VIBRA SCREW INC. BULK BAG FILLER (FIBC)



When designing a FIBC (Flexible Intermediate Bulk Container) filler, there are several important considerations to ensure efficient and safe operation. Here are some key design considerations:

1. Filling Rate: Determine the desired filling rate based on the material properties, process requirements, and equipment capacity. Consider factors such as material flow characteristics, bulk density, and required throughput.

2. FIBC Handling: The design should accommodate easy loading and securing of the FIBC onto the filler. Consider incorporating features like lifting loops, hanging frames, or clamping systems to hold the FIBC in place during the filling process.

3. Dust Control: Implement measures to minimize dust emissions during the filling operation. This can include the use of dust collection systems, enclosed filling spouts, or dust containment bags. Dust control is essential for operator safety and environmental compliance.

4. Filling Spout Design: The filling spout should be designed to fit securely into the FIBC opening, ensuring a tight seal to minimize product leakage and dust emissions. Consider features like clamps, inflatable seals, or integrated dust collection ports to improve sealing effectiveness.

5. Product Settling: Some materials tend to settle during filling, resulting in empty space within the FIBC. Incorporate mechanisms, such as vibration or mechanical agitators, to promote material settling and maximize the FIBC's capacity utilization.

6. Weighing and Level Control: Integrate weighing systems and level sensors to monitor the filling process accurately. This allows for precise filling control and prevents overfilling, which could lead to safety hazards or equipment damage.

7. Operator Safety: Design safety features to protect operators during the filling process. This can include safety interlocks, emergency stop buttons, guarding, and clear warning signage. Ensure that operators have easy access to controls and can observe the filling process from a safe distance.

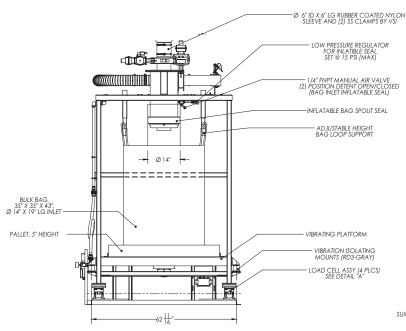
8. Control System: Implement a user-friendly control system that enables operators to easily set and adjust fill ing parameters. Consider incorporating features like preset recipes, data logging, and alarms for efficient operation and process monitoring.

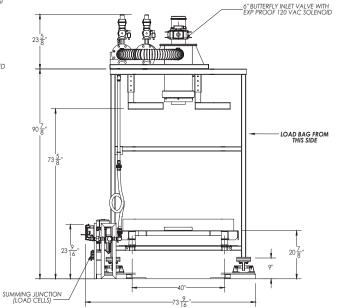
9. Material Compatibility: Consider the compatibility of the FIBC filler design with the materials being filled. Certain materials may require special construction materials, surface finishes, or additional features to prevent contamination or reactiveness with the equipment.

10. Maintenance and Cleanability: Design the filler with easy maintenance and cleanability in mind. Accessible components, quick-release mechanisms, and smooth surfaces aid in cleaning, inspection, and maintenance activities.

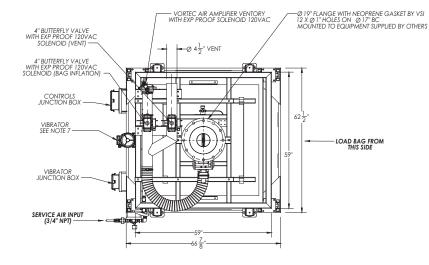
11. Compliance with Standards: Ensure that the design of the FIBC filler meets applicable industry standards and regulations. This may include safety standards, electrical codes, and hygiene requirements, depending on the application and industry.

By considering these design criteria, Vibra Screw developed a FIBC filler that is efficient, safe, and compliant with industry standards, providing reliable and effective filling operations for bulk material handling.













BULK BAG FILLER

Vibra Screw Bulk Bag Fillers ensure fast, dust free and precise filling of Bulk Bags. Available in a variety of configurations, this ruggedly constructed filler allows its operators to easily insert, fill and remove bags. From simple volumetric filling to calibrated weighing, the Vibra Screw Bulk Bag Filler is the unit that is custom built for your application.

Custom Controls

On site or remote mounting. Includes all

electronics necessary for manual to fully-

automated operation.

Air-Inflatable Inlet Seal Provides positive, 360° seal. Eliminates leaks and dust.

Adjustable Bag Loop Supports Square steel tubing. Ensures stable bag for complete filling.

Adjustable Height telescoping frame accepts bulk bag to 100 cubic feet.

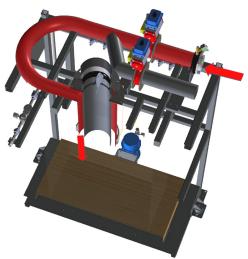
Vibrating Bag Table (Optional) supports pallet and assures proper deaeration and material densification.

Load Cells (Optional) Provide weighing accuracy.

Support Frame Four Post Design, Oversize Steel Tubing for stability and operator safety.

Air Inlet and Vent Inflate empty bags and vent during filling

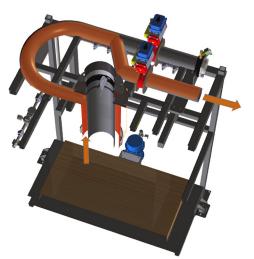
Controlled Vibration deaerates and densifies materials for accurate bag filling.



OPTIONAL BAG INFLATOR



GAIN-IN-WEIGH BATCH CONTROLLER



OPTIONAL DUST EVACUATION



INFLATABLE BAG INLET SPOUT SEAL

Model 1000 Bulk Bag Filler

Description:

- Sturdy welded tubular steel frame
- One piece fill spout
- Inflatable inlet spout seal with regulator
- Vibrating platform for consistent filling
- Adjustable height bag loop supports
- Adjustable width bag loop supports
- Dust connection vent
- Pallet stops
- Enamel Paint
- Custom configurations available

Contact / Frame Materials:

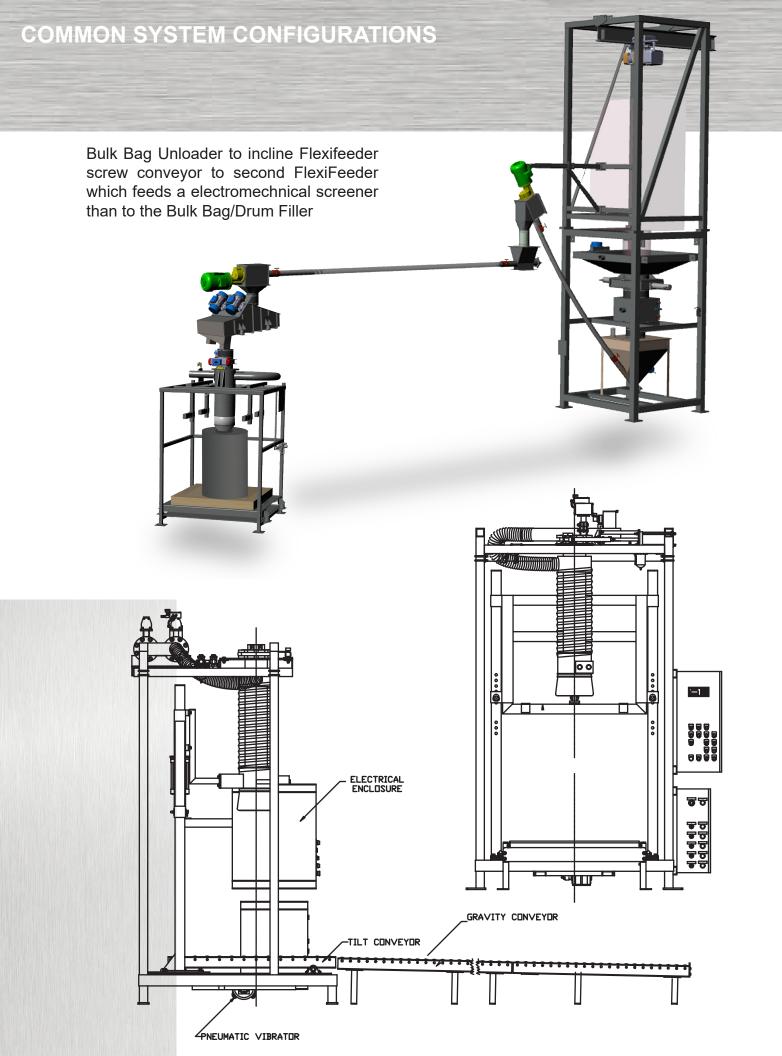
- Carbon Steel
- 304 Stainless Steel
- 316 Stainless Steel

Optional Items:

- Adjustable height frame
- Load cells with isolation pads
- Model 920 Batch Controller (for use with load cell package)
- Partial or fully automated operation
- · Bag inflation system with butterfly valves
- Inline air filter / regulator with local shutoff valve
- Dust collection system
- Pneumatic vibrator
- Inlet flow control valve
- Epoxy Paint

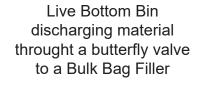
Motors:

- Standard: 230-460v TENV motor enclosure
- Optional: Special motor voltages on request / Pneumatic



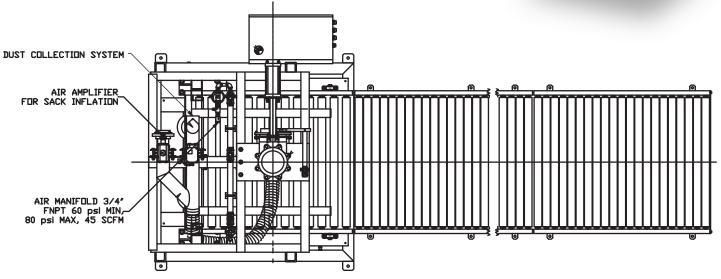


Live Bottom Bin discharging material to an incline Flexifeeder screw conveyor to a Bulk Bag Filler





Bagging System with roll-away onveyor



Keeping Dry Materials Moving

With a wealth of knowledge and experience in the use of controlled vibration to process dry bulk materials, Vibra Screw engineers have devised systems to handle most materials -- probably your material included.

As the leader in dry solids processing, our name is recognized and trusted worldwide in such diverse industries as:

FOODS

Flour, Soy, Meal, Sugar, Vitamin Supplements

MINING

Aggregate, Kiln Feed, Crushed Ores, Coal, Lime

CHEMICAL Pigments, Additives, Starch, Carbon Black

STEEL

Foundry Sand, Ores, Binders, Ferrous & Non-Ferrous Additives

FOREST PRODUCTS Chips, Sawdust, Waste-by-products

PLASTICS Regrind, Virgin, Colorant, Talc

ENVIRONMENTAL CONTROL

Filter Aids, Resource Recovery, Lime, Soda Ash, Activated Carbon, Fly Ash, Solid Wastes, Scrap

ORDNANCE Ammonium Nitrate, Oxidizing Salts, Solid Base Propellants, Ammonium Perchlorate, HMX, RDX

AGRICULTURE Cattle Feed, Soy Bean Meal, Vitamin Supplements, Mill Feed, Spent Grain

PHARMACEUTICALS

Calcium Carbonate, Aspirin, Sodium Bicarbonate, Ascorbic Acid



The Vibra Screw Product Line For additional information, ask for literature on the following:

- AccuFeed
- Batching Systems
- Bin Activator
- Bulk Bag Filler
- Bulk Bag Unloader
- DE Feeder
- Heavy Duty Screw Feeder
- Loss-In-Weight Feeder
- Live Bottom Bin
- Live Bin
- Live Bin Screw Feeder
- Pan & Tube feeder
- Portable Bin Unloader
- Screener
- Storage Pile Activator
- VersiFeeder
- Vibra-Blender
- Vibrating Screens
- Volumetric Belt Feeder
- Weigh Belt Feeder
- Water Treatment Systems



THE VIBRA SCREW GUARANTE

If your Vibra Screw equipment doesn't perform in the service for which it was sold, we'll refund your money. Ask any other equipment manufacturer to put that in writing.

No time limits. No conditions.