

# Poseidon Filtration Systems® — U-Shaped Backwash Troughs

## Stainless Steel or Fiberglass Reinforced Plastic

### Key Benefits:

- Wide range of capacities
- Economic variety of solutions
- Reinforced for strength
- Long service life
- Adjustable straight-edge or V-notch weir plates available



Stainless Steel Backwash Troughs

*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.*



Fabricated from 304 or 316 stainless steel or fiberglass-reinforced plastic (FRP), *Poseidon* U-shaped backwash troughs are engineered to uniformly and efficiently remove washwater during backwashing of gravity filters. Troughs are manufactured in a wide range of capacities to meet any practical design requirement.

FRP models provide long life and low maintenance service with excellent resistance to sunlight and atmospheric conditions. FRP troughs are lightweight, permitting easy installation, yet designed for rigidity and to meet specific dimensional tolerances. Longitudinal and horizontal stiffeners provide reinforcement to prevent

twisting and deflection. FRP thickness is increased at least 50% at all support locations, flanges, and ends. Inner surfaces are smooth to minimize flow resistance. Stainless steel models provide the longest-lasting, corrosion- and maintenance-free service at competitive capital costs. Standard material is Type 304; however, Type 316 troughs are also available.

Spacing and elevation of *Poseidon* troughs are carefully determined so that dislodged suspended matter will be efficiently washed away and filter media will not be carried out. The required cross sectional area of a trough for a given design flow may be determined from the figure below.

