



MetalFab, Inc.

**Bulk Bag Filling Stands
and Systems**

Metalfab...Bulk Bag Filling Stand

The Best Available Quality and Choice from a Basic Stand to Complete

Here's Why:

Rugged, Durable Construction for Years of Reliable Service

Metalfab Bulk Bag Filling Stands and Systems are engineered to provide a safe, reliable, and dust free means to fill lined, reusable, and disposable (one way) bags with a wide variety of powders and other difficult to handle dry bulk materials.

The basic cantilever filling stand allows loading from three sides and includes a 60" x 60" diamond plate bag support surface with 5,000 lb. capacity, adjustable bag holding frame fabricated from 3" structural tubing, fixed position bag holding hooks, and frame mounted inflatable bag seal for dust free filling. The main support posts and bag clamp bars are predrilled at 2" intervals to allow adjustment of the frame to accommodate bags from 36-85" in height. All material contact surfaces are 304 stainless steel.

Metalfab can also provide a completely integrated turnkey package inclusive of the stand, a choice of weighing options, feeding systems, cutoff valves, digital control instrumentation for direct connection to a PLC or DCS, and motorized conveyor sections to remove filled bags from the bulk bag or bulk container filling stand.

Simple, Safe, and Dust Free Operation

Metalfab Bulk Bag Filling Stands and Systems are easily operated by one person – saving on labor and operating costs. Each filling system features an inflatable bag seal with internal cavity and 3" dust collection port (for easy connection to a dust collection system) that provides a positive seal to hold the bag in place and ensure dust free operation during the filling process.

To start the filling process on the basic cantilever filling stand, the operator places a pallet on the platform scale, attaches an empty bag to the unit's bag holding hooks, connects the bag fill chute to the unit's inflatable bag seal, and begins the filling process.

On an integrated, turnkey system the operator places a pallet on the platform scale, attaches a bag using the adjustable bag holding clamps, connects the bag fill chute to the unit's inflatable bag seal, enters the desired target weight, dribble weight, and preact weight into the unit's Better-Weigh® Batch Controller, and presses start to begin the filling process via a screw feeder, mechanical or pneumatic conveying system, slide gate or other means as determined by the customer or dictated by the product. The controller provides two outputs for fast (bulk) and slow (dribble) speed filling, and preact compensation that adjusts the final cutoff point to account for material in suspension. An analog output for speed control can be supplied to adjust the speed of screw type feeders that require 4-20 mA or 0-10 Volt input for speed control.



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Turnkey Packages Built to Suit Your Exact Application Requirements

A Wide Range of Options to Meet Virtually Any Plant Operating Requirement or Dry Solids Handling Need

Pneumatically Operated Bag Clamps automatically hold bag straps in place during filling, and quickly release filled bag straps to make it easy to move the bag out of position and onto a rolling conveyor. Solenoid and related controls in a NEMA 4X enclosure. Requires 80 psi plant air.

Motorized Conveyor Sections for the load cell weighing system option facilitate loading and unloading of full bags from the filling system while waiting for forklift removal to the storage area. 60" L x 51.75" W roller bed with 2.5" diameter rollers spaced at 6" centers, No. 50 motorized chain with guard to drive the rollers, prelubricated, sealed ball bearings, and 1/2 hp motor with speed of 30 FPM. Mounts to bulk bag support or drum pallet frame to support bulk bag, tote, or drum pallet during filling.

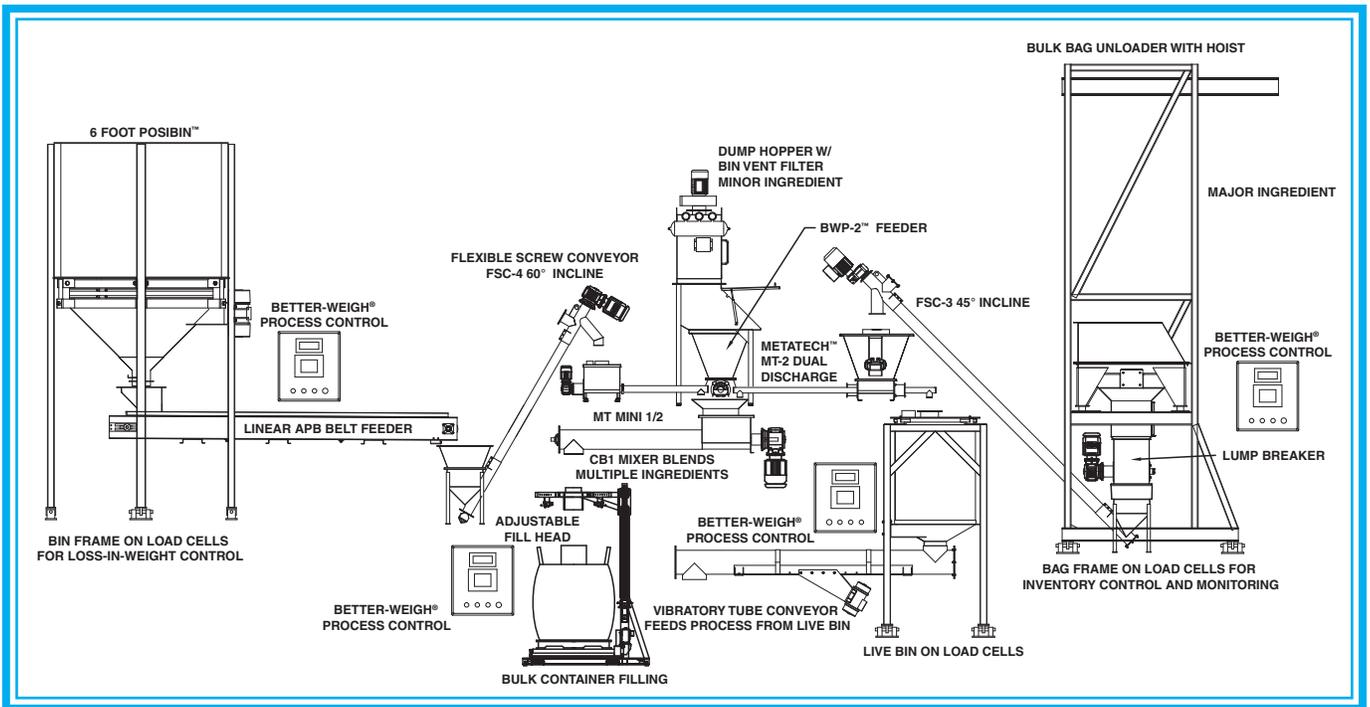
Acme Jack Screw option provides an automatic "Raise and Lower" feature to accommodate different size bags easily. The unit includes sensors for the PLC to monitor bag position at all times. Operator can simply enter bag vertical seam dimension via the touch screen to have bag placed in the proper position for filling. On tall bags the fill can automatically lower to a more comfortable loading position and then raise to the fill position. Requires 480 three phase power.

Vibration Platform densifies product in the bulk bag to maximize bag fill volumes. Electrically vibrates the pallet while the bag is filling. Adjustable cycle targets can be set up to three times during the fill cycle, and vibration time is adjustable from the controller touch screen. Requires 80 psi plant air and 3-phase power to operate vibrator. Includes all controls, starters, solenoid valves, "lock out" air cutoff valve, and related hardware.

Drum Filling Attachment fills up to four drums on a pallet in sequence. Features motorized filling head with variable speed Euro-drive and proximity sensors for positioning. Designed for filling 22" diameter drums. Attaches to fill chute, is removable for filling bulk bags, and requires Better-Weigh® Controller. Drum lid is available as an option for dusty materials.

Slide Gate stops the flow of product into bulk bags. 6", 8", or 10" diameters available in full open and 2 position configurations. Regulates fast (bulk) and slow (dribble) feed of product when used with weighing system option for batching operations.





Sample artwork configuration showing the wide range of available Metalfab equipment that can be integrated into a complete dry solids material handling system or subsystem.

Available Weighing System Choices Include:

Better-Weigh® Digital Rate/Batch Controller for use with load cell weighing option. Features touch screen interface with NEMA rated buttons on the door for start, stop, jog, e-stop, and power. Gain in weight, loss in weight or continuous feed selection with analog output to control speed of feed device. Two contact closures to select between fast (bulk) and slow (dribble) speed for feed devices that do not accept analog input. Analog output selectable as weight in feeder or rate output. Interfaces with optional Digital Weight Display listed below and provides RS-232 communication to processor.

Available Better-Weigh® Controller options include 1) Analog Input feature to interface with remote PC. Two inputs can be selected for "Rate Set-Point" when used as a continuous controller, or "Target Set-Point" when used as a batch controller. 2) Alarm Light that mounts on top of the controller enclosure, or remotely, to alert the operator an alarm condition exists and intervention is needed. Connects to the alarm output provided in the Better-Weigh® Controller.

Load Cell Weighing for use with container filling stand. Includes plated steel load cells with 2500 lb. capacity each, stainless steel leveling foot with lock nut, 20 foot cable, NEMA 4X summing box, and hardware for mounting on the bulk container filling stand. Stainless steel load cells available as option.

Digital Weight Display for display of weight on load cell scale with gross/net selection, pushbutton tare, pushbutton zero, and print control from front panel. Includes NEMA 4X enclosure and 4-20 mA analog output for weight in container.



Contact Parts: Carbon steel, epoxy-coated carbon steel, 304 or 316 stainless steel.
External Structure Parts: Carbon steel that is primed and painted blue enamel. Also available in stainless steel construction.

For more information and a quote on Metalfab Bulk Bag Filling Stands and Systems call 800-764-2999, in NJ 973-764-2000, Fax: 973-764-0272, or e-mail: sales@metalfabinc.com. Visit our web site at www.metalfabinc.com for PDF downloads of product literature and/or PDF/CAD drawings or write:

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