



AQUA-AEROBIC SYSTEMS, INC.

AquaDrum[®]

CLOTH MEDIA FILTER

Aqua-Aerobic Systems is well-known throughout the wastewater treatment industry for its complete line of pile cloth media filtration systems including the original AquaDisk® and AquaDiamond® filters. The tradition continues with the AquaDrum® filter featuring OptiFiber® pile cloth media. This filter is designed to provide economical treatment of smaller flows, particularly where driving head is limited. The AquaDrum filter can be utilized for any tertiary treatment application.

Features and Advantages

- High quality filtrate
- For use with all OptiFiber standard and microfiber cloth media
- Small footprint
- Low hydraulic profile
- Low maintenance; few components, simple design
- Peak flow capacity up to 425 gallons per minute (gpm)
- Available in stainless steel or concrete tanks
- May be retrofitted into existing structures



Internal view of an AquaDrum® cloth media filter.

Operation Description

Filtration Mode

- Inlet wastewater enters the filter tank through the influent channel
- The stationary cloth media Drum is completely submerged
- Thousands of hair-like fibers intercept solids, which are stored within the deep pile cloth filtration media
- Filtrate is collected inside the drum, then discharged through the center shaft to the effluent channel

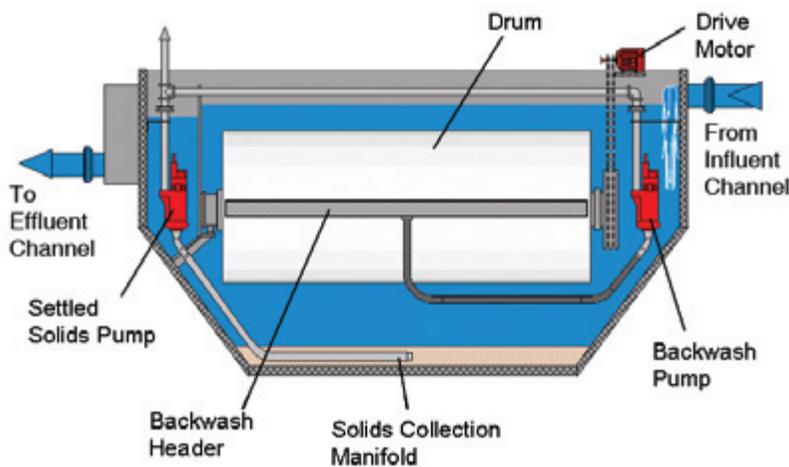
Backwash Mode

- Solids build-up causes headloss to increase, thus raising the water level in the tank

- When headloss reaches a predetermined level, backwash is automatically initiated
- The Drive Motor rotates the Drum. The Backwash Header contacts the media directly while vacuum pressure from the Backwash Pump removes solids from the media. Filtration continues without interruption during the backwash mode
- Backwash solids are returned to one of the preceding treatment stages

Solids Wasting Mode

- Heavier solids that settle to the bottom of the tank are periodically removed via the Settled Solids Pump



Typical Applications

- Tertiary treatment
- Reuse/recycle
- Phosphorus removal
- Small municipal and industrial process streams

Visit our website to learn more about the AquaDrum® Cloth Media Filter and our complete line of products and services.