

PF Filter

ALL-ROUND SYSTEM FOR THE HIGHEST FILTER OUTPUT



PF FILTER – THE FILTER THAT MAKES THE DIFFERENCE

The PF Filter is suitable for cleaning and bath maintenance for pre-treatment systems in the surface treatment/automobile industry/supplier industry as well as for the filtration of cooling lubricants.

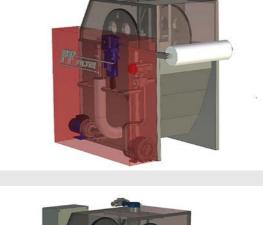
Quality improvements and service life extensions of the process medium can be realised with it.

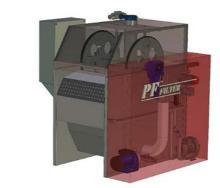
Through these factors, there are also substantial cost savings in terms of chemicals used, less waste disposal and cleaning costs.

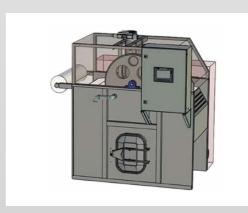
Depending on the quantity throughput, different filter fleece widths are available.

The filtration grade is essentially determined by selecting the filter fleece; fineness grades up to $10 \mu m$ are possible. The formation of a filter cake at the woven filter medium enhances the filtration action.

The vacuum created by the PF Filter under the filter fleece ensures a low consumption and maximum exploitation of the filter fleece.









Function

Our PF filter is a fully automatic filtration system made with a round filter bed and additional vacuum support.

The medium to be filtered is led via an inflow distributor into the hemispherical filter chamber.

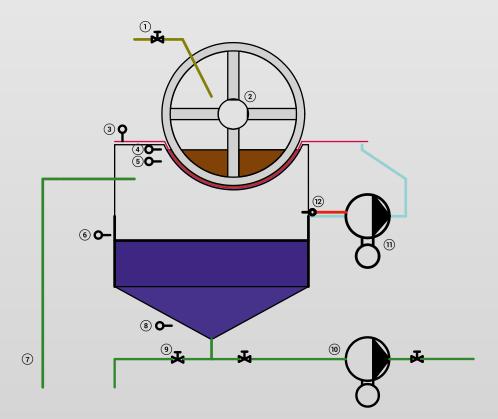
The filter fleece is sealed by means of two synchronous wheels touching the hemispherical supporting structure.

The elastic seal ensures optimum sealing of the dirt chamber from the clean chamber.

Owing to the continuous fouling of the woven filter medium, the medium level in the dirt chamber increases up to a certain height; once a certain level is reached, the vacuum pump also gets switched on. Only when the maximum medium level is reached is the filter fleece moved forward.

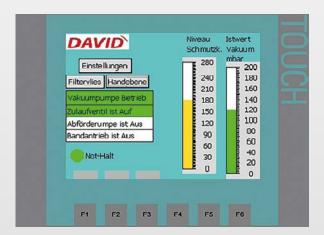
- Maximum exploitation of the filter fleece with minimum energy consumption
- Frequency-controlled regulation of the vacuum pump:
 this results in a further saving of energy with th
 - this results in a further saving of energy with the best possible exploitation of the filter fleece
- The filtered medium gets discharged into the output tank fitted below the filter fleece; a level controller monitors the level in the output tank and activates a recirculating pump which pumps the medium back into the process.
- Cleaning of degreasing baths, rinsing baths
- Sludge dewatering, wastewater treatment
- Cooling water cleaning, cooling lubricant treatment

- 1) Dirty water supply
- 2 Filter fleece transport
- (3) Filter fleece control
- 4 Dirty water max.
- 5 Filter fleece step
- 6 Clean water max.
- (7) Overflow
- 8 Clean water min.
- 9 Drain valve
- 10 Drain pump
- 11) Vacuum pump
- (12) Pressure sensor



Easy control and ease of operation

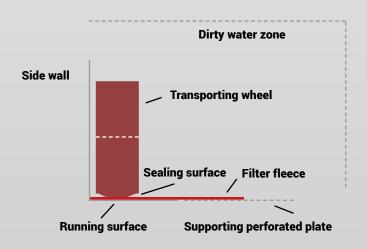
- The screen structure is very clear and can be operated intuitively.
- The process values are displayed clearly in the form of a bar chart.
- Operational states are shown in colour.
 green = in operation, red flashing = faults





Highest sealing in the dirty water zone

The lateral sealing of the dirty water and the woven filter from the clean water area is achieved by means of simultaneously rotating wheels with an elastic sealing surface arranged laterally.



Filter fleece





Advantages for optimum filtration action

- Adjustable vacuum: the vacuum control and hence the rotational speed of the side channel compressor is achieved by means of a frequency converter. As a result, only the quantity of energy that is required is consumed, no bypass for excess vacuum
- Simple intuitive operation via the operating panel
- Display of all the process-relevant parameters on the operating panel
- The device, including the fitted attachments, is made of stainless steel
- Flexible version options
- Fitting a fleece coiling device is possible

- Large bandwidth of different filter fleece
- Selection of high-quality components of renowned manufacturers
 - Vacuum pump → Gardner-Denver
 - Drive motor → SEW
 - Pumps → KSB
- Compact construction, as a result, small footprint (approx. 1.5 m²)
- Big cleaning opening in the output tank (service-friendliness)
- Clear-to-oversee construction, access to all the components is very good, very maintenance-friendly
- Level controller is robust and not sensitive to dirt deposits

Туре	PF 1.500	PF 1.700	PF1.1000
Throughput capacity	15 m³/h	20 m³/h	30 m³/h
Woven filter medium width	500 mm	710 mm	1000 mm
Vacuum capacity	180 mbar	180 mbar	180 mbar
E. Connected load	1.1 kW	1.1 kW	1.1 kW
Length	1600 mm	1600 mm	1600 mm
Width	1250 mm	1450 mm	1750 mm
Height	1800 mm	1800 mm	1800 mm

Tank materials: 1.4301 / 1.4571





Anlagen & Service GmbH

Zur Mosterei 13 D-36282 Hauneck-Eitra T +49 (0) 6621 147 07 F +49 (0) 6621 147 11

info@david-anlagen.de www.david-anlagen.de



Germany China USA Russia Czechia Turkey Hungary Brazil Spain Belgium England Poland