




## Expurgo™ Series in Recreational Aquatic Applications


### Why use Ultraviolet (UV) Disinfection?

 Inactivates potentially harmful organisms such as bacteria, viruses, cysts, protozoa, and even chlorine resistant Cryptosporidium and Giardiasis, rendering them incapable of replication.

 No disinfection by-products are formed, pool chemical balance is unaffected, super-chlorination is eliminated, and maintenance personnel cannot overdose with UV.



Reduces chloramines which create the unpleasant odour in the pool environment, cause bather and staff eye and respiratory irritation, and corrode the facility's fittings and HVAC equipment. 

Reduces fresh water and chlorine consumption. Chlorine storage and handling requirements also drop due to the much lower Chlorine residual. 

### Why specify the Expurgo™ Series?



The electropolished, 316L stainless steel UV Reactor houses more lamps per volume of flow than MP. This provides a more uniform UV intensity field and inherent degree of redundancy. Consider the situation where a single lamp fails in a 2-lamp MP system versus an 8-lamp amalgam lamp system.

The heart of our UV Systems is our *UV-Xtender™* amalgam lamps which emit over 400% more 254nm UV than standard low pressure lamps, are over twice the efficiency of typical medium pressure (MP) lamps and have an operating life up to 16,000 hours...2 to 3 times that of typical MP lamps. We warrant our lamps for 13,000 hours!



Our *Hi-E™* electronic ballasts boast an energy efficiency of 94%. This factor along with the high efficiency of our *UV-Xtender™* amalgam lamps keep the annual energy costs at least 50% lower than MP systems.



A standard Industrial Programmable Logic Controller (PLC), controls, monitors and reports the operating status of the UV System

via an LCD display and panel indicators. A calibrated, ultra stable, UV Sensor monitors the 254nm UV irradiance within the UV Reactor.



A safe 120°C lamp operating temperature significantly reduces the potential for overheating damage and quartz sleeve fouling associated with the 900°C typical operating temperature of MP lamps. Our *UV-Xtender™* lamps also provide a much more stable output with variations in water temperature, as compared to standard output lamps.



Access the amalgam UV lamps in just 2 seconds with our proprietary waterproof bayonet fittings.