

Precoat Powder Injection Guidelines

Baghouse.com Precoat powder conditioning agent safeguards your air pollution control investment by protecting your bags from fine particulate bleedthrough. Baghouse.com Precoat powder powder can be used to establish a control layer dustcake on new bags, reduce existing bleedthrough and high operating differential pressures, post-treat fabric for winter or plant shutdowns, or absorb moisture and oils during upset conditions.

Features:

- Wide variety of particle shapes and sizes.
- Chemically stable, inert and non-flammable.
- Superior hydrocarbon and moisture absorbancy.
- Aluminum Silicate powder has no detectable free silica contents.

Benefits:

- Sets up consistent porous dustcakes for improved airflows and efficiency.
- Absorbs moisture and oils that can shorten bag life.
- Safe to handle, lightweight powder remains on the filter bags.
- Baghouse.com Precoat powder is available in 40 lb. bags or via a bulk transport truck for systems requiring 12,000 lbs. or more.

Injection Guidelines For Collectors With A Full Set Of New Bags

1. With the fan running, the cleaning mechanism off, and the process off, inject Baghouse.com Precoat powder into the system. Please note “Injection Location” on page 3 of this instruction sheet.
2. With cleaning mechanism remaining off, bring the process on-line.
3. Operate under normal conditions and allow differential pressure to reach 4” to 5” w.c.
4. Monitor differential pressure across the collector. It may be possible to reduce the frequency and/or duration of cleaning and maintain adequate differential pressure. This may extend filter bag life.

Injection Guidelines For Bag Recovery And Spot Changing On-Line Cleaning Collectors: Pulse-Jet Only

1. Turn off the fan and run the system through the cleaning cycle two or three times to purge the excess particulate. Turn off the cleaning system after purging the collector and leave it off through step 5.
2. With the process off, restart the fan and inject Baghouse.com Precoat powder into the system. Please note “Injection Location” on page 2.
3. With the cleaning mechanism remaining off, bring the process back on-line.
4. Operate under normal conditions and allow differential pressure to reach 4” to 5” w.c.
5. Turn the cleaning system on. Monitor differential pressure across the collector. It may be possible to reduce the frequency and/or duration of cleaning and maintain adequate differential pressure. For better cleaning on pulse-jet applications, stagger the row pulsing to prevent re-entrainment of particulate onto the bags.

Off-Line Cleaning Collectors: Reverse Air, Shaker, And Pulse-Jet

1. Individually isolate the inlet and outlet of the compartments which will receive the injection and manually run through the cleaning cycle two or three times.
2. Turn off the cleaning mechanism in each compartment and leave it off until step 6.
3. The outlet of the compartment should be opened on negative systems. On positive systems, both the inlet and the outlet to the compartment should be opened.
4. Inject Baghouse.com Precoat powder into your system. Please note the “Injection Location” shown on page 3.
5. With the cleaning mechanism still locked out, the isolated compartment should be returned to service. The pressure drop should be allowed to build up to the normal operating differential pressure before the cleaning mechanism is reactivated.
6. Turn the cleaning system on. Due to increased airflow and decreased differential pressure, it may be possible to reduce the frequency and/or duration of cleaning. This may extend filter bag life.

Injection Location

1. Negative systems can inject Baghouse.com Precoat powder powder via an access door, port, or coupling prior to the collector or compartment. An injection port, at least 3” in diameter (see drawing on next page), should be installed on the inlet elbow or inlet transition of each compartment. This will ensure proper distribution of the Baghouse.com Precoat powder powder. There may be enough suction in the duct to allow attaching a flexible hose to the port and drawing the Baghouse.com Precoat powder powder out of the container.
2. Positive pressure systems can inject Baghouse.com Precoat powder powder via an access door or port on the negative (suction) side of the fan or install an injection port, at least 3” in diameter (see drawing on next page), on the inlet elbow or inlet transition of each compartment and utilize Vacutrans™. Positive pressure systems may require a ball valve or gate valve to be installed on the injection port to keep hot gases from escaping while connecting and disconnecting the injection hose.
3. Systems with insufficient suction must use an air injection method. Vacutrans™ can be utilized.
4. ***DO NOT SHUT OFF THE COLLECTOR FAN FOR A MINIMUM OF 8 HOURS AFTER THE PRECOAT POWDER INJECTION!*** The Baghouse.com Precoat powder powder may dislodge and fall into the collection hopper if the fan is shut off.
5. Inject Baghouse.com Precoat powder powder prior to startup or prior to extended shutdowns.

Each 40 Ib. Bag of Baghouse.com Precoat powder Will Provide a 1/16th Inch Control Layer for 800 Sq. Ft. of Filtration Bag Cloth Area.

- To find the total cloth area in square feet of your baghouse, follow this formula:
- Total Cloth Area = ([Filter Bag Diameter In Inches X 3.14 X Length In Inches] ÷144) X Total Number of Bags in Collector

To determine number of bags of Baghouse.com Precoat powder to use:

- For 1/16th inch layer: Total cloth area ÷ 800 = number of bags of Baghouse.com Precoat powder for
- 1/8th inch layer: Total cloth area ÷ 400 = number of bags of Baghouse.com Precoat powder
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Conditioning Feed Of Baghouse.com Precoat powder

Using Baghouse.com Precoat powder helps your baghouse operate more efficiently. After the initial injection, Baghouse.com Precoat powder can be added on a continuing basis as a conditioning feed to improve overall long-term collection efficiency and absorb damaging moisture. A continued feed of measured amounts of Baghouse.com Precoat powder provides improved porosity of the dustcakes, resulting in better airflow while reducing bag blinding and depth penetration that can shorten filter bag life.

Baghouse.com Precoat powder particles vary in shape and size to keep dustcake permeable by mixing with particulate in the gas stream. During the cleaning cycle, the Precoat powder® conditioning feed facilitates fracture of the dustcake for more effective cleaning. Although every case is site-specific, the following formula applies for conditioning feed:

Conditioning Feed = 10% of Precoat Powder Initial Control Layer Per Day

