



# Deep-bed filtration with SF 400B, SF 600B, SF 1000B



# Design and structure of sheet filter

As in the case of a filter press, a filter package is installed in a stand between a "fixed cover" and a "loose cover". Depending on the type of filtration, the filter package may consist of filter plates or a combination of plates and frames. Filter beds are inserted between the filter elements and pressed together by the fixed cover and the loose cover. The fixed cover is connected to the traverse via connecting and tie bars. The filter package is pressed together by a pressure unit, which is integrated in the traverse.

# Version SF 400B, SF 600B (photo front cover)

- Plate formats400 x 400 mm for SF 400B600 x 600 mm for SF 600B
- Self-supporting filter stand including spindle
- Massive strong pressure cover
- Valves, fittings and drip tray
- In stainless steel SS 304 or SS 316
- Mobile on wheels or stationary on cups

#### Pressure unit

Increased contact force is generally required on filtration with counterpressure. Alternatively available:

■ Manual hydraulic, installed between the spindle and loose cover a manual shift wheel with integrated planetary gear





#### Version SF 1000B

- Plate format 1000 x 1000 mm
- Stationary self-supporting filter stand on height-adjustable cup feet
- Filter cover, traverse, carry bars and hydraulic cylinders are made of high-quality solid steel, clad with stainless-steel plating
- Divided operator gangways on both sides
- Carry bars resting on supports depending on stand length
- Suspensions on filter elements or carry bars are lower on operator's side to facilitate insertion of filter beds and cleaning.
  In addition, the switching of sides when inserting filter plates is avoided.

#### Pressure unit

- The hydraulic system and electronic components are protected from splashing and installed in a housing underneath the traverse
- Installation of the hydraulic cylinder is static so that the loose cover is not subjected to additional weight
- Automatic follow-up pressure control on individual contact force during filtration process

Valves and fittings to be selected according to maximum microbiological safety on sterilisation

#### Valves and fittings

#### Fixed cover

- Removable risers, alternatively as inlet and outlet with slanted seat plunger valve, disk valve or corner valve
- Manometer, sterile
- Safety inspection glasses with venting and drainage

#### Loose cover

Other valves and fittings necessary (venting, drainage)

SF 1000B with kieselguhr discharge unit





## Filtration with deep filter beds

An outstanding filtration result can be expected due to the optimum selection of deep filter beds according to the individual requirements. The wide range of deep filter beds offers great flexibility here.



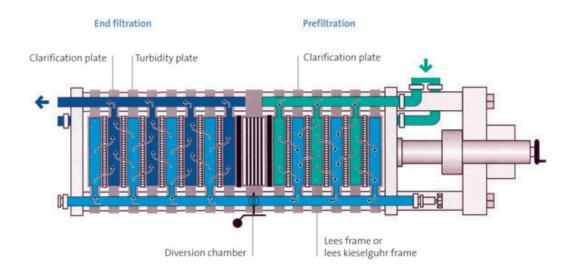
Kieselguhr and sterile filtration with bypass chamber

## Filtration with filter aids (cake filtration)

Here the filter package must be equipped with plates and frames. The filter aid (e.g. kieselguhr) forms a filter cake with the solid matter to be separated off in the liquid in the frame elements. The filtration efficiency is determined by the filter cake.

## Double filtration

Multistage filtration is possible with a bypass chamber or bypass plate, e.g. kieselguhr and sterile filtration or clarifying and sterile filtration.





## Filter elements

- Ideal flow distribution via 4 eyes in the plates and frames for the inflow and outflow of filtrate
- The upper eyes are positioned several millimetres above the sealing edge and outside the plate width for optimum venting,
- the lower eyes are below the sealing edge and plate width to ensure complete emptying of the filter system.
- Sealing is carried out using universal sleeve gaskets, which can be used for all bed thicknesses
- Optimum utilisation of the filter area, resulting in maximum filter bed capacity via web slot drainage
- Optional: lower soiling level due to smoother surface with wave-type drainage
- Possible as closed system, with all-round gasket for hermetic seal of filter package
- Made of stainless steel SS 304, SS 316 or plastic





## **Technical data**

Туре	SF 400B					
Stand size	24	50	74	100		
Max. number of filter plates	23	49				
Max. number of filter beds	24	50	73	100		
Max. filter area in m2	<u> </u>	7,2	10,6	14,3		
Max. number of kieselguhr frames/filter plates	5/6	12/13	19/20	27/28		
Max. number of support beds (double fold bed)	6		20	28		
Max. filter area in m2		13		8		
	1,7	3.7	5,7	٥		
Dimensions in mm with spindle						
L tot.	1550	2550	2870	3240		
W max.	730	730	730	730		
H max.	1090	1090	1090	1090		
Weights without plates with spindle	252	283	295	322		
Weights without plates with motor hydraulics	312	343	355	382		
Weight filter plate stainless steel in kg	4,3					
Weight filter plate plastic in kg	1,6					
Weight filter frame stainless steel in kg	5,3					
Туре	SF 600B					
Stand size	50	100	150	200	250	300
Max. number of filter plates	49	99	149	199	249	299
Max. number of filter beds	50	100	150	199	250	300
Max. filter area in m2	16,5		51,0	66,5	83	102
Max. number of kieselguhr frames/filter plates		33,5				88/89
	14/15		42/43	56/57	70/71	_
Max. number of support beds (double fold bed)	15	29	43	57	71	89
Max. filter area in m2	10,1	19,2	28,5	31,2	47,5	59,5
Dimensions in mm with spindle						
L tot.	2680	3580	4790	5750	6650	7550
W max.	810	810	810	810	810	810
H max.	1370	1370	1370	1370	1370	1370
Weights without plates with spindle	954	1054	1156	1254	1422	1594
Weights without plates with motor hydraulics	1012	1112	1216	1315	1484	1652
Weight filter plate stainless steel in kg	9					
Weight filter plate plastic in kg	3,8					
Weight filter frame stainless steel in kg	11,4					
Type SF 1000B						
Stand size	100	150	200	250	300	350
Max. number of filter plates	99	149	199	249	299	349
Max. number of double filter beds	50	75	100	125	150	175
Max. filter area in m2	95	142,5	190	237,5	285	332,5
Max. number of kieselguhr frames/filter plates	28/29	42/43	56/57	79/71	84/85	98/99
Max. number of support beds (double fold bed)	29	43	57	71	85	99
Max. filter area in m2	55,1	81,7	108,3	134,9	161,5	188,1
Dimensions in mm with motor hydraulics	33,1	01,7	.50,5	.74.9	.51,5	.50,1
L tot.	4575	F20F	6275	7275	Q. F. 7. F.	0.475
W max.	4575	5395	6375	7275	8575	9475
	1320	1320	1320	1320	1320	1320
H max.	2260	2260	2260	2260	2260	2260
Weights without plates with motor hydraulics	4030	4120	4180	4230	4320	4420
Weight filter plate stainless steel in kg	24					
Weight filter frame stainless steel in kg	26,5					

Strassburger Filter GmbH + Co. KG Osthofener Landstraße 14 D-67593 Westhofen Germany Telephone +49 (0) 62 44 / 90 800-0 Telefax +49 (0) 62 44 / 90 800-8 info@strassburger-filter.de www.strassburger-filter.de

## Universal Filtration

703 Bascomb Commercial Park, Suite 103 Woodstock, Ga 30189 USA 770-592-7564 www.automaticfilterpress.com sales@automaticfilterpress.com

