



# HiFlux Filtration A/S Specialists in liquid filtration solutions

**Company brochure** 



## About us

HiFlux Filtration A/S has for more than 60 years specialised in providing solutions for filtration of liquids for the food and process industry, as well as the energy sectors.

#### Experience and accumulated knowledge base

Providing advice and problem solving adapted to each individual customer is the foundation of our approach to customer satisfaction, giving our customers access to our long-standing expertise within filtration of liquids.

#### Quality is the keyword at HiFlux Filtration A/S

HiFlux has a strong focus on always providing high quality solutions, whether supplying standard or customised filtration solutions.



HiFlux Filtration A/S is situated in Denmark, has a branch office in the Netherlands and is represented by partners all over Europe. Our focus is on development and manufacturing of liquid filters and consulting on process solutions are key elements of our activities

#### Sustainability:

Sustainability is an integrated part of our strategy. We work to improve our production and business to comply with the ESG agenda.

We have begun our journey to reduce our carbon footprint through various actions thus committing to the 1.5 degree increase in compliance with the objective set by the Science-Based Targets Initiative (SBTi).





## Our values

#### Mission:

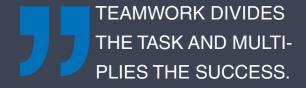
We aim to be the preferred supplier of customised solutions for liquid filtration and increase productivity for our customers.

#### Vision:

To be the best developer and manufacturer of high-quality automatic filtration solutions.

#### Values:

To be open, honest, and fair in everything we do - we do it right and we do it together with mutual benefit.



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## What we do?

#### We filtrate most liquids.

The two main reasons for filtration.

#### **Protection:**

- Reduce damages from larger impurities or erosion
- Protect pumps and heat exchangers
- Protect valves, boilers and pipes
- Protect spray equipment

#### Refining:

- Modifying the product and securing the quality
- Remove unwanted particles and amalgamations
- Retaining valuable particles in the liquid



#### Improve the product quality

The closed system design eliminates the risk of contamination of your product.



#### Reduce waste and operation costs

The self-cleaning filter eliminates the need for replacing filter media and disposal costs, reducing product wastage, downtime, and labour costs.



#### Increase your production rates

With its self-cleaning design there is no need to change filter media, resulting in consistent and reliable filtration.



#### Safeguard the health and safety of your operators

With a closed system design, no hazardous product or evaporations escape during operation, limiting operator exposure to contact with the products.



## **How does it work?**

HiFlux Auto-line® filter is designed as a compact self-cleaning filter. The sturdy construction of the filter makes it well suited for industrial and hygienic applications in which operational reliability and dependability are essential.

The area of application is broad and includes filtration of many different types of liquids such as highly viscous liquids, dairy products, chocolates, beverages within the food sector as well as paint & varnish, polymer suspensions, emulsions, process water and wastewater in the industrial sector, where effective pre- or final filtration is required.



#### Reduction in operational costs

The Auto-line® continuously removes unwanted particles. This means that consumption of conventional filter bags or cartridges, including the time spent changing them, can be substantially reduced - or eliminated altogether. As a result, operating costs are reduced and the need to handle problem waste in the form of filter cartridges or bags is avoided.



#### **Functionality**

The filtration principle is based on a filter strainer, with the solid particles being retained on the inside of the filter element. In the cleaning process, a vertical or a rotating scraper transport the solids into a sludge chamber at the bottom of the filter.

The chamber is designed in such a way that a high concentration of solids can be retained before purging. The scraping action is activated either automatically by differential pressure across the filter due to saturation or at fixed time intervals. The concentrated slurry is drained at appropriate intervals through the discharge valve at the bottom of the filter.

Drainage is controlled individually by an electrically or pneumatically operated control system, which means that product loss is kept at an absolute minimum. Drainage in batch processes may also be controlled manually in cases where it is only required at the end of the batch.



#### Operation

On a rotating filter a number of knives scrape the surface of the filter element leading the sludge into the sludge chamber in the bottom of the filter. On a linear filter, the plunger movement is actuated with a pneumatic cylinder, which can be equipped with an extended piston rod to avoid, that any part of the piston rod encounters the media as well as the inside of the pneumatic cylinder.



## **Product range**

The HiFlux Auto-line® Filter is developed to be adapted to our customers' needs and requirements and are available in various sizes for industrial and hygienic applications.

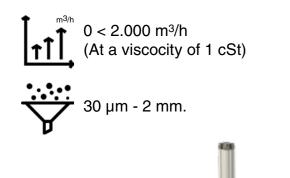
#### Why choose a HiFlux Auto-line® filter?

Because HiFlux Filtration A/S does not see an Auto-line® filter as a commodity. Different customers, different applications, and different demands require different filter solutions. The filters are modular and allow for switching between the rotating and the linear cleaning principle as well as a wide range of addons is available.

It is this open-minded approach combined with more than 60 years of filtration experience and thinking in solutions, which is the base of designing high-performance filters for satisfied customers worldwide. HiFlux Filtration A/S increases your productivity and your bottom-line.

#### Advantages with the Auto-line® filter:

- Easy installation, operation and service
- Removes unwanted particles
- Continuous flow process
- Low maintenance cost
- Eliminates downtimeEnsures the quality



## Norms, rules and regulations

HiFlux Filtration A/S Auto-line<sup>®</sup> filters are designed acc. to the EC directive for pressure vessels PED 97/23/EC, and can be supplied with approval to categories I, II, III or IV. Furthermore, the filters can be supplied for use in explosive areas, category 2 (zone 1) and category 3 (zone 2), according to 2014/34/EU.

For any food application, HiFlux Filtration A/S designs hygienic self-cleaning Auto-line<sup>®</sup> filters in accordance with EU regulation EC 1935/2004 (registered by the Danish Food Administration). Furthermore HiFlux Filtration A/S can fulfil the FDA material certification requirements and respects the European Hygienic Equipment Design Group's (EHEDG) design recommendations.



< 27 m $^{3}$ /h < 47 m $^{3}$ /h < 66 m $^{3}$ /h < 110 m $^{3}$ /h < 2.000 m $^{3}$ /h < 970 m $^{3}$ /h < 2.000 m $^{3}$ /h

Hygienic & Industrial — Industrial

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## **Our sectors**

We have a competent knowledge of a large range of sectors through dedicated work and research. This enables us to offer the most optimal filtration solutions.

We develop customer-specific solutions to improve your production and achieve a uniform product.

The area of application is broad and includes filtration of many different types of liquids within the food and industrial sector where effective pre- or final filtration in the 30  $\mu$ m - 2 mm. range is required.



Food/ hygienic



**Industrial** 



**Pharmaceutical** 



**Chemicals & Polymers** 



**Paint & Coating** 





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## Addons for the Auto-line<sup>®</sup> filter solutions

We have developed a wide range of addons to the Auto-line<sup>®</sup> filter series. It is possible to customise the filtration solutions for specific applications depending on the demands of each filtration project such as drive systems, controllers, heating jacket, sluice systems, scrapers, sealing boxes, lifting device and much more.



## Drive systems

Depending on the application, different types of drive systems are available.

- Electrical motor
- Pneumatic cylinder
- Double cylinder
- Pneumatic motor



## Filter elements

Different types of elements with unique features, that makes them well suited for various applications.

- Wedge wire
- Laser bore
- Perforated



## Scraper arrangement

Depending on customer needs and specifications, we customise the scraper arrangement to achieve maximum performance.

- Angle
- Straight
- 4-channel



## PLC & on/off controllers

Various controllers to provide high reliability and secure operation.

- Safe and simple operation
- Easy maintenance



## Heating jacket

The heating jacket can be provided for applications where the media must maintain a fixed temperature.

- Operating temperatures (270°C)
  - Double-walled construction
    - Space for insulation





## Sluice system

The sluice concentrates the purge volume in the system and are available in different sizes and designs.

- Prevents pressure drop
- Reduces product loss





## Lifting device

Mechanical lifting device to be mounted on the filter housing and cover.

- Increased safety
- Easy access and maintenance (one-man operation)



## Inside view of the Auto-line® filter

The filtration principle is based on a filter strainer, with the solid particles being retained on the inside of the filter element.

In the cleaning process the particles are scraped into a sludge chamber at the bottom of the filter.

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## **Customer in focus**



#### **Better profitability**

- Completely automate the filtration process
- Re-usable filter elements
- Secure product filtration
- Reduce product loss



#### Self-cleaning automatic filter

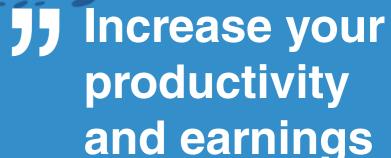
- Easy and simple service
- High quality product
- Proven reliability
- Easy installation



#### Improved work environment

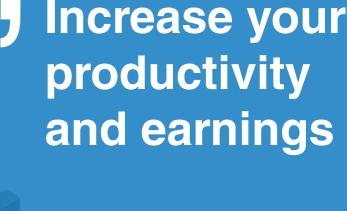
- Eliminate contact with product
- Reduced risk of errors
- Long service life
- Easy to operate





We develop and manufacture quality filtration solutions, which retain particles in liquids. We create value by: Protecting production facilities from losses and risks. Refine products and increase efficiency in processes. Contribute to increased sustainability





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## **Test** before investing

We offer the possibility to lease the Auto-line<sup>®</sup> filter before investing. This way we can make sure you get the most optimal filter solution customised to your specific application.

Choosing the right filter can be a difficult task, that is why we offer both hygienic and industrial filter solutions in order to test your application. An informed, considered decision will help ensure seamless integration of the filter solution into your production and ensure trouble-free operation for years to come.

You will see how simple it is to install the Auto-line<sup>®</sup> filter in any environment. You will notice and appreciate its compact design and experience how easy it is to service and operate on daily basis.

#### **Proven results after test:**

- Costs for filter bags are removed
- Increased production capacity
- Better protection for operators
- Continuously production
- Reduced loss of media
- Eliminates down time
- Ensures the quality
- Reduced waste



Use one of our filters on a leasing basis to experience first hand, filtration testing made easy.





#### Contact us:

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