CleanStation’s Revolutionary DFS Technology proven to Surpass HEPA filtration!
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DFS stands for Disinfecting Filtration System. DFS main filter is less dense around 85% at .3 micron, but within the system the high energy field raises the efficiency of the filter to 99.99% at .3 micron.

HEPA stands for High Efficiency Particulate Arresting. The standard for HEPA efficiency is 99.97% at .3 microns. This has become very confusing to many people in the industry. There are two main types of HEPA’s being marketed today. First you have your True Medical Grade HEPA systems. These machines are indicating that their total system efficiency is 99.97% at .3 microns or better. Total system efficiency means the air coming in the machine will be 99.97% cleaner at .3 micron after it has passed through the filter apparatus, in this case the HEPA filter.

Big Box HEPA’s- Your lower end machines that state HEPA type are indicating that they are using a HEPA paper type media. HEPA Type means the filter media alone may have the ability to reduce particles up to 99.97% but total system efficiency is much lower, in most cases around 50%. The cause of this is bypass around the filter media in the filter frame or no sealing in the unit allowing particles around the filter, no sealing etc.

HEPA- HEPA has always been a good particulate capturing device, but has drawbacks that allows it to be less effective. DFS compensates for these drawbacks. Below is a brief comparison on True HEPA systems vs. DFS.

High air flow restriction. HEPA is a very dense paper media 99.97% at .3 micron. This is great for efficiency but can result in poor air cleaner performance more specifically reduced airflow. You can have the most efficient filter in the world but if you do not move enough air your air cleaner is ineffective. You see many manufacturers make the claim of silent HEPA. The physics behind mechanical filtration are, if you have a dense media you need a strong motor and blower to really push the air through the filter this results in NOISE. In most cases manufacturers are not pushing any air through their machines on low or medium speed and they are claiming silent or quiet. This may be the case but they are not providing effective air cleaning either. On high speed TRUE HEPA systems are providing clean air at 99.97% efficiency at .3 microns, but they sound like a jet taking off.

The DFS main filter is less dense around 85% at .3 micron, but within the system the high energy field raises the efficiency of the filter to 99.99% at .3 micron without restricting the airflow like a true HEPA. The end result is better overall system efficiency than TRUE HEPA with much more airflow. This can also be done much quieter because the motor and blower do not have to work as hard to push the air through the filter.

HEPA- The dense media filter can load with particulates rather quickly. Most HEPA systems are on timers therefore not truly indicating when filters actually need to be changed. In many cases these filters need to be changed every six months.

DFS- with a less dense media filter you can expect 4X the loading capacity of a similar sized HEPA. With true filter monitoring by pressure drop we can indicate when the filter has reached its maximum loading capacity. The DFS main filter also incorporates SST technology. Spun Sealed Technology ensures every filter is
100% sealed. This will guarantee the consumer is receiving maximum performance from their machine.

HEPA- It has been long known that after media filters become coated they may have the tendency to create a breeding ground for bacteria. When moisture is built up in a filter, bacteria, viruses, and fungi have a better chance of staying alive and incubating or reproducing. This can create a very dangerous environment inside the filter media. If filters are not changed timely microorganisms may possibly breed through the filter or disperse back into the environment when changing the filter.

DFS- Disinfecting Filtration System was developed by focusing on this exact issue. Two metal grids, one on the top of the filter media, and one below the filter media contains 18kv of energy. This creates an uninhabitable environment for microorganisms to reproduce. Certified Test Data supports 99-100% virus destruction, 98-100% bacteria destruction, 94-100% old and fungi capture. This process ensures that Microorganisms can not breed through the filter and do not have the ability to disperse back into the environment when changing filters.

CleanStation has been a leading manufacture of HEPA, ULPA, ASHRAE and media filtration products for 30 years, providing solutions for hospitals, government facilities, and homes worldwide. The introduction of the new DFS technology surpasses expectations of symptom relief for the allergy and asthma sufferer while expanding the market to reach the new wave of wellness customers.

For more information contact customer service at CleanStation at 1-315-298-4221 or visit us on the web at www.cleanstation.info.