

# FORMPAK INC

## 400 BB-IOM 2021 EDITION

### **DISCLAIMERS:**

NOT ALL ITEMS IN THIS MANUAL ARE ON EVERY SYSTEM.

SYSTEM CONFIGURATIONS VARY PER CUSTOMER ORDERS & SPECS.

ANY MODIFICATIONS TO THE EQUIPMENT WITHOUT APPROVAL OF FORMPAK ENGINEERING WILL  
RESULT IN VOIDING ANY WARRANTY.

#### **Operation Hours**

**Monday – Friday 8:00AM–5:00PM CST**

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## **INTRODUCTION:**

Dust Collectors and Bag Dump Stations help control dust nuisance problems created when bags or drums of dusty material are manually charged into a process stream. An exhaust blower quietly draws ambient air downward through the material loading grate carrying airborne dust particles into the enclosed filter chamber. Dust laden air is drawn through the filter media where dust is retained on the outer surface of the filter. To maintain continuous dust removal capability, filter is periodically cleaned by a reverse-flow method achieved by short bursts of compressed air. The effect is a brief controlled inflation of the filter membrane causing accumulated dust to dislodge and fall into the discharge hopper located beneath the collector. The dust collector can be utilized as a stand-alone dust control package or as a complete manual bag unloading station, complete with hinged access door, removable grate, and discharge hopper.

## **DESCRIPTIONS:**

**Exhaust Blower** - A positive displacement blower is furnished to provide dust entraining airflow through material inlet grating. It is externally mounted for ease of access and is complete with AC drive motor.

**Filter Cartridge** - Each dust collector is equipped with cartridge-type filter elements for maximum filtration efficiency. This filter utilizes a pleated cloth configuration for greater surface area and better release capabilities. Each filter has a nominal cloth area of 200 square feet and is available in a variety of cloth media for various applications. Filter cartridges are easily removed and replaced requiring no special tools.

**Controller** The on board controller provides on off control of the dust collector and automatic cleaning of filter media. An adjustable, solid-state timer controls both duration and frequency of compressed air bursts for optimum dust control and cartridge cleaning.

## INSTALLATION INSTRUCTIONS:

Install the dust collector / bag dump station indoors on solid level flooring and anchored securely to prevent excessive movement and vibration. Excessive loads should not be placed on dust collector housing or discharge hopper. Note: The dust collector is designed for indoor operation and for handling dry, dusty materials. Avoid exposure to moisture and/or outdoor storage.

### A) Compressed Air Requirements:

The filter cleaning mechanism requires a small quality (5 8 S.S.F.M.) of clean and dry compressed air. For most applications, a compressed air supply of 90 100 psi provides optimum filter cleaning. A commercially available strainer and moisture separator should be installed where compressed air quality is marginal.

**CAUTION: COMPRESSED AIR PRESSURE EXCEEDING 100 psi MAY DAMAGE AIR CONTROL VALVES AND FILTER CARTRIDGES.**

### B) Electrical Requirements:

The solid state filter controller requires 110 vac, single phase, 60 cycle electrical supply for operation. Most exhaust blowers require 460 vac, 3 phase, 60 cycle supply. Motor starter and safety disconnect are not supplied by FormPak and should be provided by the purchaser for adequate motor control.

## START-UP:

Before operating the dust collector equipment we recommend the following start up check list be reviewed by qualified maintenance personnel

- 1) Check tightness of filter cartridge attachment hardware.
- 2) Check compressed air supply lines for leakage, moisture and debris.
- 3) Verify correct blower rotation.
- 4) Inspect controller for loose wiring connections, blown or broken fuses.
- 5) Verify solid state timer settings and check operation of compressed air cleaning mechanism:

Factor Timer Settings Interval:

40 Seconds

Duration: 0.15 seconds

**CAUTION: ALWAYS DISCONNECT AND ISOLATE ELECTRICAL BEFORE INSPECTION AND MAINTENANCE PROCEDURES.**

## MAINTENANCE:

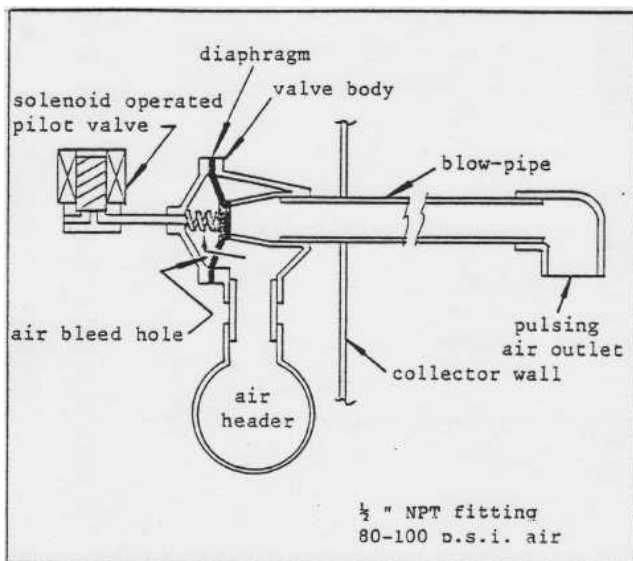
Regular maintenance and inspection will prolong the life of the dust collector unit.

- 1) Check blower operation for smoothness and wear.
- 2) Check operation of filter cleaning mechanism verify adequate filter cleaning.

For video on filter replacement please look here: <https://youtu.be/DFZc3RIDz4s>

- 3) Inspect cartridge filter elements for leakage and excessive post build up. Replace periodically.

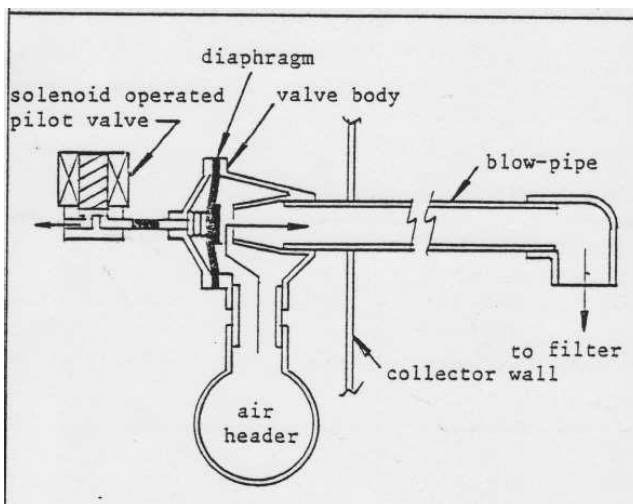
## How The Pulsing Air System Operates:



### Normally Closed Position:

Compressed air passes through a small bleed hole in the diaphragm or air bleed passage in the valve body and is checked at the pilot valve by the solenoid armature.

Pressure in the valve cover increases until it equals the pressure in the air header. Since the pressure is considerably lower in the blow pipe, the diaphragm seats tightly against the valve body.



### Pulsing Position:

When an electrical pulse from the timer energizes the solenoid coil, the solenoid armature lifts off of its seat and allows compressed air to flow through the pilot valve to atmosphere. Pressure drops in the valve cover and the higher pressure in the valve body moves the diaphragm into the open position. Air flows from the compressed air header through the blow-pipe to clean the cartridge. At the conclusion of the electrical pulse, the pilot valve closes and pressure rises again in the valve cover to return the diaphragm to the closed position.

## Formpak Machinery Catalog

### **BagPak Series (Bulk Bag Fillers)**

- BagPak 1100-DT (Duffel Top Bag Filler)
- BagPak 2100-ST (Spout Top Bag Filler)
- BagPak 2100-SS (Spout Top, Scale Controlled Bag Filler)
- BagPak 4400-AD (Auto Discharge Bag Filler)

### **BagFlo/EasyFlo Series (Bulk Bag Dischargers)**

- BagFlo 500-FL (Fork Loaded Bulk Bag Unloader)
- BagFlo 500-HT (Hoist & Trolley Loaded Bulk Bag Unloader)
- BagFlo 500-HF (Half Frame Bulk Bag Unloader)
- BagFlo 500-RK (Retrofit Kit)
- EasyFlo 500-FL (Free Flowing Bulk Bag Unloader)
- EasyFlo 500-HT (Free Flowing Bulk Bag Unloader)
- EasyFlo 500-HF
- BagFlo LIW (Loss-in-Weight Bulk Bag Unloader)
- BagFlo GC (Gantry Crane Bulk Bag Unloader)
- BagFlo SLH (Super Low Head)

### **Lifting Devices**

- BagLift 100-CA (Bulk Bag Crane Adapter)
- BagLift 100-FA (Bulk Bag Fork Adapter)
- BagLift 100-FF (Flying Fork Adapter)
- BagLift 100-LH (Low Head)
- BagLift 200-HL (High Lift)

### **Small Bag Handling Equipment (Bag Break Stations)**

- BagBreak 100-SH (Simple Bag Break Hopper)
- BagBreak 400-UC (Bag Break with Upper Cabinet)
- BagBreak 400-BB (Dual Filter Bag Break)

### **Other Products**

- FlexFlo Flexible Screw Conveyors
- FeedFlo-VSF (Volumetric Screw Feeder)
- FeedFlo-VFV (Vibratory Volumetric Feeder)
- FeedFlo-SFS (Screw Feeder with Scale)
- FeedFlo-VFS (Vibratory Feeder with Scale)
- FeedFlo LIW (Loss-In-Weight) feeder
- GH-1000 (Gyrated Hopper)
- VM-4000 (Venturi Mixing System)
- MatFlo (Lump Breaker)
- BagBreaker (Bag Conditioner)

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- Live Hoppers
- Eduction Systems
- Batching Systems

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