

Solutions for Heavy-Duty Engine Air Intake Filtration

The engine is the most important part of the vehicle, and the air intake system is the most important part of the engine. Clean, dry air will directly affect the operation of the engine as well as its service life. An engine air intake filtration system prevents cylinder block abrasion from particles and offers system protection to the cylinder block. The more precise the engine, the more efficient the filtration system it requires.

The latest industry findings indicate that on top of high-efficiency protection, engine fuel consumption is closely related to the resistance of the engine air intake filtration system. Given the backdrop of carbon neutrality initiatives, global auto OEs—especially heavy-duty truck OEs—face huge challenges to saving fuel consumption.

H&V's Heavy-Duty Engine Air Filtration Solutions

To help diesel vehicles worldwide save on fuel consumption, Hollingsworth & Vose provides revolutionary engine air intake filtration materials around the world. H&V's advanced air intake filtration materials were first applied to the protection of military equipment during World War II, and since then H&V continues leading the development of global engine air intake materials.

H&V provides high-efficiency, environmentally-friendly materials for the air intake filtration systems of global mainstream commercial trucks, construction machinery, and agricultural machinery, as well as other material solutions that provide long service intervals for smaller-sized filters.

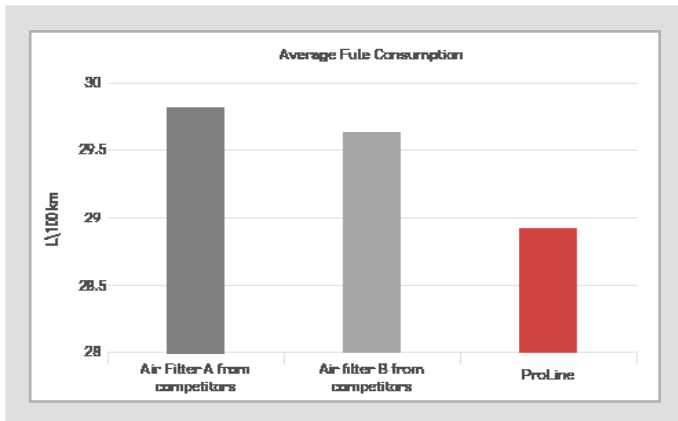
» **Cellulose media:** The cellulose media from H&V can meet filtration levels from classes M6 to F8 per the EN 779:2002 standard. H&V's cellulose media also offers a variety of service intervals, from 30,000 km to 60,000 km. Our specially constructed cellulose media with corrugation structure is able to significantly decrease the initial pressure drop of filters, with stable filtration performance and much longer service life for air intake filters.

» **Nanofiber coated media:** One noteworthy advantage of H&V's nanofiber coated media is the vast effective filtration area. The initial efficiency of single-layer nanofiber coated media can reach 90% or above, and the full-life filter efficiency of the element produced from nanofiber coated media can achieve 99.99%. The filtration efficiency of our nanofiber coated media can maintain the filtration level of F9 per the EN 779:2012 standard. The high density of this filter media will avoid situations of rupture or ash leakage during media pleating.

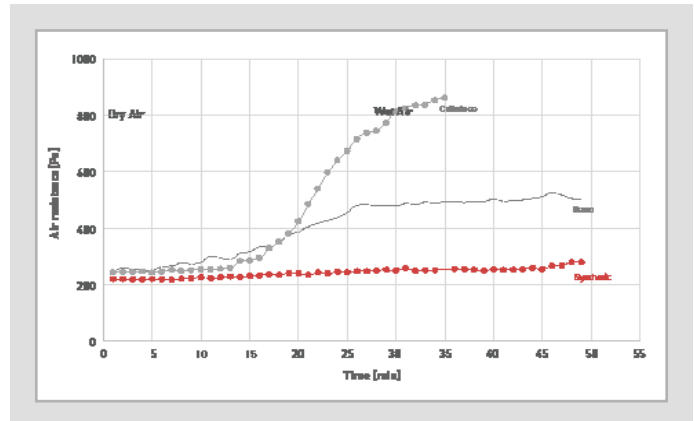
» **Full synthetic media:** H&V's full synthetic media has a much smoother resistance curve compared to that of traditional cellulose media. During actual field tests of both kinds of filtration media, the full synthetic media provided vehicles with much lower fuel consumption levels than the cellulose filtration media did.



Technical Specifications



Compared to our competitors' filter media, H&V's synthetic filter media saves vehicles much more fuel.



During H&V's laboratory test, the full synthetic media maintained air permeability above 70% after 2 hours of water immersion. However, in the same testing conditions, the air permeability of cellulose media significantly decreased to 10% of its initial efficiency.

APAC grades

Grade	Media composite	Basis Weight g/m ²	Air Permeability CFM	Efficiency @ 0.407 μm % ISO 5011 A2 dust	Dust Holding Capacity g/m ² ISO 5011 A2 dust
FA9463	Cellulose	116	13	90.4	85
FA9435	Cellulose	117	13	84.1	61
FA9310	Nano	119	22	99.6	87
FA9490	Synthetic	107	21	96.8	89

Americas grades

Grade	Media composite	Basis Weight g/m ²	Air Permeability CFM	Efficiency %	Dust Holding Capacity g/m ² ISO 5011 A2 dust
FA6405NFA	Cellulose	111	13	99.9 @ 2000 Pa, PALAS 3000 @ 11.1 cm/s, gravimetric	43 @ 2000 Pa, PALAS 3000 @ 11.1 cm/s
FA6776	Cellulose	88	19.5	99.7 @ 2000 Pa, PALAS 3000 @ 11.1 cm/s, gravimetric	38 @ 2000 Pa, PALAS 3000 @ 11.1 cm/s

Contact Us to Learn More



About Hollingsworth & Vose

Your most critical filtration applications require industry-leading solutions. Hollingsworth & Vose provides cutting-edge filter media to a variety of industries, including medical, automotive, OEM, HVAC, food and beverage, and more. Our heavy-duty engine air intake filter media solutions are designed to reduce your engine's fuel consumption and prolong its service life. Contact H&V to learn more about our filtration technologies.