

XtremeUF

Robust Ceramic Ultrafiltration: Engineered Package with Self Cleaning Controls

- Consider XtremeUF where polymeric UF does not apply
- Remove suspended solids and organics from the most challenging slurries and impacted wastewaters
- Two sizes built into a tidy package: 100 and 600 m³/day
- Intelligently automated to maintain performance
- High tolerance to a wide range of input waters, turbidity, oils, grease, chemicals, pH and temperature
- Corrosion resistant materials of construction for high salinity
- Commodity ceramic membranes available from a broad supply chain, not linking you to a single supplier
- Built-in redundancy



Polymeric or Ceramic?

Ultrafiltration (UF) filters out particulate, bacteria, viruses, oils and grease greater than 0.01 micron. UF is widely used in wastewater treatment, often with polymeric membranes. When traditional polymeric UF does not meet your needs consider Saltworks' XtremeUF.

Parameter	Typical Polymeric UF Limits	XtremeUF Limits
Total Suspended Solids, TSS (mg/L)	100	100,000
Maximum particle size (µm)	300	1000
pH Continuous	3-9	1-12
pH Temporary	2-11	0-14
Turbidity (NTU)	300	No limit
Total Organic Carbon, TOC (mg/L)	40	1000
Chemical Oxygen Demand, COD (mg/L)	60	No limit
Oil and Grease (mg/L)	2	1000
Temperature (°C)	40	85*

*Limit of CPVC piping. Membrane temperature limit is 300°C. UF vessels de-rated to 60°C for ASME rated units, or alternative higher cost ASME vessels can be fitted.

Sizing

Ultrafiltration capacity changes with inlet water quality. The table below is based on a flux of 280 LMH (litres m² per hour) / 165 GFD. Refer to the water quality figures on the next page to estimate your capacity.

	X-UF 100	X-UF 600
Inlet Water Specification	Any, contact us	Any, contact us
Rated Filtrate Capacity (m³/day)	100	600
Nominal Power (kW)	10	50
Skid Weight (tonne)	4	10
Skid Dimensions (meters)	3.7L x 2.3W x 2.6H	7.3L x 3.0W x 2.9H
Filtration Pore Size (µm)	0.01; 0.05; 0.1; 0.5; and 1.2 μm	





XtremeUF 100 Performance



XtremeUF 600 Performance



XtremeUF Recovery and Flux



XtremeUF Energy Performance



Pilot and full-scale plants available. Contact us with your project needs.