



MANN Air Filters

State-of-the-art technology for optimum engine protection.

**MANN
FILTER**



The benefits of MANN Air Filters:

- reliability throughout the whole service interval
- optimum dirt separation efficiency
- low flow resistance
- permanently 100 % leakproof
- specially embossed and creased paper
- special impregnation prevents water absorption

MANN Air Filters: Reliable technology for the best protection

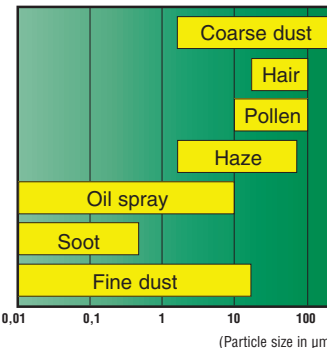
Clean intake air is essential for problem-free driving. However, pollutants such as particles, soot etc are taken in with the air. The result: dirt particles get into the combustion chamber, causing grooves and premature wear on the engine. Electronic components, such as sensors which are located between the intake and the combustion chamber are impaired in their function or even destroyed.

MANN air filters ensure reliable protection

Modern MANN filter media for air filters demonstrate particularly high mechanical stability. They filter the intake air efficiently and reliably. This allows optimum composition of the air/fuel mix and ensures consistent engine performance. With high-quality air filters, fuel consumption is reduced by 3 – 4 %, if the filter is changed regularly.

Multifaceted talent: Functions of MANN fuel filters

MANN air filters have numerous important functions. They filter destructive particles such as dust, pollen, sand, soot or even drops of water out of the intake air. They ensure that only clean air gets into the combustion chamber. MANN air filters also prevent damage caused in various ways to electronic components such as highly delicate sensors (hot-film air flow meters). MANN air filters have other important functions: They lessen intake noise, control temperature regulation and seal off adjacent components. MANN-FILTER is setting new standards for the air filtration of tomorrow with its air filter solutions.



Typical impurities taken in with the air

MANN Air Filter shapes

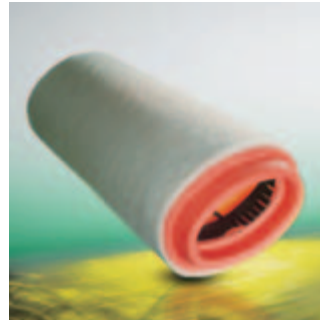
Far-reaching development in electronics and extensive technology to meet increasing safety and comfort requirements, as well as developments in engine design have resulted in a constant reduction in space for installation. This means less space for air filters. Modern air filter systems must therefore adapt to new circumstances.



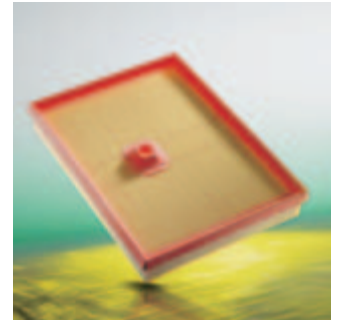
Air filter with stepped bellows



Trapezium air filter



Oval-conical filter



Air filter with fixing hole



Round and rectangular MANN Air Filters

MANN-FILTER is developing innovative air filters which fit the installation location exactly in form and function. Air filters do not always need to be rectangular.

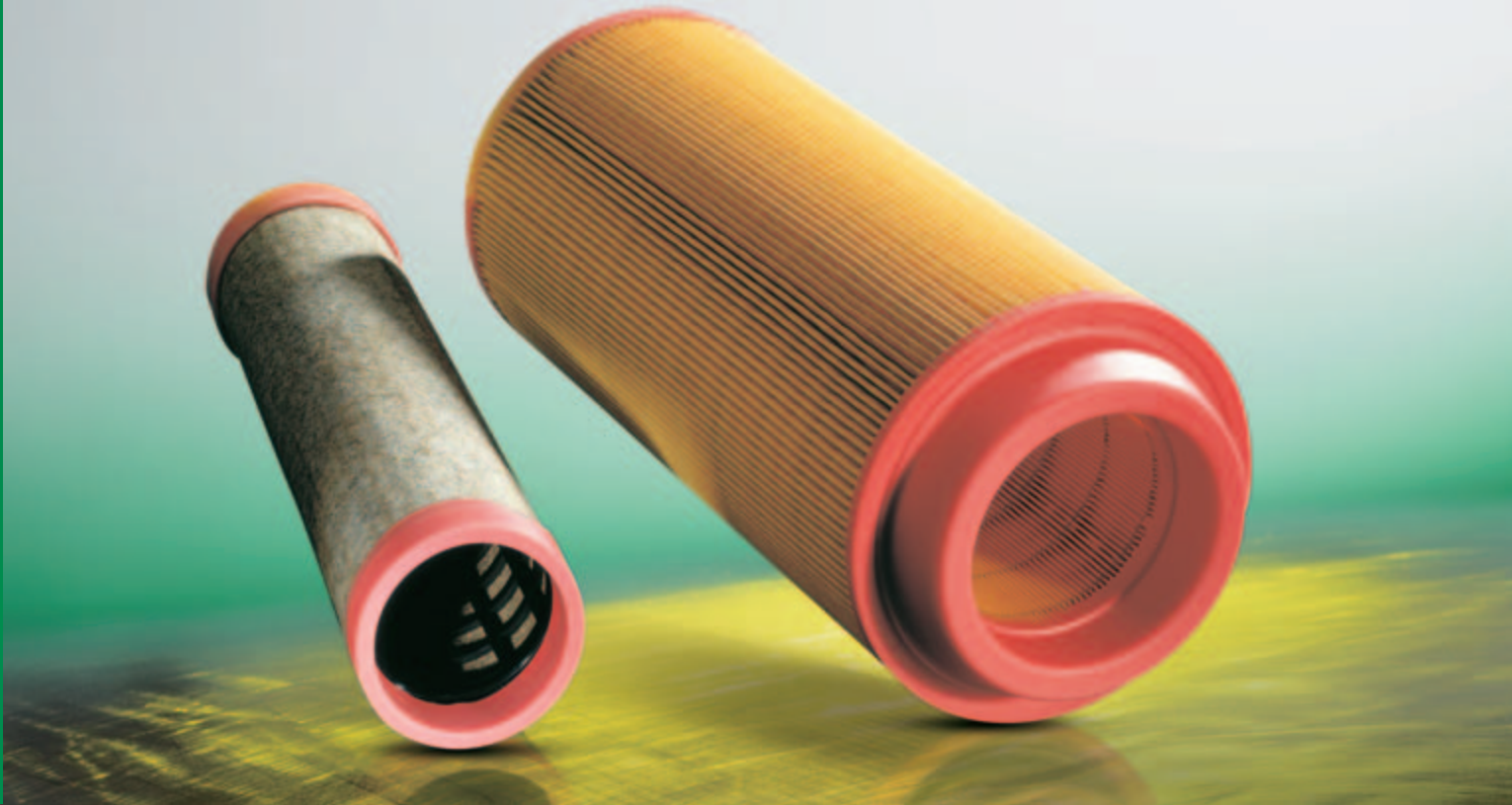
Where the installation conditions make it necessary, alternative shapes are available (trapezium, oval-conical filters etc). An example for optimum use of installation space is the MANN air filter with stepped bellows. The stepped arrangement increases the filter surface considerably and improves the filter

capacity. The air filter with a hole for bracing a hood and housing also demonstrates MANN+HUMMEL's ingenious techniques: There are two air filter elements in each vehicle. The fixing mandrel for the cover hood goes through the element.

MANN-FILTER offers a huge range of products, with hundreds of shapes and sizes. All of them are of the same high quality.



Mercedes-Benz design air filter



MANN Air Filter elements for MANN Europiclón

MANN secondary elements for air filters: Optimum safety for engines



The high-quality MANN secondary elements for air filters offer all-round protection from wear. This is even maintained when the main filter element is damaged or not effective due to a maintenance error. The additional protection is required particularly under extremely dusty conditions. MANN secondary elements are therefore included as standard in many agricultural machines and construction vehicles.



You can order more product brochures, catalogues (also on CD-ROM), a cross-reference list and a dimension table under www.mann-filter.com or by telephone. Or you can use our internet catalogue.

The MANN-FILTER Carefree package

With MANN-FILTER, we are concerned not simply with providing excellent product quality, but also with everything that facilitates our partnership with you. The Carefree package consists of six major components, the mainstays of our relationship:

1. **The comprehensive MANN-FILTER catalogue**
2. **Reliable logistics**
3. **Customer-specific sales promotion**
4. **Professional key account management**
5. **The Customer Service Center (CSC)**
6. **Electronic Customer Relationship Management (eCRM)**



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