

FIBRAFIX®

DEPTH FILTER SHEETS

For food and industrial applications



Characteristics

FIBRAFIX® depth filter sheets represent an approved and established filtration technology for solid liquid separation. The three dimensional medium assures superior retention capacity for solid particles at a high flow rate.

The pore sizes can be fine enough to retain bacteria and thus produce a sterile liquid (logarithmic retention of bacteria up to LRV 8). The dirt holding capacity of a FIBRAFIX® depth filter sheet can be up to 4 kg per m². In the filtration process, solid particles are slowed down and eventually retained by the tortuous path inside the filter sheet and by electrokinetical interactions («zeta potential»). Through this unique mechanism, a high capacity (long lifetime of filter until plugging) can be achieved.

All materials are food grade and FDA approved.

Applications

The broad variety of available porosities allow for their use in a wide range of applications. Porosity grades are available from coarse over fine to germ reducing and germ removing filtration («sterile filtration»). Examples of industries:

- Biotech
- Beverage (beer, wine, spirits, juice...)
- Cosmetics
- Enzymes
- Fine chemicals
- Herbal or other natural extracts
- Inks, paints and glue
- Pharmaceutical intermediates
- Process water
- Solvents

Sheet sizes

FIBRAFIX® sheets are available in various sizes and shapes up to 1215 x 2425 mm: square, rectangular, round, with/without holes, foldover, etc.

Available grades

Standard version	High capacity version*	Retention rate (µm)	
FILTRODUR®			Supporting sheet
AF 6		35 – 15	Coarse filtration
AF 9		30 – 10	
AF 15		20 – 8.0	
AF 20	AF 21H	15 – 6.0	Clarifying filtration
AF 30	AF 31H (U3)	12 – 5.0	
AF 40	AF 41H	9.0 – 4.0	
AF 50		6.0 – 3.0	
AF 70	AF 71H	3.0 – 1.5	Fine filtration
AF 100	AF 101H	1.5 – 0.6	Germ reducing filtration
AF ST 110		0.8 – 0.5	Sterile filtration
AF ST 130		0.6 – 0.4	
AF ST 140		0.4 – 0.2	
AF ST 150		0.2 – 0.04	

*Provides increased dirt holding capacity for longer service life

Handling

Depth filter sheets are used in a plate and frame filter, such as the FILTROX NOVOX® series. The sheets need to be wetted when the filters are loaded and in beverage applications they need to be pre-flushed with 50 L/m². A pressure difference between in and outlet assures constant flow. The sheets are exhausted when the differential pressure exceeds a certain value (1.0 – 2.5 bar, depending on porosity and application). In some applications the sheets can be regenerated e.g. with caustic soda solution. Please refer to special literature.

Sterilization conditions

The sheets can be sterilized with hot water (85°C) or inline steam (125°C).

