



# Continuous Backflush Screen Changer (CSC/BF)

"All PSI products and components are proudly designed and manufactured in the USA."



## Features Include

- Guaranteed leak-free operation to 10,000 psi
- Breaker plate open area largest in the industry
- All parts manufactured to ISO-9002 standards
- No seals or contact parts
- Rugged design provides resilience to wear
- Continuous operation means no shut down
- Process temperatures to 650° F

The Continuous Backflush Screen Changer (CSC/BF) performs much like the Continuous Screen Changer (CSC) design. Polymer is divided into eight streams, all being filtered in the top and bottom piston. Unlike the CSC design, the backflush unit has two filtration cavities in each piston, allowing for twice the filtration of the comparable sized CSC design. The most unique aspect of the backflush CSC/BF is the capability of "recycling" or "maximizing screen life" while in the melt flow. When upstream pressure rises due to a high contaminant level, the PLC control automatically actuates each piston to its backflush position, allowing pressure to push contaminants off the dirty screenpack. Contaminants are purged out of ports in the bottom of the housing into a drip pan. Once the backflush sequence takes place, the "recycled" screens are returned to the home position until the sequence takes place again. The number of backflush sequences varies from process to process before a screen change is required; however increased screen life of 25 times or more is common.

## Benefits

- Screen life increased as many as 25 times or more
- Increased output due to lower backpressure
- Design allows for screen changes without interrupting material flow
- Eliminates line shutdown thus increasing production
- Absence of wear surfaces allows us to provide a five year warranty against melt leaks
- No maintenance or seals to replace
- Easier access and less interference for the operator
- Quick delivery time and return on investment

## Applications

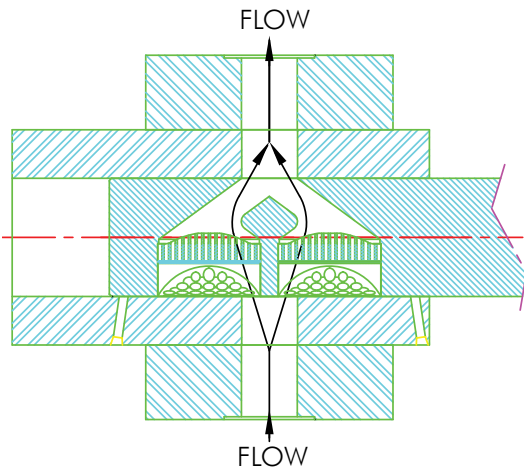
- Recycling of most polymers
- Sheet
- Coating
- Pipe and profile
- Compounding
- Wire and cable
- Tubing
- Textiles (fibers and nonwovens)
- EVA, hot melt adhesive and PSA
- Pelletizing (strand and underwater)
- Highly contaminated polymers
- Blown film and cast film
- Degradable materials

# Technical Data

Model CSC/BF	Extruder Output (lbs/hr)   (kg/hr)	Screen Diameter (in)   (mm)	Filter Area (in <sup>2</sup> )   (cm <sup>2</sup> )	Weight (lbs)   (kg)
116	900-2,400   410-1,090	4.58   116.3	4 x 16.47   4 x 106.26	2,050   930
148	1,750-4,400   794-1,996	5.84   148.3	4 x 26.76   4 x 172.64	3,150   1,429
176	3,100-6,600   1,406-2,994	6.94   176.3	4 x 37.83   4 x 244.06	4,450   2,019
200	3,750-8,400   1,700-3,810	7.89   200.3	4 x 48.73   4 x 314.39	7,050   3,198
230	4,850-11,500   2,200-5,216	9.07   230.3	4 x 64.53   4 x 416.32	8,650   3,927
250	10,600-19,400   4,808-8,800	9.85   250.3	4 x 76.08   4 x 490.84	11,400   5,171

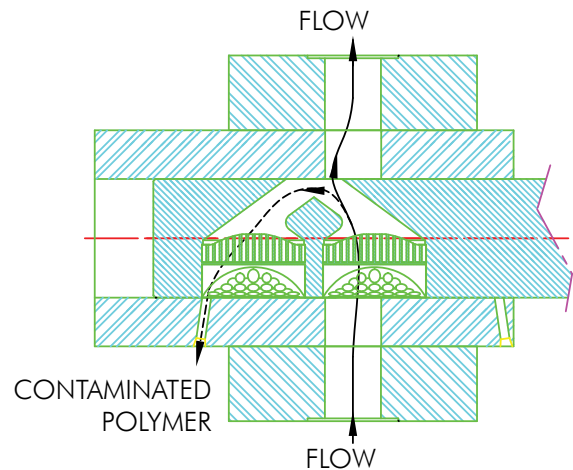
For larger sizes and special applications contact our PSI sales office

NORMAL FILTER POSITION



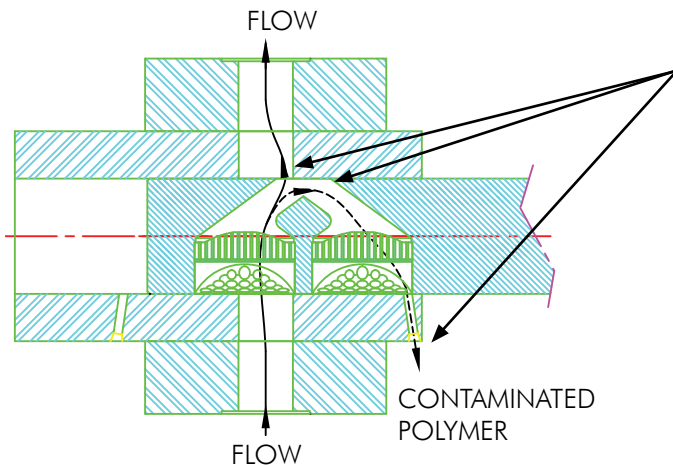
Each piston has two screen cavities for a total of four screen packs

BACKFLUSH POSITION 1



Back flushing is achieved by reversing the polymer flow through each of the four breaker plate cavities and purging contamination from the screen pack to the atmosphere

BACKFLUSH POSITION 2



Back flush screen changer designs that incorporate intricate flow channels often require purging, complete disassembly and cleaning due to slow flow or degradation areas. PSI simply restricts the flow downstream, redirecting polymer flow through the neighboring breaker plate cavity.

The piston slightly actuated allows for some polymer to still continue downstream, however this restriction redirects the flow in the opposite screen cavity, thus purging contamination from the screen pack