



OUR FILTER MEDIA IS CATCHING ALMOST EVERYTHING

FILTER MEDIA IS THE HEART AND SOUL OF A FILTER ELEMENT

The filter media of our filter program consist either of specially treated papers, non-woven materials or multi-layer filter media, depending on specifications and applications.

Filter non-woven materials

Non-woven materials, on the other hand, consist of plastic fibers



with thicknesses in the micron range: the finer the fibers, the better the separation. The non-woven materials are applied in layers in which the density and fineness of the fibers increase from the dirt side to the clean side. This so-called funnel effect allows efficiencies of up to 99.9 percent with low flow resistance at the same time.

For some years now fleece has been used for cabin filters as well as for new developments in the oil filter sector. Recently, fleece is also increasingly being used in air filters – with the advantage of up to 40 percent increase in filter performance and a longer service life. Fleece is also being used increasingly in fuel filters, mostly combined with stabilizing base paper.



Filters made from paper

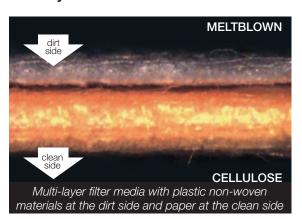
The paper for our filters is made from high-grade cellulose fibers impregnated with special resins. These materials are treated in a special production process: special pre-warming prepares the paper for the embossing of vertical ridges. Afterwards,



the paper is folded according to requirements. Then the impregnation is cured to make the paper mechanically stable and to make it resistant to chemical and

thermal influences. The result: filters with stable pleat geometry that prevent the feared forming of blocks under high load and ensure that air, oil or fuel can flow freely through the paper at all times. The filters can remove particles as small as 1 micron, depending on the requirements, and offer safe conditions for highest contaminant elimination.

Multi-layer filter media



These are combinations of non-woven materials and paper that have been fused in a complex production process. Compared to conventional paper filters, these filters eliminate up to 40 percent more contaminants, with particle sizes as small as 3 to 5 microns.

Multi-layer filter media are used for modern diesel fuel injection systems (in turbo diesel direct injection, common rail or pump injector technology).





Air Filters

Clean air is essential for optimized engine power and fuel consumption. MAHLE Original® air filters reduce up to 99.9% of airborne particles, assuring an optimal air/fuel mixture. The high dust holding capacity ensures long service life even under extreme environmental conditions. To ensure perfect and lasting filter and engine performance, filters must be replaced as recommended by the car manufacturers.

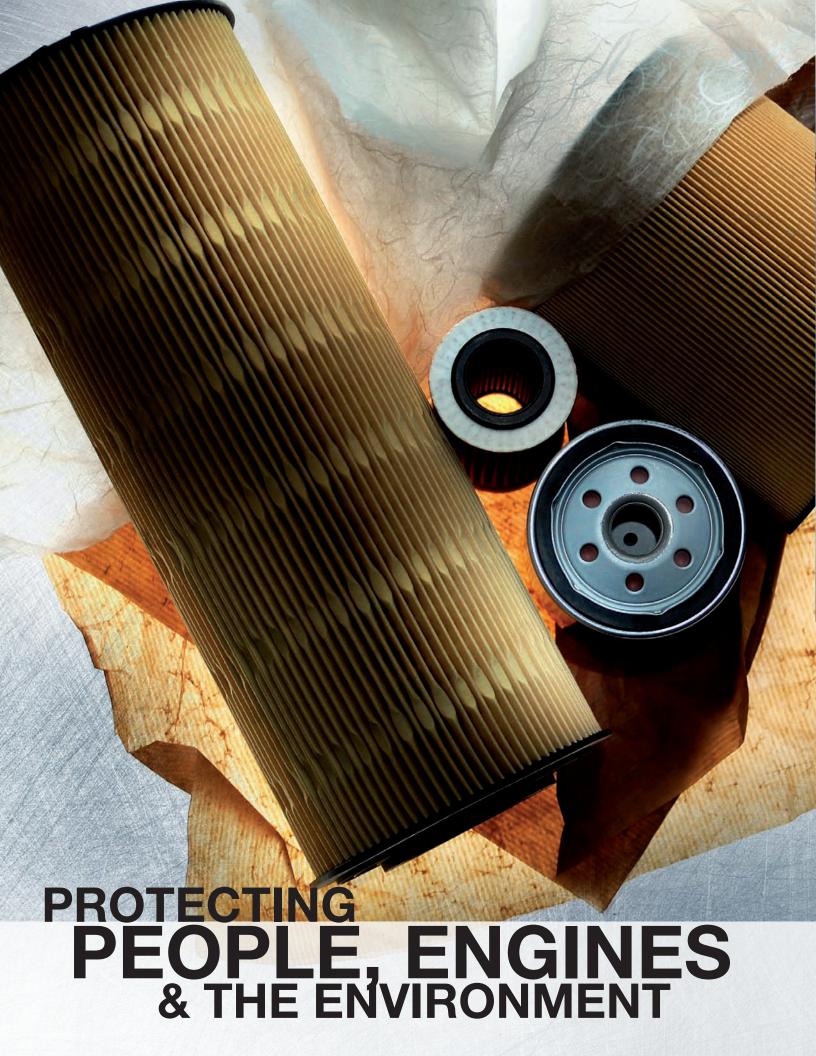
MAHLE Original® oil filters maintain oil quality as well as the performance and efficiency of the engine. Superior filter media and its processing prevents decomposition and collapse of the filter under extreme conditions such as repeated cold start and high dirt load. Bypass and check valves assure constant oil supply at all times.

Fuel Filters

Modern fuel injection systems require extremely clean and constant fuel supply. MAHLE Original® fuel filters consistently hold back foreign particles found in fuel. The high-quality filter media protects the fuel system from the smallest dirt particles safeguarding efficient engine operation. Pressure regulation and fuel recirculation ensures optimum continuous supply. Our fuel filters comply with the highest safety standards of all car manufacturers to ensure fuel containment in the event of external damage.

Cabin Air Filters

MAHLE Original® cabin air filters supply the driver and passengers with clean air to breathe. During only one hour of driving, an air volume of up to 25,000 gallons flows into the passenger cabin. Should the cabin air filter fail or become clogged, the pollutant concentration inside the vehicle can increase up to six times compared to the outside air. Simply changing the air filter guarantees clean air and prevents costly air conditioning system repairs.





MAHLE has manufacturing locations worldwide... The numerous applications required for optimum efficiency in filtration require a complex product range. Considering the spectrum of vehicles from light vehicle to heavy duty, and from domestic to import; a supplier's manufacturing needs span as far as the reaches of the earth. That is the reason MAHLE has a network of filter manufacturing facilities on five continents serving the needs of both original equipment manufacturers as well as the Aftermarket around the world. All MAHLE Original filters have one thing in common - they are highly effective in protecting people, engines, and the environment. Our filter program constantly evolves with more innovative products that are high in demand. This drive for technical superiority is validated by the extensive list of recognizable names who trust MAHLE for their filter needs.

The best references worldwide - these original equipment customers trust in MAHLE throughout the world.

Alfa Romeo, Audi, BMW, Case New Holland, Caterpillar, Citroën, Cummins, Daewoo, DAF, Deutz, Ducati, Ferrari, Fiat, Ford, General Motors, Harley Davidson, Hatz, Honda, Hyundai, Isuzu, Iveco, Jaguar, John Deere, Komatsu, Lancia, Land Rover, Mack, Magna Steyr, MAN, Maserati, Mazda, Mercedes-Benz, Mitsubishi, Moto Guzzi, MWM, Nissan, Perkins, Peugeot, Porsche, Renault, RVI, Saab, Scania, Seat, Skoda, Smart, Steyr Daimer Puch, Stihl, Suzuki, Toyota, Volkswagen, Volvo, Zettelmeyer.





















Driven by performance

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