

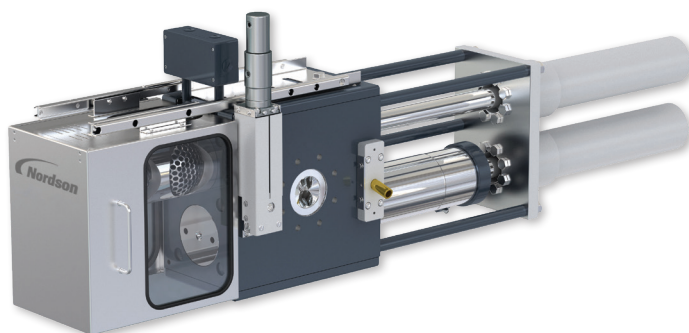
# BKG<sup>®</sup> HiCon<sup>™</sup> K-SWE – 4K/RS

## Double Piston Backflush Screen Changer for Continuous Operation

- Normal operation:** 4 screen cavities (100%) in the process
- Backflush:** 3 screen cavities (75%) in the process
- Screen change:** During a screen change, 2 of the screen cavities (50%) are removed from the process, allowing for 2 of the screen cavities (50%) to remain in operation

### Applications

Suitable for almost all processes and materials. It can be used in compounding, film, pipe, sheet, and pelletizing applications. It can manage processes with a high proportion of contaminants (recycling) and enables process runs to continue without any system shutdowns while changing the screen.



### Benefits

- Reduced spare part costs recognized due to the integrated self-cleaning (backflush) process, allowing screens to be used repeatedly
- Fully automated backflush and venting procedure (via PLC) reduces operator intervention
- Significant reduction in operating costs (screen & labor costs) due to up to 100 backflushes

### Features

- Backflush function
- Optimized flow channel geometry utilizing rheological data
- Wear-free metallic sealing system - no additional seal required
- Easily integrated into the line controls
- Includes complete guard system, offering maximized safety for the operators

### Technical Information

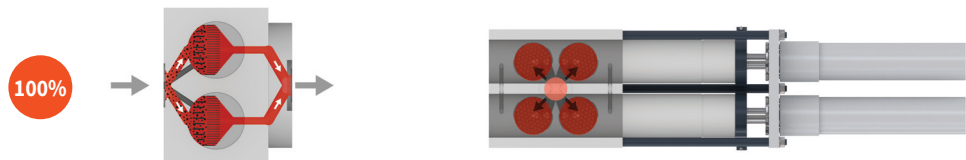
Machine Type/Size	K-SWE-100-4K/RS – K-SWE-280-4K/RS
Screen Dimensions	Ø76 – Ø250 mm (2.99 – 9.84 in)
Throughput	160 – 3,000 kg/h (28 – 6.614 lb/hr)
Screen Area	180 – 1,960 cm <sup>2</sup> (27.9 – 303.8 in <sup>2</sup> )
Temperature	Up to 450°C (842°F)
Heating	Electric, Fluid, or Steam
Max. Operating Pressure	From size 100 to size 200: Max. 500 bar (7,252 psi) Size 250 and up: Max. 300 bar (4,351 psi)
Differential Pressure	Max. 150 bar (2 176 psi)

\*These throughput values are only estimates. The actual rates are dependent upon the viscosity of the material, filtration fineness, application, and the contamination level of the material; therefore, the values may differ depending on the actual process parameters.

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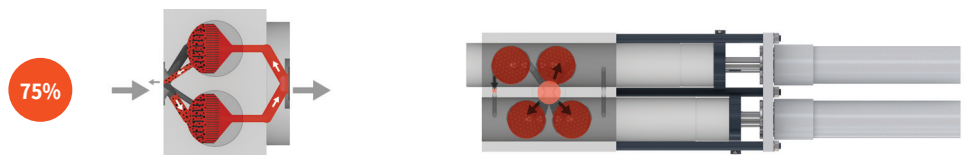
## Double Piston Backflush Screen Changer for Continuous Operation

### Normal operation



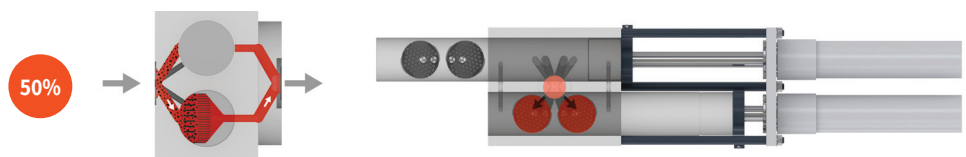
The heated steel housing allows for two screen bearing pistons, which contain two screen cavities per piston. The melt flow is subdivided into four flow paths and is directed through each of the four screen cavities.

### Backflush



If the chosen differential pressure ( $\Delta p$ ) increases due to the contamination of the filter screens, the piston automatically moves into the backflush position. The subsequent process is not adversely affected. Through a reversal of the flow inside of the screen changer, the contaminations from the screen pack are led outwards via a spillway. The screen pack is fixed within the screen retainer. After cleaning the filter element, the adjacent screen of the same piston is cleaned in an identical manner. During each backflush, 75% of the screen area remains in production.

### Screen change



The exchange of the screens is triggered when reaching a chosen differential pressure ( $\Delta p$ ). The screen piston with the changeable filter element is moved out of the housing to allow for the screen packs of the piston to be removed and replaced with a new filter elements. During the screen change, the screen cavity of the other piston remains in the production position and the melt flow is not interrupted. Fifty percent (50%) of the filter area is still used for filtration. Due to a special venting procedure, no air can enter the process after the screen exchange.

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