# Continuous Screen Changer (CSC)

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

Shown: CSC-176

## Features

- Operating pressure to 10,000 psi {690 bar}
- Process temperatures up to 850°F {454°C}
- Filtration area up to 219 inch$^2$ {1413 cm$^2$}
- All parts manufactured to ISO-9002 standards
- Breaker plate open area largest in the industry
- Field interchangable pistons and housings
- No seals design - Guaranteed leak-free
- Automated, touch screen control

CSC Continuous Screen Changers eliminate process interruption and production losses for filter changes. The Continuous Screen Changer acheives this by spliting the melt flow between two screen bolts, each containing an on-line filter cavity.

When a screen change is required, one of the bolts is moved out of the housing while the other remains in the operating position. After the contaminated screen pack is removed and replaced the bolt is moved back into the housing to its venting stages before resuming operation. These steps are then repeated for the other bolt. PSI Continuous Screen Changers can be designed to withstand extremely high pressure applications.

## Benefits

Perform screen changes without process interruption or production losses

Minimize head pressure rise and shear stress caused by contaminated screens

Improve your production yield through reduced back pressure from the increase on-line filter area

Optimized vent geometries bleed air without impacting the process

Automated control frees the line operator to perform other high value activites

Five (5) year leak-free warranty on the body and bolts

## Applications

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

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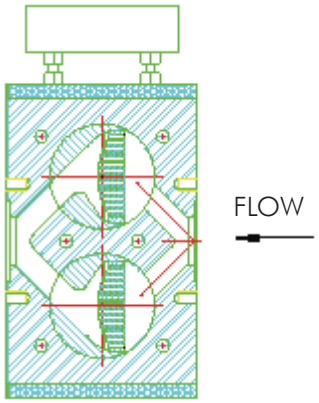
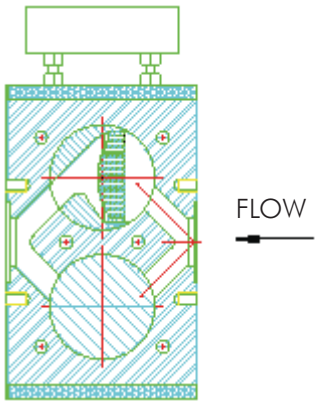
# Technical Data

| Model CSC | Extruder Output lbs/hr \| kg/hr | Screen Diameter in \| mm | Filter Area $in^2$ \| $cm^2$ | Weight lbs \| kg |
|---|---|---|---|---|
| 058 | 100-375 \| 45-170 | 2.30 \| 58.3 | 2 x 4.12 \| 2 x 26.58 | 320 \| 145 |
| 076 | 250-650 \| 110-295 | 3.00 \| 76.3 | 2 x 7.07 \| 2 x 45.61 | 425 \| 193 |
| 096 | 425-1,000 \| 190-455 | 3.79 \| 96.3 | 2 x 11.28 \| 2 x 72.77 | 410 \| 185 |
| 116 | 600-1,500 \| 270-680 | 4.58 \| 116.3 | 2 x 16.47 \| 2 x 106.26 | 775 \| 352 |
| 125 | 800-2,000 \| 360-910 | 4.93 \| 125.3 | 2 x 19.09 \| 2 x 123.16 | 1,100 \| 499 |
| 148 | 1,000-2,400 \| 450-1,090 | 5.84 \| 148.3 | 2 x 26.76 \| 2 x 172.64 | 1,450 \| 658 |
| 176 | 1,400-3,500 \| 635-1,590 | 6.94 \| 176.3 | 2 x 37.83 \| 2 x 244.06 | 2,050 \| 930 |
| 200 | 1,750-4,500 \| 800-2,040 | 7.88 \| 200.3 | 2 x 48.73 \| 2 x 314.39 | 3,030 \| 1,374 |
| 230 | 2,250-6,000 \| 1,000-2,720 | 9.07 \| 230.3 | 2 x 64.53 \| 2 x 416.32 | 4,200 \| 1,905 |
| 250 | 5,250-9,500 \| 2,400-4,310 | 9.85 \| 250.3 | 2 x 76.08 \| 2 x 490.84 | 5,700 \| 2,586 |
| 300 | 8,800-19,500 \| 3,990-8,845 | 11.82 \| 300.3 | 2 x 109.56 \| 2 x 706.84 | 8,900 \| 4,037 |

For larger sizes and special applications contact our PSI sales office




Normal Production Position
Flow Through Both Screen Packs

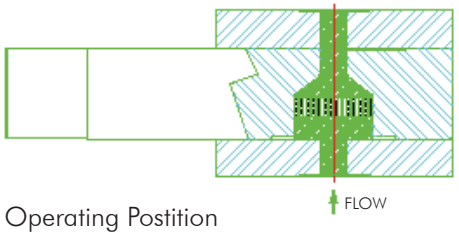



Screen Change Postition
Flow Through One Screen Pack

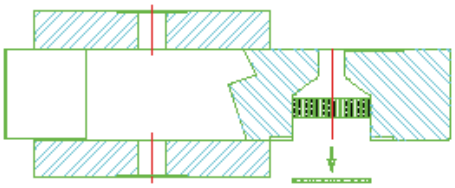
The PSI Polymer Systems Continuous Screen Changer is designed for the continuous filtration of thermoplastic materials. The melt flow is divided into two streams at the housing inlet and is conveyed through each of two breaker plates and screen packs. By means of an additional super plate, 92% of the screen surface is useable for filtration.

Each breaker plate and flow channel is designed to accommodate the full throughput of the extruder or upstream equipment. When a screen change is required, one screen bolt is moved out of the housing by activating the corresponding hydraulic cylinder.

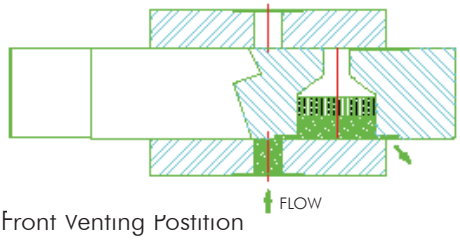
The entire flow is transitioned through one screen pack. The contaminated screen pack is then replaced with a clean one, and then the screen bolt is moved back into the housing to the venting position. After the air is removed, the bolt is moved to the operating position. This procedure is repeated with the second screen bolt.



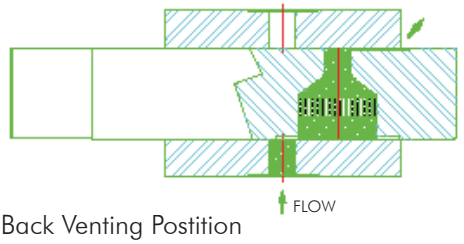

Operating Postition



Screen Change Postition




Front Venting Postition




Back Venting Postition

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