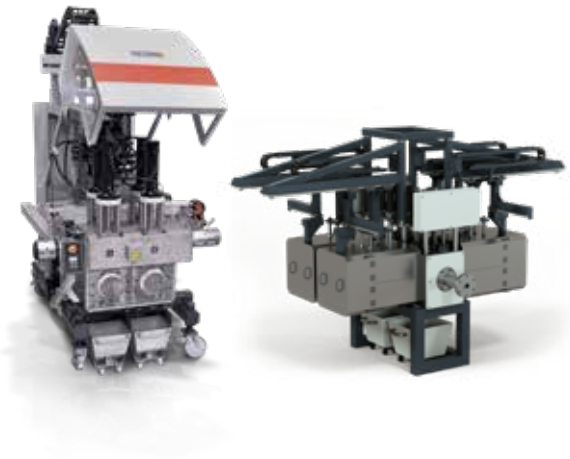
RECYCLING TECHNOLOGY

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**



Starlinger

MELT FILTER SPB / MPB

Continuous melt filter with unique design for the efficient removal 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

Entire surface of the piston
can be cleaned – this ensures easy maintenance and long service life

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

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

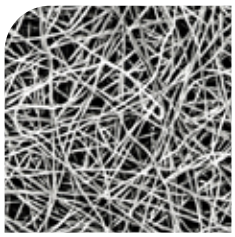
MELT FILTER RSC

RECYCLING TECHNOLOGY

Machines pictured may include equipment sold as options.

The Rapid Sleeve Changer is available with 1, 2 or 4 canisters from 500 to 2,000 kg/h, depending on output and filtration fineness.

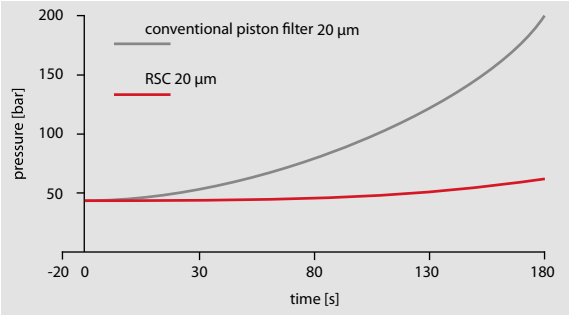
Candle filter with unique design for **finest filtration requirements.** Efficient removal of solid contaminants during the recycling process. Suitable for PET bottle flakes, continuous filament and biaxially oriented film.



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

Filter element with support pipe and sleeve featuring quick-release technology – 0.5 m² filtration area per sleeve

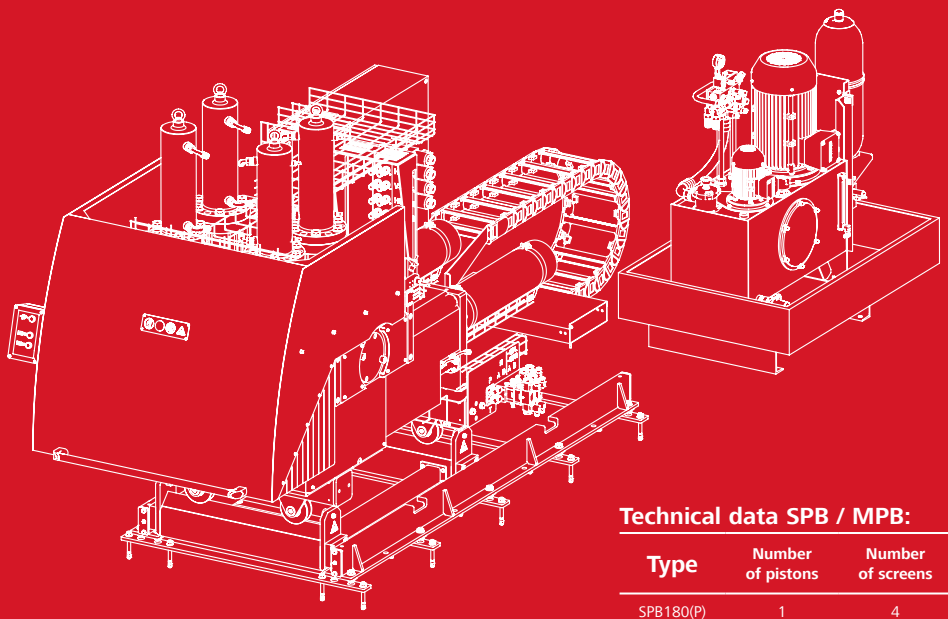
Infrared heating
for a higher energy efficiency and easy maintenance



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

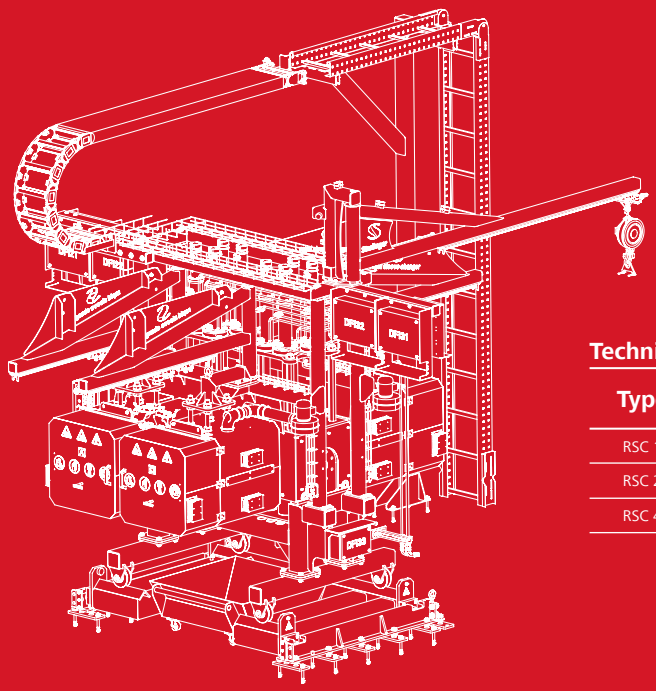
Sleeve design with quick-release technology:

- 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



Technical data SPB / MPB:

Type	Number of pistons	Number of screens	Total screen area [cm²]	*Total screen area [inch²]*	Screen diameter [mm]	*Screen diameter [inch]*
SPB180(P)	1	4	180	*27.9*	76.3	*3*
SPB290(P)	1	4	290	*44.9*	96.3	*3.8*
SPB490(P)	1	4	490	*75.9*	125.3	*4.9*
MPB980(P)	2	8	980	*151.9*	125.3	*4.9*
MPB1940(P)	2	8	1940	*300.7*	176.3	*6.9*
MPB2910(P)	3	12	2910	*451.1*	176.3	*6.9*



Technical data RSC:

Type	Output kg/h	Number of canisters	Number of filter elements/ canister	Total filtration area [m²]	*Total filtration area [ft²]*
RSC 1	500	1	6	3	*32.5*
RSC 2	1000	2	6	6	*64.5*
RSC 4	2000	4	6	12	*129*

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