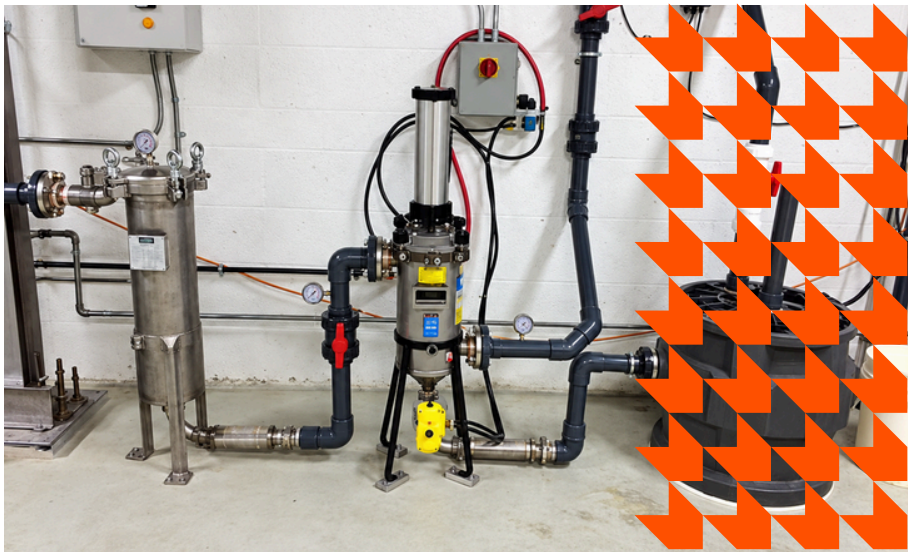
JOHN BROOKS
Keeping our world flowing™



Case Study

Eaton DCF 800 Eliminates Three Hours of Daily Filter Maintenance Downtime

Wastewater pre-filtration at a consumer packaging facility

Technology Utilized

Eaton DCF-800 Mechanically Cleaned Automatic Filter

- 38-micron stainless steel filter screen
- Spring-loaded disc for mechanical screen cleaning
- Automatic contaminant collection and discharge
- Cleaning while the filter remains in service
- Reusable screen without disposable filter pads

How It Works

1. Wastewater passes through a cylindrical screen. Suspended contaminants collect on the screen's inner surface before the filtered water reaches the ultrafiltration system.
2. A spring-loaded disc moves along the screen during cleaning cycles, removing accumulated solids and directing them to the bottom of the housing.
3. Collected contaminants are automatically discharged while filtration continues. This reduces manual handling and avoids the shutdowns previously needed for filter pad changes.

THE CHALLENGE

A North American contract manufacturer of household and personal care products used a filter press to remove flocculated contaminants from wastewater before ultrafiltration and discharge. Operators replaced twelve 40-micron filter pads twice daily, causing approximately three hours of downtime each day. The messy, labour-intensive process also exposed workers to contaminants such as oils, zinc oxide particles and silicates. The facility needed to maintain filtration performance with less downtime and manual handling.

THE SOLUTION

John Brooks filtration specialists recommended replacing the filter press with an Eaton DCF-800 Mechanically Cleaned Automatic Filter equipped with a 38-micron screen. Installed upstream of the ultrafiltration system, the filter removed contaminants and cleaned its screen while remaining in service. The change eliminated routine filter pad replacements, improved downstream equipment protection and maintained process flow rates.

THE RESULTS

- Eliminated approximately three hours of daily downtime associated with filter press maintenance
- Removed recurring filter pad purchase and disposal costs, along with labour for pad changes
- Reduced operator exposure to contaminants during manual filter handling
- Improved protection and extended service life of downstream ultrafiltration equipment
- Projected payback of less than one year from labour savings alone
- Reduced disposable filter media consumption and associated waste

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