

Improving food and beverage production

At Eaton (Ronningen-Petter), we understand the specialized needs of the food and beverage industry. With the industry's broadest and deepest line of filtration solutions, we can handle almost any filtration need to remove impurities from food and beverage products.

Our portfolio of filter systems includes bags and cartridges, DCF™ mechanically cleaned filters, backwashing pressure filters, and large-scale vacuum and gravity filtration systems. And, with hundreds of years of know-how, we can recommend a filtration or mixing system solution that meets both your process and overall business goals.

The food and beverage market is as diverse as the source materials it draws upon. Eaton can readily adapt a system to meet the precise demands of your application.

Whether producing beverages, edible oils, proteins, sugars, liquid sweeteners, flavors, vegetables, extracts, or starches, we offer a wide variety of standard filters for both difficult and less challenging applications.

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Food and beverage processing system solutions

EATON

A solution to almost every food processing challenge

The combined resources of Eaton (Ronningen-Petter) offer hundreds of years of food processing experience. Our filtration systems have helped improve efficiency, maximize uptime, and enhance finished product quality in food and beverage applications around the globe.



AFR-Series tubular backwashing pressure filter system

Juice, Wine, Beer and Other Beverages

All beverages require filtration to remove impurities and improve finished product quality. Eaton (Ronningen-Petter) can help reduce waste and improve the quality of products such as:

- Concentrates
- Carbonated soft drinks
- Coffee- and tea-based beverages
- Fruit juices and isotonic
- Sweetening and shelf-stability additives
- Wash water for fill/bottling lines

Meat, Poultry and Sausage

Meat production also has many filtration needs – for example, the removal of potential contaminants. In addition to filtering raw materials, filtration is also needed for:

- Collagen casings
- Liquid flavoring
- Fillers
- Coloring

Edible Oils

Edible oils depend on tremendous clarity to help deliver shelf appeal to consumers. Eaton can help engineer a staged filtration solution that progressively and efficiently removes contaminants down to 1 micron and reduces valuable product loss.

- Edible oils include:
- Canola, palm, olive, peanut, soybean and corn



ETI side hill strainer filter system

Corn Processing

In addition to cooking oil, there are many other applications for corn which have benefited from Eaton's expertise, including:

- Alcoholic beverages
- Cereals
- Starch
- Corn-based sweeteners
- Corn syrup
- Glucose, fructose and dextrose

Confectionery

Sugars, starches and fats all must be filtered to ensure a high-quality finished product. In addition, there are varying global standards for consistency, so your filtration system needs the capability to handle this diversity in raw materials.

Some applications include:

- Fudge
- Chocolate mixtures
- Fruit-based candy
- Chocolate-based candy
- Chocolate-based coatings
- Pure sugar for other confectionery coatings
- Caramel, molasses and other high-sugar sweeteners
- Frostings, glazes and fillers

Fruits and Vegetables

Cleaning and processing fruits and vegetables demands a tremendous consumption of costly process water for effective product washing. Eaton filters are used to recover valuable wash water for many products, including:

- Baby carrots
- Shredded cabbage and coleslaw mixtures
- Lettuce mixes
- Berries and other fruits

DCF mechanically cleaned filter system with Twin Actuator



More choices for more solutions

Eaton is committed to the right solutions. We build what you need – the industry's most comprehensive line of pressure, gravity and vacuum filtration solutions.

Bag and Cartridge Filters

Eaton's full line of bag and cartridge filters can handle a wide range of contaminants. Both are available with our CERTA-SEAL™ technology, which eliminates bypass conditions. And our MAX-LOAD™ bags hold significantly more dirt, for reduced disposal demands.

Backwashing Pressure Filters

Tubular backwashing pressure filters are used in high-flow, high-pressure applications, for filtering water-like liquids. Suitable for retention of particles larger than 5 microns, our systems are as easy to clean as they are to operate, using a simple reversal of liquid flow through the filter.

AFR™ -Series Filters

The AFR™ -Series is our flagship backwashing pressure filter. Its compact circular configuration enables a single AFR™ -Series system to replace a 13-station multiplexed in-line system – saving valuable manufacturing space with no reduction in efficiency.

DCF™ Filters

The DCF is an innovative self-cleaning filter designed to remove solids greater than 25 microns. It requires no operator intervention, can be easily automated, and causes no loss of valuable product during cleaning. Next-generation Twin Actuator™ and FluidSeal™ options help with highly viscous, sticky, or abrasive liquids.

Gravity Filters

The ETI™ gravity filter utilizes a stainless screen and an efficient, gravity-driven system ideal for wash water recovery.

Mixers and Extruders

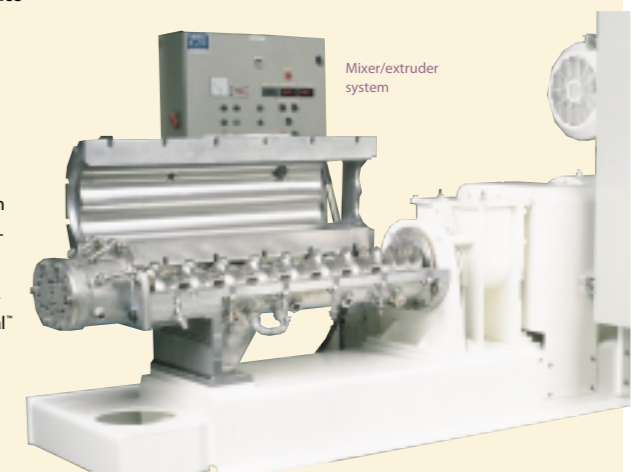
Eaton mixing and extrusion equipment is ideally suited to the demands of food applications. We offer both batch and continuous mixing, as well as small lab units. We also offer rugged extrusion units, proven in food applications worldwide.

Added-Value Features and Options for Food and Beverage Applications

We have many key features specially designed for the food and beverage industry, including:

- Available FDA-approved 3A polish.
- Food-grade White BUNA N elastomers on bag filters.
- High temperature Viton elastomers on liquid bag filters and DCF resist breakdown from exposure to high-temperature frying oils.
- Sanitary quick-disconnect fittings on our DCF line provide a quick, easy-to-clean, "no cracks, no crevices" interior surface finish.

We also offer a wide variety of additional features for food and beverage processing. For more information about standard equipment, or customizing a system, contact your Eaton representative, or contact us directly.



Mixer/extruder system