

Poseidon Filtration System® — Ortho-Wash™ Media-Retention Trough

Guaranteed retainage of anthracite or GAC during concurrent air-water backwash

Key Benefits:

- Negligible media loss during concurrent air scour and backwash at prescribed rates
- Allows for sustained air scour with backwash
- Wide range of capacities
- Stainless steel construction provides long service life
- Adjustable baffles and weirs for optimum performance



Ortho-Wash™ Troughs with Pipe Outlet

Poseidon Filtration Systems® deliver to municipal clientele comprehensive process technology that includes Ortho-Wash™ controls, Centurion™ nozzle-based monolithic floor underdrains, air manifolds, backwash troughs, filtration media, pumps, blowers, valves, and instrumentation.

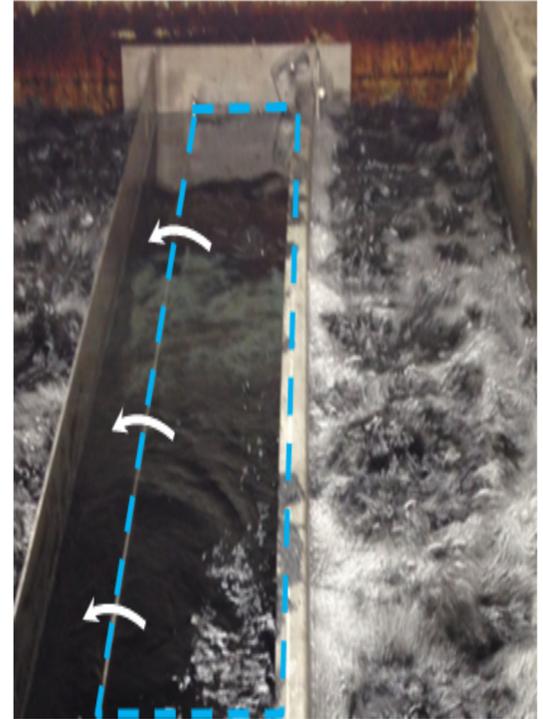


Poseidon Ortho-Wash™ media-retention troughs prevent media loss using specifically-engineered and integrally-mounted baffles that deflect air and provide an adjacent quiescent volume to settle out lightweight granular activated carbon (GAC) or anthracite.

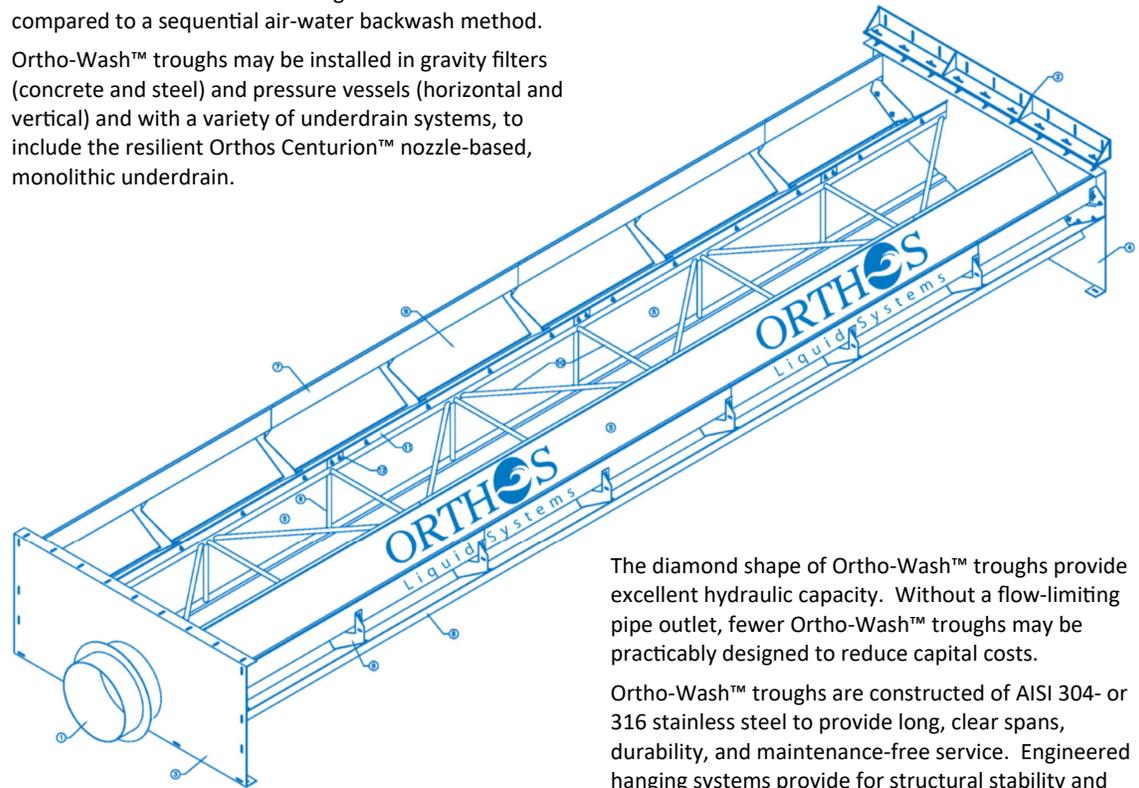
Used in retrofits of low-freeboard granular media filters or when sustained concurrent air-water backwash is desired, Ortho-Wash™ troughs employ a vertical baffle with precision-width slots to allow through-flow, while media is deterred from entering the quiescent area. Reduction of flow path velocities into the quiescent space allows Ortho-Wash™ troughs to effectively settle any problematic GAC or anthracite out of the baffled volume. The Ortho-Wash™ diamond-shaped trough, in conjunction with its adjustable baffles, reliably ensure negligible media loss during vigorous concurrent air scour with water backwash.

Filters without baffled troughs require approximately one vertical foot of freeboard between the filter media and trough bottom for every minute of concurrent air-water backwash. For low-freeboard filters, this may result in an insufficient amount of available time for concurrent backwash and media cleaning. Use of Ortho-Wash™ media-retention troughs allow for sustained concurrent backwash to more effectively clean the media bed while also reducing backwash volumes as compared to a sequential air-water backwash method.

Ortho-Wash™ troughs may be installed in gravity filters (concrete and steel) and pressure vessels (horizontal and vertical) and with a variety of underdrain systems, to include the resilient Orthos Centurion™ nozzle-based, monolithic underdrain.



Baffled Quiescent Area



Ortho-Wash™ Trough

The diamond shape of Ortho-Wash™ troughs provide excellent hydraulic capacity. Without a flow-limiting pipe outlet, fewer Ortho-Wash™ troughs may be practicably designed to reduce capital costs.

Ortho-Wash™ troughs are constructed of AISI 304- or 316 stainless steel to provide long, clear spans, durability, and maintenance-free service. Engineered hanging systems provide for structural stability and material compatibility.