

DUST COLLECTOR OPERATOR PROBLEM:

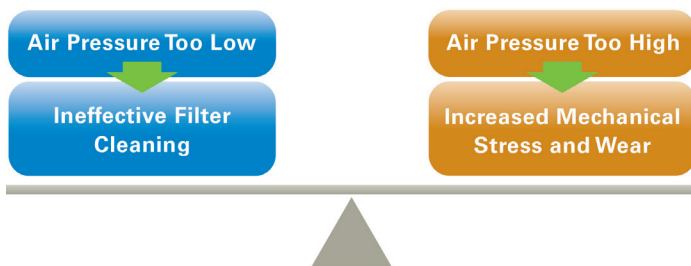
My pulse jet dust collector was installed years ago, and now it does not seem to be achieving the same filter life it once did.

SOLUTION – INVESTIGATE:

- Has the dust collection process changed in a way that might negatively impact filter life?
- If not, ensure all the components are working properly by conducting a detailed inspection.
- If all components are working properly, check the air pressure on the compressed air supply to the pulse jet type dust collector. (To ensure effective filter cleaning, this gauge should be independently verified to confirm accurate working pressure.)

Correct compressed air pressure is critical for effective filter cleaning and filter longevity. If compressed air pressure is too low, filters will not clean properly, and the result will be reduced filter life. If compressed air pressure is too high, filter media becomes stressed and can potentially fail mechanically - again reducing effective filter life.

Importance of Maintaining Proper Air Pressure



If a regulator and pressure gauge are not present on the compressed air line serving the dust collector, look for the closest gauge on the air piping system to confirm air pressure. This pressure gauge might be located on a receiver tank or at the compressor itself.

It's important to note the gauge could be located some distance upstream and away from the dust collector. It's also worth noting that the compressed air supply may be supplying other plant compressed air needs. The observed pressure might not necessarily be the proper compressed air pressure required at the dust collector due to demand reducing pressure during operational periods.

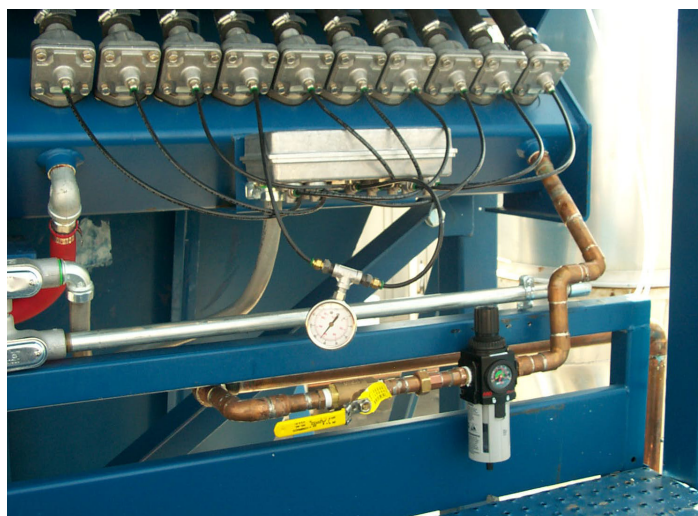
Even if a regulator and pressure gauge are located at the dust collector, these components can fail over time and give false indications of compressed air pressure. An item I always carry is a liquid filled in-line air pressure gauge I can place between the diaphragm and solenoid valves to confirm compressed air pressure at the dust collector. (See photo below.)

This photo shows the inline compressed air test gauge as it compares with the customer's own compressed air filter/regulator pressure gauge on a new dust collector. The original regulator was faulty and only able to achieve 60 PSI, which was too little for effective filter cleaning. The customer replaced the faulty regulator with a new one to achieve the factory recommended 90 PSI of compressed air.

This is a quick, easy way to confirm the actual compressed air pressure at the dust collector.

I recommend checking compressed air pressure with an independent test gauge twice annually during the preventative maintenance schedules for any pulse jet type dust collector. Please consult the installation and operation manual for proper compressed air pressure settings as recommended by the dust collector manufacturer for your particular model.

Remember proper compressed air pressure at the dust collector is critical for effective filter cleaning, which equals fewer filter changes per year and money saved!



Donaldson Company, Inc.
Torit
P.O. Box 1299
Minneapolis, MN
55440-1299 U.S.A.

Tel 800-365-1331 (USA)
Tel 800-343-3639 (within Mexico)

donaldsontorit@donaldson.com
donaldsontorit.com