

# SFXmagnus

*Permanent pressure and process consistency*

The *SFXmagnus* operates automatically as well as process- and pressure-constant. It is suitable for almost every application and it is characterized by an extra large active screen surface area, its compact design as well as extremely easy operation. Screen changes do not have any influence on the product quality. Short flow channels, which are free of dead areas, guarantee a very short melt dwell time.

## The advantages of the SFXmagnus Filtration System

- **High economic efficiency**

The extra large active screen surface area in relation to the screenchanger size allows a unique economic efficiency of the *SFXmagnus*. The return on investment is realized within a very short period of time.

- **Consistency of melt pressure, temperature and viscosity**

By assuring a consistent active screen area, the pressure can be kept nearly constant during the whole production process. Melt temperature and viscosity are also free of variations at any time. Constant quality of the final product is guaranteed even during screen changes.

- **Melt purity and quality are always guaranteed**

Melt purity and quality always meet the requirements. Here, the optimum flow channel design and the encapsulation against contact with air play an important role.

- **Short melt dwell time**

The melt dwell time in the filtration system is very short (< 1 minute) due to the optimized flow channel design, which also assures a fast material or color change.

- **User-friendly screen changes**

The control system informs the operator in advance of an upcoming screen change. The screens can be changed quickly and easily and without any influence on the process or pressure consistency.

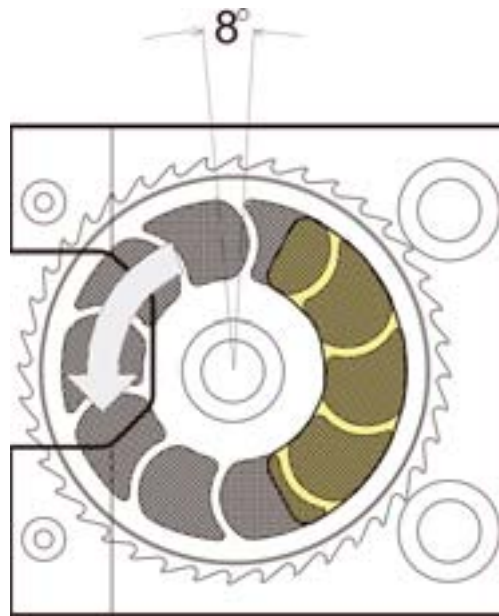
- **Small size and easy installation**

The remarkably compact size of the *SFXmagnus* allows an easy and inexpensive integration even within limited space.



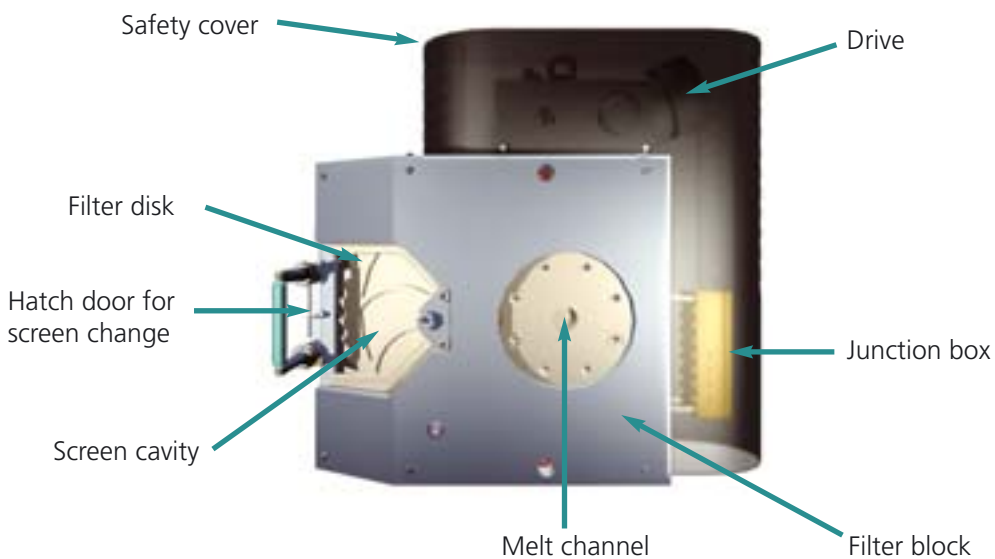
## Mode of operation

When a pressure increase upstream of the filter is registered, the filter disk is indexed automatically by means of a hydraulic drive. This guarantees that the free screen area is always kept constant and that the pressure upstream of the filter increases only slightly during the whole production process. After the cavities have passed through the melt flow, the screens can be removed without disturbing the production process.



## Design

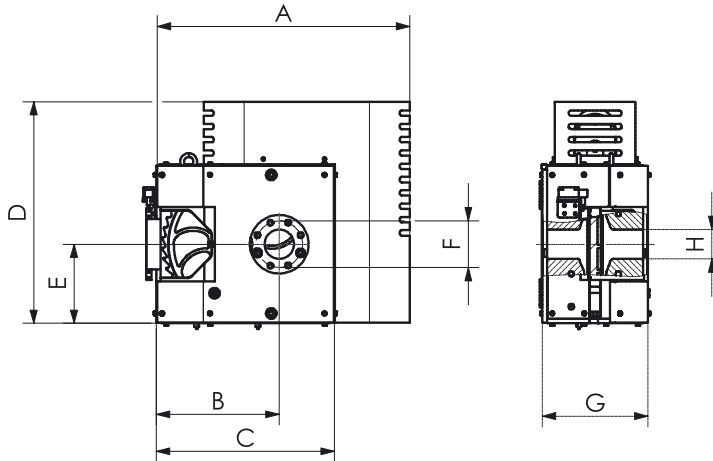
The filter disk – on which the screen cavities are located in a ring pattern – is completely encapsulated by the two filter blocks. Screens can be inserted into the cavities by opening a small hatch door giving access to the cavities. The production process is not disturbed by the screen change procedure. Thanks to the modular design of this filtration system, it is possible to replace the few wearing parts (such as heater elements and bearing bushings) during operation. Continuous production over many years is thus made possible.



# Technical data



patented



## Technical data **SFXmagnus**

as of 08.2004

filter type	active screen area		heating capacity in watt		heater zones		pressure in psi max. <sup>(1)</sup>	temp. in °F max. <sup>(2)</sup>	Q <sup>(3)</sup> in lbs/h	dimensions in inches								weight in lbs
	total in in <sup>2</sup>	activ in in <sup>2</sup>	electric	oil/vapor	electric	oil/vapor				A	B	C	D	E	F	G	H <sup>(4)</sup>	
SFXmagnus 45	38,8	14,0	7000	8500	2	2	5075	600	880	23,62	12,8	16,5	23,6	7,9	4,72	5,512	0,8	550
SFXmagnus 60	69,8	24,8	7300	9000	2	2	5075	600	1540	25,59	13,8	17,7	24,8	8,5	5,91	8,189	0,8	682
SFXmagnus 75	93,0	34,1	8200	10000	2	2	5075	600	1980	29,53	15,7	19,7	28,0	9,1	5,51	9,921	1	946
SFXmagnus 90	155,0	54,3	18000	22000	2	2	4350	600	2200	32,28	18,5	23,6	29,1	11	6,3	12,91	1,2	1606
SFXmagnus 130	217,0	77,5	20000	25000	2	2	4350	600	4400	34,25	19,7	25,6	31,5	12	6,89	14,25	1,2	2090
SFXmagnus 150	248,0	93,0	20000	25000	2	2	4350	600	5500	35,43	20,5	27,6	32,5	12	8,66	14,37	1,4	2310
SFXmagnus 175	403,0	131,8	-	25000	3	2	3625	600	7700	43,31	22,0	30,7	41,3	14	9,84	16,06	1,6	3740
SFXmagnus 200	496,0	186,0	-	35000	-	2	2900	600	11000	45,28	23,6	33,5	43,3	15	11,8	19,69	1,8	6600
SFXmagnus 300	899,0	341,0	-	40000	-	2	2900	600	19800	55,12	27,6	41,3	55,1	20	13,8	21,65	2	8800
SFXmagnus 400	1705,0	651,0	-	60000	-	2	2900	600	37400	70,87	43,3	59,1	63,0	26	13,8	29,53	2,4	15400

(1)= High pressure versions available as an option.

(2)= Up to 750°F possible as an option.

(3)= Based on: 1000 Pas, 60 µm, Δp 580 psi.

(4)= The dimension "I" can be freely chosen, the values given are minimum values.



For more information on the control system see "controls"!