FILTER CARTRIDGES & CARTRIDGE HOUSINGS

Efficient and reliable filtration solutions
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 decades of 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.
Filter cartridges

amaTech

The amaTech premium wound filter cartridges represent the state of the art in wound depth filtration technology. amaTech premium wound filter cartridges are manufactured under strict quality procedures. Each batch is tested on weight, length and air permeability, ensuring that each cartridge has the same high quality. Because of the state of the art technology used in manufacturing the filter cartridges, the amaTech premium wound filter cartridges offer a highly effective depth filtration. Different filter media available such as cotton, polypropylene, nylon, glass-fiber and other materials on-request.

Applications: Potable water, Process water, Food and Beverage, Edible oils, Organic solvents, Acids (diluted or concentrated), Alkales, Condensate

amaPure

amaPure filtration is a depth filtration. The unique, one-step melt blown process is used to create a graded density which improves flow characteristics and increases dirt holding capacity when compared to other polypropylene cartridges. The process thermally bonds the fibers together virtually eliminating media migration. Thermal bonding also eliminates the need for a separate centre core, providing both high collapse strength and enabling easy disposal through incineration.

The amaPure is manufactured using strict standards creating a high quality melt blown filter cartridge. Available in different qualities from nominal till absolute retention.

Applications: Food & Beverages, Fine chemicals, Pre-filtration for Reverse Osmosis filter, Potable water, Process water, General water treatment

amaCarb

The general use of activated carbon cartridges is to remove taste, odour and colour from water and other liquids, air and gases. The amaCarb filter cartridge can be granular activated carbon, porous block activated carbon or impregnated cellulose with carbon. The amaCarb is an excellent cartridge to reduce chlorine, taste, odour, colour and organics in water. One can also use these cartridges to reduce organics, taste, odour, colour and oil vapour in air and other gas applications.

Applications: Removal of unwanted colour, taste and odour from water, Soft drinks, Potable water, Organic removal, Chlorine reduction
amaLloy

amaLloy metal filter cartridges are designed for the most extreme operating conditions like high temperatures or aggressive chemicals. The completely welded 316L stainless steel amaLloy is available in pleated or cylindrical construction. Together with the different media types, the amaLloy offers you excellent performance in most extreme applications. The amaLloy is not only suitable for liquids but can also be used for many gas applications or steam filtration. The amaLloy filter cartridges have the option for backwash.

Applications: High temperature process, Aggressive fluids, Chemicals, Steam

amaGuard

The amaGuard are pleated filter cartridges manufactured from polypropylene or micro glass fiber and are the result of years of experience in manufacturing filter cartridges. State of the art technology is used in manufacturing the filter cartridges. The amaGuard offers highly effective surface filtration at a competitive price.

Applications: Chemicals, Food and Beverage, Deionized water, Process water, Pre-filtration for R.O. water, Water treatment, Sea water desalination, Fine chemicals, Cooling water

amaFine

The amaFine cartridge is specially designed with either polyethersulphone or polysulphone membrane. The configuration and the protection of the sterile zone against mechanical damage are perfectly combined in a design to allow the filter cartridge with a high degree of integrity. To reduce the possibility of contaminating your product the amaFine can also function as a vent filter to protect the product from viruses and micro-organisms.

Applications: Pure water processes, Fine chemicals, Vent filters

amaCera

Porous ceramic filters are used for solid particulate removal in liquid and gas applications.

The amaCera PC filter cartridge is specially designed for the polishing filtration of liquid sulphur. These rugged porous ceramic cartridges are manufactured by fusing aluminium oxide grains using a porcelain bond to form a strong, uniformly porous and homogeneous structure.

Applications: Liquid sulphur, Solvents, Hot gas filtration, Liquid backwash
Corrosive fluids, Chemicals, High temperature processes
AFK6-24 Multi cartridge filter housing stainless steel for all industrial liquid and gas applications conform to PED 2014/68/EU

Filtration Group Process Systems (amafilter – LFC Lochem) housings type AFK6-24 are industrial cartridge filter housings in stainless steel. The four models (AFK6, AFK12, AFK18 and AFK24) are small to mid size models in the AFK range, to suit various flow rates. The AFK cartridge housings are an economical solution for all industrial liquid and gas applications conform to PED 2014/68/EU category III. The maximum temperature is 150 °C.

Applications: Filtration of hazardous fluids and non-hazardous fluids

AFK30-40 Multi cartridge filter housing for all industrial liquid conform to PED 2014/68/EU

Filtration Group Process Systems (amafilter – LFC Lochem) AFK30-40 series are industrial cartridge filter housings in stainless steel. These models are medium size models in the AFK range, to suit various flow rates. The AFK cartridge housings depending on the fluid rheology are an economical solution for all industrial liquid conform to PED 2014/68/EU. The maximum temperature is 150 °C.

Applications: Filtration of hazardous fluids and non-hazardous fluids

AFK72 Multi cartridge filter housing stainless steel, economical solution for all industrial liquid

Filtration Group Process Systems (amafilter – LFC Lochem) AFK72 is an industrial cartridge filter housing in stainless steel. This model is larger size model in the AFK range, to suit various flow rates. The AFK cartridge housings depending on the fluid rheology is an economical solution for all industrial liquid conform to PED 2014/68/EU. The maximum temperature is 150 °C.

Applications: Filtration of hazardous fluids and non-hazardous fluids

AFK136 Multi cartridge filter housing economical solution for all industrial liquid conform to PED 2014/68/EU.

Filtration Group Process Systems (amafilter – LFC Lochem) housing type AFK136 is an industrial cartridge filter housing in stainless steel. This model is the largest standard model in the AFK range, to suit various flow rates. The AFK cartridge housing is depending on the fluid rheology an economical solution for all industrial liquid and gas applications conform to PED 2014/68/EU category IV. The maximum temperature is 150 °C.

Applications: Filtration of hazardous fluids and non-hazardous fluids
AFS Sanitary cartridge filter housing series proven quality in the pharmaceutical and beverage industries

Filtration Group Process Systems (amafilter – LFC Lochem) provides single & multi cartridge filter housings for sterile filter applications. We offer a range of high quality sanitary filter housings in stainless steel. The filter housings, AFS1, AFS3-8 & AFS12-30 are according PED2014/68/EU. The maximum temperature for this filter housing series is 150 °C at 4 bar.

**Applications:** Filtration of beverages, Filtration of soft drinks, Filtration of mineral water, Filtration of non-hazardous fluids and steam sterilizing is possible

AFM6-24 Multi cartridge filter housings for filtration of non-hazardous fluids or (process) water

Filtration Group Process Systems (amafilter – LFC Lochem) filter housing type AFM6-24 are industrial cartridge filter housings in stainless steel. Four different sizes are available to suit various flow rates. The AFM cartridge filter housings are an economical solution for all industrial non-hazardous liquid applications. The maximum temperature is 90 °C. Designed are according PED2014/68/EU article 4, paragraph 3.

**Applications:** Filtration of non-hazardous fluids, Filtration of (process) water

AFT7-28 cartridge filter housing for the filtration of (process) water

Filtration Group Process Systems (amafilter – LFC Lochem) AFT series of cartridge filter housings have been designed to offer a cost effective range of stainless steel filter housings. Available in a wide range of options these housings are suitable for a broad range of applications, particularly in water applications. The maximum temperature is 90 °C. The filter housing is according PED2014/68/EU article 4, paragraph 3.

**Applications:** Filtration of (process) water

S-AFC3-24 Plastic multi cartridge filter housing for filtration of seawater or chemicals

In specific applications a plastic multi cartridge filter housing is preferable to a metal filter housing. Filtration Group Process Systems (amafilter – LFC Lochem) has for these applications the solution with our S-AFC3-24 series. S-AFC3-24 is a polypropylene multi cartridge filter housing. Cartridge filters are being used in the filtration of liquids containing fine particles, safety filter, as end-filtration or polishing of liquids with minor concentrations of particles. The filter housing is according PED2014/68/EU article 4, paragraph 3.

**Applications:** Filtration of seawater, Filtration of chemicals (such as acids and alkaline)
AFL1-P Single plastic cartridge filter housings, economic and shatter resistant three piece filter housing, designed for a wide range of applications

Filtration Group Process Systems (amafilter – LFC Lochem) offer a single plastic cartridge filter housing, AFL1-P. This filter housing is ideally for small batch process which needs polishing or for low-flow applications (maximum of 3 m³/h). AFL1-P is an economic and shatter resistant three piece filter housing, designed for a wide range of applications. The filter housing is according PED2014/68/EU article 4, paragraph 3. The maximum temperature for this filter housing series is 50 °C.

Applications: Filtration of water, Filtration of chemical, Filtration of food and beverages

AFL1-S single cartridge filter housings economical solution for small batch processes and low-flow applications

The Filtration Group Process Systems (amafilter – LFC Lochem) AFL1-S stainless steel cartridge filter housing is designed to accommodate a single filter cartridge. This filter housing is ideally for small batch process which needs polishing or for low-flow applications (maximum of 3 m³/h). The closure of the housing avoids the need for using tools for changing the filter cartridge. The filter cartridge housing are suitable for filtering non-dangerous liquids and is conform the PED 2014/68/EU article 4, paragraph 3. Maximum temperature of the filter housing is 90 °C.

Applications: Filtration of water, Filtration of chemicals, Filtration of food and beverages, Filtration of non-hazardous fluids

HFH series High flow cartridge filter housings (from 1 to 19 cartridges) designed specifically with a high throughputs whilst occupying a minor “footprint” area

Filtration Group Process Systems (amafilter – LFC Lochem) can also provide for high flow processes the HFH1-19, multi high flow cartridge filter housing. HFH is designed specifically with a high throughputs whilst occupying a minor “footprint” area. HFH filter housings can be used in both the horizontal and vertical orientation depending on the availability of space. The in-line horizontally mounted housing minimizes pressure drop and is more accessible.

The filter housing series is according PED2014/68/EU article 4, paragraph 3. The maximum temperature for this filter housing series is 90 °C.

Applications: Filtration of process water, Filtration of waste water, Filtration of cooling water, Filtration of utility water, Filtration of fine chemicals
Filtration Group Process Systems (amafilter – LFC Lochem) provides a wide range of pleated depth and membrane filter cartridges to filter fluids to the highest level of purity. This includes removal of dissolved and particulate components to meet the stringent demands in a wide range of industries, including:

- Food & Beverage
- Ultra-pure water processes
- Pharmaceutical
- Enzyme
- Electronics
- Cosmetics
- Solvents
- Aggressive fluids

Materials of construction for the high purity products comply with standards established by the European Union and US Food and Drug Administration to assure purity and safe use with food and beverages for human consumption.

For more details please contact your regional sales account manager or visit www.filtration.group
**Filter bags & bag filter housings**

amahafilter – LFC Lochem (Filtration Group Process Systems) amaFlow 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. amaFlow filter bags are also especially suitable for end filtration or polishing of liquids. Together with our filter bag housings amamahafilter – LFC Lochem offers an excellent choice.

**Single & multi bag filter housing**

Amamahafilter LFC Lochem – Filtration Group Process Systems designs, engineers and manufactures single and multi bag filter housings for industrial, chemical, water, hygienic and high purity applications.

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

For a complete overview of our filter bags & bag filter solutions, please visit our website www.filtration.group

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

Learn more
www.filtration.group/filterbags
Filtration Group Process Systems (amafilter - LFC Lochem) can design, engineer and manufacture special cartridge & bag 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.

Custom design, engineering and manufacturing to suit your needs
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.

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.

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.

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.

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

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.
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
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 it’s 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 Eurofitec (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.