

# Eaton

## Bread Maker Switches to Ronningen-Petter® DCF Filters to Improve Safety

**Safer to Operate**  
**Uninterrupted Filtering**  
**Unsurpassed Performance**

A producer of bagels and specialty breads decides the Ronningen-Petter DCF Mechanically-Cleaned filter is the perfect fit for its bagel boiler water filtration process.

### ■ SITUATION

A Canadian bread company was putting a new bagel boiler in its Alberta plant and required a filtering system to clean the recycled boiler water of raisins, sesame seeds, bits of dough and corn meal. Corn meal can create water quality problems if the temperature is allowed to fall, requiring an expensive and time consuming water change. It is critical that the water in a bagel boiler be kept up to temperature, even as it is filtered and recycled.

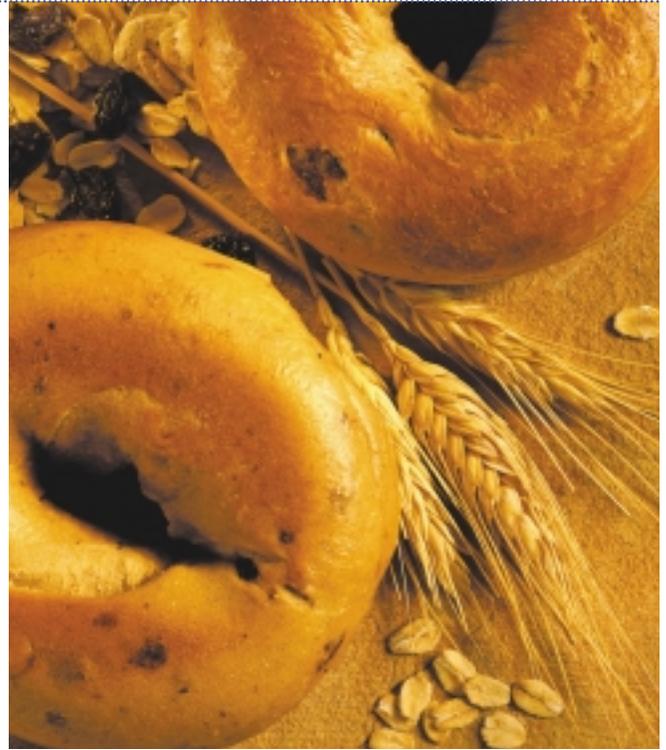
The company was using duplex bag filters in its bagel boiler process at its Toronto facility. Concerned about employee safety, however, the maintenance supervisor at the company's Alberta plant wanted a filtering system that required less operator intervention than a bag system. High water temperatures used in the process can be a serious hazard to an operator changing filter bags, especially if the operator is pressed for time during the shutdown process and opens up the filter housing while it is still pressurized.

### ■ EATON SOLUTION

Decision-makers at the Alberta plant wanted a filter they could count on, without the hazards occasionally associated with bag filter maintenance. Working with an Eaton (Ronningen-Petter) sales representative, the plant manager and maintenance supervisor determined that the Ronningen-Petter DCF Mechanically-Cleaned filter was the permanent solution to meet their business objectives.

Two Ronningen-Petter DCF-800 filters were installed on the bagel boiler water recycle line at the Alberta facility. DCF filters successfully removed the raisins, sesame seeds and bits of dough that would adversely affect the final product. Uninterrupted filtering by DCF also ensured consistently high water temperatures required to maintain bagel boiler water quality.

DCF performs a self-cleaning action by mechanically scraping collected debris from the filter screen with a patented disc that moves up and down the screen, parallel to the liquid flow. Collected debris is then automatically purged from the collection chamber at the bottom of the filter. This self-cleaning



▶ **Increased operator safety:** Less operator intervention and exposure to the high temperature water used in the process.

▶ **Uninterrupted filtering:** Allows the water temperature to remain high eliminating the potential water quality problems caused by corn meal.

▶ **Material savings:** Saves the dollars spent on bags.

action is performed without halting production, and provides the highest quality filtering under continuous demand. Because the screen is cleaned continuously, without interrupting production, a consistently high flow rate is maintained.

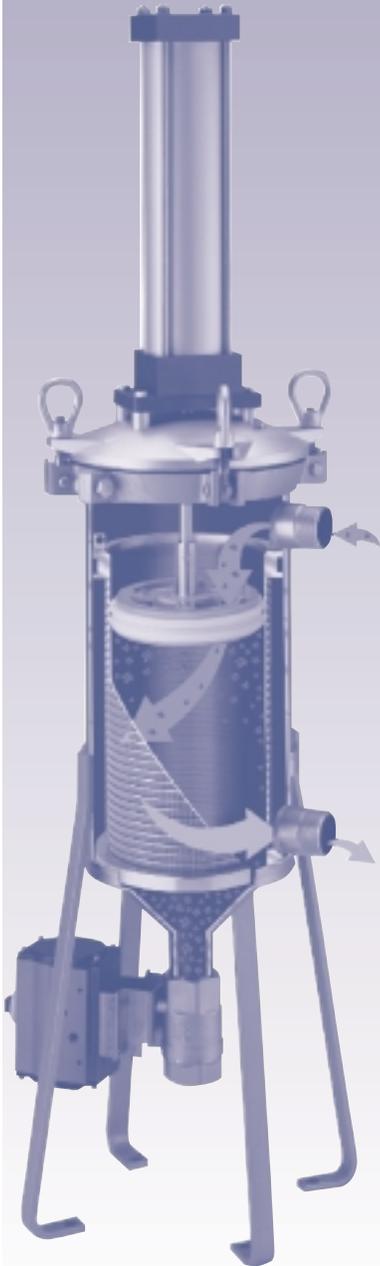
### ■ RESULTS

The Alberta facility has completely eliminated the risk of operator injury due to changing filter bags, because with Ronningen-Petter DCF filters, there are no messy bags to remove and media cleaning is automatic.

The Alberta facility's supervisors are also impressed with the unsurpassed filtering of its bagel boiler water with the DCF filters. High water temperature is maintained and water quality problems are avoided.

In fact, the company is so happy with the performance of the DCF filters at its Alberta plant, the Langley, B.C. facility is also installing DCF filters on its bagel boiler system — instead of previously planned bags.

## RONNINGEN-PETTER® DCF MECHANICALLY-CLEANED FILTER



The DCF-800 filter has a patented cleaning disc that moves up and down the filtering screen, scraping debris from the screen and collecting it in a chamber at the bottom of the filter. Debris is periodically purged from the collection chamber by a discharge valve, in a process that takes less than seven-tenths of a second — with no interruption in production.

### DCF is the closed filter system specifically designed for paint, coating, ink, adhesive, resin and other viscous liquid applications

Because the DCF filter's unique traveling cleaning disc maintains a low, constant differential pressure, you get maximum throughput. And you collect and discharge only the contaminants, not a filter bag or cartridge loaded with your valuable product. so you retain more product in the process for increased profitability.

DCF eliminates media replacement, reduces worker exposure, labor and disposal costs...so you will achieve more consistent solids removal, more consistent product flow and get better housekeeping, too.

DCF filters can also be used as a stand alone solution or in combination with backwashing filters to concentrate effluent and simplify waste management.

## CONCLUSION

A Canadian bread company went in search of a safer filtering system and found an Eaton (Ronningen-Petter) solution. Ronningen-Petter DCF Mechanically-Cleaned filters provide the company with unsurpassed filtering, automatic cleaning of the filter media, and a safer work environment for its operators.

## APPLICATION DETAILS

**Filter model:** Ronningen-Petter DCF-800

**Type of liquid:** Bagel Boiler Water

**Pressure:** 50 psi (3.45 bar)

**Temperature:** 206°F (96.7°C)

**Flow Rate:** 25-35 gpm (5.7-7.9 m<sup>3</sup>/h)

**Contaminants removed:** Dough Pieces, Raisins, Sesame Seeds

## DCF MODELS AVAILABLE

DCF-400 flow up to 30 gpm (6.8 m<sup>3</sup>/h)

DCF-800 flow up to 60 gpm (13.6 m<sup>3</sup>/h)

DCF-1600 flow up to 200 gpm (45.4 m<sup>3</sup>/h)

## INFORMATION

For more information visit [www.filtration.eaton.com](http://www.filtration.eaton.com), e-mail us at [info@eaton.com](mailto:info@eaton.com), or call us at +1 269 323 1313.

