

separation technology



Lenzing CanFil – Automatic backwash filter











Lenzing CanFil

Automatic backwash filter – filtration down to 50 µm

CanFil is a fully automatic, continuous system that works according to the principle of surface filtration. A wedge wire screen or metal fibre fabric is used for filter candles which retain particles of different sizes on their surfaces. After the pre-determined degree of contamination has been reached, the filter candles are cleaned by backwashing a small quantity of filtered medium, while filtration continues during backwash.

Features

- backwash without interrupting filtration
- completely closed system
- high operating pressure up to 40 bar possible
- high throughput up to 10.000 m³/h
- Iow pressure drop
- filter fineness of 50 µm to 3.000 µm
- Iow backwash amount through optimal design of backwash elements
- Iong standing times between backwash procedures
- minimal operating costs
- Iow investment costs

Markets

- waste water treatment
- snow making
- pulp and paper industry
- fiber industry
- chemical industry and petrochemistry
- textile industry
- steel industry
- automotive industry
- water treatment
- power supply / power plants

Fluids

process water
river water
sea water
reused water
cooling water
circulation water
waste water
wash water
well water



Operating principle

CanFil is a fully automatic filtration system

Filtration

The fluid to be filtered is forwarded into the untreated water area of the filter via the inlet pipe, flows through the filter candles fastened to the perforated disc and exits purified through the outlet pipe.

The automatic vent separates possible gas and air bubbles. Impurities are kept back within the filter candles and produce an increasing flow resistance.

Backwashing

As soon as the pressure difference is reached, which can be set on the pressure difference switch, or a pre-selected period of time expires, the automatic backwashing with own medium gets activated. The backwash rotor moves from one bottom opened candle to all other filter candles, without interrupting operations, so that if the backwash valve is opened at the same time all filter candles will be backwashed with the filtered own medium, through flow reversal.

After a full rotation of the backwash rotor, the backwash process is finished and the backwash valve will be closed.



Fixed V-column filter candle



Metal fiber fabric



Status: Filtration





Status: Backwashing

Working principle CanFil

Particular construction features

- separated filter casing with variable nozzle positions
- motor of backwash rotor under the casing bottom
- check filter candles: only remove casing lid
- check rinsing device: only loosen floor flange
- welding construction for operating pressures up to 40 bar
- throughput power up to 10,000 m³/h

Design / construction type

CanFil is available in different sizes

CanFil-100 - 150



CanFil-200 - 500



Design / construction type

	from	to
flow rate	1 m³/h	10.000 m ³ /h
fineness of filtration	50 µm	3.000 µm
flange dimensions	DN25	DN900
design pressure	6 bar	16 bar *1
design temperature	0 °C	80 °C *2
range of application	filtration for low viscose fluids	
type of filter candles	fixed V-column or metal fibre fabric	
control board for backwashing	by time or differential pressure	

*1 higher pressures upon request, *2 higher temperatures upon request

Fabrication material

Carbon steel coated, Carbon steel rubber lined, Stainless steel AISI 316Ti/L (1.4404, 1.4571), AISI 904L (1.4539)

Gaskets

EPDM, Buna, FPM, PTFE



CanFil-100

CanFil-200





CanFil-350



Filtration and separation technology

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Viscose and fiber technology



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