



# Air Filtration Products and Systems

REAL World Technology - Reliable Products - Optimal Performance

Air



# REAL PERFORMANCE. DON'T COMPROMISE ON AIR FILTRATION.

## There is something in the Air.

Air is not only vital for any life form on earth but also important for today's state of the art diesel engines. An average Heavy Duty Diesel truck engine requires between 13,000 to 20,000 litres of air (459-706 cfm) to burn just one litre of fuel. However - this air is polluted and contains all kinds of contaminants such as fumes, dust, smog and other particles.

Like temperature and humidity these particles are not always visible to the eye, but they are harmful to the engine. They diminish the purity of the air and can lead to severe damage of all engine components. Under normal highway conditions the air consumed in a 16 litre engine contains almost 20 kilogrammes (44 lbs) of dirt/contaminants per 100,000 Kms (62,000 miles).



## Air quality significantly impacts the performance of your engine.

There is no room for compromise. The air intake is a completely open system. Air Filters are essential for heavy-duty diesel engines and the air that these engines 'breathe' needs to be as clean as possible. The air quality will significantly impact the performance of a diesel engine. Plugged Air Filters reduce engine performance, create higher fuel consumption, increase exhaust fumes and are harmful to the environment. Fleetguard air filters are engineered to deliver optimized air quality, and provide the best overall performance and service life.

## Small Difference - Big Consequence.

One air cleaner can be significantly more effective than another - even if the difference in efficiency appears to be marginal. The test results below were obtained in high dust conditions (200 mg/m<sup>3</sup>).

	Efficiency	Dust into engine
Filter 1	99.0%	2,0 grams/hour
Filter 2	99.5%	1,0 grams/hour
Filter 3	99.6%	0,8 grams/hour
Filter 4	99.7%	0,6 grams/hour
Filter 5	99.8%	0,4 grams/hour
Filter 6	99.9%	0,2 grams/hour

An air filter @ 99.0% efficiency permits twice as much dust to pass into the engine compared to an air filter @ 99.5% efficiency. This means 10 times more dust than at 99.9% efficiency! Sooner or later, the choice of the right filter for the right application can make a substantial difference in wear rate, cost and performance of your diesel engine.





OptiAir - Air Intake System

Fleetguard products cover all the needs for a sophisticated air intake system.

### From Precleaning to OptiAir.

With a range of over 1,500 different air filtration products from clamps to air housings to state-of-the-art air filters, Cummins Filtration, a world class leader in Heavy Duty Air Filtration, covers all the needs for your sophisticated air intake systems. Fleetguard Visibowl Pre-Cleaners and highly efficient Fleetguard self cleaning Precleaners are strongly recommended for construction, mining, farming, forestry and other segments where operating conditions are



severe. For best preventive maintenance practice and to automatically monitor the performance of your air filter, use Fleetguard restriction indicators. Cummins Filtration products are

dedicated to continuous improvement on filter performance and quality.

Our products are engineered to provide the best overall performance and service life. They are the ideal solution in terms of better engine protection, extended service intervals and lower maintenance cost.

### Designed to exceed specifications.

Fleetguard media technology is designed to meet technical specifications including fibre size, shape, pore size, paper thickness weave and mechanical strength. Fleetguard dimple pleat media system ensures that pleats are evenly spaced and that the air spreads equally throughout the surface to maximize filter capacity and life. Special resins impregnated in the media provide maximum performance.



Hot melt bonding ensures proper alignment and protection of pleats throughout filter life. Corrosion resistant, closed metal plates with durable mag-grip handles ensure easy installation and service. Fleetguard gasket designs and compounds are hermetically sealed for each application to ensure reliable fit throughout the filter's service life.

Fleetguard "M" (Magnum) Air filter elements are constructed with an additional 15% more media than standard versions. In arduous conditions, this capacity can lead to substantially longer life and fewer element changes. Products with a suffix "K", have integral fins on the filter body to swirl the air around the housing, expelling many larger dirt particles before they reach the filter media. Such filters lessen the dirt load being trapped by the filter, again helping to prolong product life, while giving maximum engine protection. Fleetguard's range of RS filters utilise a 360° self-adjusting seal around the inside of the end cap.

These "push-on" elements are easy to change and are found on a wide range of equipment, replacing older axial-sealing designs. With such radial seal elements, the risk of dirt falling from the element



into the air intake, when changing filters, is largely avoided. The latest innovation in air filter technology is Fleetguard's OptiAir. These products are already appearing on equipment around the world and offer very high dirt holding capacity, combined with minimum restriction. Once again, Fleetguard technology is setting new performance standards in Air Filtration.



REAL Confidence.

Depend on Fleetguard for the Highest Quality  
Air Filtration Products.

### Certified Quality.

Fleetguard Air Filtration products are manufactured according to the highest standards which apply to all Fleetguard products. The Cummins Filtration quality system is certified compliant to QS 9000 / ISO 9001 / TS16949. Each filter is manufactured through a long sequence of quality checks and individually inspected before leaving the factory. Special packaging ensures full product integrity from the factory to the point of delivery.



QS 9000  
ISO 9001  
ISO 14001  
TS 16949



**Filtration**

For more information, visit  
[cumminsfiltration.com](http://cumminsfiltration.com)

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