

AquaStorm[®]

Cloth Media Filter

A Solution for Wet Weather Applications



AQUA-AEROBIC SYSTEMS, INC.
A Metawater Company

AquaStorm[®]

Cloth Media Filter Featuring OptiFiber[®]

Pile Cloth Media

The AquaStorm[®] cloth media filtration system is designed as an economical and efficient solution for the treatment of wet weather applications. This system utilizes a disk configuration and the exclusive OptiFiber PF-14[®] pile cloth filtration media to effectively filter high solids waste streams with and without the use of chemicals as determined necessary for application-specific water quality. This system is ideal for wet weather applications due to its proven removal efficiencies and high quality effluent, even under varying influent conditions.

The AquaStorm system is designed to handle a wide range of flows in a fraction of space compared to other wet weather treatment technologies. The system's high effluent quality along with the ability to startup immediately for wet weather events makes the technology ideal for treatment at wastewater plants or remote overflow sites.

System Features and Advantages

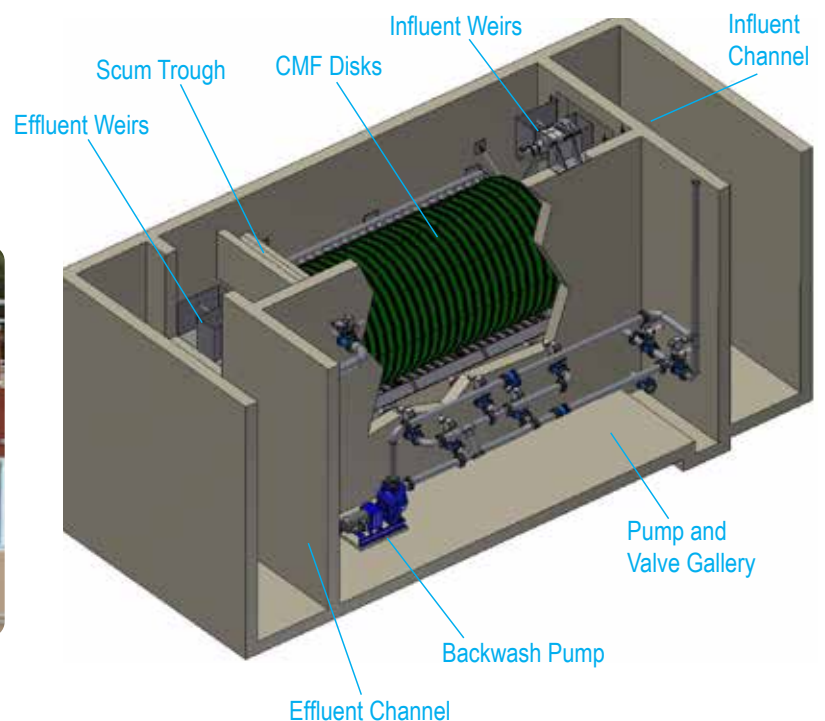
- Vertically oriented cloth media disks reduce required footprint
- Each disk is lightweight, with removable segments for ease of maintenance
- Effective backwash system that fluidizes cloth fibers to release stored solids
- Specifically designed floatable and solids removal zones
- Available in several configurations
- Fully automatic PLC control with color touchscreen HMI
- Use with or without chemicals, depending on site-specific water quality requirements
- Can be configured for dual-use application for tertiary and wet weather operation
- Simple start-up and shutdown with unattended operation for remote locations
- Automatic storage procedure for cleaning and draining the unit for offline storage
- Improves disinfection of wet weather flows

Typical Applications

- Stormwater
- Sanitary Sewer Overflow (SSO)
- Combined Sewer Overflow (CSO)

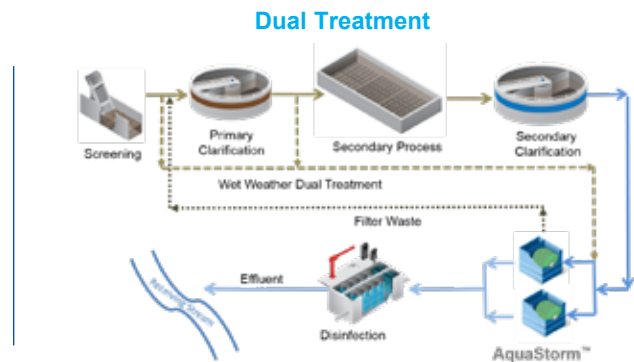
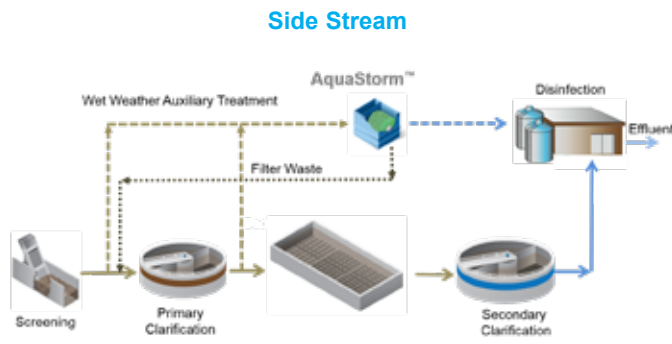


An AquaStorm[®] system operating at a municipality for dual tertiary/wet weather treatment.



AquaStorm[®]

Typical Locations For Treatment



Modes of Operation

The AquaStorm[®] cloth media filtration system operates on four (4) modes of operation: FILTRATION, BACKWASH, SOLIDS WASTING and FLOATABLE WASTING. For graphical representation, the AquaStorm modes of operation are described below:



Filtration Mode:

- Influent wastewater/wet weather flow enters the filter by gravity
- Stationary cloth media disks are completely submerged
- Solids deposit on the outside of the cloth media forming a mat as filtrate flows through the media
- Tank liquid level rises as headloss builds due to the collection of solids
- Filtrate is collected in the hollow center tube and discharged over an effluent weir
- Heavier solids settle to the specifically designed hoppers tank bottom

Backwash Mode:


- Solids are backwashed at a predetermined liquid level or time
- Backwash shoes directly contact the cloth media and solids are removed by vacuum pressure using a backwash pump
- Disks rotate slowly and two disks are backwashed at a time (unless a single disk is utilized)
- Filtration is not interrupted
- Backwash water is directed to waste handling facilities (thickening, digester, etc.)

Solids Wasting Mode

- Heavier solids in the settled solids collection area are removed on an intermittent basis
- Backwash/Solids Pump provides suction to the solids collection manifold for wasting of settled solids
- Solids are pumped back to the waste handling facilities (thickening, digesters, etc.)

Floatable Wasting Mode

- Floatable scum is allowed to collect on the water surface
- After a preset number of backwashes, the water level is allowed to rise above the preset high level
- As the water level increases, floating scum is removed by hydraulic decantation
- Scum wasting water is directed to the plant's waste handling facility

 A "Green" Advantage Product
Lower Energy • Small Carbon Footprint



Since 1969, Aqua-Aerobic Systems, Inc. has led the industry by providing advanced solutions in water and wastewater treatment. As an applied engineering company serving both municipal and industrial customers, we work collaboratively with consulting engineers, owners, plant managers, and operators to design and manufacture the best treatment solution with the lowest lifecycle cost.

Providing **TOTAL** Water Management Solutions

Aeration & Mixing

Biological Processes

Filtration

Oxidation & Disinfection

Membranes

Controls & Monitoring Systems

Aftermarket Products and Services

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Visit our website at www.aqua-aerobic.com to learn more about the AquaStorm[®] Cloth Media Filter and our complete line of products and services.



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