



# MELT FILTER SPB / MPB / RSC

continuous melt filter, screen changers with backflush and large open filter surface, hydraulic power-backflush with decoupled self cleaning mechanism, candle filters for finest filtration down

to 15 µm with sleeve change during operation and quick-release technology





### **MELT FILTER SPB / MPB**



Continuous melt filter with unique design for the efficient removing of solid contaminants during the recycling process. Suitable for production waste as well as post-industrial and pre-washed post-consumer waste.

- Melt filter with 1, 2 or 3 pistons and 4, 8 or 12 screens
- Continuous melt filtration: During screen change the remaining screens filter the entire melt stream no interruption of the production process
- Self-cleaning with backflush or power backflush, depending on the level of contaminants
- Wide range of applications.
- Output rates of 150 up to 4.000 kg/h
- Large open filter surface for the efficient processing of contaminated materials
- The intelligent locking system enables easy exchange of the screens with 1 tool and ensures proper fixation of the backflush plate



Power backflush filter with adjustable operation of melt accumulators



Large open filter surface with interlocked backflush plate can be cleaned - this ensures



Entire surface of the piston easy maintenance and long service life

### Optional power backflush (P) function:

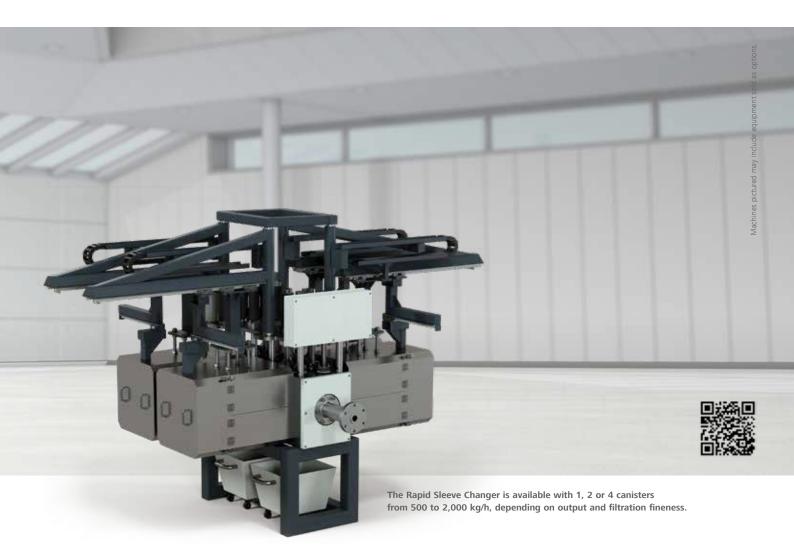
- Hydraulic power backflush decoupled and independent
- Extremely high cleaning efficiency
- Short backflush cycles through higher pressure build-up
- Reduced melt loss during backflush
- Maximum filter screen lifetime
- Excellent pressure stability
- Backflush of low-viscosity melt possible
- No counterpressure after filter required

### Standard backflush function:

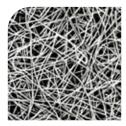
- Increased screen service life and longer filter change intervals to reduce screen costs
- Fully automatic and efficient backflush function for high operational reliability
- 2 opposite screens per piston ensure pressure balance
- High cleaning efficiency due to backflushing of each screen

# **MELT FILTER RSC**





**Candle filter** with unique design for **finest filtration requirements.** Efficient removal of solid contaminants during the recycling process. Suitable for PET bottle flakes, continuous filament and biaxially oriented film.



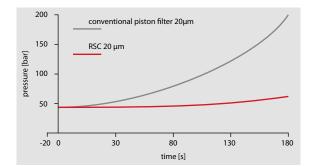
**Fibre felt filter media** for 3D fine filtration down to 15 µm



Filter element with support pipe and sleeve featuring quick-release technology – 0.5 m<sup>2</sup> filtration area per sleeve



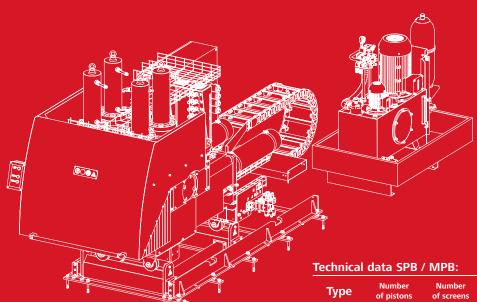
Infrared heating for a higher energy efficiency and easy maintenance



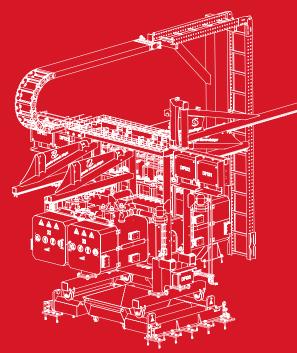
The graph shows the pressure build-up on a lab extruder with 5  $\mu$ m melt filtration, comparing rPET melt filtered on a conventional piston filter with 20  $\mu$ m wire mesh vs. the RSC filter with 20  $\mu$ m 3-D fibre felt.

### Sleeve design with quick-release technology:

- 6 filter elements per canister
- Filter elements consist of support pipes with sleeves
- Contact-free heater enables easy access
- Sleeves are changed easily "on the fly" instead of changing the whole canister
- Sleeve change without interruption of production (with 2 or 4 canisters)
- High uptime and low melt loss



Number of pistons	Number of screens	Total screen area [cm²]	Total screen area [inch²]	Screen diameter [mm]	Screen diameter [inch]
1	4	180	27.9	76.3	3
		290	44.9	96.3	3.8
1	4	490	75.9	125.3	4.9
2	8	980	151.9	125.3	4.9
		1940	300.7	176.3	6.9
3	12	2910	451.1	176.3	6.9
	of pistons 1 1 1 2 2 2	of pistons         of screens           1         4           1         4           1         4           2         8           2         8	of pistons         of screens         area [cm²]           1         4         180           1         4         290           1         4         490           2         8         980           2         8         1940	of pistons         of screens         area [cm²]         area [inch²]           1         4         180         27.9           1         4         290         44.9           1         4         490         75.9           2         8         980         151.9           2         8         1940         300.7	Number of pistons         Number of screens         lotal screen area [cm <sup>2</sup> ]         lotal screen area [inch <sup>2</sup> ]         diameter [mm]           1         4         180         27.9         76.3           1         4         290         44.9         96.3           1         4         490         75.9         125.3           2         8         980         151.9         125.3           2         8         1940         300.7         176.3



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#### Technical data RSC:

Туре	Output kg/h	Quantity of Canister	Quantity of candles/ canisters	Total filtration area [m²]	Total filtration area [ft²]
RSC 1	500				64,5
RSC 2	1000			12	129
RSC 4	2000	4	6	24	258