

Twin Ultra™ Greywater Recycling System

Enterprise Ventures Corporation's (EVC's) Twin Ultra Greywater Recycling System treats greywater from laundry, sinks, showers, and other commercial and industrial sources and recycles the treated water for use in washing machines and other non-potable sanitary systems. This system fulfills greywater recycling needs in multiple markets:

Federal Government • Military • Local Government • Industrial • Commercial • Mining • Hospitality
Multi-Family Residence • Higher Education • Oil & Gas • Manufacturing • Disaster Relief

System Benefits:

- Reduces costly water and wastewater utility bills
- Features a fully automated computer interface with minimal operator time requirements
- Includes scalable, modular, portable systems that are energy efficient and low maintenance
- Uses membrane filtration technology, enabling benefits such as filtration path stability; reduced maintenance and operator time; instant system startup; and the ability for computer controls, continuous monitoring, and real-time adjustments
- Enables businesses to exist where water recycling is required or in regions with restricted water availability
- Lowers water and wastewater hauling costs and risks for military and temporary installations
- Provides social and environmental benefits, especially for water-scarce regions and disaster relief operations across the U.S. and abroad



**Twin Ultra 10,000 gal/day (38m³/day)
skid-mounted, water recycling system**

System Specifications:

Operating Parameter	Value	
Acceptable input wastewater ¹	Greywater from laundries, laundromats, showers, and sinks. Able to treat many other non-blackwater commercial and industrial wastewaters.	
Gross Nominal Design Capacity	10,000 gal/day (gpd)	38m³/day
Net Nominal Design Capacity ²	7,000 gpd	26.5m³/day
Percent Recycled ²	70%	
System Size	114" (L) x 50" (W) x 70" (H)	290 cm (L) x 127 cm (W) x 178 cm (H)
Maximum water temperature ³	104-135°F	40°C - 57°C
Factory set point for produced water pH ⁴	6 to 8	
Disinfection method	UV (default), chlorine, or ozone	
Maximum ambient air temperature	104°F	40°C
Minimum ambient air temperature	33°F	0.5°C
Input Voltage	208 or 480 VAC, 3 phase	
Frequency	50-60 Hz	
Peak Electrical Process Power	8 kW	

¹ For non-traditional greywater, please contact EVC regarding your specific wastewater composition and our system's ability to treat and recycle this wastewater.

² Percent recycled can be factory adjusted between 60% to 90%. 70% is optimal percent recycled for the least energy input per unit treated. Net design capacity and percent recycled is site specific and may vary depending upon influent water quality.

³ Maximum water temperature limited to 104°F (40°C) when UV disinfection is used. Higher water temperatures up to 135°F (57°C) achievable with chlorine disinfection.

⁴ Produced pH range can be adjusted by the manufacturer.

Manufacturer's specifications are subject to change without notice.



Innovative Solutions for a Complex World

Continued



Custom Designed for Your Greywater Recycling Needs

EVC offers the Twin Ultra product line that is capable of meeting your needs for nearly all greywater recycling applications. Our Twin Ultra base model is optimized for energy-efficient treatment for most low to moderate detergent laundry applications. For laundries processing heavily soiled fabrics where high detergent and chemical use is required, EVC offers the Twin Ultra Plus™, which adds a reverse osmosis module for removal of dissolved solids (i.e., salts), nutrients, and heavy metals. The Twin Ultra is suitable for recycling in systems not exposed to direct human contact, while the Twin Ultra Plus can be recycled in non-potable applications where human contact occurs, such as use in showers, sinks, etc.

Which System is Appropriate for Your Treatment Removal Needs?

Removed During Treatment	Twin Ultra	Twin Ultra Plus
Dirt (e.g., turbidity)	✓	✓
Most detergents	✓	✓
All detergents		✓
BOD/COD for recycling	✓	✓
BOD/COD for surface discharge		✓
Salts and total dissolved solids		✓
Fats, oil, grease	✓	✓
Heavy metals		✓
Organically bound nutrients	✓	✓
Nutrients		✓
Pathogens	✓	✓

How Would You Like to Recycle Your Water?

Recycling Capability	Twin Ultra	Twin Ultra Plus
Soap and initial rinse cycle	✓	✓
Final rinse cycle		✓
Recycling into a hot water tank		✓
Surface discharge		✓
Sink/shower human contact recycling		✓

Contact

Mark Pitterle, Principal Water Engineer, 814-269-6835, water@evc.ctc.com

Visit our website: evc.ctc.com

EVC's quality management systems are certified to the ISO 9001:2015 (Quality) and 14001:2015 (Environmental) standards, and to AS9100D:2016 (Quality-Aerospace-Related Products).