Bulk Solids Conveying

Polymer Concrete Ground Hopper

Small and Large Aggregate Versions

Application: Metering and Conveying of bulk ingredients

Precise metering eliminates waste

Eliminate labor-intensive manual bulk powder handling and tank filling

No overhead mountings

Used with the Gruber Autocaster Ultra continuous casting system (Polymer Concrete version)

The Polymer Concrete Ground Hopper automates the metering and batching of either small or large aggregates for polymer concrete matrix. Use of the Ground Hopper reduces labor costs, improves production efficiencies, reduces wastage (material cost), and likely reduces overhead costs.

Two models are offered – a small aggregate version, and a large aggregate version for processing of larger aggregates of up to 3/8" (7 mm) - such as Quartz, Sand, Pea Gravel or Small Rock.

Gruber Ground Hoppers accommodate either bulk bags (super sacks) or individual bags of filler. The Ground Hopper is one element of a complete bulk filler handling system. Gruber offers a number of other bulk filler handling accessories further automate or customize its integration into your workflow. Bulk Bag Roller Conveyor easily transports super sacks to the ground hopper. Bulk Bag Suspender Frame allows suspension of extra bulk filler material (bulk bags) above the ground hopper for additional processing capabilities. The Bulk Bag Gantry aids lifting of bulk bags into position (over the bulk bag suspender).

The Polymer Concrete Ground Hopper is generally used in conjunction with Gruber Systems' Autocaster Ultra Polymer Concrete (P/C) continuous casting system.

Gruber produces a variety of other Ground Hoppers for metering of other composite materials, and can custom configure a Ground Hopper to your specific needs for other materials or applications. Please call to discuss your needs.

The Polymer Concrete Ground Hopper differs from Gruber's standard Ground Hopper by incorporating heavier-duty, "industrial-strength" components that withstand the processing of abrasive aggregates like those found in Polymer Concrete. These key features include:

- Reinforced auger tube for extended durability and lifespan.
- Strengthened progressive auger for longer wear life and to reduce weight in the lifting tube.
- Feed shutoff slide to allow the auger to empty before stopping preventing binding at startup and reduced weight in tube when at rest.

Other features include:

- 500 cu/in per minute throughput capacity (based on calcium carbonate blends)
- Solid core auger constructed from carbon steel, progressive pitch. 45 degree incline
- Overall height 57.5" x 42.5" x 45" (LWH) excluding auger
- Large, rugged 15 cubic feet capacity bin constructed of 12 gauge carbon steel
- Powerful 3 HP 120/230/460 volt motor
- Sealed dust tight drive and idler bearings with transmission ratio of 10:1 (standard)
- 2-way forklift entries for convenient positioning
- Screen for reducing introduction of bag scraps and other debris from reaching auger
- Chain clamps for securing bulk bag hopper support

Other Ground Hoppers available, or we can custom configure one to your needs. Visit our website, or contact Gruber Systems for more information.

Above: Polymer Concrete Ground Hopperr

Description/Order No.

Polymer Concrete Ground Hopper – Small Aggregate Version - #1000AGHPCS

Polymer Concrete Ground Hopper – Large Aggregate Version - #1000AGHPCL

Ground Hopper Accessories

Bulk Bag Suspender Frame - #150160
Bulk Bag Gantry, 4 leg, 10' - #0831208
4000 lb Electric Hoist - #0831215
4000 lb Trolley - #0831217
Bulk Bag Roller Conveyor, 10' - #0831216

Crating

Crating For Ground Hopper - # CEHOPPER
Crate - Bulk Bag Suspender - # CEBBS

Ground Hoppers - General Accessories

Each Gruber Ground Hopper offers a variety of optional accessories to further automate your bulk material handling system:

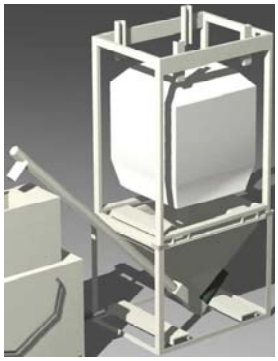
Bulk Bag Suspender Frame

The optional Bulk Bag Suspender Frame allows the option of mounting larger, more economical bulk bags ("Super Sacks") above Gruber's Ground Hopper™ bulk solids conveyors. Mounting large bulk bags reduce interruptions during the manufacturing process, and reduces labor costs normally associated with manual loading of a metering or feed hopper – particularly when compared to manual loading of smaller bulk material bags. Automation of the bulk material handling system also results in a cleaner, safer working environment and more efficient manufacturing workflow.

Gruber offers a number of other accessories to further automate delivery and positioning of bulk solids – including powdered, granular or other bulk ingredients – such as calcium carbonate and other "difficult" materials. A forklift is generally used to load super sacks into position*, but Gruber also offers other material loading and positioning options, including Bulk Bag Gantries and Roller Conveyors to provide a number of possible material loading configurations.

Features:

- Designed to sit above a Gruber Ground Hopper, and allow positioning of a super sack for drainage into the Ground Hopper
- 4 way forklift entry for easy positioning of super sacks
- The entire can be dropped to ground for bulk bag loading (with a forklift)
- Rated for maximum 2500 lb bulk bags
- Adjustable hook height



* Note: Requires fork lift access to lift super sacks into position.

Order Information:

Part No.	Description
150160	Bulk Bag Suspender Frame
0831516	Bulk Bag Support - Freestanding
CEBBS	Crate - Bulk Bag Suspender Frame

Bin Lids - Minimize contamination with a metal hopper lid.

Metering Control Options - Call for information.

Load Cells - Call for information.

Automatic Casting Tables

Cart allowing repositioning and height adjustments to your existing conveyor system and the Autocaster. **#150111 (XY)** or **#150110 (XYZ)**

Bulk Bag Roller Conveyor

Bulk bag conveyors facilitate the movement and storage of pallets containing bulk bags (super sacks) from a fork-lift access point to a Bulk Bag Gantry (also available separately).

Conveyors are heavy duty 2" diameter, 12-gauge galvanized steel rollers; with roll-formed heavy-gauge galvanized steel channels. Channels are reinforced laterally with cross-braces. Conveyor are secured to the floor (mounting hardware is included).

Order Information

Part No.	Description
RCBB10	Bulk Bag Roller Conveyor, 10'
0831216	Bulk Bag Roller Conveyor, 10'
R163622	Bulk Bag Roller Conveyor, 20' was Bulk Sack Pallet Conveyor
CEROLLCON	Crate - Roller Conveyor

Bulk Bag Gantry

The 4-leg bulk bag gantry is used to transport a bulk bag from a pallet and suspend it over the ground hopper using a hoisted trolley.

- For overhead lifting and dispensing of bulk bag fillers into floor hoppers for automated casting machines or automated batching systems
- Where applicable, can be used to hold bulk bags directly over metering hoppers for use with systems without floor hoppers
- Gantries are manufactured from heavy duty steel components and finished in powder-coat.
- Rated for a maximum lifting capacity of 4,000 lb.
- Cable trolleys provided to carry and guide hoist's power supply chord
- Bulk bags can be lifted from the ground with the hoist – no forklift access to ground hoppers required

Order Information

Part No.	Description
0831208	Bulk Bag Gantry, 4 leg, 10'
162768	Bulk Bag Gantry, 4 leg, 15' (10' I-Beam, Bulk Bag Suspender)
0831215	4000 lb Capacity Electric Hoist
0831217	4000 lb Capacity Trolley
CEGANTRY	Crate - Bulk Bag Gantry

Gruber
THE RIGHT TOOLS

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