



FSC

Plate screen changer for extrusion processes



FSC screen changers from maag pump systems are equipped with a pressure-adaptive sealing system as a standard. Thanks to this sealing system, the required sealing forces are adjusted to the actual melt pressure automatically. The narrow design is especially suited for being used in applications with thermally sensitive materials. Their solid and robust construction, available in all sizes and designs, ensures a reliable and leak-free filtration of molten polymers for many years. The hydraulically operated screen changer reliably guarantees the protection of melt pumps and mold gaps from damage and dirt.

Your benefits

- Simple operation and uncomplicated screen changing
- High operational reliability
- Short material residence time
- Leak-free mode of operation
- Low pressure consumption
- Flow channel geometry without any dead spots
- Short residence time

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A range of typical applications

- Flat films
- Foam films
- Blown films
- Plates
- Pipes
- Profiles
- Blown mouldings
- Fibres
- Granulation
- Recycling
- Compounding

Application limits:

Temperature:	Up to 340 °C	
Operating pressure:	700 to 1,200 bar**	
Pressure differential:	Up to 200 bar	

** Depending on size.

Accessoires

- Connection adapters
- Support carriages
- Breaker Plates

Options

- PVC design
- Chromed, nickel-plated or specially-coated flow channels
- Stainless steel construction



Additional FSC designs with

Diverter Valve

On the inlet side, the rheologically optimized flow channel directs the melt flow into the screen cavity, where the breaker plate is located. The molten plastic material flows through the breaker plate which is equipped with screen mesh selected according to the required filtration rate. Downstream of the screen, the cleaned melt stream leaves the filter housing through the flow channel.

To change the screen, the breaker plate is moved out of the housing and at the same time, the clean screen on the outside is moved into the production position. Depending on the design this can be done manually, electrically or hydraulically. When using a hydraulic accumulator (optional) the changeover takes only a fraction of a second. The melt flow will be interrupted during the traversing time of the slide plate. When selecting the optimal hydraulic accumulator processing may be continued without shutting down the pelletizer. After the screen change, rapped air escapes at the subsequent device.

Technical specifications:			
Screen diameter:	45 to 300 mm		
Filtration area:	16 cm ² to 707 cm ²		
Mounting:	Compact mounting dimensions, all positions possible		

Size	Throughput* [kg/h]	Screen diameter [mm]	Filter area [cm²]
045	30-80	1 x 46	1 x 16
050	35-85	1 x 51	1 x 20
060	60-150	1 x 62	1 x 28
075	80-200	1 x 77	1 x 44
080	110-290	1 x 83	1 x 50
090	110-290	1 x 93	1 x 64
100	140-350	1 x 103	1 x 79
120	200-500	1 x 123	1 x 113
140	300-750	1 x 143	1 x 154
160	400-1,000	1 x 163	1 x 201
180	500-1,250	1 x 184	1 x 254
200	600-1,500	1 x 204	1 x 314
225	800-2,000	1 x 229	1 x 397
250	950-2,450	1 x 255	1 x 491
300	1,400-3,400	1 x 304	1 x 707
400	2,500-6,000	1 x 405	1 x 1,256
450	3,200-7,500	1 x 455	1 x 1,590

* Depending on viscosity, filtration size and degree of contamination.

filtration systems