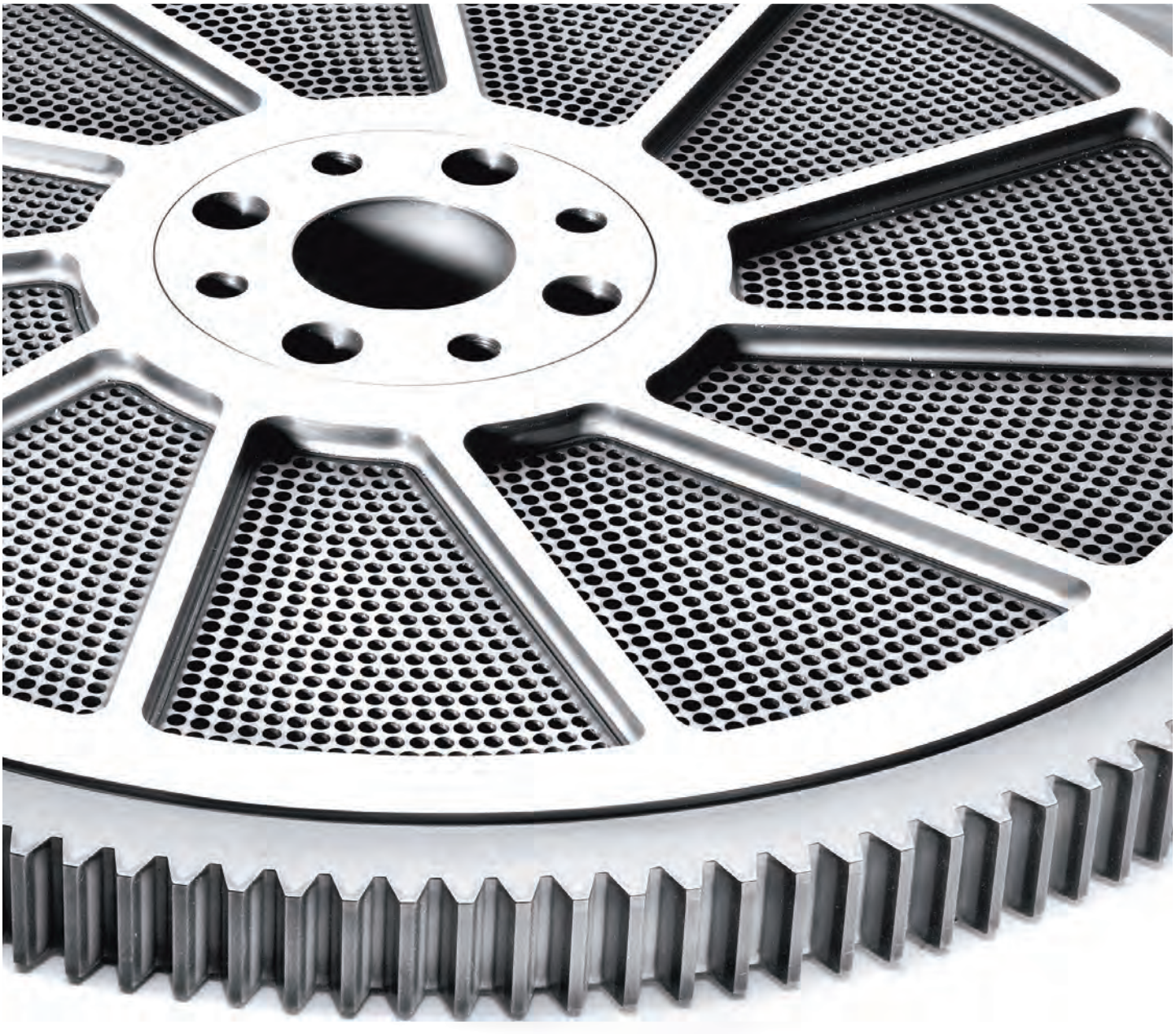
FILTRATION TECHNOLOGY



Filtration systems at a glance
Made in Germany

gneuß

WELCOME TO GNEUSS

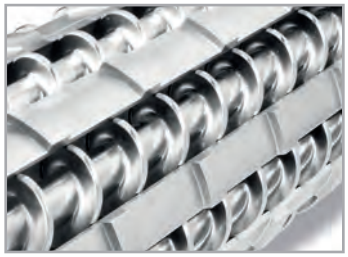
We look forward to meeting you

With more than 30 years of experience and over 60 international patents, the family-owned and operated company Gneuss has made a name for itself as a supplier of innovative solutions for the plastics processing industry. The main characteristics of our Rotary Melt Filtration Systems can be summarized in one word: "Gneussconstant" – in other words process and pressure constant in addition to their fully automatic operation.

Based in Bad Oeynhausen, Germany, Gneuss is committed to the expectations of products "made in Germany" while serving its customers worldwide.
With its daughter company in the USA, offices in Brazil and China, a cooperation partner in Japan and together with representatives worldwide, Gneuss is present throughout the world. The best possible technical support, excellent service and spare parts availability is provided on all five continents. Support is available around the clock via a telephone service hotline. Pilot lines for trials and development work are available at several locations.

BUSINESS AREAS


Filtration Technology


Processing Technology


Measurement Technology

CONTENT

MULTIFACETED EXPERTISE

Gneuss at a glance

In addition to Filtration Technology, Gneuss offers a wide range of services to ensure permanent production consistency and product quality in the manufacture and processing of plastics.

Processing Technology

MRS Extrusion Technology

The Gneuss MRS Multi Rotation System offers new possibilities in the venting or devolatilization of polymer melts. It allows, for example, the processing of PET without pre-drying. Alternatively, this technology can also be used to introduce gases (for foamed products) or fillers / additives homogeneously into the melt.

Process and Control Technology

The use of patented measurement and control technology allows Gneuss to simplify extrusion processes while at the same time increasing their reliability.

Viscosity Measurement

The Gneuss Online Viscometer VIS allows the permanent, real time monitoring of polymer viscosity. Its rugged design and measurement accuracy are well proven. The viscosity measurement takes place without material losses. The design permits easy cleaning, without influencing the process.

Measurement Technology

Measurement Technology

Gneuss Melt Pressure and Temperature Sensors are characterized by their extremely high precision, combined with a high degree of robustness. Consistent application of latest technology ensures permanent quality control during the production process.

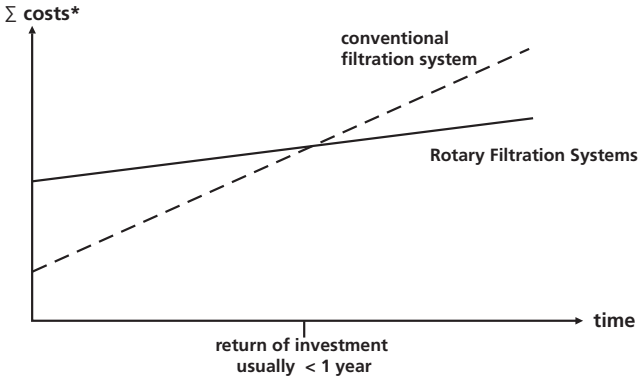
FILTERED FOR YOUR ADVANTAGE

Why plastic melts love Gneuss Filtration

When selecting a Screen Changer or Melt Filtration System, the operating efficiency must be considered: not only the investment costs, but also the operating costs. For example the screen element costs, throughput variations or the creation of off grade product during screen changes or the back flushing waste from self-cleaning systems should be considered.

High profitability

The return on investment for Rotary Filtration Systems is extremely short:



* investment costs and running costs

Some economic advantages of the Rotary Filtration Systems		
Our performance		**Your advantage**
Guaranteed process- and pressure consistency even when changing screens.	→	Reduction of production and material losses. Minimization of operator attention. Possibility of finer filtration. Protection of downstream equpiment. Increased profit due to product quality. Usage of cheaper material (e.g. recycled material). Capacity increases.
Minimal thickness variations.	→	Reduction of production tolerances. Material savings.
Minimized back flushing loss.	→	Material savings through the reduction of production and / or material losses.
Improved re-use of filter elements due to improved cleaning efficiency.	→	Reduction of screen costs.
Extremely low energy consumption due to compact design and high quality insulation.	→	Reduction of running costs.

RSF*genius* Series

Fully-automatic, pressure-constant, permanent process consistency

With regard to the achievable product quality, economic efficiency and in terms of operator and maintenance friendliness, the RSF*genius* series offers unrivalled possibilities. This fully-automatic and pressure-constant filtration system can be used in virtually any application, for automation of the production process and for the manufacture of a high quality final product.

Application fields

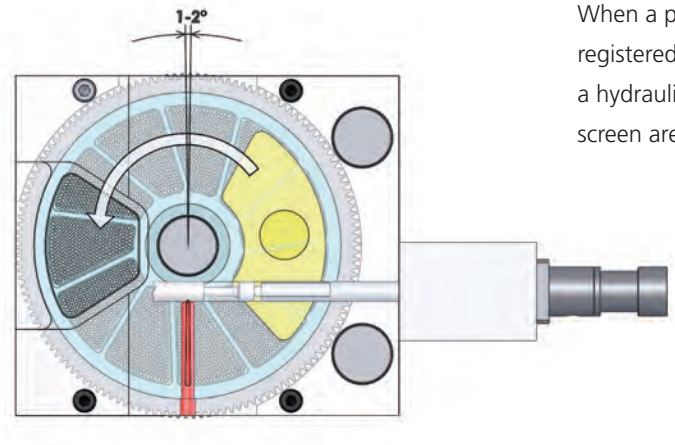
- Can be used for all plastic materials
- Max. active screen area 2,500 cm^2
- Max. filtration capacity 1.8 m^2/h
- Max. pressure 350 bar*
- Max. temperature 320 °C*

* can be increased as an option

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.



Mode of operation

When a pressure increase upstream of the filter is registered, the filter disk is indexed by means of a hydraulic drive. This guarantees that the active screen area is always kept constant.

Just before the contaminated screen is reintroduced into the melt channel, it is cleaned by a patented, integrated back-flush piston system.

The advantages of the RSF*genius* Filtration System

Fully-automatic mode of operation with integrated self-cleaning

The filtration system operates fully-automatically and ensures 100 % availability of the line. Depending on the contamination level, a screen change (which takes approx. 20 - 30 minutes) is carried out approx. every 1 - 16 weeks and has no influence on the production process and product quality.

Constant melt pressure, temperature, viscosity and throughput

By always keeping the size of the active screen area constant, pressure, temperature, viscosity and throughput of the melt remain constant, which guarantees the highest end product quality.

Guaranteed melt purity and quality, short dwell time of the melt

Optimal flow channel design and encapsulation guarantee lasting purity and quality of the melt after the filtration. The short dwell time of the melt in the filtration system (< 1 minute) permits quick material or color changes. Filtration finenesses down to 1µm are possible.

Simple and safe screen changes, low filtration costs

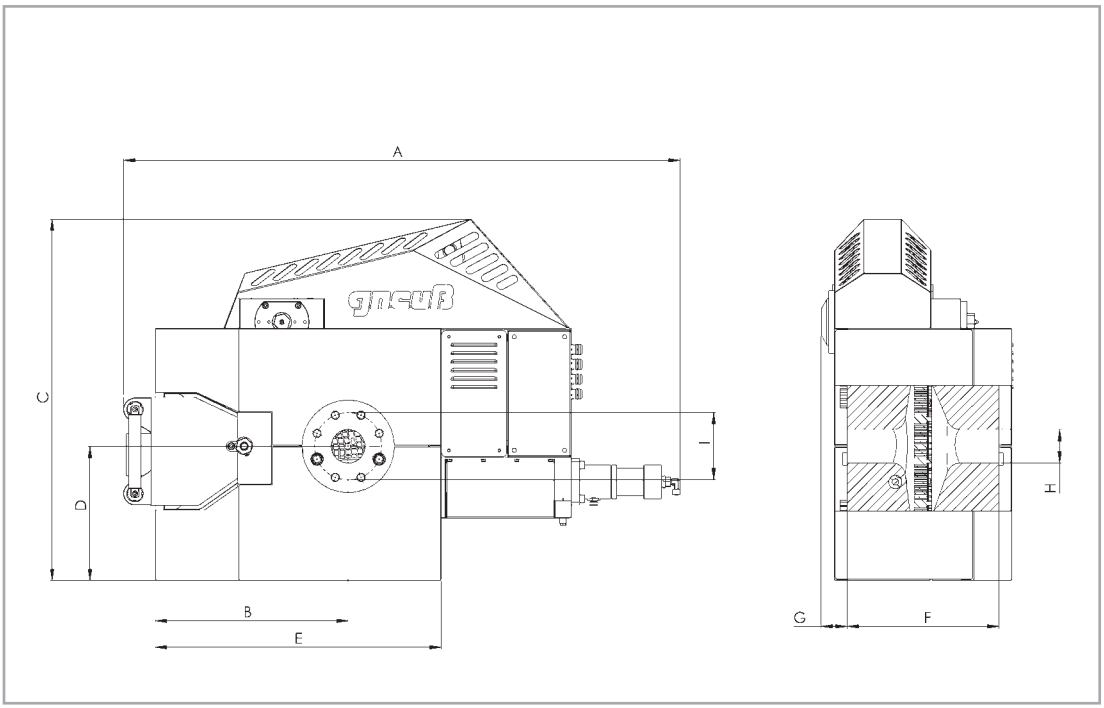
Screen changes do not expose personnel and environment to any danger. With the fully encapsulated design of the RSF*genius*, influences from the environment (e.g. moisture, oxygen) during the filtration process are excluded. Due to the very effective screen cleaning with high pressure impulses, screens are automatically re-used 100 - 400 times (depending on the filtration fineness).

Compact size and minimal installation effort

The small and compact design of the RSF*genius* makes a simple and cost-efficient integration possible even in a very confined space. Thanks to the compact design and the high quality insulation, the energy consumption is extremely low.

RSF*genius* Series

Technical data



Subject to modifications.

Technical Data RSF*genius*

filter type	screen area		heating capacity in watt		heater zones		pressure in bar max. (1)	temp. in °C max. (2)	Q in kg/h (3)	dimensions in mm									weight in kg
	active in cm²	capacity in cm² / h	electric	oil / vapor	electric	oil / vapor				A	B	C	D	E	F	G	H(4)	I	
RSF*genius* 45	35	750	7960	8000	3	2	350	320	150	1035	277	725	265	430	185	92	20	110	240
RSF*genius* 60	80	1000	7960	8000	3	2	350	320	400	1035	277	725	265	430	185	92	25	110	220
RSF*genius* 75	115	1500	8270	9000	3	2	350	320	590	1100	307	785	270	510	232	65	25	140	360
RSF*genius* 90	190	3000	18480	20000	4	2	300	320	870	1330	443	875	335	637	328	80	25	160	740
RSF*genius* 150	400	4600	22080	22000	4	2	250	320	2175	1400	469	910	380	707	362	62	35	160	975
RSF*genius* 175	590	5600	28400	30000	4	2	250	320	2700	1750	603	1165	480	855	405	120	40	220	1850
RSF*genius* 200	860	6800	38000	40000	6	2	220	320	4050	1920	695	1300	550	1000	555	82	45	250	3300
RSF*genius* 250	1200	9500	46000	48000	6	2	220	320	5410	2000	750	1390	610	1080	605	80	50	300	4200
RSF*genius* 330	1850	14000	-	60000	-	2	200	320	8330	2445	925	1820	735	1320	695	131	50	300	7300
RSF*genius* 400	2500	18000	-	72000	-	2	180	320	11675	2675	1080	1960	820	1550	800	75	50	350	11500

(1) = High pressure versions available as an option.
(2) = Up to 400 °C possible as an option.
(3) = Based on: 1000 Pas, 60 µm und Δp 40 bar.
(4) = The dimension „H" can be freely chosen, the values given are minimum values.

Applications RSF*genius* Series

The RSF*genius*, with its unique sequential back flushing system, is the ultimate back flushing screen changer and can be implemented in practically any application. It is in operation in the manufacture of film and sheet, filament, staple and nonwoven fibers, compounding and recycling as well as on numerous other applications.

RSF*genius* in recycling (repelletizing)

RSF*genius* in the manufacture of PET thermo-forming sheet

Depending on the application, this figure typically lies between 0.01 % and 0.3 % of the throughput rate – in most cases only 10 % of the material loss from back flushing encountered with conventional back flushing screen changers.

The RSF*genius* provides the best possible return on investment in applications with a very high contamination level and / or where a high level of automation or high product quality are important.

Thanks to its unique back flushing system, the back flushing losses are minimal.

RSF*genius* in the manufacture of PET strapping tape

RSF*genius* M

The new **RSF*genius* M** was especially designed for highly contaminated materials, such as in recycling processes.
The innovative synchronization of the drive and back-flushing concept of the self-cleaning RSF*genius* Rotary Filter drastically increases the screen area that can be provided per day and represents a further optimization of the unique self-cleaning technology.

SFX*magnus* Series

Permanent pressure and process consistency

The SFX*magnus* series operates fully-automatically as well as process- and pressure-constant. It is suitable for almost every application. 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.

Application fields

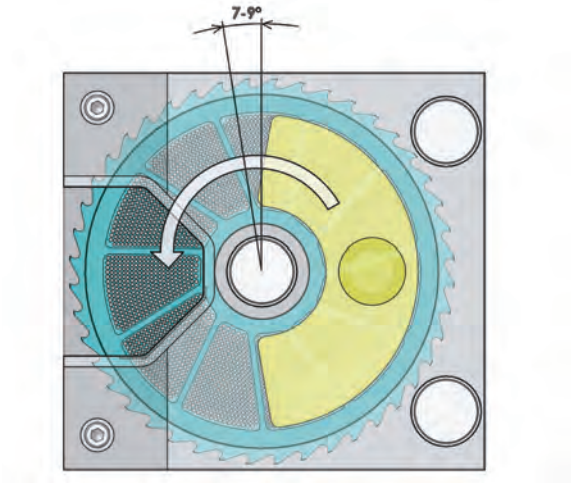
- Can be used for all plastic materials
- Max. active screen area 7,600 cm^2
- Max. pressure 350 bar *
- Max. temperature 320 °C *

* can be increased as an option

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.



Mode of operation

When a pressure increase upstream of the filter is registered, the filter disk is indexed automatically by means of a pneumatic or hydraulic drive. This guarantees that the active 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.

The advantages of the SFX*magnus* Filtration System

High economic efficiency

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

Consistency of melt pressure, temperature, viscosity and throughput

By assuring a consistent active screen area, the pressure can be kept nearly constant during the whole production process. Melt temperature, viscosity and throughput 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

Thanks to the optimized melt channel flow path and completely airtight encapsulated design, the requirements with regard to the purity and quality of the melt can be achieved and permanently maintained.

Minimized Melt Residence Time

The optimized rheological design of the melt channel flowpath ensures a minimized residence time (< 1 minute) thus ensuring for example fast material or color changes.

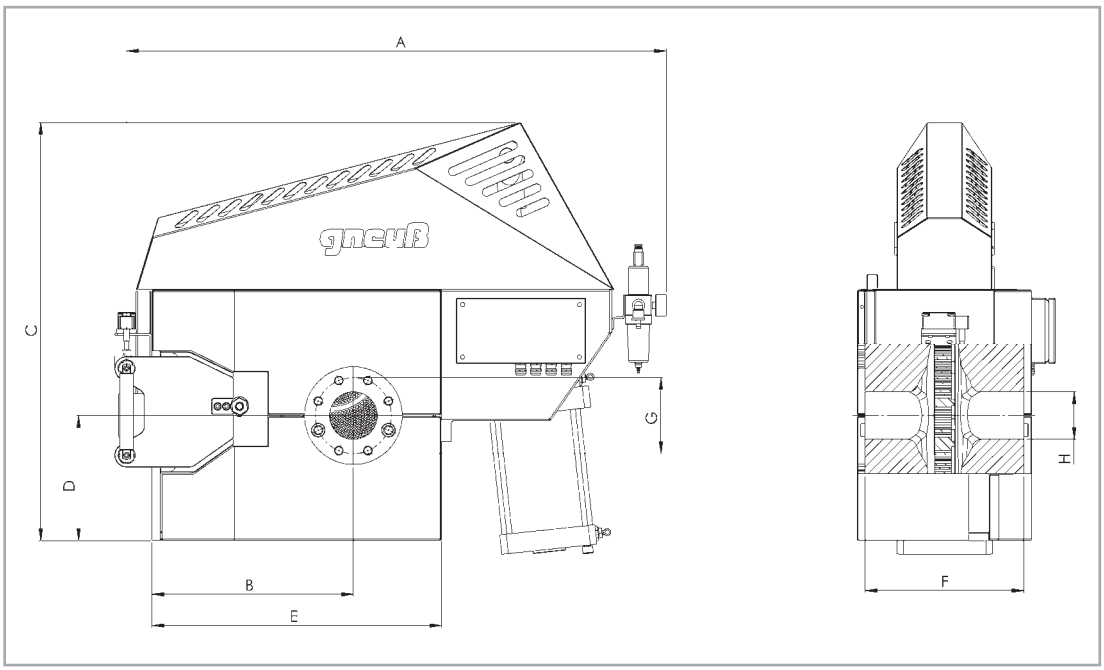
User-friendly screen changes

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 SFX*magnus* allows an easy and inexpensive integration even within limited space. Thanks to the compact design and the high quality insulation, the energy consumption is extremely low.

SFX*magnus* Series
Technical data



Subject to modifications.

Technical data SFX*magnus*

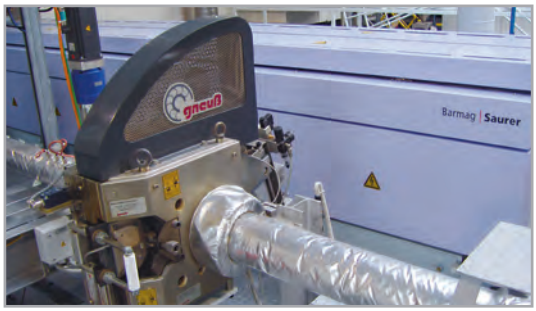
filter type	screen area		heating capacity in watt		heater zones		pressure in bar max. (1)	temp. in °C max. (2)	Q in kg/h (3)	dimensions in mm								weight in kg
	aktiv in cm²	gesamt in cm²	elektr.	flüssig	elektr.	flüssig				A	B	C	D	E	F	G	H(4)	
SFX*magnus* 45	90	250	7500	8500	4	2	350	320	400	890	300	700	175	435	188	125	20	250
SFX*magnus* 60	160	450	8000	10000	4	2	350	320	700	890	300	720	190	435	188	125	20	350
SFX*magnus* 75	220	600	8500	10000	4	2	350	320	900	960	330	810	215	500	232	140	25	450
SFX*magnus* 90	350	1000	19000	22000	4	2	300	320	1000	1110	435	985	265	600	328	160	30	800
SFXmagnus 130	500	1400	19000	25000	4	2	300	320	2000	1190	465	1040	290	665	362	175	30	950
SFX*magnus* 150	600	1600	19000	25000	4	2	300	320	2500	1195	465	1040	290	665	365	175	35	1050
SFX*magnus* 175	1000	2200	25000	32000	4	2	250	320	3500	1300	650	1100	380	1300	405	250	40	1700
SFX*magnus* 200	1300	3100	35000	36000	4	2	200	320	5000	1375	675	1400	490	1010	560	270	45	3500
SFX*magnus* 250	1700	4000	46000	40000	4	2	200	320	7800	1505	750	1500	550	1080	610	320	50	4200
SFX*magnus* 330	2900	6400	-	45000	-	2	200	320	12000	12000	1700	1550	550	1700	695	350	55	7000
SFX*magnus* 400	3800	8700	-	60000	-	2	200	320	16000	16000	1800	1600	650	1800	800	400	60	9000
SFX*magnus*-D 330	5800	12800	-	60000	-	3	200	320	24000	24000	1800	1600	550	1700	1100	350	55	9500
SFX*magnus*-D 400	7600	17400	-	80000	-	3	200	320	32000	32000	1900	1700	650	1800	1400	400	60	14000

(1) = High pressure versions available as an option.
(2) = Up to 400 °C possible as an option.
(3) = Based on: 1000 Pas, 60 µm und Δp 40 bar.
(4) = The dimesion „H" can be freely chosen, the values given are minimum values.

Applications SFX*magnus* Series

The SFX*magnus* is suitable for practically every application. It is operated with great success in sheet, film, filament, staple and nonwoven fibers, pipe, profile, compounding and recycling as well as in numerous other applications.
The SFX*magnus* is one of the most compact Filtration Systems available on the market and can be installed on even the most cramped extrusion lines.

SFX*magnus* in the manufacture of blown film



SFX*magnus* in the manufacture of non woven fibers

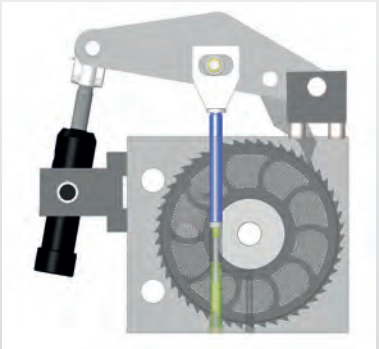
In automatic mode, the screens are used equally. They are changed as a set, without any influence on the process. Typically, the unit will run for several days before a screen element change is necessary.

The SFX*magnus* is a process-constant Filtration System which is available at a very favorable price-to-performance ratio.

SFX*magnus* in the manufacture of foam sheet

SFX*magnus* R

The **SFX*magnus* R** offers for the first time in the SFXmagnus series an integrated back-flushing system that can automatically clean the filter elements. This compact Rotary Filtration System has been designed for applications with varying contamination levels. The **SFX*magnus* R** allows the self-cleaning feature to be turned on and off as desired, making this a very versatile Filtration System.



SFX*magnus* R back view

SF Series

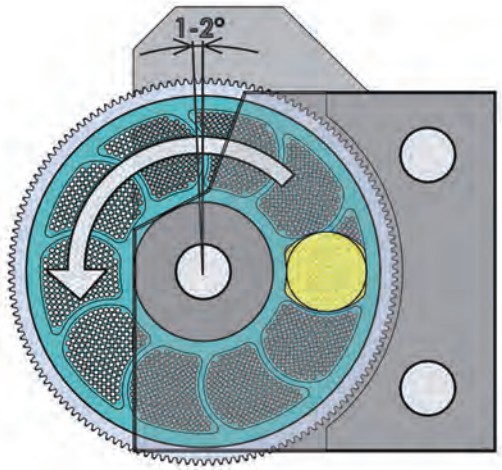
Maximum pressure and process consistency

The SF Filtration System operates continuously and pressure- and process constant. The screen change procedure does not influence the product quality. Furthermore, short flow channels – free from dead spots – guarantee an extremely short dwell time of the melt in the system.

Application fields

- Can be used for all plastic materials
- Max. active screen area 500 cm^2
- Max. pressure 350 bar *
- Max. temperature 320 °C *

* can be increased as an option



Design

The filter disk – on which the screen cavities are located in a ring pattern – rotates between the two filter blocks. To change the screens, the safety cover has to be opened. The production process is not disturbed by the screen change procedure.

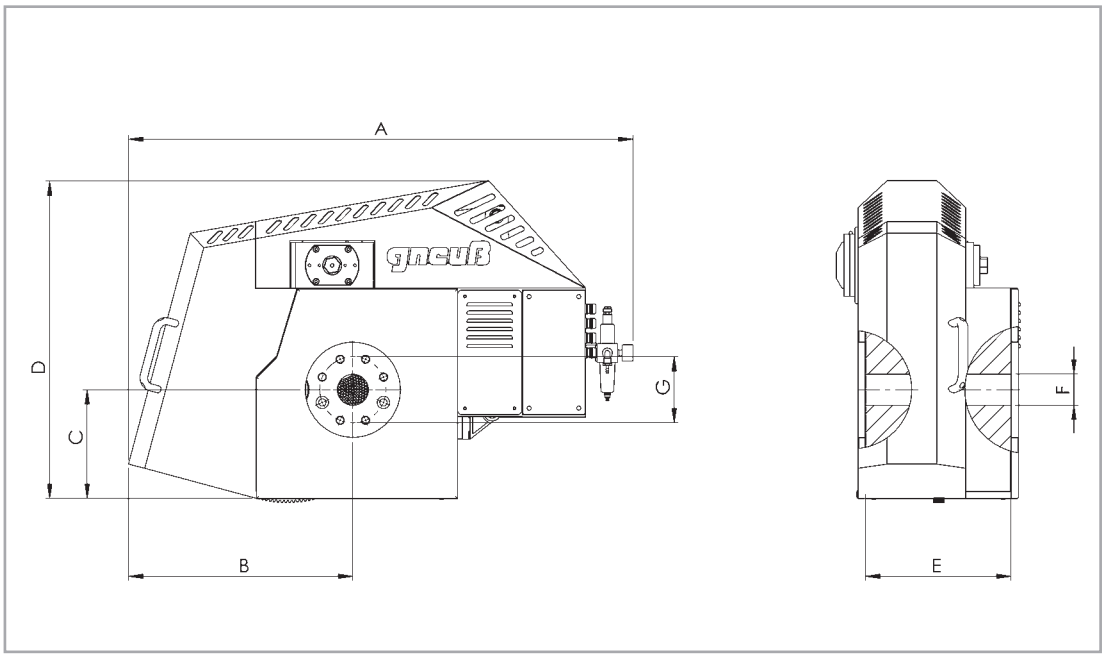
Mode of operation

When a pressure increase upstream of the filter due to contamination is registered, the filter disk is indexed by means of a pneumatic drive. This guarantees that the free screen area is always kept constant and that the pressure variation in front of the filter is < 1.5 bar.

SF*pvc*

The Rotary Technology has been used successfully in PVC processing and PVC recycling applications for more than 30 years. With the **SF*pvc*** Gneuss now offers a new addition to its SF series which is specially tailored to these challenging applications. The **SF*pvc*** offers optimized surface protection, an enhanced rheological melt flow design as well as a new drive technology.

SF Series
Technical data



Subject to modifications.

Technical data SF

filter type	active screen area	heating capacity in watt		heater zones		pressure in bar max.(1)	temp. in °C max. (2)	Q in kg/h (3)	dimensions in mm							weight in kg
	in cm²	electric	liquid	electr.	liquid				A	B	C	D	E	F	G	
SF 30	8	1200	1870	2	2	350	320	40	460	154	250	90	95	15	90	30
SF 45	19	1900	2730	2	2	350	320	120	560	210	335	130	138	20	120	75
SF 60	35	3090	3690	2	2	350	320	220	670	270	420	150	172	20	240	115
SF 75	45	5860	8580	2	2	300	320	310	720	290	440	170	225	25	175	220
SF 90	70	7300	10140	2	2	300	320	550	900	395	580	220	319	30	220	460
SF 130	135	8000	10760	2	2	300	320	910	950	432	630	245	352	30	220	530
SF 150	180	8000	10760	2	2	300	320	1430	950	432	630	245	352	35	220	550
SF 175	250	12000	16380	3	2	300	320	2080	1100	550	940	305	400	40	310	1200
SF 200	320	-	28000	-	2	250	320	2850	1200	635	1150	360	445	45	320	1680
SF 250	500	-	32000	-	2	250	320	4070	1300	690	1170	400	545	50	370	2300

(1) = High pressure versions available as an option.
(2) = Up to 400 °C possible as an option.
(3) = Based on: MFI 2-5, filtration fineness 200 µm and differential pressure 50 bar.

KSF

Permanent process consistency

The KSF Filtration System guarantees a constant production process. As neither pressure spikes nor degraded material are created, melt purity and a constant product quality are guaranteed. Further, short flow channels – free from dead spots – guarantee a short dwell time of the melt.

Application fields

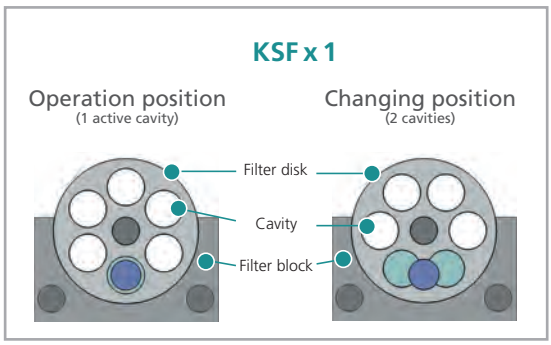
- Can be used for all plastic materials
- Max. active screen area 1,920 cm^2
- Max. pressure 500 bar*
- Max. temperature 320 °C*

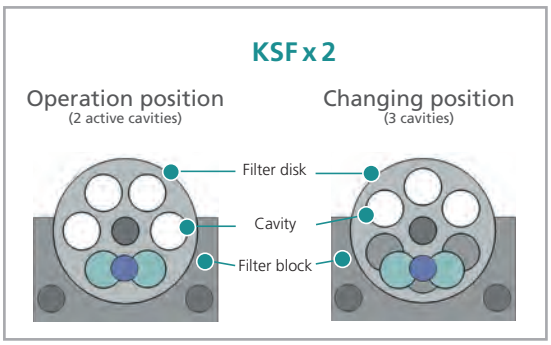
* can be increased as an option

Mode of operation

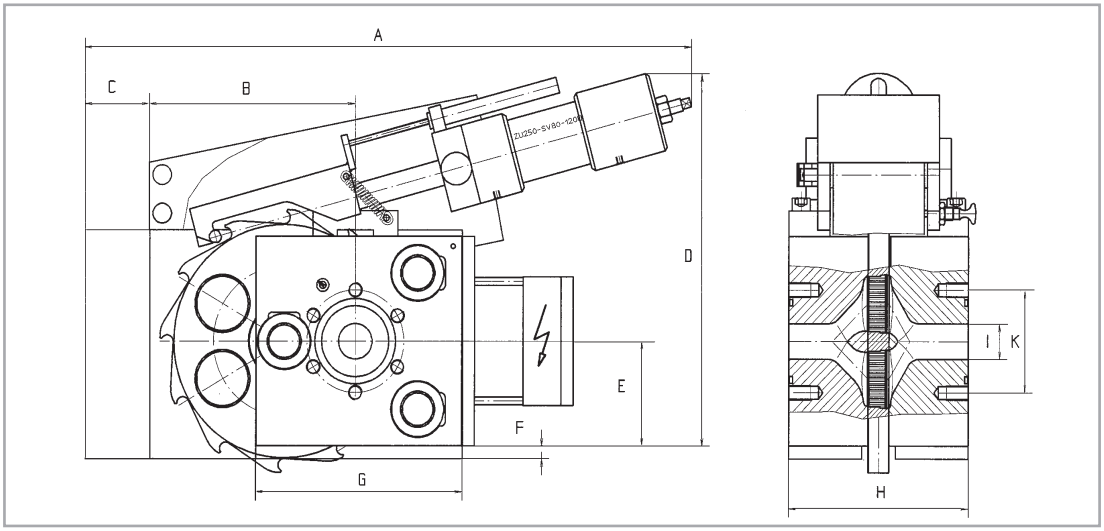
The KSF Filtration System is characterized by rheologically optimized melt flow channels absolutely free from dead spots. The channels are matched individually to the respective filtration task. When the pressure upstream of the filter increases due to contamination of the screen and the selected pressure value is reached, a screen change is carried out automatically.

During screen changes, polymer flows briefly over either 2 (KSF) or 3 (KSF x 2) screen cavities, thereby avoiding pressure spikes and consequently avoiding process disturbances. It is possible to remove the breaker plates during screen changes and replace them with clean plates. This is especially important for thermally sensitive materials, to make sure that always a 100 % clean cavity and breaker plate enter into the melt flow.





KSF
Technical data



Subject to modifications.

Technical data KSF

filter type	active screen area	heating capacity in watt		heater zones		pressure in bar max. (1)	temp. in °C max.(2)	Q in kg/h (3)	dimensions in mm										weight in kg
	in cm²	electric	liquid	electr.	liquid				A	B	C	D	E	F	G	H	I(4)	K	
KSF 30	7	1600	-	1	-	500	320	35	555	160	250	310	98	-	190	135	15	90	50
KSF 45	16	1760	-	2	-	500	320	100	685	225	310	428	108	25	205	145	15	110	80
KSF 60	28	3400	4400	2	2	450	320	175	715	280	340	505	145	15	238	175	20	120	100
KSF 75	44	5680	7400	2	2	450	320	300	875	305	385	545	150	35	300	230	20	120	290
KSF 90	64	6400	8320	2	2	400	320	500	891	339	421	583	163	42	340	295	25	180	350
KSF 110	95	6800	8800	2	2	400	320	700	945	415	205	800	215	25	375	363	30	220	550
KSF 130	135	14000	18200	2	2	350	320	900	1065	468	172	855	249	30	425	400	30	220	800
KSF 150	180	16000	20800	3	2	350	320	1400	1190	550	250	1110	300	30	525	445	35	240	1000
KSF 175	240	20000	26000	3	2	300	320	2000	1270	600	300	1000	330	40	570	490	40	285	1500
KSF 200	315	-	36000	-	2	300	320	2800	1447	685	340	1120	375	50	650	560	45	325	1680
KSF 250	490	-	62000	-	2	300	320	4000	1135	790	365	1910	645	20	750	660	50	360	3800
KSF 300	705	-	84000	-	2	250	320	5800	1210	910	400	2040	710	20	850	670	60	420	6500
KSF 350	960	-	84000	-	2	250	320	7900	1555	1115	695	2980	1325	20	945	790	100	315	8500
KSF 30 x 2	14	1600	-	1	-	350	320	70	555	160	250	310	98	-	190	135	15	90	50
KSF 45 x 2	32	1760	-	2	-	350	320	200	685	225	310	428	108	25	205	145	25	110	80
KSF 60 x 2	56	3400	4400	2	2	350	320	350	715	280	340	505	145	15	238	175	35	110	100
KSF 75 x 2	88	5680	7400	2	2	350	320	600	875	305	385	545	150	35	300	230	45	120	290
KSF 90 x 2	130	6400	8320	2	2	350	320	1000	891	339	421	583	163	42	340	295	55	180	350
KSF 110 x 2	190	6800	8800	2	2	300	320	1400	945	415	205	800	215	25	375	362,5	60	220	550
KSF 130 x 2	265	14000	18200	2	2	300	320	1800	1065	468	172	855	249	30	425	400	65	220	800
KSF 150 x 2	355	16000	20800	3	2	300	320	2800	1190	550	250	1110	300	30	525	445	80	240	1000
KSF 175 x 2	480	20000	26000	3	2	300	320	4000	1270	600	300	1000	330	40	570	490	90	285	1500
KSF 200 x 2	630	-	36000	-	2	250	320	5600	1447	685	340	1120	375	50	650	560	100	325	1680
KSF 250 x 2	980	-	62000	-	2	250	320	8000	1135	790	365	1910	645	20	750	660	100	360	3800
KSF 300 x 2	1410	-	84000	-	2	200	320	11600	1210	910	400	2040	710	20	850	780	100	420	7500
KSF 350 x 2	1920	-	84000	-	2	200	320	16000	1555	1115	695	2980	1325	20	945	790	100	315	8500

(1) = High pressure versions available as an option.
(2) = Up to 400 °C possible as an option.
(3) = Based on: MFI 2-5, filtration fineness 200 µm and differential pressure 50 bar.
(4) = The dimesion „I" can be freely chosen, the values given are minimum values.

KR

The discontinuous screen changer

The Rotary Filter KR is our latest design which combines the series of discontinuous screen changers with the proven concept of the Rotary Filtration Technology.

Application fields

- Can be used for all plastic materials
- Max. active screen area 240 cm^2
- Max. pressure 500 bar
- Max. temperature 320 °C *

* can be increased as an option

The advantages of the KR screen changer

Compact size and simple installation

The small and compact design of the Rotary Filtration Systems makes simple and cost-efficient integration possible even in a very confined space.

Sturdy design

The metallic sealing system is highly wear-resistant. It guarantees leak-free operation even with low-viscosity melts up to 500 bar.

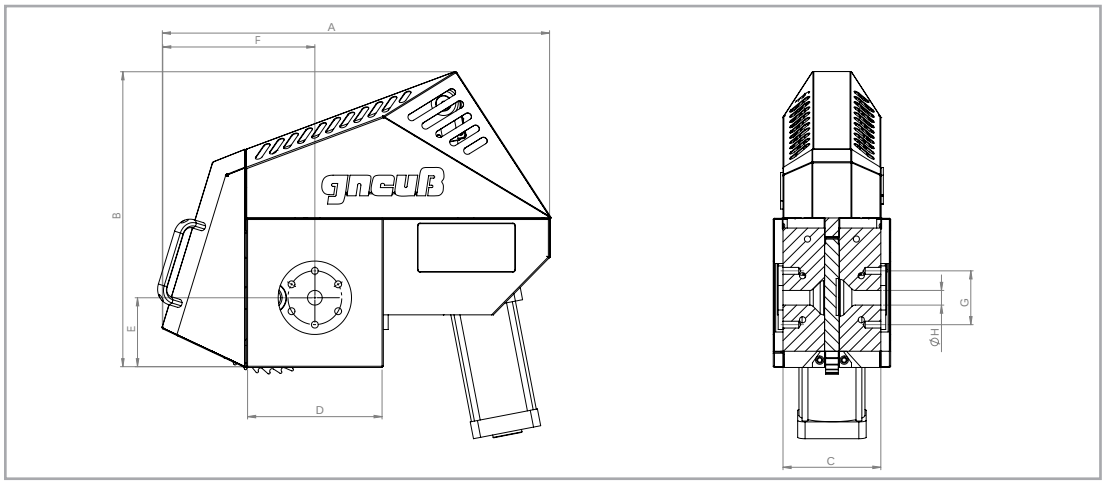
Optimum rheological properties

The rheology of the melt channel and the inner parts of the screen changer can be individually adjusted to the specific requirements. These screen changers are also perfectly suitable for thermally sensitive polymers such as PVC.

Simple handling during screen changes

A screen change can be initiated automatically without the need to stop production.

KR
Technical data



Subject to modifications.

Technical data KR

filter type	active screen area	heating capacity in watt	heater zones	pressure in bar max. (1)	temp. in °C max.(2)	Q in kg/h (3)	dimensions in mm								weight in kg
	in cm²	electr.	electr.				A	B	C	D	E	F	G	H max (4)	
KR 45	16	3840	2	500	320	100	600	350	130	180	93	110	90	45	85
KR 60	28	4440	2	500	320	175	750	450	145	200	110	200	110	60	114
KR 75	44	5040	2	500	320	300	900	605	195	260	142	310	130	75	170
KR 90	64	10640	2	500	320	500	1100	800	232	290	165	380	155	90	240
KR 110	95	12640	2	500	320	700	1200	900	255	335	200	420	175	110	365
KR 130	135	13680	3	500	320	900	1300	980	298	390	226	500	175	130	510
KR 150	180	15680	3	500	320	1400	1380	1020	330	420	260	520	240	150	680
KR 175	240	17680	3	500	320	2000	1420	1200	385	480	295	580	300	175	1030

(1) = High pressure versions available as an option.
(2) = Up to 400 °C possible as an option.
(3) = Based on: MFI 2-5, filtration fineness 200 µm and differential pressure 50 bar.
(4) = The dimesion „H" can be freely chosen, the values given are minimum values.

HS*primus*

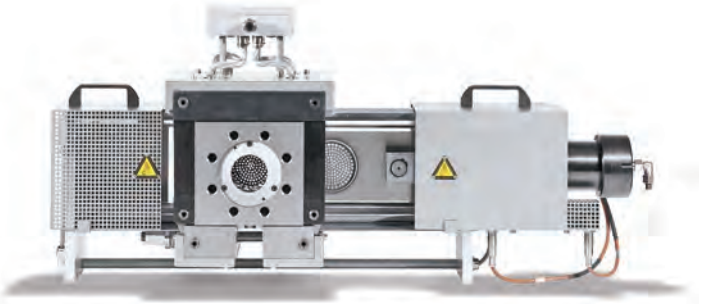
The hydraulic screen changer

With the hydraulic screen changer HS*primus* a sturdy screen changer is available, which represents major technical advances combined with operator friendliness and permanent availability. The HS*primus* is also available as a diverter valve.

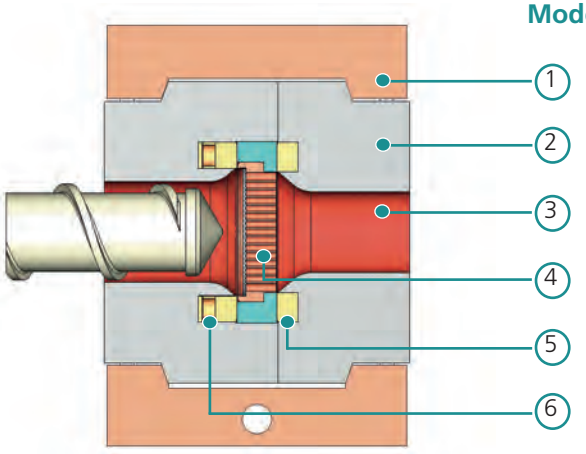
Application fields

- Can be used for all plastic materials
- Max. active screen area 855 cm^2
- Max. pressure 300 bar
- Max. temperature 280 °C *

* can be increased as an option



Mode of operation



1. Housing clamping blocks, floating design, simple tightening via a single screw.
2. Housing blocks, absolutely leak-free through flexible high pressure tensioning.
3. Melt channel sleeves, matched to the individual processing-technical requirements.
4. Support breaker plate (removable), with maximum possible active filtration area. The shape of the HSprimus breaker plate is round, whereas it is oval for the HSSprimus, which therefore is especially suited for twin screw extruders.
5. Sliding ring in special steel ensures permanent leak free operation and high availability of the extrusion line.
6. EMS ring (Elastic Metal System) guarantees a leak-free operation unaffected by high pressures and temperatures.

SWIVEL VALVE WV

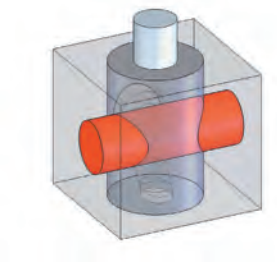
Discharge valve for polymer melts

The Swivel Valve WV is a rugged value for money discharge valve. Its advanced design combines easy operation with excellent availability. Thanks to the compactness of its design, it is ideal for modern extrusion lines. The discharge valve is also available with a filtration function (screen changer). The customers can select between manually, hydraulically and pneumatically operated designs.

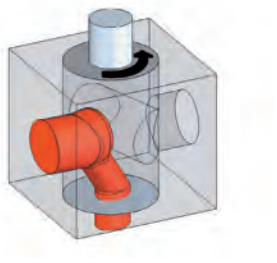
Application fields

- Can be used for all plastic materials
- Max. channel Ø 490 mm
- Max. pressure 800 bar

Operating position



Discharge position



The advantages of the swivel valve WV

Sturdy design

The metallic sealing system is highly wear-resistant and is backed by a ten year warranty. It guarantees a leak-free operation at pressures up to 800 bar.

Optimum rheological properties

The melt channel rheology of the Swivel Valve WV is optimized and thus ensures an even melt flow.

Simple handling

The melt flow can be diverted at any time, even while the production is running.

Optimum performance even at high temperatures

The standard unit is suitable for temperatures of up to 320 °C. Special versions for higher temperatures are available (option).

Integrated melt filtration

As an option, the Swivel Valve WV can also be supplied with integrated melt filtration.

FILTER ELEMENTS / SCREEN PACKS

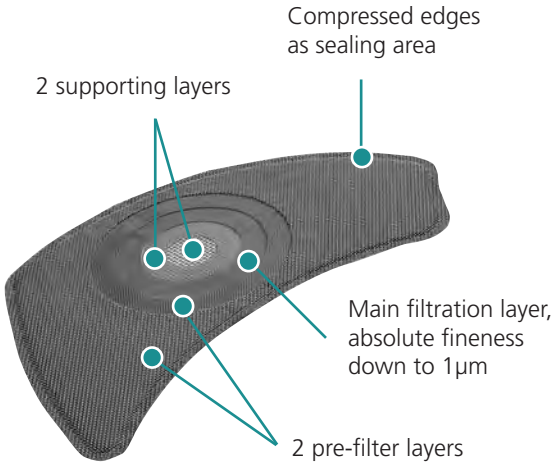
From the specialists in the field of polymer melt filtration

Gneuss guarantees consistently high polymer melt and product purity. Only wirecloth of the highest quality, with the highest specification and with clearly defined openings are used (ISO 9001 certified). We are pleased to make our long and extensive experience in the design and specification of filter elements available for your advantage.

Number of layers *

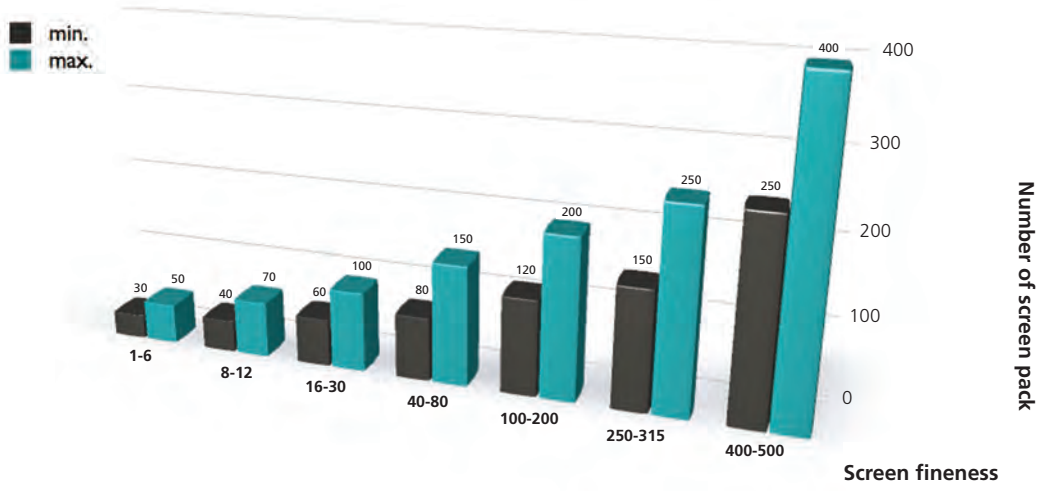
	RSF*genius*	SFX*magnus*, SF, KSF, KR, HS*primus*		
Filtration fineness in microns	all model sizes	45 - 75	90 - 150	175 - 400
1	5	5	5	5
3	5	5	5	5
6	5	5	5	5
8	5	5	5	5
12	5	5	5	5
16	5	5	5	5
20	5	5	5	5
25	5	4	4	4
30	5	4	4	4
40	5	3	4	4
60	5	3	4	4
80	5	3	4	4
100	5	3	4	4
125	5	3	4	4
160	5	3	3	3
250	5	2	3	3
315	5	2	3	3
500	3	2	2	2
800	3	1	1	2
1000	3	1	1	2

* Standard Design. Material-specific custom made designs on request.



RSF*genius* screen

Reusability RSF*genius* screens



ALWAYS SOMEWHERE NEAR YOU

Our Locations

Based in Bad Oeynhausen, Germany, Gneuss is committed to the expectations of products "made in Germany" while serving its customers worldwide. A technology center for processing technical trials and development work is available at Gneuss´ headquarters in Bad Oeynhausen. Pilot lines are also available for trials at our daughter company, Gneuss Inc. in the USA and at our cooperation partner, Itochu SysTech in Japan.

Subsidiary

Gneuss, Inc.
10820-G Independence Pointe Parkway
Matthews, NC 28105, USA
Phone +1.704.841.7251
Fax +1.704.841.7254
E-Mail gneuss.usa@gneuss.com

Headquarters

Gneuss Kunststofftechnik GmbH
Moenichhusen 42
32549 Bad Oeynhausen, Germany
Phone +49.5731.5307.0
Fax +49.5731.5307.77
E-Mail gneuss@gneuss.com

Sales and Service Centers

Gneuss Office Shanghai
Room 6B5, Harvest Building,
No. 585 Longhua Road West,
200232 Shanghai, China
Phone +86.21.6469 7706
Fax +86.21.6469 7916
E-Mail gneuss.china@gneuss.com

Gneuss - Divisão America do Sul
Al. Rio Negro, 1084 - cj 114
06454-000 - Barueri - SP, Brasilien
Phone +55.11.4191.1449
Fax +55.11.4191.1449
E-Mail gneuss.southamerica@gneuss.com

GNEUSS

Service hotline: +49 700 463877 24

www.gneuss.com