

Success Story: Metal Food Packaging

Market Served
Manufacturing



Eaton Filters are Can Do Solutions

Location Details:

Somerville, NJ USA

Problem:

Manufacturing facility was relying on an antiquated paper filtering process, which was expensive, hard-to-maintain, and time consuming.

Solution:

Eaton's MCF 824-Series
Mechanically Cleaned Filter

Results:

An easy to use filter that practically eliminated paper costs of approximately \$60,000 per year, realized maintenance and labor savings, increased operator safety, and reduced landfill waste

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"Eaton has been right there with us and I have been very impressed with that."

Quality Control Manager

Background

The largest supplier of metal food containers in North America prides itself on quality, customer support, implementing leading edge technologies, sustainable business practices, and lowering costs whenever possible. Partnering with suppliers that can best help meet those goals is another primary objective.

With annual sales in excess of a billion dollars, the company's containers are used primarily by processors and packagers for foods such as soup, vegetables, fruit, meat, tomato-based products, coffee, seafood, adult nutritional drinks, pet food, and other miscellaneous food products.

A wealth of well-known manufacturer brands, large and small, rely on the company's cans for the consistent delivery of high-quality, high-grade consumable goods.

Challenge

The cutting and shaping of metals is an important part of the manufacturing process. According to the quality control manager at one of the company's 28 manufacturing facilities whose process requires the use of lubricants to keep the metal cool so that it can be shaped properly and precisely. The lubricant, or coolant, also picks up metal shavings, oils, and dirt that occur naturally.

A filtering process is required to clean the coolant and return it to the manufacturing line. For years, the facility was relying on an antiquated paper filtering process, which was expensive, hard-to-maintain, and time-consuming.

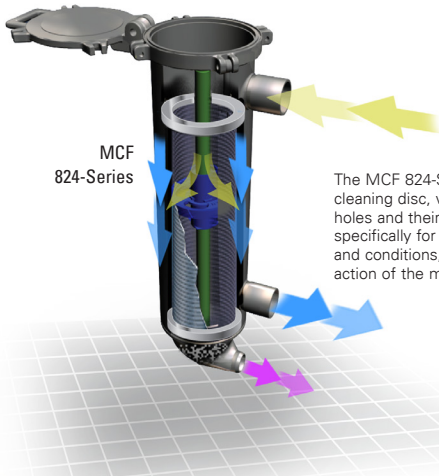
Paper costs alone were running about \$5000 per month, says the quality control manager. "On top of that, the changing of the paper filters would take the operator about a half-hour to 45 minutes of his time to cut off the paper with a razor knife, carry it down stairs and put it on a pallet, dispose of it, and mop up the mess," he adds.

EATON

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MCF 824-Series

The MCF 824-Series features a magnetically coupled cleaning disc, which eliminates the need for lid thru-holes and their associated seals. It was designed specifically for the most challenging process liquids and conditions, and features the fastest cleaning action of the mechanically cleaned family.



Eaton's unique spring loaded cleaning disc ensures intimate contact with the filtration screen to thoroughly and uniformly clean the media.

Solution

However, that's all changed now thanks to the installation of new Eaton MCF 824-Series mechanically cleaned filtration systems.

The system features a cylindrical stainless steel housing that contains a cleanable, permanent filter screen. Unfiltered liquids flow from the top down and from the inside of the media toward the outside. Impurities are deposited on the interior surface of the filter screen, and the clean fluid exits through an outlet. When the media requires cleaning, a spring loaded cleaning disc travels top to bottom inside the filter media, directing collected contaminants downward, where they are concentrated in the purging chamber for easy expulsion.

The whole cleaning process occurs while the filter remains in service, eliminating or reducing the use of disposable filter bags, decreasing operator handling, lowering inventory costs, and decreasing waste disposal. The innovative, magnetically coupled driving technology that moves the cleaning disc – without the need for shaft or drive external seals – adds additional appeal to the unique design.

Result

The quality control manager reports significant financial gains by practically eliminating paper costs. The old systems are still used, but only as a backup when the Eaton MCF 824 units are undergoing scheduled maintenance.

"We have been very satisfied," adds the manager. "We've been running the systems for four years and Eaton has been very helpful with us in making the original changeover and later updating the equipment with new parts over the years.

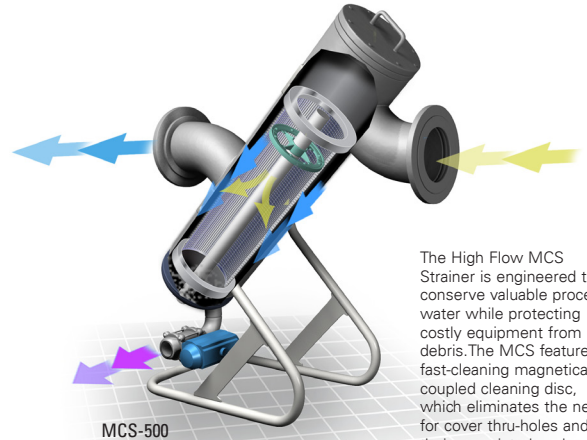
"They even came up with a better way of cleaning the MCF 824-Series filters. So we were able to extend the life of the filters even further. We originally had to change the filters every four or five days. Now we can stretch it out to once every eight days."

"Eaton has been right there with us and I have been very impressed with that."

Not to be overlooked, he notes, are the additional gains being realized in maintenance savings, labor savings, and disposal savings – which deems that the responsible management of the environment plays a significant role in achieving success.

"Now everything is pretty much automatic," notes the manager. "It's a much better system in a variety of ways."

He is confident other company manufacturing facilities around the country could also benefit with the Eaton setup, which has effectively turned the filtering process from a can of worms into a can of corn.

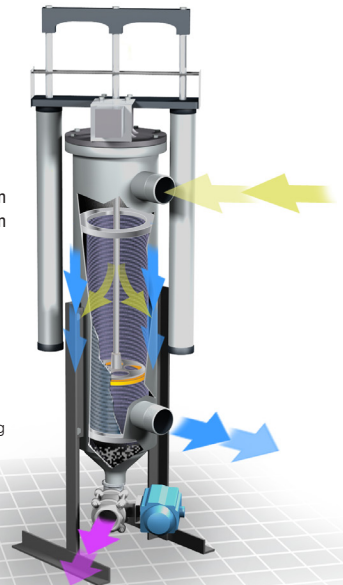


MCS-500

The High Flow MCS Strainer is engineered to conserve valuable process water while protecting costly equipment from debris. The MCS features fast-cleaning magnetically coupled cleaning disc, which eliminates the need for cover thru-holes and their associated seals.

DCF-1600 with twin actuation

DCF with Twin Actuation
Designed for the rigors of processing highly viscous, abrasive, sticky, or otherwise hard-to-process liquids, the Twin Actuation is ideal for a broad spectrum of challenging applications.



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