

Filtration Group Process Systems – amafilter® – LFC Lochem®

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FILTER BAGS & BAG FILTER HOUSINGS

Efficient and reliable filtration solutions



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Safer, healthier & more productive

Filtration Group has an extensive product range like filter elements, filter cartridges, filter bags and filter sheets, filter housings and modules to large system installations. Tell us your application and we will advise which product would fit best to support your application.

Your total solution provider in filtration

We understand our customer's increasingly demanding and complex process and environmental requirements. Drawing from one of the industry's broadest in-house technology bases, our market specialists and engineering teams are experienced to design a total filtration solution for our customers.

Available worldwide

Filtration Group offers a complete range of products, services and support for filtration and separation technologies on a global basis. Globally positioned with production facilities and regional sales offices in Europe, USA and Asia.

Well experienced, highly skilled

Filtration Group supports direct sales and a large network of distributors and agents. The group's capabilities are backed by decades of innovative experience in providing filtration solutions to a broad range of industries.

Continuous improvements, highest standards

Filtration Group continues to develop products with the highest standards, enabling its customers to comply with strictest environmental regulations, industry demands and increasing complexity.

Finding solutions

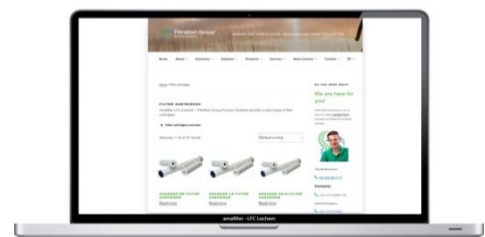
We believe in partnering with our customers to provide total filtration solutions throughout the life of your filters. Our team of experts can help to optimize your filtration process and streamline your efficiency for a better total cost of ownership.

Giving support

We offer design, testing, commissioning and service together with customer support. We also offer service for auditing, troubleshooting and preventative maintenance on-site.

One stop shop

Our service department has unique experience in filtration processes and equipment. We are able to offer comprehensive maintenance and repair programs. We supply filter spares, elements, leaves and equipment upgrades for most types of filtration equipment.



www.filtration.group



amaFlow series filter bags

amaFlow filter bags are excellent for use in surface filtration. By retaining the solids a cake is formed and a depth filtration might occur. The amaFlow are beneficial when handling batches of (various) liquids and excellent for use in the filtration of liquids containing higher concentrations of coarse solids. amaFlow filter bags are suitable for pre-filtration, end-filtration or as a polishing filter for liquids with extremely low concentrations of solids.

Needle felt

amaFlow needle felt bags (AP – SP – N – TF – RT – HT) are mainly used where depth filtration properties and high dirty capacity are required. The unique properties of the needle felt material creates a three dimensional media and retain particles within the needle felt. Available in different types of materials and the possibility of thermal surface treatment for minimize fiber migration. Please contact us for the wide range of options.



Woven monofilament

amaFlow (NMO, PEMO, POMO, T) woven monofilament filter bags are mainly employed where accurate straining is required. The precisely woven non-fiber shedding material results in a very consistent filter quality. Monofilament filter bags have excellent fabric strength and uniform openings. For applications where no fiber migration is required.



Woven multifilament

amaFlow (NMU – PEMU) woven multifilament, single threads twisted to create one thicker thread and woven in nominally spaced openings. Multifilament filter bags are very cost effective for those applications where nominal filtration is required. The amaFlow multifilament is available in nylon or polyester.



Extended life needle felt

amaFlow XL (PEXL – POXL) extended life needle felt filter bags have improved filtration properties and an extended service life due to increased depth design from graded needle felt. This is achieved by the unique manufactured thicker needle felt layer.





Added area

amaFlow (AA) added area filter bags have a filtration area which is approximately 2/3 times higher than the standard size filter bags. This leads to longer service life and less filter bag change out. Due to the added area bag configuration the need of a special support basket is required.



Pleated needle felt

amaFlow SP-EP pleated needle felt bags offer an increased filtration area and dirt holding capacity resulting in additional service life compared to standard needle felt filter bags. The graded density design and the thermally set pleat design are the key features of these bags which fit into standard support baskets. These bags are particularly well suited for applications with low viscosity liquids.

Multi-layer filter bag

amaFlow multi-layer filter bags consists of 2 or 3 layers of needle felt material. The micron rating is depending on the application and requirements.



High performance

The absolute rated amaFlow high performance filter bags (HPM) are mainly used for the demanding high end of bag filter applications. In general filter bags have a moderate efficiency. If an application needs a high performance filter bag than the HPM bags can be the solution. The special configuration consisting of multi layers of filter media results in a high performance filter bag with available efficiencies of 92% up to 99%.



High efficiency

The highly efficient amaFlow SPMF bags are suited for a wide range of applications, from food to chemical. The configuration of the SPMF filter media contains a needle felt layer and two layers of micro fibers and results in a high efficiency filter bag.



Absorptive

amaFlow SPAR absorptive filter bags are used for treating liquids by absorbing specific substances. The filter bags are sealed on the sides. The fluid flows through the absorption material. The absorption media will be determined by the application and customer demands.



Resin bond

The amaFlow BRB is made from resin coated polyester fibers. The resulting graded double layer rigid depth design makes the filter bag ideally suitable for removing gel particles.



Single bag filter housings

amafilter – LFC Lochem (Filtration Group Process Systems) supplies a wide range of filter bags and bag filter housings. Bag filters are a simple, easy to use and economical choice. Our bag filters are excellent for use in the filtration of liquids containing higher concentrations of coarse solids. They are particularly beneficial when handling batches of (various) liquids. Our bag filters can be used as end-filtration or polishing of liquids with extremely low concentrations of solids.



Suitable for filtration of water

amafilter – LFC Lochem (Filtration Group Process Systems) single bag filter housing **AFB** is suitable for water processes and non-hazardous liquids according PED2014/68EU article 4, paragraph 3. The maximum temperature for these housings is 90 °C.



Water treatment

amafilter – LFC Lochem (Filtration Group Process Systems) **AFH** bag filter housing is an easy to use and economical choice. Typical applications range from pre-filtration for reverse osmosis to filters for washing installations and filters for cooling or heating water. **AFH** is according PED2014/68EU article 4, paragraph 3. The maximum temperature for these housings is 90 °C.



Waste water treatment and R.O. pre-filtration

amafilter – LFC Lochem (Filtration Group Process Systems) **AFN** single bag filter housing is an economical filter housing used in process applications such as waste water treatment and R.O. pre-filtration. Specifically designed to allow the use of standard and special filter bags. **AFN** is according PED2014/68EU article 4, paragraph 3. The maximum temperature for these housings is 90 °C.



Edible oil

Within the edible oil industry amafilter – LFC Lochem (Filtration Group Process Systems) bag filters are commonly used during several process steps. The **AFE** bag filter housings are excellent as safety filtration, after bleaching or as polishing filtration of edible oil. The maximum temperature for these housings is 120 °C.



Filtering hazardous and non-hazardous liquid

The single bag filter housing **AFZ** is suitable for filtering hazardous and non-hazardous liquids according PED2014/68/EU with a design filter housing according AD2000 Regelwerk. The maximum temperature for the **AFZ** single bag housings is 150 °C.



Small bag filter housing, easy to use, filtration of general industrial liquids for low flows

amafilter – LFC Lochem (Filtration Group Process Systems) has a small bag filter housing available, **UF1**, for size 30 and size 65 filter bags. **UF1** is suitable to handle small liquid batch processes. The **UF1-30** and **UF1-65** are according PED2014/68EU article 4, paragraph 3. The maximum temperature for these housings is 90 °C. Please contact us if you need a customized small bag filter housing.



Plastic single bag filter housing, fluid does not come into contact with metal parts

In specific applications a plastic bag filter housing is preferable to a metal filter housing. amafilter – LFC Lochem (Filtration Group Process Systems) has for these applications the solution with our **S-AF1**. This is a polypropylene single bag filter housing and according PED2014/68/EU article 4, paragraph 3.



Multi bag filter housings

Multi bag filter housings are used where high capacities are needed. amafilter – LFC Lochem (Filtration Group Process Systems) multi bag filters are available for 3 to 14 bags. Filtration Group bag filters are excellent for use in the filtration of liquids containing higher concentrations of coarse solids. They are particularly beneficial when handling batches of (various) liquids. They are also especially suitable for end filtration or polishing of liquids with extremely low concentrations of solids.



For handling batches of (various) liquids, end filtration or polishing of liquids with extremely low concentrations of solids

Multi bag filter housing MBF 8-14 for handling batches of (various) liquids, end filtration or polishing of liquids with extremely low concentrations of solids. The MBF has the possibility for containing 8 to 14 filter bags. If required customized and tailor made version available on request. The MBF 8-14 is also suitable for processes with hazardous liquids.



Excellent for use in the filtration of liquids containing higher concentrations of coarse solids and water applications

Multi bag filter housing MBH 3-12 can be used where high capacities are needed. amafilter – LFC Lochem (Filtration Group Process Systems) multi bag filters are available for 3 up to 12 bags. The MBH 3-12 is suitable for applications such as water processes and non-hazardous liquids.



Multi bag filter housing equipped with a quick release cover with safety device.

amafilter – LFC Lochem (Filtration Group Process Systems) **MBQ multi bag filter housing** are ideally suited where high filtration capacities are needed and processes which requires frequently bag replacing. **MBQ** has a quick release with safety device. The inlet and outlet are on the same height for easier in-line installation. The **MBQ** is suitable for applications such as water processes and non-hazardous liquids.



Multi bag filter housing MBF 3-6 suitable for end filtration or polishing of liquids with extremely low concentrations of solids

Multi bag filter housings are used where high capacities are needed. amafilter – LFC Lochem (Filtration Group Process Systems) **MBF3-6 multi bag filters** are available for 3 up to 6 bags. If required customized and tailor made versions are available on request. Filtration Group bag filters are excellent for use in the filtration of liquids containing higher concentrations of coarse solids. The **MBF 3-6** is also suitable for processes with hazardous liquids.





Filter cartridges & cartridge housings

amafilter – LFC Lochem (Filtration Group Process Systems) supplies a wide range of filter cartridges and cartridge filter housings. Cartridge filters are easy to use and an economical choice. Our cartridge filters are excellent for use in the filtration of liquids containing minor solid load. Filter cartridges can be used in many process steps such as pre-filtration, final filtration or polish filtration. The applications can be water treatment, industrial, chemical up to high purity and high demanding processes.

Filter cartridges & housings

We offer a wide range of cartridges and stainless steel, metal and plastic cartridge filter housings for hazardous and non-hazardous fluids, sterile filtration, water, seawater, edible oil, chemical and many other applications.

Most of our stainless steel housings can be customized to meet our customer demands.

For a complete overview of our filter cartridges & housings, please visit our website www.filtration.group

For special requirements contact us! Our dedicated team is there for you!

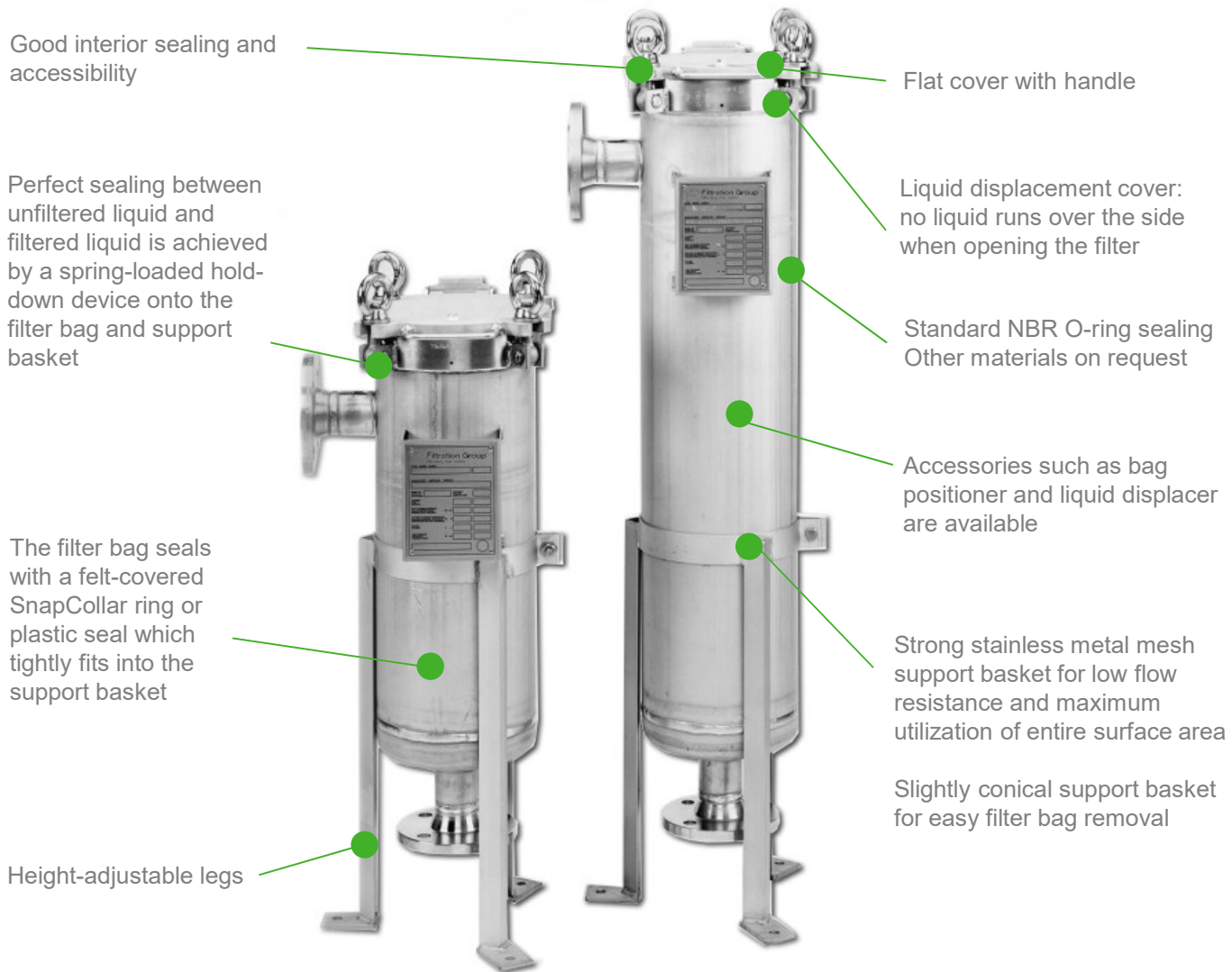


Learn more
www.filtration.group/filtercartridges



Custom design, engineering and manufacturing to suit your needs

amafilter LFC Lochem (Filtration Group Process Systems) can design, engineer and manufacture special bag & cartridge filter housing models to suit customer requirements. Non-standard types for higher temperatures, pressures and other materials according to current design codes are available on request.





Systems / cake filtration

Pressure Leaf Filters

The pressure leaf filter is a closed filtration system and can be fully automated which results in less operator manipulation. The regeneration time between the filtration cycles is short which reduces downtime. The pressure leaf filter itself has no rotating parts, keeping maintenance to a minimum resulting in lower maintenance cost.



Vertical Pressure Leaf Filter

The Vertical Pressure Leaf Filter is an extremely economical filter which has proven technology. Our vertical filters require only a small footprint. Our vertical filter systems are equipped with a cover lift assembly. Other cover lift assembly types are available on request.



Cricketfilter® technology

The Cricketfilter is a pressure filter with a large specific filtration area due to the filter elements shape. This unique shape provides an up to 40% higher filtration area. The filter volume ratio is better than with round shaped filter cartridges. Our innovative Cricketfilter is well known for e.g. Edible Oil, Gelatin, Cocoa and Sugar filtration, Oleo Chemical, Mining applications, Metal plating bath filtering and Amine cleaning in the Oil & Gas market.



Horizontal Pressure Leaf Filter

The Horizontal Pressure Leaf Filter is an enclosed filtration system and can be automated. This filter produces high filtrate clarity after the clarification run and is suitable for most filter aids. The regeneration time between the filtration cycles is optimized and short.

amafilter – LFC Lochem supplies horizontal pressure leaf filters with retractable shells or bundles as a solution for various applications.

The Cricketfilter® is a closed filtration system and can be fully automated. The Cricketfilter® produces consistent filtrate clarity. Elements are mounted on internal filtrate manifolds. Cake release by back pulsing with pressurized gas is done for each register individually, which results in a very effective cake discharge.

Learn more
www.filtration.group/productportfolio



Our services

Amafilter - LFC Lochem relies on its in-depth understanding of a customer's process and liquid filtration requirements to deliver comprehensive filtration solutions. Consumables, (ongoing) service and customized engineered systems to optimize the customer's process.

Amafilter – LFC Lochem has developed a broad range of technologies and has leading application expertise in the specific process filtration markets.

Optimization

In a 2 day test observations are made to optimize the filtration process on:

- The correct filter type
- The correct filter aid
- The correct dosing
- The correct filter cloth or drain cloth

Process Engineering Package (PEP)

With our Process Engineering Package (PEP) amafilter – LFC Lochem provides you with all relevant information to your specific filtering process.

Programmed control system

Control your filtration system with a fully programmed control system designed by amafilter – LFC Lochem.

This service can be supplied with several days on site support.

Software upgrade/optimization

If a control system is installed on your filter system then amafilter – LFC Lochem can upgrade / optimize it when required.

Skid

If you are looking for a turn-key solution, we can offer a total solution for your filtration challenge.

Commissioning

We offer on-site support during the commissioning of your filter so you can start using your system immediately. amafilter – LFC Lochem can also provide an initial process optimization.

Research & Development Partnership

If an entirely new filtration process must be developed we can do it for you. With experienced specialists and an in-house laboratory and R&D department we can co-develop filtration solutions to meet your needs

Sample screening

Through our screening test, we can provide you with a better understanding of how your fluid will perform using one of or filtration technologies. For a very competitive price, we will provide you with process data relating to your fluid that will enable you to make clear decisions regarding the best filtration solution.

Laboratory test

In a 2 day test all important parameters are being determined for an accurate sizing your future Filtration Group filter system. This test is being completed with an extensive report. A follow-up plan can be discussed for Pilot filter installation.

Rescreen and repair services

Amafilter – LFC Lochem offers the best in filter leaf rescreen and repair services for your used or damaged pressure leaf filter screens.

Our state of the art manufacturing center and dedicated and experienced craftsmen in the Netherlands allows for the inspection, rescreen, repair or replacement of our 5 ply screens available in the marketplace today.



Learn more
www.filtration.group/service

Filtration Group

On a mission to make the world safer, healthier and more productive.

Filtration Group Process Systems (amafilter – LFC Lochem) is a subsidiary of Filtration Group Corporation. The fastest growing filtration company in the world.

Filtration Group is on a mission to make the world safer, healthier and more productive. With a passionate workforce, global footprint and world class engineering and manufacturing capabilities, we are driving innovation and developing solutions across a broad spectrum of applications in the fast-growing global filtration industry. We are committed to maintaining an entrepreneurial culture built on a foundation of trust and in which our leaders exhibit a strong bias for action.

The Company began in 2009 and has rapidly grown to be a global leader in the highly attractive filtration industry. With revenues of \$1.6 billion, Filtration Group is consistently recognized as the fastest growing and one of the largest filtration businesses in the world. With over 7,000 employees, the Company serves its customers from a global footprint of 105 facilities in over 25 countries. Filtration Group operates across a wide variety of attractive end markets and produces mission critical products with high replacement rates. Over 80% of the Company's revenue comes from replacement / consumable products, many of which are specified into customer's products or processes.

Filtration Group is an affiliate of Madison Industries, one of the largest and most successful privately held companies in the world. Madison builds entrepreneurially driven, branded market leaders that are committed to making the world safer, healthier and more productive by creating innovative solutions that deliver outstanding customer value. The team at Madison is committed to building something truly remarkable that long outlasts them while coaching others to reach their highest potential.

Filtration Group Process Systems – amafilter – LFC Lochem

www.filtration.group

Filtration Group Corporation

www.filtrationgroup.com

Madison Industries

www.madison.net





SOLID LIQUID FILTRATION SOLUTIONS SINCE 1930

Active since the 1930's and now part of Filtration Group's Industrial Technologies division, **amafilter®** and **LFC Lochem®** key activity is the design and manufacturing of filter installations aimed at separating solids from liquids. These filter systems are sold and serviced worldwide. **Filtration Group Process Systems** provides an extensive product range for your filtration challenges. Our assortment of products and services ranges from fully operational plug-and-play filtration systems to components such as filter bags, filter cartridges, filter housings and spare parts.

1930 amafilter®

In the 1930's *Mr. L. Benjamins* started a company in the Netherlands which sold filtration consumables and parts.

After WW2 *Mr. L. Benjamins* and his son started importing and not much later the manufacturing of "Niagara filters" branded as "Amsterdamse Machine- en Apparatenfabriek" (**amafilter®**). The main products were vertical pressure blades for the food & beverage industry. Soon after **amafilter** started exporting its products worldwide.

Due to rapid growth **amafilter®** moved from Amsterdam to Alkmaar. The new location in Alkmaar expanded multiple times to offer more production capacity. In those years many filter types were developed. Many filters were added to the **amafilter** scope of products.

The **amafilter®** brand is a well established name in the global market for solid-liquid filtration serving customers worldwide.

1979 LFC Lochem®

In 1979, three employees of Machine Factory Arnhem in the Netherlands started their own company to manufacture pressure leaf filters and named the company "Liquid Filtration Consultants" or "LFC Lochem®".

The company quickly gained an outstanding reputation as an innovative engineering and manufacturing company that specialized in liquid filtration technology.

Over the years, LFC Lochem® developed and perfected many filtration products. This resulted in a high quality, comprehensive standard range for widely diverging industries.

LFC Lochem® has an excellent reputation in the field of filtration technology and on its ability to quickly respond to specific customer requests.

LFC Lochem® joined forces with **amafilter** when both companies were joined together in **Amafiltergroup** together with Eurofiltrec (France), Vanpipe (UK) and Falban Filtri (Italy) and Nowata (USA).

2016 Filtration Group®

The **Amafiltergroup** was acquired by MAHLE in 2008 and merged together with its filtration division.

In 2016 MAHLE industrial filtration was acquired by Filtration Group. With Filtration Group the **amafilter®** and LFC Lochem® brands returned under the umbrella of "Filtration Group Process Systems".

Over 7000 employees in 28 countries and 102 locations strive together to make the world safer, healthier and more productive.

In various manufacturing plants Filtration Group Process Systems designs, engineers and manufactures various filters like pressure leaf filters, plug-and-play filtration systems, consumables and parts that meet the highest level of quality standards.

Filtration Group® offers a combined experience in filtration of over 500 year.



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Together we are making the world safer, healthier and more productive

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