

# Three Benefits of On Demand Cleaning for your Dust Collector

## Pulse Jet Technology and On Demand Cleaning

Pulse jet cleaning is the most common type of dust collector available today and makes up nearly 50% of all new dust collector installations. In a pulse jet dust collector, filter bags are cleaned when a high pressure jet of air, or compressed pulse, is sent through the system to shock the bags and remove and fracture the dust cake. One advantage of pulse jet dust collectors is the bags can be cleaned while the dust collector is still running so plant production and processing can continue without interruption.

It's important that bags are cleaned regularly to improve airflow through the system, prevent plugging from dust build up, and improve pick up velocities. But it may be time consuming and labor intensive to know how frequently and how often the bags need to be cleaned. On demand cleaning is an automated cleaning system for your dust collector that can improve your dust collectors efficiency and performance while reducing energy consumption and labor costs.

## How On Demand Cleaning Works

In a pulse jet dust collector, as dust starts to cake on the bag the differential pressure between the dirty air environment and the clean air environment increases. With on demand cleaning, the control panel is set by the operator to clean the bags only when the differential pressure reaches a high range, then the system will pulse down to a lower range. Cleaning pauses until the differential pressure reaches the high range once more and the system will automatically pulse down again. This continues as an ongoing cycle that is performed the entire time your dust collector is running.

Here are some benefits of on demand cleaning for your dust collector.

## Improved Airflows

With on demand cleaning, bags will automatically be cleaned at the right differential pressure when airflow is still optimal. This means that the dust cake on the bags will be cleaned before the dust build up becomes excessive enough to impact and decrease airflow through the system. You will see more consistent and increased airflow due to a lower drop in differential pressure.

## Lower Maintenance Costs

With on demand cleaning the system is much less likely to plug and filters will last longer. Automation requires less oversight and time management from plant operators. Your pulse valve diaphragms and solenoids will last longer and won't need to be replaced as often because of the increased efficiency. The cost for the on demand cleaning time and module is insignificant compared to the savings in cost and time for bag wear, valve wear, changeouts, and plant down time.

## Better Pick Up Velocities and Plant Hygiene

Consistent cleaning will improve airflow through the system and improve pick up velocities especially in systems where dust loading is high. Automated cleaning will improve plant hygiene because the entire system from the filters to the pulse diaphragm and solenoid valves will be more efficient allowing better filtration.

Because of the performance benefits of on demand cleaning, we offer this as a standard feature on all of our baghouses, cartridge collectors and bin vents. To learn more about how to upgrade your unit to on demand cleaning, contact one of our engineers today at 888-221-0312 or visit us at [www.usairfiltration.com](http://www.usairfiltration.com)