



AQUA-AEROBIC SYSTEMS, INC.

**OptiFiber[®] Cloth Media Filtration
Primary Filtration Pilot System**

OptiFiber® Primary Filtration Pilot System

Technology pilot demonstrations can be beneficial to wastewater treatment plants by providing a snapshot of essential process operating conditions and allowing the customer to interact with the technology and factory personnel.

Aqua-Aerobic Systems has completed extensive testing in applying Pile Cloth Media Filtration for primary effluent filtration that can also replace primary clarifiers. This testing has shown substantial TSS and BOD reduction to the secondary process and within a smaller footprint compared to traditional primary clarifiers.

The OptiFiber® Primary Filtration Pilot System is available to demonstrate this technology at treatment plants across the country that are looking for an efficient and cost-effective solution for primary effluent filtration.



OptiFiber PA2-13®

Features and Advantages

- Totally enclosed, drop-deck trailer housing a full-scale Aqua MiniDisk® cloth media filter with monitoring and analytical equipment
- On-board SCADA system with data logging and remote access
- Customized filter design for primary treatment
- Enhanced solids settling zone below cloth media disk
- Flexibility to test pretreatment options including chemical addition and flocculation
- Specialized scum removal system
- Outside-in filtration
- OptiFiber PA2-13®, OptiFiber PES-13® and OptiFiber PES-14® (Microfiber) pile cloth filtration media available for testing
- Industry leading filter pilot services including test protocol, Aqua-Aerobic pilot technician, and comprehensive pilot study report



OptiFiber PES-13®

Applications for Primary Filtration

- Footprint savings compared to traditional primary clarifiers
- Increase plant capacity without increasing the size of the secondary treatment process
- Save energy through reduced organic load to secondary process
- Increase organics to anaerobic digesters for gas production



OptiFiber PES-14®

Industry Leading Pilot Services

- Customized Test Protocol: Outlines performance objectives and testing methods
- Services of an experienced Aqua-Aerobic pilot unit technician from start to finish for:
 - Supervised placement of the cloth media pilot trailer and necessary hydraulic and electronic connections
 - Process and mechanical operation of the pilot equipment for the duration of the test
 - Sampling, laboratory testing and analysis
 - Training plant personnel on operation and maintenance of the pilot unit
 - Decommissioning of the pilot unit at the close of testing
- A comprehensive pilot study report which includes:
 - Daily operating conditions
 - Influent and effluent turbidity charts
 - Influent and backwash flow rates
 - Particle size, suspended solids, phosphorus analysis (including speciation)
 - Other specific data, per customer request



OptiFiber® Primary Filtration Pilot System

Contact Aqua-Aerobic Systems for more information on piloting the OptiFiber Primary Filtration System at your plant.