# CARTRIDGE & BAG FILTER HOUSINGS

Making the world safer, healthier and more productive®





# Amafilter<sup>®</sup>



# Over 90 years' experience in providing solid liquid filtration solutions across the world

Amafilter<sup>®</sup> is a Filtration Group brand, specializing in the design, engineering, manufacture and delivery of systems that maximize the efficiency of our customers' plant filtration processes. Our aim is to develop products which deliver cuttingedge filtration solutions that have a direct impact on your process applications and which enable your operations to run more efficiently.

Our expertise is built from over 90 years' experience of providing filtration solutions across the world in market sectors including food & beverages, minerals & mining and chemical industries. Our expertise covers an extensive range of sector-focused applications, such as beet and cane sugar, artificial sweeteners, cheese brine, cocoa butter and gelatine, within the food and beverages sectors. Our experience also extends to chemical applications such as copper electrolytes, waterglass, oleo chemicals, brine, activated carbon filtration to name a few, as well as minerals applications.

# Our product range

Our product range caters for the most demanding applications and includes, cartridge filter housings, bag filter housings, single and multi-bag filter housings and larger filtration systems such as the Amafilter® Cricketfilter® and horizontal & vertical pressure leaf filters.

# Cartridge filter housing and bag filter housings

We can design, engineer and manufacture special cartridge and bag filter housing models to suit customer requirements. Non-standard models for higher temperatures, pressures and other materials are available on request.

# MISSION

We are committed to a better tomorrow and our mission is to make the world safer, healthier and more productive<sup>®</sup>.

Our mission comes alive through the markets we serve, the solutions we provide and how we interact with our teams and customers.





# Markets we serve



# Food and Beverages

We understand that the food and beverages industry manage large volumes of products throughout their processes, and that maintaining their quality and cleanliness is paramount. Our extensive product range can be utilized for all areas of the food and beverages market. Sterile conditions in a manufacturing environment improve products longevity, ensure consistent quality and reduce the need for preservatives in the final product.

Our expertise covers an extensive range of sector-focused applications, such as edible oil, beet and cane sugar, artificial sweeteners, cheese brine, cocoa butter and gelatine, within the food and beverages sectors.



# **Chemical Industries**

The chemical market faces various filtration challenges, including the quality of bulk chemicals, intermediates, up to ultra-fine chemicals. Filtration Group has extensive experience in the supply of innovative filtration technologies that provide optimized solutions for the chemical processing industries. Our products are designed to provide the chemical industry with the highest consistency and quality of output, ensuring the removal of any contaminants, hence improving product yield.

Our experience in the chemical industry includes applications such as copper electrolytes, water glass, oleo chemicals, brine, activated carbon filtration to name a few.



# Mineral Processing – Molten Sulphur

Impurities have a significant negative impact on the efficient production of sulphuric acid and operations across the world need to ensure their filtration processes are designed to minimise contamination and ensure the lowest cost of ownership.

Amafilter<sup>®</sup> has extensive expertise in the molten sulphur sector of the sulphuric acid industry, having designed and supplied pressure leaf filter systems across the globe assisting customers to optimise their molten sulphur total filtration process.



# **Biofuels**

Biofuel production presents unique filtration challenges. The quality of incoming feedstock used in the production of biodiesel can vary extensively. Converting inconsistent feedstock to high quality, pure, renewable fuels that meet ASTM standards requires extensive filtration expertise and appropriate technologies.

Amafilter<sup>®</sup> can carry out a complete analysis of your plant's processes and recommend the correct filtration and separations technologies to meet the product quality you require.



# Cartridge Filter Housings

Amafilter<sup>®</sup> liquid cartridge filter housings are designed and built to deliver quality, functionality and reliability. They are produced to ASME industry standards and can be used in a variety of filtration processes including pre-filtration, final filtration and polished filtration. Our housings are extensively used in the chemical, mining & minerals and food & beverages industries.

We can custom-design cartridge filter housings to meet specific customer requirements and meet all necessary regulations and international standards. We work closely with our customers to understand their challenges and design and customize our housings to meet their unique needs.





# The AFK multi filter housing range

The AFK range of cartridge filter housings is suitable for hazardous fluids and non-hazardous fluids applications and for gas applications. It is available in small to large sizes to accommodate specific flow and filtration requirements. The AFK multi cartridge range is manufactured in stainless steel providing quality and durability for industrial liquid applications. The complete range conforms to PED 2014/68/EU.



# AFK6-24 Multi Cartridge Filter Housings

The four models, AFK6, AFK12, AFK18 and AFK24, are small to medium size models within the AFK range and suit various flow rates. Suitable for 6 filter cartridges in 10", 20", 30" or 40" lengths.



# AFK30-40 Multi Cartridge Filter Housings

These are medium size models in the AFK range and suit various flow rates. Suitable for 10 filter cartridges in 30" or 40" lengths.



# AFK72 Multi Cartridge Filter Housing

This model is a larger size version within the AFK range and suits various flow rates. Suitable for 18 filter cartridges in 40" lengths.



# AFK136 Multi Cartridge Filter Housing

The AFK136 is the largest size model within the AFK range. It is suitable for use with various flow rates. Suitable for 34 filter cartridges in 40" lengths.

FEATURES	BENEFITS	ADVANTAGES
Produced in stainless steel.	Suitable for both hazardous fluids and non-hazardous fluid and gas applications.	Provides quality and durability. Suitable for high chemical compatibility.
Ergonomic cover closure design.	Easy to operate.	Easy access.
The maximum pressure allowed is 12 bar(g).	Suitable for most filtration process conditions in Food & Beverages and chemical applications.	Rigid design, ensures durability. Suitable for high number of pressure cycles.
Fully drainable.	Effective drainage, no blockages.	Easy to clean.
The maximum temperature is 150°.	Suitable for most Food & Beverages and chemical applications.	Rigid design, ensures durability.



# Cartridge Filter Housings



# AFM6-24 multi cartridge filter housings

Suitable for non-hazardous fluids or (process) water applications.

The amafilter<sup>®</sup> AFM6-24 industrial cartridge filter housings, depending on the fluid rheology, offer an economical solution for non-hazardous fluids and (process) water applications.

The range is available in four different sizes to suit various flow rates.

The range is manufactured in stainless steel and conforms to PED2014/68/EU article 4, paragraph 3.

# Features:

- Stainless steel cartridge housing.
- Compact design.
- Easy to use.
- The maximum temperature is 90 °C.
- Suitable for six filter cartridges.
- Suitable for length 10", 20", 30" or 40" filter cartridges.
- Available from stock. Amafilter<sup>®</sup> can supply four standard sizes in stainless steel from stock.

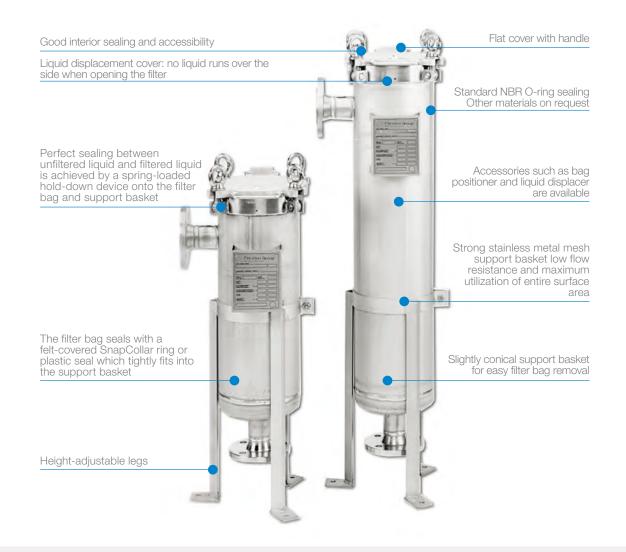
These are available with flanged connections.



Amafilter<sup>®</sup> offer a wide range of bag filter housings. Bag filter housings are used for the filtration of liquids containing high concentrations of coarse solids. They are easy to use and cost effective and are particularly beneficial when handling batches of various liquids.

Amafilter<sup>®</sup> bag filter housings can be used as end-filtration or for the polishing of liquids with extremely low concentrations of solids. All the bag filter housings are designed with height adjustable legs. Amafilter<sup>®</sup> also design, engineered and manufactured custom single bag filter housings to meet your specific requirements.

FEATURES	BENEFITS	ADVANTAGES
Well fitted cover design.	Perfect sealing.	Safe and clean operation.
Robust stainless steel support basket provides maximum utilisation of the entire surface area.	Ensures low flow resistance.	Provides a more extensive bag filtration time.
Slightly conical support basket.	Makes it easy to remove the filter bag.	Easier and quicker maintenance.
Designed with vent ports.	Provides optimal filtration results.	Quality of product and filtration efficiency.
Perfect sealing between unfiltered and filtered liquid is achieved with a retainer.	Ensures there are no solids by-passing.	Provides better quality filtrate.





# **Bag Filter Housings**



# AFE Bag Filter Housings

Suitable for edible oil applications.

Amafilter<sup>®</sup> AFE bag filter housings are commonly used during several filtration process steps in edible oil applications.

The AFE bag filter housings are excellent as safety filtration, after bleaching or as polishing filtration of edible oil.

# Features:

- The maximum temperature for these housings is 120 °C.
- Liquid displacement cover design: no liquid runs over the side when opening the filter. Safe and clean operation.



#### **AFZ Bag Filter Housings**

Suitable for hazardous and non-hazardous media

The amafilter<sup>®</sup> AFZ single bag filter housing complies with PED2014/68/EU, designed according to AD2000 Regelwerk.

# Features:

- The maximum temperature for the AFZ single bag housings is 150 °C.
- Hinged cover with handle, easy to operate.
- Liquid displacement cover design: no liquid runs over the side when opening the filter. Safe and clean operation.



#### **AFB Bag Filter Housings**

Suitable for non-hazardous liquids.

Amafilter<sup>®</sup> AFB bag filter housings conform to PED2014/68/EU article 4, paragraph 3.

# Features:

- The maximum temperature for these housings is 90 °C.
- Height adjustable legs.
- Liquid displacement cover design: no liquid runs over the side when opening the filter. Safe and clean operation.



# **Multi Bag Filter Housings**

Amafilter<sup>®</sup> multi bag filters housings are an easy to use, cost effective product suitable in most applications and ideal where high flow capacities are required. Bag filters are used in the filtration of liquids containing high concentrations of coarse solids, handling batches of (various) liquids and as end-filtration or polishing of liquids with minor concentrations of solids.



# MBF 3-14 Multi Bag Filter Housing

Suitable for hazardous and non-hazardous and gasous applications.

The amafilter<sup>®</sup> MBF 3-14 multi bag filter housings range is available for a mininum of 3 up to 14 bags. Suitable to filtrate hazardous, non-hazardous and gaseous media as per PED 2014/68/EU directive.

# Features:

- Easy to use, effective overall sealing and accessibility.
- Robust stainless steel support basket for low flow resistance and maximum utilization of entire surface area.
- Slightly conical support basket for easy filter bag removal.
- Perfect sealing between unfiltered liquid and filtered liquid is achieved by a bag retainer. The filter bag seals with a felt-covered Snap-Collar ring or plastic seal which tightly fits into the support basket.

Amafilter<sup>®</sup> supply bag positioners and liquid displacers to suit its range of bag filter housings. These accessories improve handling and make it easier to replace filter bags.



# Bag Positioner

The bag positioner is both a positioning aid as well as a bag support in reverse flow. It is available for our AFB, AFE and AFZ ranges.

# Features:

- Produced in stainless steel.
- Easy and correct positioning of the filter bag in the support basket of the housing.
- Avoids potential problems caused by incorrect bag mounting.
- It will keep the filter bag in its position especially in reverse flow situation.



# Liquid Displacers

The liquid displacers are available for size one and size two bags to fit into all amafilter<sup>®</sup> bag filter housings.

The liquid displacer reduces dead liquid volume significantly, ensuring minimised product loss. The liquid displacers are made from stainless steel and designed for 150 °C.



# Strainers

Amafilter<sup>®</sup> offers a range of strainers suitable for a variety of applications.

These elements are often used as coarse filters to screen out larger particles before the fluid passes through a fine filter.



# Services



Amafilter<sup>®</sup>'s reputation for delivering outstanding service and efficient filtration systems is built on decades of hard work, research and design. All of which allow us to produce industry-leading products which meet full international standards.

# We are committed to service

We work closely with our customers to understand their filtration needs. And then use our expertise to customize their system processes to enhance performance and improve the total cost of ownership.

From our test laboratory in Lochem, Netherlands, we provide testing services using the latest filtration equipment so we can offer customers the right products for their specific application. And we carry out sample screening tests to demonstrate how amafilter<sup>®</sup> can improve your filtration process.

Should you wish to have tests carried out at your plant, we have an extensive range of testing equipment which can be rented and installed at your premises. This will provide you with information on the suitability of your chosen system, ensuring you reduce capital investment risk and achieve the best possible results for your operation.



Consultancy & Analysis - System Optimisation – Process Engineering Package (PEP) Existing Vessel Evaluation New Vessel Design Software Engineering



# **Field Services**

Field Service Support Installation & Commissioning Rental Site Inspections Spares Re-screening Maintenance programmes On-site (operator) training



Equipment and Process Optimization Upgrades and overhauls Fluid Quantification Quick Scan laboratory test Extensive laboratory test



# **Engineering services**

# **CONSULTANCY & ANALYSIS – SYSTEM OPTIMISATION**

Amafilter<sup>®</sup> engineers use their expertise to analyse customer filtration processes and systems to optimise their performance.

## PROCESS ENGINEERING PACKAGE (PEP)

Our Process Engineering Package (PEP) examins your specific filtering process providing you with an insight on how your process is performing and how it can be optimised.

# **Field services**

# FIELD SERVICE SUPPORT

Amafilter<sup>®</sup>'s field service team are highly trained and experienced in assisting with any field service support you may require. We provide a global service which means that our engineers are available to visit you onsite, wherever you need them.

#### **INSTALLATION & COMMISSIONING**

We provide on-site support during the installation stage of your new or rebuild filtration system ensuring your plant delivers maximum efficiency with minimal downtime from the outset. Our service offer includes commissioning a new or rebuild filtration system to achieve optimal filtration.

#### RENTAL

For on site testing, we have a wide range of mobile test units that can be rented and installed at a customer's site to enable filtration tests to take place directly at the location, exposing the process to the exact same conditions the final installation will be exposed to.

#### SITE INSPECTIONS

We carry out site inspections to explore and investigate any potential issues that may be effecting your system and could lead to malfunctions and filtration inefficiencies.

## SPARES

We can discuss your specific spares requirements including the option of keeping spares in stock locally.

## **RE-SCREENING**

Our extensive experience in filtration and separation enables us to rebuild and rescreen old and/or damaged filter leaves for almost any make of filter and return them to their original working order.

## MAINTENANCE PROGRAMMES

Once your system is installed, we provide technical assistance on and off site and have a number of maintenance programmes to suit different customer requirements including:

**Preventive maintenance:** We offer pro-active maintenance on filtration systems and accessories to increase reliability, prevent damage and reduce downtime.

**Corrective maintenance:** We provide effective filtration remedies to resolve and repair systems problems or malfunctions.

**Training:** We provide on-site maintenance training programmes. Our knowledgable engineers are eager to share their valuable experience and train your team on how to maintain an efficient filtration system.

# Lab services

# EQUIPMENT AND PROCESS OPTIMIZATION

We provide a two day observations and research test in our specialised laboratory to investigate and optimize the filtration process. This includes identifying:

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

# UPGRADES AND OVERHAULS

The amafilter<sup>®</sup> team works closely with customers to identify how best a filtration system can be upgraded to integrate the latest state of the art technology and automation. This could include remote access, overhauling and revision of parts subject to wear. To support this service we offer extensive laboratory testing or a quick scan of your filtration system.





Scan QR Code to find our locations



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08/12/2023

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