



# Filtration Systems

## Mechanical Particulate Removal

### Cloth Filter Systems

Auquix is pleased to offer woven polyester, nylon or polypropylene filter clothes in a satin finish for an ultimate barrier for suspended solids in tertiary treatment processes. The inside-out filtration design allows for a higher operating capability, ensuring a more sustainable operation in terms of maintenance attention, more throughput, better feed distribution, and increased solids treatment capacity. Auquix cloth filter systems offer flexibility for a broad range of flows and applications including water reuse, tertiary filtration and process water filtration. Cloth filter fabric is compatible with many corrosive fluids, including acids, alkalis, oils, organic solvents and microorganisms.

### Sand Media Filters Systems

Auquix sand media filters are designed for high rate general purpose water filtration and feature automatic backwashing. These permanent media filters will remove organic and/or inorganic suspended solids down to 20 microns in size. Through the use of automatically controlled backwashing, the filters will operate for extended time periods prior to cycling. Automatic filter operation is monitored on both elapsed time as well as pressure differential. When the controller signals for a backwash the actuated valves flush external water removing solids from the tank(s) and then the filtration process begins anew. The sand media filters utilize a epoxy coated side shell depth of 36" with uniform green sand filtration media. Systems include automatic valves and PLC controls. Each system is shipped as a packaged unit for easy installation and start-up. Standard inlet/outlet connections are flanged. Sand media filters are ideally suited for use in water pre-treatment (RO), reuse applications or as pre-treatment prior to cloth filter systems.

### Multi-Media Filters Systems

Auquix multi-media filters are designed for enhanced water quality filtration and feature automatic backwashing. These permanent media systems will remove organic and/or inorganic suspended solids down to 5 microns in size and will entrap greater amounts of suspended solids containments than standard sand media filters. Through the use of automatic backwashing, the filter will operate for extended periods of time before cycling. Automatic filter operation is monitored on both elapsed time as well as pressure differential. When the controller signals a backwash cycle external water flushes solids from the tank(s) and the filtration process begins anew. The multi-media filters utilize a side shell depth of 60" with layered graded beds of filtration media. Through the use of multiple layers of select filter media optimal progressive filtration is achieved. The first layers trap and hold larger solids while allowing smaller particles to be removed in subsequent media layers. The final media layer "polishes" the water removing suspended solids down to 5 microns in size. Multi-media filters are ideally suited for use where stringent water quality standards are required or where higher levels of suspended solids are present. These applications can include water reuse, water pretreatment for RO, or as final treatment of a post clarification process.

### Microfiltration Membrane Systems

Auquix offers microfiltration membrane system technologies as a cost effective and sustainable solution for wastewater and water reuse applications. Increased costs of conventional filtration methods and the highly effective separation and cost effectiveness of membrane microfiltration have brought it to the forefront of water production and reuse technology. Auquix has an on-going development commitment to R&D engineering coupled with eye on economy of installation and operation. Microfiltration technologies are available as stand-alone, pre-packaged units or as components for large projects.

