



**PLANET FRIENDLY®**  
Est. 1994

## **Solve ODOR and ALGAE Problems in Car Wash Reclamation Systems**

By: Larry Couture

Municipal regulation of new car wash construction requiring reclamation systems has created specific challenges in water treatment with most sites experiencing noxious odors and algae growth on the walls due to the reclamation water.

ECOsmarte oxygenation/ionization systems have been installed since 1999 in Michigan, Maine and Minnesota with specific success utilizing the existing water treatment equipment onsite. Installation time for the average six bay wash has been accomplished in less than 2 hours. The DC voltage controller, self sacrificing copper anodes and titanium/platinum oxygenation anodes operate at a cost of about \$50 per bay, per year with 30 minutes of quarterly maintenance.

In 2009, the addition of low pressure, high flow rate glass media filtration has been engineered to better separate solids using the glass and oxygen in a swimming pool sand filter platform.

On each site the algae build-up on the walls stopped (in both summer and winter) and the odor has been virtually eliminated. The algae itself is often a source of the odor but the reclamation sump is the ultimate culprit with soaps, minerals, dirt and plant spores creating an optimal environment.

Source water dissolved oxygen (DO) levels are increased from 2 to 3ppm to 6.0 to 6.5 range ppm and a low level copper ionization level of .2 to .4ppm is maintained through both programmable and flow switch controllers. The increases in DO are true in both hot and cold water, and regardless of ph.

Maintenance personnel maintain the copper residual with a simple Lamotte EC 70 test kit, a 5 drop reagent and quarterly cleaning of the anodes in a diluted acid wash.

The reclamation system can be installed as part of a new car wash build or added to all existing water treatment strategies.



**The addition of a simple ECOsmarte electronics package to the existing water treatment equipment with a glass media filter will enhance separation of oils and solids as well**

1600 East 78th St. Richfield, MN 55423  
(612)866-1200 (800)466-7946 US, Canada, Mexico  
[www.ecosmarte.com](http://www.ecosmarte.com)  
[www.glasspackfilter.com](http://www.glasspackfilter.com)



## TECHNICAL SPECIFICATIONS

### **MECHANICAL & PLUMBING**

Operating Press. Max. 150 PSIG  
 Operation Temp. Max. 120° F  
 Tank listing and structural integrity requirements only.

### **OXYGEN ELECTRODES**

Proprietary composite material

### **IONIZATION ELECTRODES**

100% Pure Copper

Ozone or UV Bulb replacement will generally not be required after installing an ECOsmarte Package.

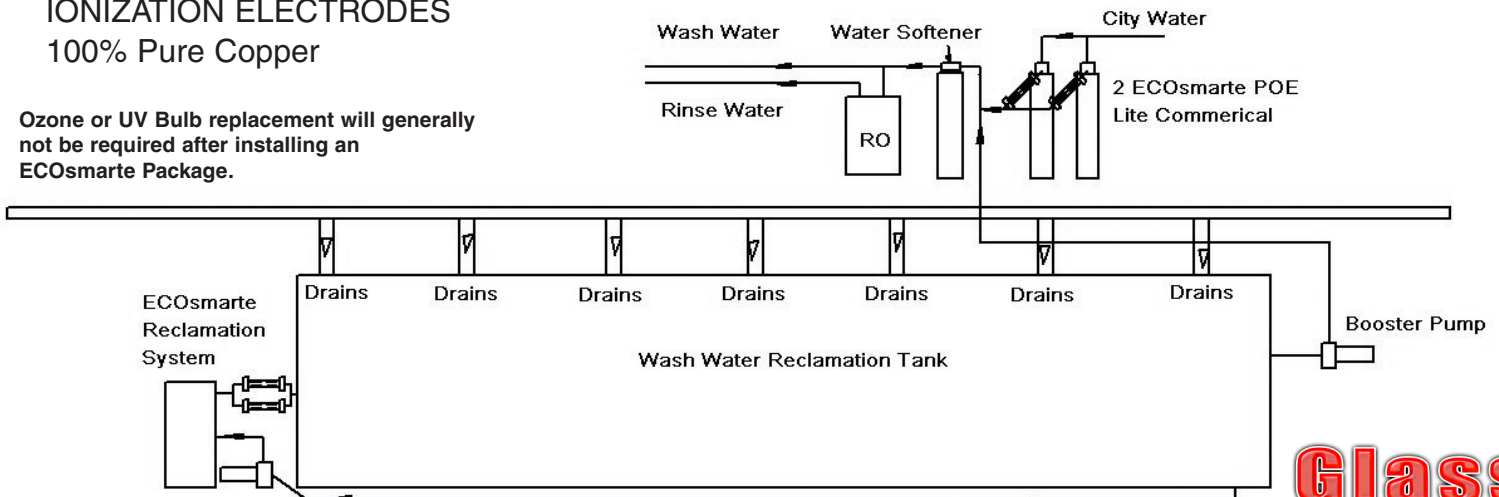
### **ELECTRICAL**

Input Voltage: 110 to 267 Volts, Specify  
 Output Voltage: 100 VA Class UL CSA  
 Compliance Power Supply  
 GPM: Each Unit 5 GPM to 200 GPM

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Multiple Bay Systems May Require More Than One Electronics Package.



**Glass Pack®**



Existing bag filters may or may not be used, depending on existing water treatment.



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