Solutions for Fuel Filtration

Dirty diesel fuel can cause abnormal wear of an engine's fuel injection system and cylinder, rapidly increase fuel consumption, and reduce its power and service life. Since the global upgrade of emissions regulations, advanced diesel engines have increasingly applied high-pressure common rail (HPCR) systems. However, the sophisticated and costly HPCR system requires high-standard fuel quality. Fine particles and even traces of water can cause damage to the HPCR and create downtime for vehicles. Since different countries and regions have different diesel oil levels, the guard period for the common rail system of diesel engines faces huge challenges.

The fuel filtration system of an engine should provide cleaner fuel quality and reach emissions standards. The proper fuel filtration media can maximize the cleanness of diesel oil and improve the service life of the engine.

H&V's Fuel Filtration Solutions

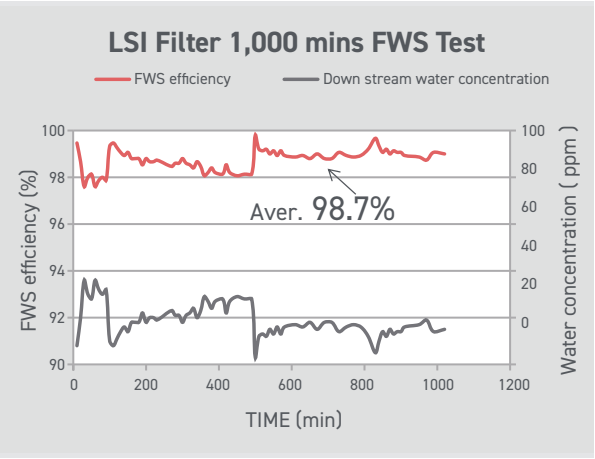
Hollingsworth & Vose provides fuel filtration material solutions that have long service intervals and meet the strictest emissions regulations. H&V first introduced ground-breaking EOL-FWS (End-of-Life Fuel Water Separation) filtration materials around the world. The fuel-water separation efficiency can be maintained even when the filter has reached the end of its service life. This filtration material is widely applied in the global mainstream truck and construction machinery industries.

H&V's EOL-FWS solution is based on glass fiber filtration media. Even in the most stringent testing conditions, the efficiency of fuel-water separation is above 95%. In dust-loading tests simulating actual vehicle operation for 100,000 km, the fuel-water separation performance of LSI (Long Service Interval) glass fiber media can still be maintained at stable levels even in the long run.

Technical Specifications

Features:

- High FWS Efficiency
- High DHC
- Low Pressure Drop

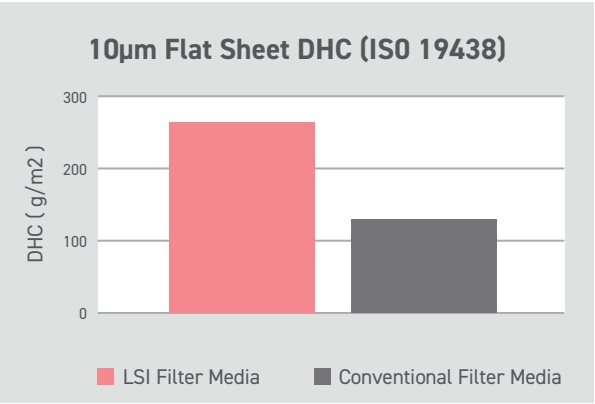


High FWS Efficiency

In a fuel-water separation test lasting 1,000 minutes, H&V's LSI glass fiber filter media provides an average efficiency of 98.7%

Testing conditions:

- ISO 16332 (2018)
- Water drop diameter 10 µm
- Surface tension 13 mN/m

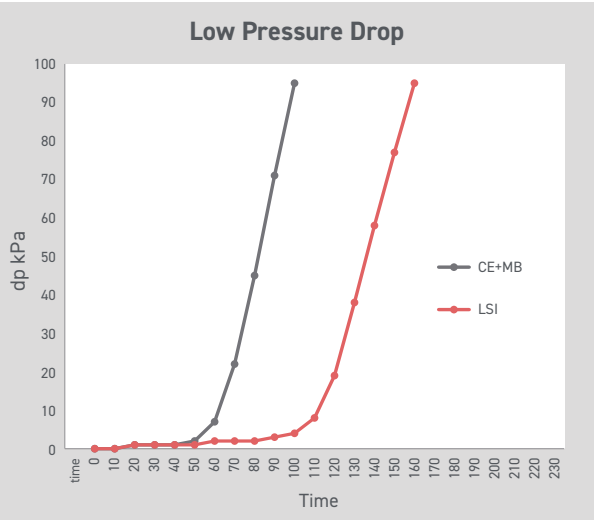


High DHC

Another outstanding feature of LSI glass fiber media is its high dust-holding capacity (DHC), which is twice that of cellulose melt-blown media. LSI glass fiber media offers 100,000 km service intervals for medium and heavy-duty trucks.

Testing conditions:

- Testing flow rate: 0.7 L/min
- Area: 200 cm^2
- Ending pressure drop: 100 kPa



Low Pressure Drop

Compared to common cellulose and melt-blown media on the market, LSI glass fiber media has a much lower pressure drop, and the resistance level can also be maintained at a much lower level during its service interval.

APAC grades								
Grade	Media Composite	Market	Basis Weight g/m²	Caliper mm	Air Permeability l/m²s (0.5" Water @ 200 Pa)	Max Pore Diameter µm	Particle Capture Efficiency % ISO 19438 @ 4 µm	Dust Holding Capacity g/m²
FS9266	Cellulose Free	China V/VI	220	1	147	35	80	264
FS9267	Cellulose Free	China V/VI	330	1.35	90	26	94	270
FS9277	Cellulose Free	China V/VI	195	0.84	245	45	50	210
FS9261	Cellulose Free	China V/VI	305	1.1	57	20	99.9	220

Americas grades					
Grade	Media Composite	Basis Weight g/m²	Air Permeability CFM	Efficiency @10 µm % ISO 19438	Dust Holding Capacity g/m² ISO 19438
FF2711GC	Cellulose/Synthetic	183	2.8	99.99	40
FS6554GC	Cellulose/Synthetic	184	5.2	99.5	125

EMEA grades					
Grade	Media Composite	Basis Weight g/m²	Air Permeability l/m²s	Efficiency @ >4 µm	Dust Holding Capacity g/m² ISO 19438
1723/3 MB221	Phenolic/CE/MB	320	7	96	135
2085 MB224	Phenolic/CE/MB	302	4	98	76
1967 MB101	Phenolic/CE/MB	220	30	75	175

About Hollingsworth & Vose

Hollingsworth and Vose is a global manufacturer of advanced materials used in filtration, battery, and industrial applications. Family-owned for seven generations, the company's origins go back to the early 1700s and we have evolved continuously since that time.

Today, H&V's advanced materials contribute to a cleaner world through their use in products that provide clean air, clean liquids, and energy storage. Our Company is headquartered in East Walpole, Massachusetts USA, with 13 manufacturing and research & development facilities in the Americas, Europe, China, and India.