

Instruction Sheet

BHA® Visolite® Leak Detection System Usage Instructions

Using The Visolite Black Light

Carefully unpack and inspect the Visolite Black Light for possible damage during shipment. If any damage is found, notify Parker Hannifin immediately before attempting to use.

Getting Started

1. Locate an inlet port in the dirty air stream to the baghouse (on negative side of fan) just before the baghouse inlet. The port should be at least 3" in diameter. If BHA Visolite test is being done on a new collector or one that has just been rebagged, go to step no. 3.
2. When doing a BHA Visolite test on a unit that has been in use, turn off the bag cleaning mechanism leaving a dustcake on the bag to give a high pressure differential between the clean and dirty side of the bag. This will encourage tracer compound to flow through any holes. Visually check the clean air plenum for heavy dust buildup and remove if possible so it won't hide the BHA Visolite powder that will mark the leakage points.
3. Start the fan and introduce 1 pound of tracer compound per 1,000 square feet of filter cloth. (On positive pressure systems, inject before the fan.) The quantity of tracer compound required may vary depending on the length of the ductwork from the fan to the baghouse. Contact Parker Hannifin for recommended usage.
4. After injection of the powder, the fan should be left on for approximately 45 seconds, but no longer than one minute. After shutting the fan off, inspect, using the Visolite Black Light. For pulse type units, inspection requires opening the top door and shining the light over the clean air plenum. (Note: Test must be performed in darkness for outside inspections.)

WARNING: This environment meets the definition of a confined space as outlined in 29 C.F.R. 1910.146. Entry should conform with the requirements as stated in the above referenced standard. In addition to these precautions, lockout practices must also be assessed to ensure the safety of all associated personnel. Check with your safety personnel on all required precautions and protective equipment prior to entry.

For shaker or reverse air units, inspection takes place from the inside, starting with the lower level and concentrating the light around the thimble sheet.

5. Areas where leaks or holes exist allow the tracer compound to pass through to the clean side of the bag where it fluoresces brilliantly when exposed to light from the Visolite Black Light. These areas of fluorescence mark the location of leaks. Bleedthrough of the tracer compound that sometimes occurs in woven material or bags that have been in service a long time, may give the appearance of a ruptured bag. You will quickly learn to differentiate between the two effects.
6. After all repairs have been completed, rerun the BHA Visolite test using a different contrasting color to ensure that no leaks remain. The second color will clearly show any areas that may have been missed.

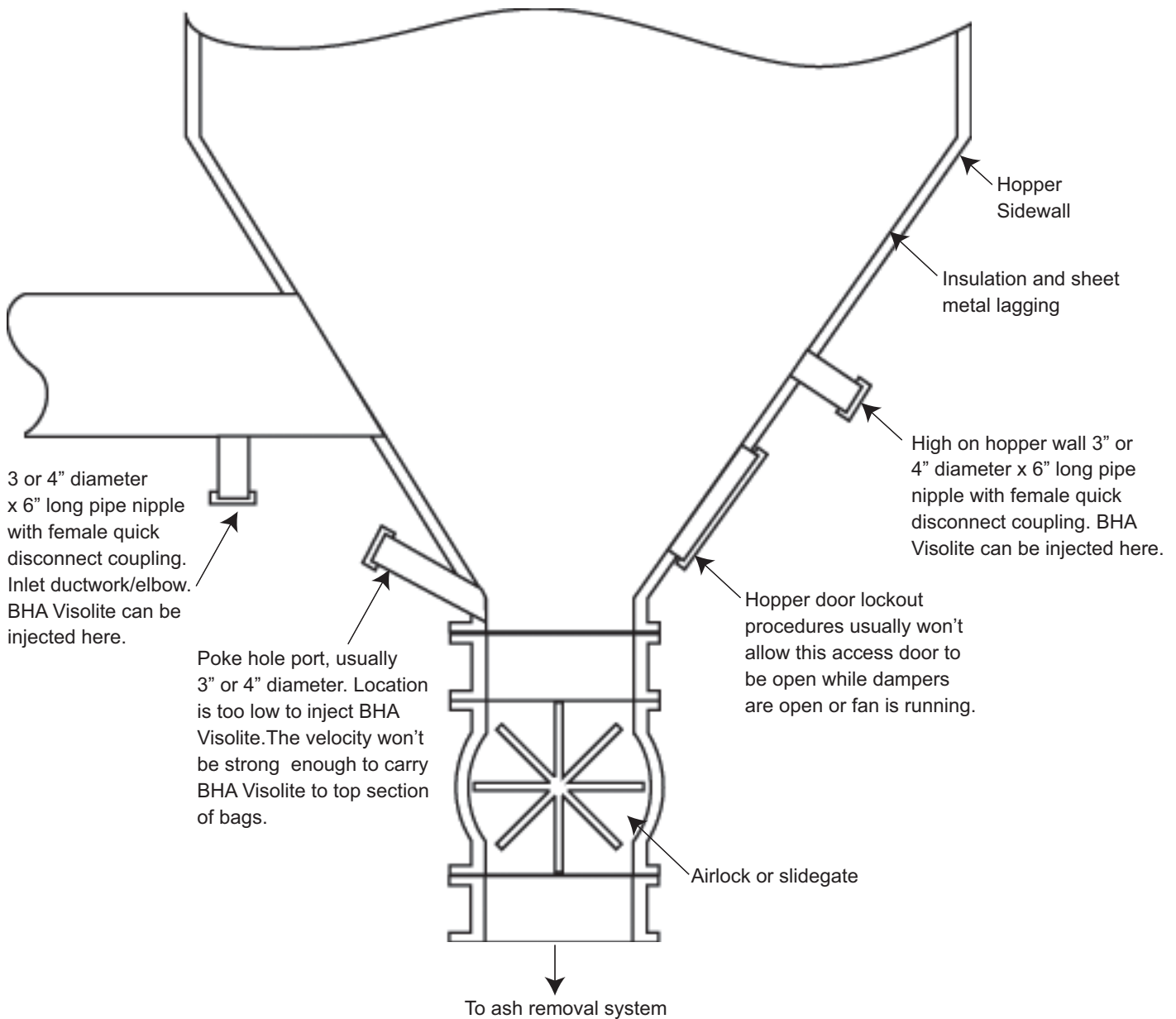


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Injecting BHA Visolite in Reverse Air and Shaker Baghouses

The BHA Visolite Leak Detection System was developed to reduce the time plant personnel spent identifying leaks in failed bags. Previously, each bag was inspected manually for tears, holes and leaking seams which took many hours and was often inaccurate. In addition, structural air leaks in the system such as weld cracks and misfitting metal enclosure covers could not be detected unless they were clearly visible. The procedure also involved extensive exposure of maintenance personnel to a highly dusty atmosphere. BHA Visolite helps solve these conventional problems. Below are injection guidelines for best distribution of BHA Visolite into the compartment.



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CAUTION: For the best results use only Parker Hannifin components. BHA Visolite tracer compound is specially formulated for each application to account for temperature, type of bags, and nature of dust. Use of other powders may permanently damage bags, particularly on high temperature applications or in corrosive atmospheres. Remove powder from cracks in metal before welding. BHA Visolite does not contain formaldehyde.

BHA Visolite Tracer Compound Usage Formula

To determine the quantity of tracer compound needed to run one BHA Visolite test, simply follow the formula below.

Formula: Diameter in inches (A) x 3.14 x Length in feet (B) ÷ 12 x # of filter bags (C) = Sq. Ft. cloth area (D).
Since 1 lb. of BHA Visolite powder per 1000 sq. ft. of filter cloth is required *, then (D) ÷ 1000 = # of lbs. required for test.

Example: (A) Diameter = 5", (B) Length = 8', (C) # of bags = 350
 $5" \times 3.14 \times 8' \div 12 \times 350 = (D)3663 \text{ sq. ft.}$
 $3663 \div 1000 = 3.7 \text{ lbs. of Visolite powder (in this case, round up to 4 lbs.)}$

NOTE: If the square footage of filter cloth per compartment or baghouse is already known, simply divide by 1000 to obtain the number of pounds of BHA Visolite powder to use.

* On positive pressure systems, inject tracer compound before the fan. Quantity of tracer compound may vary depending on length of ductwork between the fan and the baghouse. Contact Parker Hannifin for recommended usage.

