

# PHALANX™

## PACKAGED GRANULAR MEDIA FILTER

**Phalanx™ granular media packaged filter systems** are custom-designed in circular or rectangular tankage with unit capacity from 20 gpm to over 1500 gpm (multiple units used for higher flow rates). **Phalanx** is used for conventional water treatment, wastewater tertiary filtration, biologically active filtration, GAC adsorption and ion exchange, as well as denitrification (DDBF™).

Turbidity, pathogens, color, taste and odor compounds, suspended solids, phosphorus, iron, manganese, organics, ammonia, nitrate, arsenic, 1,4-dioxane, pharmaceuticals, and other contaminants may be removed by **Phalanx** with proper pretreatment.

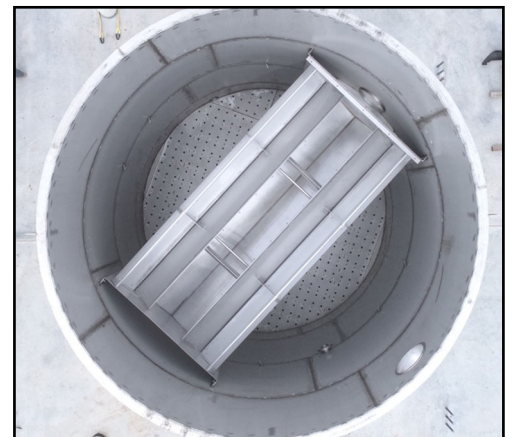


Manufactured of stainless steel or epoxy-coated carbon steel, **Phalanx** utilizes the combined air-water backwash process to clean dual- or mono-media designs to reduce water consumption and optimize cleaning. The addition of an Ortho-Wash™ baffled wash trough guarantees media retention and minimizes filter height.

Plate underdrains with Orthos Type D nozzles on 6" centers each way remove the need for gravel or other packing layers. Filter nozzles are constructed to properly retain media, negate fouling, provide appropriate pressure drop for backwashing, and effectively deliver scour air. Below the suspended underdrain, velocities are relatively low and changes are buffered, which reliably lead to excellent backwash and air distribution.

Fully-integrated controls include all hardware, programming, and instrumentation to fully automate **Phalanx** for numerous gravity filtration, contactor, and ion exchange applications. PLC-based control algorithms continuously monitor essential upstream and downstream process parameters to optimize the operation and minimize cost while enhancing effluent quality, meeting regulatory requirements, and ensuring safety.

Orthos' experienced engineers deliver the proper design and selection of media, pumps, blowers, piping, and valves to optimize functionality and longevity of the **Phalanx**. Process and structural analyses ensure that **Phalanx** delivers to clients their expectations of resiliency, reliability, repeatability, and longevity.



### Poseidon Filtration System®

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