

# Bulk Bag Filler



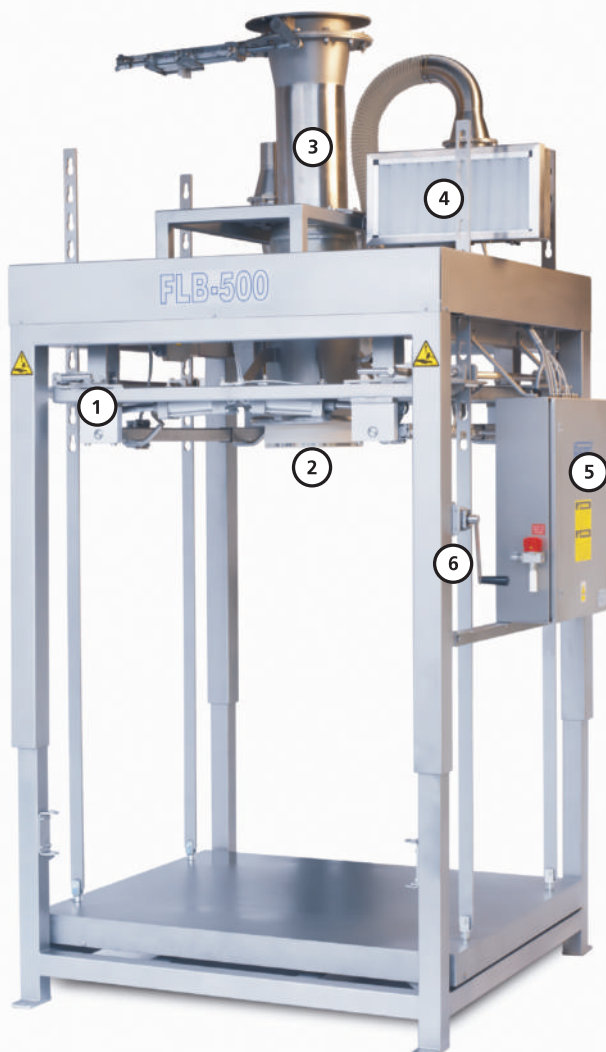
# Bulk Bag Filler

## Overview

GEA Avapac bulk bag fillers are designed to pack a wide variety of powdered products into flexible bags (FBC's). Two types of bulk bag filler (FLB 500 and FLB 800) are available and, with various options, they offer filling solutions for manual and semi-automatic operation. Features including bag inflation and base compaction maximise the available volume of the bag and result in a stable pack which reduces the risk of spillage and resulting product loss. Using a unique top weighing system, the GEA Avapac range of bulk bag fillers ensure reliable and accurate filling by eliminating the effect of bag inflation on final fill weight. An inert gas packing option means that GEA Avapac can provide solutions to meet the needs of export customers who require increased shelf life for their products.

The **FLB 500** is a reliable and easy to operate bulk bag filler which comprises a stainless steel support frame and filling system. Height adjustment enables this system to handle a wide range of bag sizes and fill weights, thereby offering a flexible solution to the dairy and food ingredients industry. Single sided operation means that the operator can load, fill and unload the bag from a single platform, which reduces the number of movements required. The result is a safe and efficient operation, which is ideally suited to higher throughput systems. An auto-release system is provided to release the bag once filled, thereby further reducing the workload on the operator. Using two FLB 500 fillers in tandem with a single product feed system, filling rates in excess of 10 bags/hour are possible for one operator.

The **FLB 800** uses the same top weighing technology as the FLB 500 and has the unique feature of gantry bag handling. Using a motorized gantry trolley, the filled bag can be automatically taken from the filling head to the awaiting palletising system. As a result, no pallets are required inside the packing room thereby achieving a high level of hygiene.



### 1. Quick-release Hooks

Automatically release the filled bag for transfer to palletising.



### 2. Inflatable Clamp

Provides dust tight filling operation.



### 3. Automatic Metering

Providing accurate metering to final fill weight.



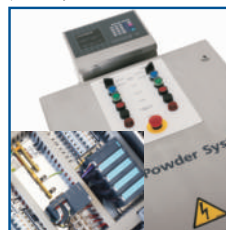
### 4. Inflate System

Ensures that the maximum volume of the bag is available for filling. Reduces risk of bag creasing and subsequent instability, HEPA filtration for maximum hygiene.



### 5. Integrated Controls

Enabling stand-alone operation or optional integration to existing plant systems.



### 6. Height Adjustment

To suit a wide variety of bag lengths. Electric motor driven version available.



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## Design Objectives

- Efficient bag handling during filling
- Safety and minimum number of manual operations
- Bulk bag stability during transportation
- Minimal room requirements and easy clean surfaces
- Handling variable bag types and sizes
- Maximum bag volume utilisation

## Features

	<b>FLB 500</b>	<b>FLB 800</b>
Bag filling	Metering valve	Variable speed screw conveyor
Bag inflation	Y	Y
Base compaction	Option	Y
Automatic gantry system	N	Y
Auto-release hooks	Y	Y
Operator interface	Y	Y
Metal detection	Option	Option
Product sampling	Option	Option
Adjustable bag height	Y	Y
Powder contact:		
Stainless steel AISI 304 or as specified by customer	Y	Y

## Standards

(a) EU Directives and their harmonized standards:

- Machine Safety 98/37/EC;
- "ATEX" 94/9/EC;
- Noise 2003/10/EC;
- Electromagnetic compatibility 2004/108/EC;
- Pressure equipment 97/23/EC;
- Hygiene EHEDG Guidelines; and compliance with

(b) US standards covering:

- Hygiene USDA Guidelines; FDA Codes of Federal Regulations – (CFR series 21)
- Machine Safety OSHA 1910 Subparts O&S; ANSI B11.19; ANSI/PMMI B155.1; NFPA 70 & 79; ANSI/ISA 12.10.05

## Powder Sampler - optional

- Metering screw for sample collection, with fixed speed auger, sample size adjustable by time
- Adjustable start / stop set points for collecting varying sample sizes
- The frequency of sampling can be customized over a sampling period
- Twin divert sampling system
- Automatic change to empty collection bag when set point (e.g. full pallet or batch) for collection is obtained
- Manual intervention possible
- Easy operation bag clamp
- Sampling control from main Control System

## Bulk Bag requirements

- Bulk Bag Types - FIBC - Flexible Intermediate Bulk Container
- Bag Outer - Woven type polyethylene with loop straps
- Liner - Polyethylene material
- Gas Barrier liner - Option



## Process Engineering

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