

Optimalair™ Nano Fiber Technology



The air inlet filter is the most important filter in your compressor. You have only one chance to stop contaminants from going into your machine. By stopping it at the inlet filter, you extend the life of all system components.

Particulate contamination in your air compressor is a sure way to destroy your investment. It is the #1 enemy of rotary screw air compressors. It will reduce the life of the compressor unit, the air/oil separator and the fluid. It will increase horsepower consumption leading to increased energy consumption. Only the best air filter will do – the Optimalair™ with Nano Fiber Technology – only from Sullair.

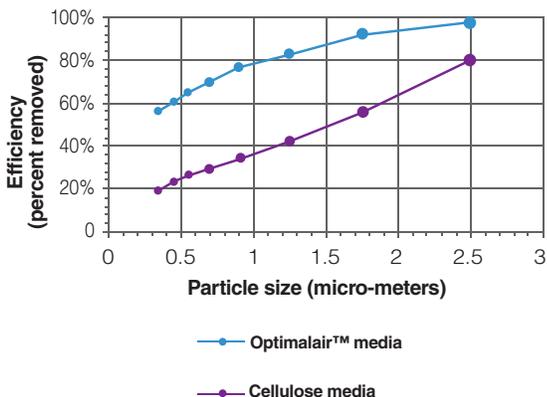
The Sullair Optimalair™ Advantage

When selecting filter elements for your compressor, it is important to understand that price does not equal cost and look beyond the initial purchase price to consider the long-term costs. The extra efficiency of Sullair Optimalair™ replacement filter elements means fewer change intervals, saving filter costs and maintenance downtime.

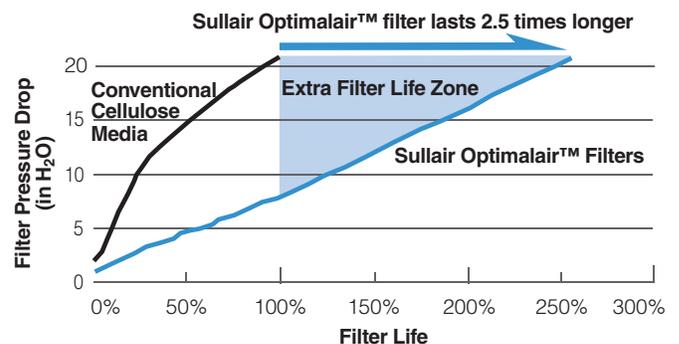
In laboratory and field tests, Optimalair™ inlet filters provide better protection by allowing less contaminant to pass through the media. Reaching a 99.99% initial efficiency faster than cellulose air filters.

Optimalair™ air filters hold up to five times more contaminant than conventional cellulose air filters, making them ideal for extended maintenance intervals on Sullair Air Compressors.

Initial Efficiency by Particle Size for Various Media



Filter Soot Life Test Results for Sullair

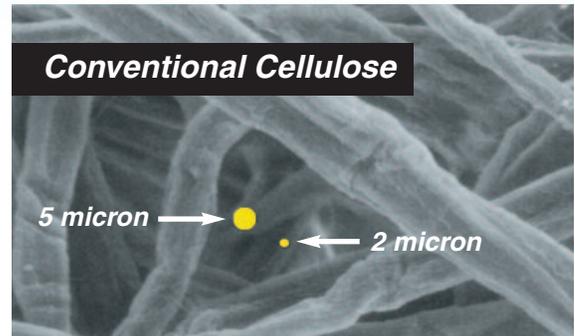
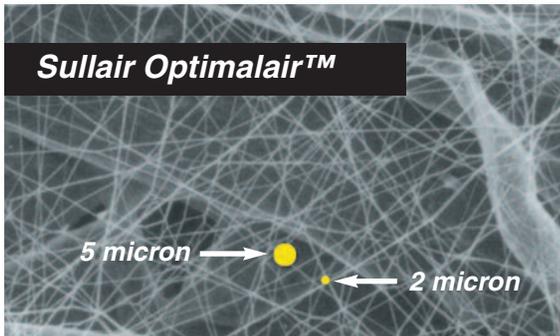


Results shown are typical. Over 200 tests have been conducted to date. Tests parameters: The challenge aerosol is diluted diesel exhaust particulate. Test flow is 200 cfm on a standard size test filter. Constant flow is maintained during filter loading. Filter media velocity is 12.3 ft/min. Terminal restriction is 20" H₂O.

Sullair Optimalair™ vs. Conventional Cellulose

Optimalair™ fibers have submicron diameters and small interfiber spaces between the fibers, which result in more contaminant being captured on the surface of the media and lower restriction. Cellulose fibers are larger than Optimalair™

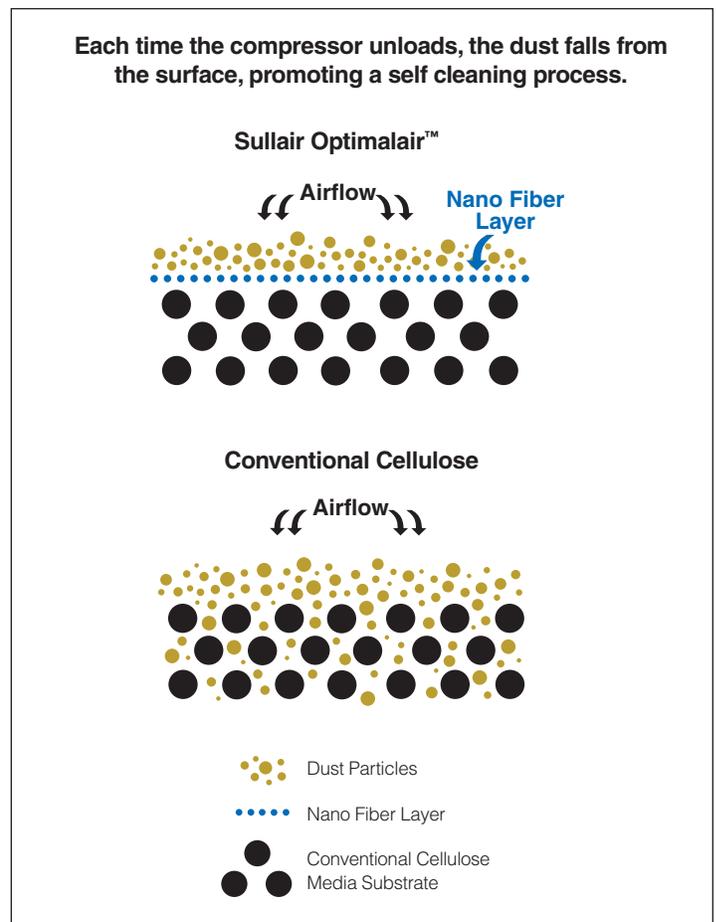
fibers and have larger interfiber spaces, causing contaminant to load in the depth of the media. Airflow is therefore restricted, capacity is lessened, and life is shortened.



Yellow circle represents the diameter of 5 micron and a 2 micron particle.

Optimalair™ Nano Fiber Technology enhances the efficiency and life of Sullair Filters resulting in high quality, cost effective filtration that outperforms the competition. Conventional cellulose filter elements often contain less media which reduces filter life, and **do not conform** to OEM dimensions leading to leaks.

Nano filtration media contains two layers. In addition to the cellulose media substrate, an extremely fine layer of fibers, only 0.2 to 0.3 microns in diameter, to capture contaminants less than 1 micron in size. Rapid accumulation of particles on the filter surface builds a thin, permeable dust-stopping cake known as surface loading. This ensures highest filtration efficiency by eliminating premature filter plugging. The result is excellent filtration efficiency with very low pressure drop.



Sullair's Compressed Air Products

www.sullair.com



Fundamental to Sullair's leadership is a dedication to reduce not only the amount of natural resources consumed to create energy, but to minimize environmental impact, in both the manufacture and use of all our products. We are constantly exploring new ideas and seeking new technologies to meet the ever-increasing need for high quality, energy-efficient compressed air products and environmental sustainability.



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