



SYSTEM AVAILABILITY

Automatic Self-Flushing Filter Results in Cost Savings and Better Eco. Impact

Technical Application Bulletin

PROJECT BACKGROUND

DISCOVER

- Customer experienced clogged furnace spray nozzles due to a neglected cooling tower.
- Small plastic fines from the cooling tower stopped cooling water to furnace wall resulting in a melted wall. Luckily no one was injured.



DIAGNOSE

- Filtration of 100 micron was targeted for a 36 inch flooded water pipe.
- A basket strainer would have to be very large to meet the flow and pressure drop requirements.
- The basket strainer would require periodic maintenance to clean, stopping the water flow and system processes – at \$10,000 per hour of lost production.

INDUSTRIES

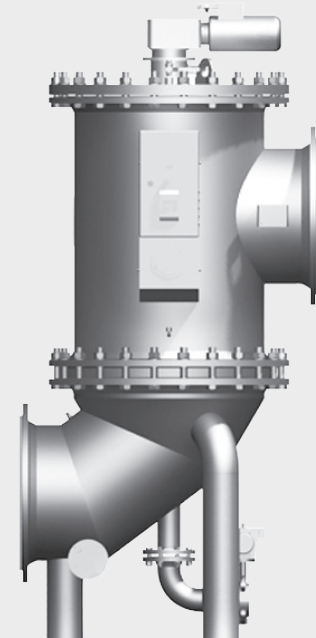


DESIGN

What We Did: Schroeder Industries employed the RF-3-5 self-flushing filter with uninterrupted flow and only 3-7 PSI drop while flushing.

Course of action

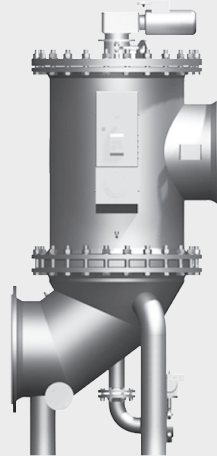
1. Schroeder Industries chose to use the Automatic Flush Filter RF Series because it removes particulate and flushes automatically.
2. The variable housing configurations provide the inlet and outlet flanges and the back-flush line to be arranged in various positions, making it possible to integrate the filter easily into any system geometry.



DELIVER

- 6 Automatic Backflush Filter RF-3s have been purchased over the last 5 years.
- Implementing the RF3 helped with cost-savings of labor and down-time. Less chemically treated water required for backwashing resulting in lower environmental impact and chemical cost savings.
- The uninterrupted water supply was the most important aspect in the purchases of the RF3.

Customer Success Story	Lost Production	Revenue Lost
Automatic Back - Flush Filter RF3	0 Days	\$0K/Hour
Previous Machinery	21 Days	\$10k/Hour



CUSTOMER BENEFITS

- Uninterrupted cooling spray for continuous production
- Self-flushing requires no labor costs
- Safe and maintenance free

FURTHER APPLICATION AREAS

- Caster
- Roll Mill
- Beam Mill for nozzle protection
- Pump & Heat Exchanger Protection

ROI

Underlying Values:

Not only did the RF3-5 provide continuous flow, but it allowed more time to work on other plant items and protected all the downstream equipment such as the nozzles and the furnace.

The RF3 is the perfect filter to protect all your downstream equipment such as pumps, nozzles, heat exchangers and other process related equipment.

PRODUCT SPECS

RF-3-5

Flow Range: 6600 -10,790 gpm
(25,000-40,850 L/min)

Working Pressure: 87 psi (6 bar)

Max. Working Temperature: 194°

Empty Weight: 2250 lbs.
(10200 kg)

Housing Volume: 168 gallons
(635 L)

Filter Area: 8640 in.2 (55,760 cm²)

No. of Filter Elements: 24