

MAHLE

Driven by performance

KEEPING EVERYTHING FLOWING.

**Comprehensive range of filters
for individual solutions.**

FLUID TECHNOLOGY

INDUSTRIAL
FILTRATION



MORE PERFORMANCE, PRECISION, AND PASSION FOR YOUR SUCCESS.

» We see ourselves not just as a supplier, but much more as a reliable guide and expert partner that helps you better reach your goals. «



MAHLE is a leading global development partner for the automotive and engine industry with unique systems competence in the areas of engine systems, filtration, electrics/mechatronics, and thermal management. Automobile and engine manufacturers worldwide rely on products and solutions from **MAHLE**.

This unique expertise and outstanding development competence can be found in our products and solutions around the globe: in commercial vehicles, ships, trains, agricultural and construction machinery, electric vehicles and other demanding industrial applications such as forklifts, mobile hydraulics and factory equipment.

As your development, systems, and service partner, we know your requirements and processes. We know what you and your customers need and, together with you, we create added value that brings fresh power to your success: tailor-made solutions with the highest performance and reliability, durability, and economic efficiency, which sustainably contribute to increasing energy efficiency and ecological added value.

**WE DRIVE YOUR SUCCESS. WORLDWIDE.
WITH PERFORMANCE, PRECISION, AND PASSION.
MAHLE – DRIVEN BY PERFORMANCE.**



» MAHLE filters guarantee us optimal economic results every time thanks to their high filter service life and low flow resistance. «

OVERVIEW

SPECIALIZED TECHNOLOGICAL EXPERTISE: FOR OPTIMIZED FILTER PERFORMANCE.

With innovative developments, MAHLE sets new standards for your ecological progress and economic success. Through our technical expertise, we have established a tradition as your strong partner in fluid technology, air filtration, and automatic filters.

Comprehensive range for individual requirements

As a systems partner, we offer you an extensive product range and tailor-made solutions for your customer-specific requirements. We are expanding our product range to meet your specialized needs, continuously adding innovative filter designs and products based on systematic research.

Precision down to the last detail

Harmonizing environmental protection with positive commercial results is one of the most important issues your company faces. We support you with high-quality products and comprehensive service. We focus on precision down to the last detail, which makes us a reliable development partner and supplier to leading manufacturers of hydraulic systems and equipment around the world.

Safety under hand and seal

Our production is certified to DIN EN ISO 9001 and our environmental management to ISO 14001 and EMAS. All MAHLE products are approved by classification societies, such as GL, Lloyds, or DNV.

Our product range includes:

- Suction filters
- Pressure filters as full-flow or partial-flow filters
- Duplex filters with patented single-hand control
- Bypass filters
- Return-line filters
- Air breathers
- Mobile filter units
- Air filters
- Oil separators
- Filter elements in standard versions, DIN models, and customer-specific designs
- Contamination indicators
- Turbidity sensors
- Coalescer filters
- Service units

Outstanding environmental protection



EN ISO 9001



ISO 14001



PRODUCTS

HIGH-QUALITY RANGE: FOR MAXIMUM RESULTS IN EVERY AREA.

Perfect filtration is a prerequisite for the functionality of highly sensitive hydraulic systems. With ever tighter functional tolerances, the hydraulic units and systems must also strictly comply with prescribed cleanliness classes for fluid media at all times. With their multilayer design, our filter elements ensure high dirt-holding capacity and filtration performance remains constant even as differential pressures rise. Our contamination indicators make maintenance easier and provide maximal economic efficiency.

Filter elements

Always specifically matched to the cleanliness class required for your applications, to the pressure ratios, and to the medium properties, our strong and differential pressure-resistant filter elements guarantee failure-free, economical operation with a high dirt-holding capacity. Our extensive range of standard and DIN versions includes alternative variants for nearly all filter manufacturers, as well as filter elements for aggressive fluids, cooling lubricants, and aqueous media. Upon request, we will also develop special models specifically for you.



» MAHLE always develops the right filter solution to meet our special requirements. «

Suction filters



Installed upstream of the pump, or in the intake line with a contamination indicator accessible from the outside for particularly easy maintenance, our suction filters ensure that the pump is highly safe from coarse contaminants. A wide selection of elements suitable for every system protect installations and pumps in the fine range of 10–25 µm with our mic qualities, or in the coarse range with cleanable wire fabric.

Pressure filters



Our pressure filters are designed for use as full- or partial-flow filters in the ranges of low pressure up to 25 (60) bar, medium pressure up to 210 bar, and high pressure up to 450 bar. As line filters, flange-mounted filters, and sandwich filters, they provide customized solutions for the requirements of a wide variety of applications. A robust housing, streamlined design, and an extensive range of accessories guarantee efficient and sustainable results.

Duplex filters

Patented single-hand control and zero-loss changeover of the fluid flow ensure ultrahigh economic efficiency. Ready for use around the clock in the low- and medium-pressure ranges, or as return-line filters for uninterrupted operation, you can perform maintenance work while taking full advantage of the dirt-holding capacity.

Bypass filters

As a stationary design, our bypass filters are the optimal solution for filtration of large volumes of oil, which a full-flow filter cannot clean sufficiently or economically. As a mobile design, you can use bypass filters very flexibly as rinsing, filling, or filtering units.

Mobile filter units

In combination with appropriate filter elements, these high-performance devices (delivery rates of 27 and 55 L/min) for mobile bypass filtration in hydraulic and lubrication systems guarantee compliance with predefined cleanliness classes. You can also use mobile filter units for high-viscosity media. A robust pump that is not sensitive to dirt ensures long service life and use for a wide range of applications. When filling systems and tanks, transferring tank contents, or relieving the system filter during commissioning or after repairs, our mobile filter units make an impression with service-friendly operation and very high dirt-holding capacity.

Return-line filters

The return-line filter captures all of the dirt that is generated in the system and flushed out of the hydraulic unit. This prevents the risky circulation of contaminants that may arise in the tank and pump.

Air breathers

Our corrosion- and impact-resistant air breathers ensure that tanks are supplied with contaminant-free air. A wide selection of replaceable filter elements suitable for every system ensures that the required filter rating for your hydraulic filters is met.

Air filters



Our air filters ensure that compressors, vacuum pumps, and combustion engines are always supplied with clean intake air. With intake noise mufflers, they even reduce noise levels at the same time.

Oil separators



Oil separators are made of high-quality materials using modern processes. With their long service life (up to 5,000 operating hours or more), they ensure economical production of good compressed air quality in screw compressors cooled by oil injection.

Contamination indicators



Optimal performance of the filter elements depends substantially on being able to fully utilize the dirt-holding capacity with no risk. Mechanical or electronic sensors integrated or retrofitted in the filters respond to continuous changes in the pressure ratios associated with the contamination level. They transmit the values via gauges, optical, or opto-electrical switches, depending on the model. The indicator registers the vacuum pressure for suction filters, the differential pressure for pressure filters, and the back pressure for return-line filters. You can therefore determine the optimal time to change the filter elements with no risk.

PIT 400 turbidity sensor



Free water in hydraulic fluids causes turbidity, degrades the function of the entire system, and reduces the service life of the hydraulic fluid and the system components. Our PIT 400 sensor has been developed to quickly and reliably detect water ingress into the system. The areas of application of the PIT 400 include all fluid engineering systems where there is a risk of contamination from water.

PIW 1975 coalescer filter



Our coalescer filter removes free water from hydraulic systems. It works without absorption media, simply and inexpensively. Specifically arranged special filter materials collect the small water droplets floating in the fluid and separate them out.

Service units



With our mobile, easy-to-operate, measuring instruments for various measurement methods, you can quickly measure and analyze contaminants in hydraulic fluids. Calibrated in accordance with ISO 11171:1999 and using analysis in accordance with ISO 4406:1999 and NAS 1638, the PIC 9100 portable contamination measurement unit captures, identifies, and registers all particles in both suction and pressure operation, reliably displaying absolute particle counts and cleanliness classes.



» Decades of experience from MAHLE experts with countless devices, machines, and systems all over the world pays for itself every day. «

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