



PED

ISO 9001

ATEX



HiFlux Filtration A/S

## AUTO-LINE® ADVANCED AUTOMATIC SELF-CLEANING FILTERS FOR THE COATING AND CHEMICAL INDUSTRY









More than 50 years' experience
Reliable design - tomorrow's technology today

Auto-line® LR-E with electric drive



Solid spring loaded rotating scraper system.

#### **Industry demands**

Being coating, printing inks or adhesive manufacturing, there is a ever increasing demand for efficiency and reliable filtration, ensuring product quality and productivity. HiFlux Filtration A/S designed the first automatic filter for these industries more than 35 years ago. In the past decades, the automatic self-cleaning filters have been adapted to suit the various special requirements under the product name of Auto-line®. Today you will find the filters in the manufacturing of solvent and water-based coatings, in production of various adhesives and resins, as well as in manufacturing of other basic chemicals and additives.

#### **ATEX** and pressure design

The HiFlux Auto-line® is designed according to the European Pressure Equipment Directive 2014/68/EU. The filters can be supplied for installation in EX zones in accordance with ATEX Ex II 2 G c IIC T4 - T1. Further the filters may be supplied with either electric or pneumatic drives.

#### Easy to service and clean

The filter has been designed with special attention to ease of service and cleaning. Few moving parts ensure trouble-free operation and make the filter very reliable and easy to service.

The filter is designed with smooth surfaces, ensuring easy cleaning between batches and reducing time-consuming manual work.

For even better performance during cleaning the filter may be supplied with surfaces polished to Ra 0,8 µm.

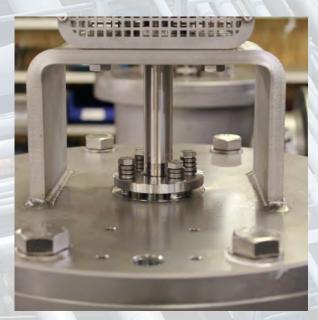
#### Filter cart with pump

The HiFlux Auto-line® may be supplied mounted on a cart with a pneumatic diaphragm pump for flexible application at various points of use. Type of pump will be in accordance with customer specification.

#### **Problems solved**

- Downtime due to blocked strainer or bag filters
- Product recall or re-filtration due to impurities in the final product
- Batch rejection due to burst filter bag
- Too high costs for waste removal (filter bags)
- Automatization of hot and hazardous processes

#### **AUTO-LINE® Filters for the coating and chemical industry**



Spring loaded sealing box for tight sealing

# Robust industrial design - easy to handle

The filter is designed with heavy duty industrial use in mind. It handles highly viscous, sticky, abrasive and even very hot products without any problems.



Rotating Auto-line® with pneumatic drive

#### **Rotating scraping system**

The rotating scraping system is based on high performance PEEK scrapers. PEEK has perfect temperature and chemical resistance and a low wear gradient. The scraping system is spring loaded securing positive scraping action and a long service life. An agitator can be mounted in the purge cone to keep the slurry in a liquid state.



**Lifting** device

The lifting device allows for easy access to the filter housing for inspection and cleaning.

The top down access ensures that the media will stay inside the filter housing and that spillage on the floor is limited.



Auto-line® LR-P filter cart with diaphragm pump

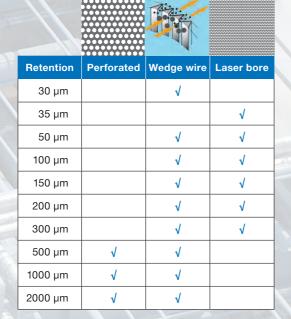
#### **Heating jacket**

With optional heating jacket, it is possible to maintain a steady temperature of the liquid, ensuring product quality and required process flow during filtration. Process temperature of up to 270°C is possible.

Lifting device for easy service

#### **Screen options**

A wide range of perforated, wedge wire and laser bore (defined pore) filter elements, with grades from 30 to 2000 microns are available. This makes it easy to adapt the filter exactly to each specific application. By adjusting the operational values, hard, soft and fragile solids can be retained.





Filter elements

As standard, Auto-line® filters are made from acid-proof stainless steel EN 1.4404 (AISI 316L), and are designed for system pressures of 10 and 16 bar and working temperature of up to 100° C. The filter elements are designed for a maximum differential pressure of 3, 5 or 7 bar. Connections are flange PN16 EN 1092-1/11, however most other connections can be supplied upon request.

SPEC. AUTO-LINE® LINEAR	ME	MLE	LE	XLE	XXLE
SPEC. AUTO-LINE® ROTATING	n/a	MLR-P/E	LR-P/E	XLR-P/E	XXLR-E
Capacity (1 cSt, ΔP 0.2 bar, 100 μm)	27 m³/h	44 m³/h	63 m³/h	100 m³/h	223 m³/h
Filtration area	860 cm <sup>2</sup>	1500 cm <sup>2</sup>	2175 cm <sup>2</sup>	3300 cm <sup>2</sup>	4840 cm <sup>2</sup>
Filter volume	6 liters	15 liters	27 liters	35 liters	89 liters
Connections inlet/outlet	DN50	DN65	DN80	DN100	DN150

#### **Customized solutions**

The engineers at HiFlux Filtration A/S can combine a wide range of standard Auto-line® product features with customized solutions suitable for each specific filtration application.

#### **Test filters**

HiFlux Filtration A/S offers a range of standard Auto-line® filters and filter elements for on-site testing. Before and during the test period we will offer you our advice and support.

### **AUTO-LINE® Filters for the coating and chemical industry**

# Quality and safety, increased productivity and higher bottom line earnings

- Auto-Line® filter benefits:
  - √ less hazardous waste
  - √ much less manual labor
  - √ no cost of consumables like filter bags
  - √ far less product loss compared to filter bags
  - √ no re-filtration of batches due to ruptured filter bags
  - √ no product recalls from the market
  - √ uniform product quality due to constant filtration grade in a filter bag, the build-up of a cake layer will also remove wanted particles/fillers
- Continuous quick filling process without interruptions due to constant filtration rate with no fluctuations in flow.
- Closed system resulting in no vapor from solvents etc. in the workspace, no spillage on the floor and minimal loss of valuable product.
- Heavy duty industrial design resulting in high operation efficiency and low maintenance cost.
- Laser-drilled elements with round holes secures accurate and high quality filtration, also of soft/gel particles and fibers.
- Designed for easy flushing, cleaning and service.



Filtration of natural resin at 275°C, 100 µm defined pore filtration.



Larger filter installation for water based coatings

### **AUTO-LINE® Filters for the coating and chemical industry**

#### **Areas of application**

The area of application is broad and includes the filtration or texturing of many different types of liquids.

#### **Coatings and Inks**

- √ Water based
- √ Solvent based
- √ Oil based
- √ Lacquers
- √ Varnishes
- √ Printing inks
- √ Fillers
- √ Resin & Binders
- √ Additives

#### **Chemicals and adhesives**

- √ Emulsions
- √ Isocyanates
- √ Latex
- √ Monomers
- √ Natural and modified resins
- √ Synthetic resins
- √ Polyols
- √ Polymers







#### HiFlux Filtration A/S

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