OptiFiber®

Primary Filtration & Wet Weather Pilot System

Technology pilot demonstrations can be beneficial to wastewater treatment plants and wet weather systems 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 filtration that can also replace primary clarifiers as a wet weather treatment system. 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 facilities across the country that are looking for an efficient and cost-effective solution for primary filtration and wet weather treatment.

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 and wet weather 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 PES-14® (Microfiber) pile cloth filtration media and other application specific media are available for testing

Applications

- Primary Filtration
- Primary Effluent Filtration
- Stormwater
- CSO
- SSO
- High Solids Applications (Municipal and Industrial)

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