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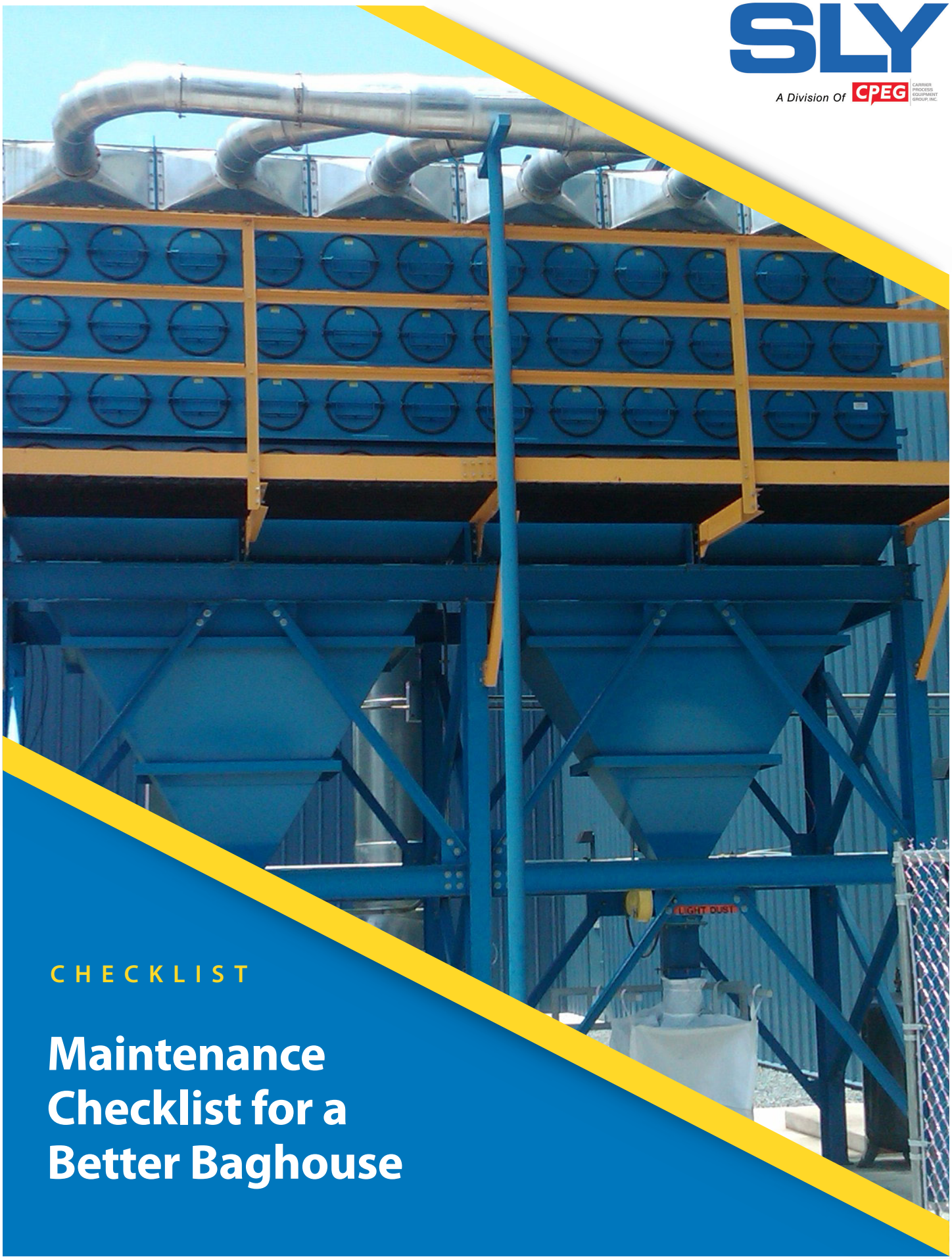

CHECKLIST

Maintenance Checklist for a Better Baghouse

Contents

Maintenance Checklist for a Better Baghouse

Checklist

Proper design, installation, operation and maintenance of dust collection equipment is critical in the manufacturing environment for worker safety and air pollution control. Plant safety in today's world depends increasingly on avoiding fire and explosion risks associated with airborne and settled dust in all industrial applications. The pulse-jet style dust collector, commonly referred to as a baghouse, is the most prevalent type of equipment used to collect and contain both nuisance and process dust in manufacturing settings.

For optimal performance and reliability of your dust collection equipment, Sly recommends a schedule of inspections and the timely repair of damaged or malfunctioning equipment. Incorporating a routine inspection and maintenance program will positively impact the equipment's performance and life. This paper provides a foundation for creating a comprehensive periodic maintenance program for all styles of dust collectors.

It is important to note, however, that toxic and/or combustible dusts require special handling. The equipment owner/operator is advised to review the appropriate NFPA documents related to combustible materials, including (but not limited to) NFPA-69, NFPA-77, NFPA-484, NFPA-654, and particularly NFPA-652, which details owner/operator obligations with regard to operating and maintaining equipment that handles combustible materials. Toxic materials must be handled and disposed of per applicable OSHA and EPA requirements. In addition, local regulations may apply. Sly cannot accept any liability for installation, improper operation, or mishandling of toxic or combustible materials in, or around, supplied dust collection equipment.

The following overview of procedures can be used as a guide to tailoring your own program.

1. Inspection/Maintenance Program

A typical program consists of a schedule for periodic inspections that are performed on a daily, weekly, monthly, semi-annual and annual basis. When a baghouse is not periodically inspected, the effectiveness of its operation can be adversely affected. Subsequently, the baghouse may not meet the source ventilation requirements or outlet emissions specified on an EPA operating permit.

As a convenience, we have included "Inspection Logs" for the different styles of Sly dust collectors with this checklist. These logs may be used as-is or modified to fit a specific installation. In either case, they cover the most important items that should be monitored to maintain an effective and efficient dust collection system. An added benefit is the development of an accurate history of operation, should questionable performance be experienced at a later date.

2. Pressure Drop

Pressure drop, or differential pressure, is the amount of static resistance required to pull or push the air through the filter housing and bags or cartridges. It is typically measured in inches of water column (w.c.). Examples of some standard gauges used for this monitoring are Magnehelic® gauges, Photohelic® switch/gauges and manometers. Pressure drop is a good indicator of the amount of dust retained on the filter media and, if continually monitored and logged, the condition of the bags themselves.

New filter bags have the lowest pressure drop because of the inherent permeability of the media. As the bags develop a dust cake, some particulate embeds itself into the inner fibers of the filter media, and the pressure drop will increase accordingly. The filtering of the airstream through this accumulated dust cake provides high-efficiency collection of fine particulate. In fact, a dust collector can offer its highest efficiency just before the cleaning mechanism is initiated. However, high differential pressures can cause bleed-through or blinding of the filter media. Therefore, exceeding the manufacturer's recommended operating pressure drop is not recommended.

Maintaining a daily log of a baghouse's differential pressure from the initial startup of the filter will provide the opportunity to diagnose problems that may occur (i.e., an increase in dust emissions, reduced ventilation air at the dust source, shortened bag life, etc.). After the filter bags' initial seasoning or conditioning period, the pressure drop should stabilize at a consistent operating range relative to the cleaning cycle, application and style of equipment. Therefore, at subsequent bag or cartridge changes, this operating range can be predicted. Deviation from this historical level will alert an operator to investigate the cause of such an occurrence.

3. Cleaning System

Any method the equipment uses to dislodge accumulated dust cake from the filter media is its cleaning system. This may be reverse air, shaker or pulse cleaning. Regardless of the style of cleaning, this system must function properly at all times. Without an effective cleaning system, dust will continue to build up on the bags. The result will be an increased pressure drop and reduced volume of ventilation air at the pick-up points. Further, airstream velocities within the ductwork will decrease and cause dust drop-out in the ducts. This may choke the entire system and render it ineffective.

Click the icon to view a video on setting up a Sly MP-404 pulse timer.

As indicated on our Inspection Logs, cleaning systems require more than just periodic monitoring. All components of the system be regularly inspected and corrections made in a timely manner. In addition to the items noted on the attached logs, refer to your OEM's Installation & Maintenance Manual to include other items specific to the equipment.

On-Demand Pulse Cleaning (for compressed air systems): One effective way to reduce compressed air usage and extend the life of the filter bags, solenoids, and diaphragm valves is to incorporate On-Demand pulsing to the cleaning system. This can be accomplished by adding a Photohelic Switch/Gauge, a differential pressure switch, or integral pressure module to the sequential timer. If a pressure module is available through the dust collector or timer manufacturer, it is typically a "plug-in" option and an easy addition to the cleaning system.

Click the icon to view a video on set-up Sly's MP-404 timer with a pressure module for on-demand cleaning.

No matter which method is used, On-Demand cleaning turns the timer's compressed air pulses on and off, depending on the differential pressure or resistance of air being pulled or pushed through the filter bags (i.e., the more accumulated dust, the greater the resistance and vice-versa). Generally, we recommend about a 1" w.g. static pressure difference between the high level (initiate pulse cleaning) and the low level (stop pulse cleaning) settings. And, depending on the condition of the filter bags, this range could be between 4" and 6" w.g. for the high setting and 3" to 4" w.g. for the low setting. If your pulse cleaning system is unable to clean the filter bags sufficiently to reduce the differential pressure to less than 6" w.g., the bags are probably blinded by fine particulate and need to be replaced.

Click the icon for a video on how to change a top-load style filter bag and here for a video on how to change a bottom-load version.

4. Hopper Discharge

The hopper on a baghouse is not to be used to store the collected product unless originally designed to do so. Storing material in a hopper can lead to bridging of the dust or it may set up as a solid mass, requiring considerable labor and downtime to correct. Material buildup, if not discovered in time, can fill a hopper to its inlet and plug the unit. Further, with low density materials, the airstream may sweep the dust into the bag section, blinding or ruining the filter bags.

Whatever method is used for material discharge (rotary valve, screw conveyor/pneumatic conveyor, etc.), it should be inspected frequently. This inspection should also be followed at shut-down and bag changes.

5. Visible Emissions

Any particulate that can be seen discharging from the exhaust stack is considered visible emissions. These emissions are an indication of a breach in a seal or a broken (torn) filter bag. In either case, the leak must be located and corrected immediately. Not only will the emissions cause health concerns and damage to property outside the plant but may result in monetary fines imposed by the local EPA. A fan ducted downstream of the collector can also be damaged from abrasion or become imbalanced if this condition is not corrected quickly.

The exhaust from a dust collector should be monitored continually and checked off in the Inspection Log. In addition to visual inspections, consider incorporating a Broken Bag Detector into the clean air ductwork. Should a bag begin to fail or there be a leak in a bag seal, the particles that bypass the media will be detected. Typically, these detectors use triboelectric or scattered light technologies. These devices can be wired to an alarm horn, siren or flashing light for an immediate indication of a failure condition.

6. Exhaust Fan

In a dust collection system, an exhaust fan is required to move ventilation air from the point of pickup, through the ductwork and baghouse filter media, and out the exhaust stack. A fan is selected to accommodate each application with respect to volume (ACFM) and pressure drop throughout the system. This pressure drop is calculated by evaluating the static resistance of the baghouse, all ductwork and pick-up points/hoods.

Should an exhaust fan experience loose or worn belts or an imbalanced impeller, it will not exhaust the volume of air it was originally designed to handle. Without adequate ventilation air, a dust collection system will not operate effectively. Thorough fan inspections are to be performed on a semi-annual basis. However, any time unusual vibration, squealing, or other obvious variances from standard operation are observed, the original manufacturer should be contacted for their evaluation and comment.

7. Filter Media

The most important item in a baghouse is the filter media because it allows for the accumulation and support of a dust cake. This dust cake is what provides high filtering efficiencies during operation. A periodic inspection of the filter bags/cartridges is mandatory. Inspect the clean air side of the baghouse for leaks, and the bags for tears. Should the pressure drop within a dust collector become extremely high relative to historical data, it may be caused by excessive dust cake or blinding of the filter bags.

Click icon to view different options for filter bag media and the available finishes for these options.

Excessive dust cake is evident when visually inspecting the filter bags (when the dust collector is presumed to be clean) and finding them covered with an unusually thick layer of collected dust. If this occurs, the cleaning system might not be functioning properly. However, if the dust cake has hardened to the bags and will not dislodge easily, the most probable cause is moisture in the baghouse. Moisture in a dust collector may be the result of dew point excursions, high moisture content in the process gas or the compressed air supply, or a leak in the collector or ductwork that allowed water to enter the dust collector.

Another obvious cause of high differential pressure might be caused by blinding of the filter bags. Blinding can occur from improper start-up conditioning of the filter bags following a bag change, by excessive dust loading or an improper selection of the filter media vs. particle size. See "Start-Up Procedures" for suggestions on how to minimize the possibility of blinding.

Click the icon for a link to a video about start-up procedures.

8. Structural Integrity

The structural integrity of equipment will not only affect its performance but can cause health and housekeeping concerns and reduce equipment life. An overall inspection should be done annually, including welds, joints and flange seals. Any leaks in the collector must be sealed either mechanically or by using silicone caulking. In a negative pressure system, a breach in a seal or weld will introduce ambient air into the collector. With this air, moisture and contaminants can find their way into the collector. In a positive pressure system, dust will blow out of the collector, causing housekeeping problems and a potential health hazard to employees exposed to the dust.

Look for the obvious. Check the structural support members for signs of fatigue and excessive corrosion. Be certain that all fasteners are in place and tightly secured, especially on the ladder and access platform.

Replace any missing bolts, clean and re-weld any cross bracing or gussets that may have cracked welds. Look closely at the filter's external walls for corrosion or signs of bowing. Clean and repaint where necessary. Repair any holes that may have developed in the dust collector walls or hopper(s).

9. Auxiliary Equipment

Aside from the baghouse itself, a thorough inspection of any system will include a check of all miscellaneous complementary equipment. Some of these items might include the exhaust fan, rotary airlock valve, screw conveyor, inlet and/or outlet dampers, level sensors, vibrators, etc. Always add any ancillary equipment to the Inspection Log.

10. Ductwork

Another important component in a ventilation system is the ductwork. If the particulate does not have an opportunity to reach the baghouse, the dust collector will not be able to perform its function. Standard practices suggest a minimum airstream velocity within any duct of 3500 feet per minute (fpm), and between 4000 and 4500 fpm for heavier dusts, such as sand. If the dust travels at lower than adequate velocities, it will tend to settle and accumulate in the ducts, choking the system. This restriction of flow will increase the pressure drop in the system and the energy required to induce the air to move. The result will be reduced ventilation air at the pick-up points. Periodically inspect the entire length of ductwork for dust accumulation and clean it out as required.

Start-Up Procedures: In an effort to maximize the operating life of new filter media in a dust collector, the practice of gradually developing a dust cake on the bags is recommended. This is what we refer to as seasoning or conditioning of the filter media.

Seasoning a collector's filter bags is one of the most important procedures a company can perform. In a fabric filter dust collector, the filter media is used to support a dust cake.

A dust cake is the porous layer of collected particulate that develops during the conditioning period of new collector bags, and following each cleaning cycle. The process can be accelerated in many installations by introducing a precoat material such as agricultural lime into the system. Commercial precoats are also available.

After installation of the filter bags and inspection of the related auxiliary equipment, the exhaust fan can be started. However, it is extremely important that the new filter bags not be exposed to the full volume (ACFM) of the fan. A reduced volume is recommended during the seasoning process. Close the fan damper (or inlet dampers) to about one-half open and run the fan until the differential pressure gauge reads approximately 2" to 3" w.g.. Once at this level, fully open the damper and continue to monitor the pressure drop. At roughly 3" to 4" w.g. differential pressure, the cleaning system can be initiated. Normal operation and periodic cleaning should bring the pressure drop to a stable level.

Depending upon the application, development of this differential pressure may take anywhere from a number of hours to a number of days. This is necessary to ensure the new filter media is exposed to low filtering velocities of dust-laden air. Reducing the volume decreases the airstream's velocity (air-to-cloth ratio), protecting the virgin bags from high velocity impingement of dust. Should the bags be exposed to the fan's full volume, fine particles may embed themselves into inner fibers of the bags and begin a "blinding" condition. This can also damage the fibers of the media, which will reduce the life of the bags.

Click icon for a link to a video about start-up procedures.

Conclusion

We at Sly Incorporated want our customers to know as much as they can about the proper operation and maintenance of a baghouse. With this information as a guide, it's possible to develop a maintenance program for any dust collection system. However, the checklist is not intended as an "all inclusive" list. Each piece of equipment and application is different, and each has its own unique components and features. They should be noted in your program as important to the operation of your equipment and monitored accordingly.

For links to available help and training videos, please visit the video page on our website ***here*** or the list at the back of this booklet.

Dust Collection Glossary

Abrasion Resistance: The ability of a fiber or fabric (media) to withstand surface wear.

ACFM: Actual cubic feet of conveying gas per minute. The volume of the gas flowing per minute at the operating temperature, pressure, elevation and composition.

Air-to-Cloth Ratio: The ratio between ACFM flowing through a dust collector and the square feet of filter area available (ACFM/ft2). Sometimes referred to as the face velocity of air through the cloth.

Baghouse: An air filtration device utilizing fabric filter bags for removing solid particulate from a gas stream (dust collector).

Blinding: Blockage in a fabric or media by dust that cannot be discharged by the cleaning mechanism, resulting in a reduced gas flow and an increased pressure drop across the media. Once enough material has built up, airflow is severely restricted and the bags have to be cleaned or replaced.

Bridging: Material handling problem characterized by the particulate forming a cavity beneath the surface over the discharge or opening of a hopper or storage vessel. Also, the accumulation of collected dust between two or more filter bags.

Can Velocity: In a dust collector with the filter elements suspended from the tubesheet (pulse-jet), "can velocity" is the velocity up through the housing without deducting for the bag area. (Also see Interstitial Velocity).

Cartridge Filter Dust Collector: An air filtration device utilizing pleated cartridge style filter elements for removing solid particulate from a gas stream (dust collector).

Clean Air Plenum: The baghouse chamber through which gases are directed, located on the clean side of the filter bags.

Collection Efficiency: The measure of a dust collector's ability to remove particulate from the inlet gas, typically expressed in percent or emission rate (grains per cubic foot).

Dewpoint: The temperature at which condensation begins to form as the gas is cooled.

Diaphragm Valve: A compressed air valve operated by a solenoid valve that opens to allow a pulse of compressed air to a row of bags.

Dirty Air Plenum: The baghouse chamber where the filter bags are located and through which dust-laden gases are directed to the filter bags.

Differential Pressure: The change in pressure or the pressure drop across a device (baghouse) located within an airstream. The difference between static pressures measured at the inlet and outlet of a device. (See Pressure Drop).

Dust Cake: A dust buildup on the filter bags that increases the efficiency of the filter media.

Dust Collector (See Baghouse).

Dust Loading: The weight of solid particulate suspended in an air stream, usually expressed in grains per cubic foot (or grams per cubic meter).

Emissions: Particulate that escapes through or around a baghouse into the atmosphere.

Fan: A device for moving air and dust through a ventilation system. If the fan is on the dirty air side of the baghouse, it is called a positive system. If the fan is on the clean air side of a baghouse, it is called a negative system.

Filter Media: The permeable barrier utilized in a fabric style dust collector on which the dust cake is supported (bag).

Hopper: The section of a dust collector located below the filter bag housing utilized for the accumulation and discharge of the collected dust.

Impingement: The physical contact of a dust laden gas flow against a filter media. Typically referred to the abrasive wear caused by this impact.

Inches of Water: A unit of pressure equal to the pressure exerted by a column of water one inch high at standard conditions (70°F @ sea level), usually expressed as inches water gauge (" w.g.) or inches water column (" w.c.).

Interstices: The openings or voids in a filter media.

Interstitial Velocity: In a dust collector with the filter elements suspended from the tubesheet (pulse-jet), "interstitial velocity" is the upward air stream speed calculated by dividing the open cross sectional area of the baghouse (less the area of the filter bags disc bottom) into the full volume of the exhaust fan (ACFM/ft2 = Feet per Minute). (Also see Can Velocity)

Magnehelic® Gauge: An instrument used to measure the differential pressure drop in a baghouse.

Manometer: A U-shaped tube filled with a specific liquid. The difference in height between the liquid in each leg of the tube gives the difference in pressure on each leg of the tube, used to monitor differential pressure.

Micron (µm): A unit of length, 1/1000 of one millimeter (1/24,000 of an inch).

Negative Pressure Baghouse: A system where the fan is located after the baghouse on the clean air side, pulling air through the system.

OEM: Original Equipment Manufacturer.

Particulate: Any airborne solid material.

Permeability: A measure of fabric porosity, or openness, expressed in cubic feet of air per minute per square foot of fabric at a 0.5" w.g. pressure differential.

Photohelic® Gauge: An instrument used to measure the differential pressure drop in a baghouse and to initiate the cleaning system by means of adjustable "high" and "low" set points for automatic actuation of a sequential timer.

Positive Pressure Baghouse: A system with a fan located prior to a baghouse on the dirty side, pushing air through the system.

Precoat: Material added to the air stream at start-up to aid in establishing the initial dust cake on the filter bags.

Pressure Drop: A measure of the resistance the gas stream encounters as it flows through the baghouse. It may refer to pressure differential across the media, across the baghouse, or the pressure drop across the entire system, depending upon the points of measurement.

Pulse Cycle: The interval of time between pulsing one row of bags and pulsing that same row again.

Pulse Duration (On-Time): The length of time a pulse lasts, generally described as the length of time the electrical signal holds the solenoid pilot valve open.

Pulse Delay (Off-Time): Elapsed time between pulses in a dust collector cleaning system.

Pulse Clean Baghouse: A baghouse using short intermittent pulses of compressed dry air to clean dust from the filter bags.

Re-entrainment: The phenomenon where dust is collected from an air stream and is then returned to the air stream. This occurs when dust is dislodged from a filter bag during cleaning and is again captured by the same or an adjacent filter bag.

Reverse Air Baghouse: A dust collector where cleaning is accomplished by mechanically, and temporarily, pre- venting the dirty gas flow into a compartment or group of filter bags while blowing low pressure cleaning air through these "off-line" bags in the opposite direction of typical air flow, to dislodge the accumulated dust cake.

Rotary Airlock Valve: Device having a star wheel (rotor) designed to provide an air tight seal between the negative or positive pressures of the collector and the outside atmosphere.

Screw Conveyor: A revolving screw, or auger, operating in a fixed trough for conveying material from one point to another. Should a screw conveyor be used in a dust collector system, an airlock is still required to ensure ventilation air does not bypass through the conveyor.

SCFM: Standard cubic feet per minute. The volume of gas flow per minute at standard temperature and pressure conditions (70°F @ sea level).

Shaker Baghouse: A dust collector where cleaning is accomplished by manually or automatically shaking the bags to dislodge the accumulated dust cake. Typically, the airstream within the baghouse is in a static condition during the shaker cleaning cycle.

Solenoid Valve: An electromechanical plunger device that is either "normally open" or "normally closed." In use with a baghouse, it is for the relief of air pressure to activate a compressed air device such as a diaphragm valve.

Timer, Sequential: An electrical mechanism that activates a dust collector's cleaning system.

Tubesheet (Dust Wall): A steel plate to which the open end of the filter bags are connected. This wall separates the clean air and dirty air plenums of the baghouse.

Venturi: A cone-shaped device located at the top of a tubular filter bag in a pulse-jet dust collector, which creates a negative pressure at the top of the venturi for pulling additional air down into the filter elements during pulsing.

Weight (Media): The average weight per square yard of fabric.

Inspection Log-TubeJet® Dust Collector

Baghouse #_____ Model No. _____

Date					
Time					
Inspector					
Daily					
Record Differential Pressure (dP)	"wg	"wg	"wg	"wg	"wg
Is timer sequencing, row by row?	Y / N	Y / N	Y / N	Y / N	Y / N
Are solenoids operating?	Y / N	Y / N	Y / N	Y / N	Y / N
Are diaphragm valves firing?	Y / N	Y / N	Y / N	Y / N	Y / N
*Hopper discharge device operating?	Y / N	Y / N	Y / N	Y / N	Y / N
Any visible stack emissions?	Y / N	Y / N	Y / N	Y / N	Y / N

Weekly					
Record compressed air pressure	PSIG	PSIG	PSIG	PSIG	PSIG
Clean compressed air filter trap	( )	( )	( )	( )	( )
Check tubesheet for bag leaks	( )	( )	( )	( )	( )
Check that hopper is empty	( )	( )	( )	( )	( )

Monthly					
Are there leaks in access doors?	Y / N	Y / N	Y / N	Y / N	Y / N
Check door seals for deterioration	( )	( )	( )	( )	( )
Check air lines & fittings for leaks	( )	( )	( )	( )	( )
Blow out dP gauge lines	( )	( )	( )	( )	( )

Semi-Annually					
Record pulse duration					
Record pulse delay					
Check bag condition (dirty side)	( )	( )	( )	( )	( )
Check pulse pipe alignment	( )	( )	( )	( )	( )
*Check fan, belt tension, etc.	( )	( )	( )	( )	( )

Annually					
Check case/support for corrosion	( )	( )	( )	( )	( )
Check all bolts and welds	( )	( )	( )	( )	( )
Check ductwork for buildup of dust	( )	( )	( )	( )	( )
Bag dye penetrant test	( )	( )	( )	( )	( )

*Lubrication of bearings, reducers, etc. should be done periodically and per specific Manufacturer's O & M manuals recommendation. Schedule maintenance and/or repair of any malfunctioning components, excessive corrosion or parts' replacement.

Notes/Comments: _____

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Inspection Log-Pacyecon® "PC" Collector

Baghouse #_____ Model No. _____

Date					
Time					
Inspector					
Daily					
Record Differential Pressure (dP)	"wg	"wg	"wg	"wg	"wg
Is timer sequencing, row by row?	Y / N	Y / N	Y / N	Y / N	Y / N
Are solenoids operating?	Y / N	Y / N	Y / N	Y / N	Y / N
Are diaphragm valves firing?	Y / N	Y / N	Y / N	Y / N	Y / N
*Hopper discharge device operating?	Y / N	Y / N	Y / N	Y / N	Y / N
Any visible stack emissions?	Y / N	Y / N	Y / N	Y / N	Y / N

Weekly					
Record compressed air pressure	PSIG	PSIG	PSIG	PSIG	PSIG
Clean compressed air filter trap	( )	( )	( )	( )	( )
Check tubesheet for bag leaks	( )	( )	( )	( )	( )
Check that hopper is empty	( )	( )	( )	( )	( )

Monthly					
Are there leaks in access doors?	Y / N	Y / N	Y / N	Y / N	Y / N
Check door seals for deterioration	( )	( )	( )	( )	( )
Check air lines & fittings for leaks	( )	( )	( )	( )	( )
Blow out dP gauge lines	( )	( )	( )	( )	( )

Semi-Annually					
Record pulse duration					
Record pulse delay					
Check bag condition (dirty side)	( )	( )	( )	( )	( )
Check pulse pipe alignment	( )	( )	( )	( )	( )
*Check fan, belt tension, etc.	( )	( )	( )	( )	( )

Annually					
Check case/support for corrosion	( )	( )	( )	( )	( )
Check all bolts and welds	( )	( )	( )	( )	( )
Check ductwork for buildup of dust	( )	( )	( )	( )	( )
Bag dye penetrant test	( )	( )	( )	( )	( )

*Lubrication of bearings, reducers, etc. should be done periodically and per specific Manufacturer's O & M manuals recommendation. Schedule maintenance and/or repair of any malfunctioning components, excessive corrosion or parts' replacement.

Notes/Comments: _____

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Inspection Log-PleatJet™ Cartridge Dust Collector

Baghouse #_____ Model No. _____

Date					
Time					
Inspector					
Daily					
Record Differential Pressure (dP)	"wg	"wg	"wg	"wg	"wg
Is timer sequencing, row by row?	Y / N	Y / N	Y / N	Y / N	Y / N
Are solenoids operating?	Y / N	Y / N	Y / N	Y / N	Y / N
Are diaphragm valves firing?	Y / N	Y / N	Y / N	Y / N	Y / N
*Hopper discharge device operating?	Y / N	Y / N	Y / N	Y / N	Y / N
Any visible stack emissions?	Y / N	Y / N	Y / N	Y / N	Y / N

Weekly					
Record compressed air pressure	PSIG	PSIG	PSIG	PSIG	PSIG
Clean compressed air filter trap	( )	( )	( )	( )	( )
Check tubesheet for bag leaks	( )	( )	( )	( )	( )
Check that hopper is empty	( )	( )	( )	( )	( )

Monthly					
Are there leaks in access doors?	Y / N	Y / N	Y / N	Y / N	Y / N
Check door seals for deterioration	( )	( )	( )	( )	( )
Check air lines & fittings for leaks	( )	( )	( )	( )	( )
Blow out dP gauge lines	( )	( )	( )	( )	( )

Semi-Annually					
Record pulse duration					
Record pulse delay					
Check bag condition (dirty side)	( )	( )	( )	( )	( )
Check pulse pipe alignment	( )	( )	( )	( )	( )
*Check fan, belt tension, etc	( )	( )	( )	( )	( )

Annually					
Check case/support for corrosion	( )	( )	( )	( )	( )
Check all bolts and welds	( )	( )	( )	( )	( )
Check ductwork for buildup of dust	( )	( )	( )	( )	( )
Bag dye penetrant test	( )	( )	( )	( )	( )

*Lubrication of bearings, reducers, etc. should be done periodically and per specific Manufacturer's O & M manuals recommendation.
Schedule maintenance and/or repair of any malfunctioning components, excessive corrosion or parts' replacement.

Notes/Comments: _____

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Inspection Log-Dynaclone® Dust Collector

Baghouse #_____ Model No. _____

Date					
Time					
Inspector					
Daily					
Record Differential Pressure (dP)	"wg	"wg	"wg	"wg	"wg
*Hopper discharge device operating?	Y / N	Y / N	Y / N	Y / N	Y / N
Any visible stack emissions?	Y / N	Y / N	Y / N	Y / N	Y / N
Weekly					
*Check traveler drive mechanism	( )	( )	( )	( )	( )
Check tubesheet for bag leaks	( )	( )	( )	( )	( )
Check that hopper is empty	( )	( )	( )	( )	( )
Monthly					
Are there leaks in access doors?	Y / N	Y / N	Y / N	Y / N	Y / N
Check door seals for deterioration	( )	( )	( )	( )	( )
Check Spiratube connections & wear	( )	( )	( )	( )	( )
Blow out dP gauge lines	( )	( )	( )	( )	( )
Semi-Annually					
Check wiper blade wear					
Check bag condition (dirty side)	( )	( )	( )	( )	( )
Check pulse pipe alignment	( )	( )	( )	( )	( )
*Check fan, belt tension, etc.	( )	( )	( )	( )	( )
Annually					
Check case/support for corrosion	( )	( )	( )	( )	( )
Check all bolts and welds	( )	( )	( )	( )	( )
Check ductwork for buildup of dust	( )	( )	( )	( )	( )
Bag dye penetrant test	( )	( )	( )	( )	( )

*Lubrication of bearings, reducers, etc. should be done periodically and per specific Manufacturer's O & M manuals recommendation.
Schedule maintenance and/or repair of any malfunctioning components, excessive corrosion or parts' replacement.

Notes/Comments: _____

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Inspection Log-Shaker Dust Collector

Baghouse #_____ Model No. _____

Date					
Time					
Inspector					
Daily					
Record Differential Pressure (dP)	"wg	"wg	"wg	"wg	"wg
*Hopper discharge device operating?	Y / N	Y / N	Y / N	Y / N	Y / N
Any visible stack emissions?	Y / N	Y / N	Y / N	Y / N	Y / N
Weekly					
*Check traveler drive mechanism	( )	( )	( )	( )	( )
Check clean air side for bag leaks	( )	( )	( )	( )	( )
Check that hopper is empty	( )	( )	( )	( )	( )
Monthly					
Are there leaks in access doors?	Y / N	Y / N	Y / N	Y / N	Y / N
Check door seals for deterioration	( )	( )	( )	( )	( )
Blow out dP gauge lines	( )	( )	( )	( )	( )
Semi-Annually					
Check wiper blade wear					
Check bag condition (dirty side)	( )	( )	( )	( )	( )
Check pulse pipe alignment	( )	( )	( )	( )	( )
*Check fan, belt tension, etc.	( )	( )	( )	( )	( )
Annually					
Check case/support for corrosion	( )	( )	( )	( )	( )
Check all bolts and welds	( )	( )	( )	( )	( )
Check ductwork for buildup of dust	( )	( )	( )	( )	( )
Bag dye penetrant test	( )	( )	( )	( )	( )

*Lubrication of bearings, reducers, etc. should be done periodically and per specific Manufacturer's O & M manuals recommendation.
Schedule maintenance and/or repair of any malfunctioning components, excessive corrosion or parts' replacement.

Notes/Comments: _____

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Help and Training Video Links

MP-404 basic timer set-up
https://youtu.be/6Wd6pteLQIs

Pressure Module set-up for MP-404 timer on demand cleaning.
https://youtu.be/wUFGMAeNa5s

Change out a top load filter bag
https://youtu.be/El912Zokm7o

Change out a bottom load filter bag
https://youtu.be/plqFVz_PEm0

Sly website media link
https://www.slyinc.com/products/fabric-filter-media-options/

Start-up Procedure for a Dust Collector
https://youtu.be/8zQtfWqtYAk

Sly website video link
https://www.slyinc.com/resources/videos/

Change out a diaphragm
https://youtu.be/d0agWKy19yk

How to measure a bottom load filter bag for a quote
https://youtu.be/PrSj52Ly6hg

How to measure a top load filter bag for a quote
https://youtu.be/1RgkXuWUrRk

New Armour guard channel installation
http://youtu.be/Fmw_ZVI24yU

Sly Envelope bag Installation
http://youtu.be/iyQbxbqaMeY

Split Cage Installation and Removal
https://youtu.be/TDUFzWNjJo4

Pulse pipe and Morris clamp installation instructional video
https://youtu.be/VMomieAmza4

Installation Sleeve for PTFE Membrane Filter Bags
https://youtu.be/zwFFgHF-DpA

NFPA Recommended Filter Bag Grounding Strap Design
https://youtu.be/IDrxkCAMBrg