

Custom Built Ultrafiltration System Specification Sheet – Water Treatment/ Tertiary Wastewater



GWT Ultrafiltration membrane treatment systems are designed and engineered to clean water from a variety of water sources including rivers, lakes, wells, greywater, seawater and tertiary wastewater. Ultrafiltration treated water can be used for drinking water, water reuse and for seawater reverse osmosis pretreatment based on feed water quality.

Standard Features:

- ✓ *Excellent filtration performance with ability to achieve high flux rates with minimized fouling*
- ✓ *High temperature tolerance and chemical resilience to provide effective membrane cleaning*
- ✓ *Very fine nominal pore diameter (0.02 μm) filtration performance*
- ✓ *Low fouling membrane modules reduces cleaning frequency*
- ✓ *Excellent removal efficiency of TSS, turbidity, trace oil/grease, and microbiological contamination*
- ✓ *Can be periodically back washed to extend operating life by removing the fouling layer on the UF membrane surface.*
- ✓ *Modular, compact systems are easy to install to minimize the associated civil construction costs.*
- ✓ *Available in two system configurations (outside-in or inside-out) that are chosen based upon the water analysis of the feed water to optimize system performance and reduce operating costs.*
- ✓ *Intelligent PLC Operation with HMI*

Optional Features:

Optional Features: Clean In Place System (CIP)

Pretreatment Systems (Based on Specific Application)

- System Crating

Inlet Feed Water Specifications:

- ✓ *Feed Water TSS: Max. 300 NTU Surface Water / 1000 NTU (Wastewater Reuse)*
- ✓ *Optimum Water Temperature: 65 F – 85 F (18-30 C)*
- ✓ *pH range: 3-11*
- ✓ *Hardness: > 1 Grain Per Gallon requires pretreatment*
- ✓ *Chlorine Tolerance: 200ppm for cleaning cycles*
- ✓ *Max. Pressure: 75 psi (5 bar), 20 psi (1.38 bar) transmembrane pressure*
- ✓ *Power: 220/460V/3ph/60hz or 220/400v/3ph/50hz*

Applications:

- Municipal Drinking Water for Surface Water & Well Water Treatment
- Seawater Desalination Pretreatment
- Greywater Reuse
- Tertiary Wastewater Reuse (Municipal/Industrial)

GWT® series Ultrafiltration systems are custom designed and fabricated modular systems, built in accordance with the clients feed water source and flow rate requirements.