GRATE WITH 6-INCH BY 4-INCH OPENINGS



TWO-PIECE, HINGED HOPPER TOP



ONE-PIECE LAY-ON HOPPER TOP



ONE-PIECE LAY-ON HOPPER TOP WITH 8-INCH CENTER HOLE

NBE Standard Build Details hopper top cover configuration is an open-top hopper.

# Mobile Storage Hopper Optional & Custom Features

National Bulk Equipment mobile storage hoppers are configurable to unique application requirements. The broad selection of NBE optional design features and accessories add performance and value to the NBE mobile storage hopper Standard Build Details. When process requirements demand more, NBE design, engineering, and manufacturing expertise and resources are ready to provide custom-engineered mobile storage hopper design, construction, and integration.



## Storage Hopper Materials of Construction

Formed of heavy-gauge carbon steel, 304 stainless steel, or 316 stainless steel, the materials and methods used to construct every NBE mobile storage hopper are specified to ensure each NBE storage hopper provides dependable, durable service in harsh environments. When stainless steel construction is required, the welded seams of NBE storage hoppers, legs, and cross bracing are electromechanically cleaned and passivated, increasing the protective properties of the welded stainless steel.



## Storage Hopper Surface Finishes

The specification of surface finishes for NBE bulk material storage hoppers is an important step in the improvement of dry bulk material storage effectiveness. Whether improving material flow, inhibiting contaminants, or color-coding process material inventory, the full selection of NBE standard, optional, and custom storage hopper surface finishes improves process operations well beyond the limitations of corrugated or molded IBCs.



## Storage Hopper Mobility Features

Whether moving bulk material across the plant or holding material for future production, the many mobility features available for NBE mobile storage hoppers help simplify the handling and storage of dry bulk materials. From manual handling of NBE storage hoppers to mechanical handling with forklifts or pallet jacks, NBE mobile storage hoppers are available with integrated mobility features, including: caster packages, push/pull handles, pallet jack entry pockets, and four-way fork pockets.



## Storage Hopper Process Features

NBE mobile storage hoppers are built to function as an application-critical part of process operations. Whether receiving and storing material from upstream, or handling material and supplying it downstream, NBE mobile hoppers are available with process-proven features including: vacuum wand openings, magnet grates, slide gates, level sensors, air fluidizers, and mechanical agitators. For custom-engineered requirements, NBE mobile hoppers can be engineered to highly demanding specifications; ensuring optimal fullstream performance.

# Bulk Material Processing and Packaging: Accurate, Dependable, Automated

Every National Bulk Equipment dry bulk material handling installation begins with Forward Thinking: looking upstream and downstream, evaluating every process influence and its possible effect on the application; from the equipment, to the material, to the operator, and the surrounding facility. With over 15,000 installations worldwide, NBE processing systems have proven their ability to maximize process capacity and improve total line performance. The full line of NBE automated processing systems includes: bulk bag dischargers, bulk bag fillers, container dischargers, container fillers, product recovery systems, mechanical conveying systems, storage, mixing and blending, weigh systems, and automation control design and manufacturing. Look ahead to NBE. Look to Forward Thinking.

## Integrated Automation: Total Process Control

Plant safety, product safety, changeovers, compliance issues, customer requirements, process complexities, equipment effectiveness; each of these factors make automated process operations a necessity. National Bulk Equipment integrated automation brings system-wide process control, communication, sensing, monitoring, and reporting together into a single, menu-driven, touch-screen HMI. High-speed Ethernet communications deliver information between NBE equipment and legacy systems to UL-listed panels designed and built by NBE. National Bulk Equipment integrated automation pushes control functionality farther out, and deeper into equipment operations to optimize total line throughput and deliver a standard, system-wide, data report from the control layer. Broader controls functionality and increased data reporting improve resource management, reduce operating burden, and extend equipment life cycles.

## Single-source Engineering and Manufacturing

Total accountability: from concept to completion. No best-guess design plans. No outsourced fabrication. No contract installers. No third-party service support. National Bulk Equipment process systems are designed, engineered, and produced in-house. This vertically integrated engineering and production environment enables the manufacturing of equipment and systems to exceptional quality standards, within strict production schedules.

Whether integrating a single National Bulk Equipment system, or designing, building, and installing a complete, fully automated, processing or packaging operation, NBE will work to ensure Real Results.





FORWARD THINKING | **REAL RESULTS**®

DISCHARGE	STORE	CONVEY	FILL	MIX	WEIGH	RECLAIM	INFEEED
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12838 Stainless Drive, Holland, MI 49424 | P 616.399.2220 | F 616.399.7365 | [sales@nbe-inc.com](mailto:sales@nbe-inc.com) | [nbe-inc.com](http://nbe-inc.com)

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