



By James Follensbee & Jack Wallace

# A Solution for Scale Removal

The Brookfields Restaurant chain consists of three large eateries located in and around Sacramento, Calif. Like many others, Brookfields Restaurants were equipped with water softeners to control lime scale on their hot water equipment, which consists of hot water heaters, dishwashers, steamers, coffeemakers and espresso machines.

Even with the softeners, Brookfields Restaurants managers reported that flatware looked dull and did not appear clean. Both flatware and dishes were also covered with water spots, and employees regularly had to clean lime scale deposits from the stainless steel appliances. Owner Sam Manolakas was concerned that even though flatware

and dishes were cleaned and sterilized, their appearance would cause customers to question their cleanliness. The restaurants triple-filtered their incoming water, but hard water problems persisted.

## Alternative Options

Manolakas began to look for alternative methods that would save the costs of managing the 11,000 gal of water used in each restaurant per day. In December 2010, Green-HVAC Solutions, a California-based representative of HydroFlow Holdings-USA LLC, installed HydroFlow HS-48 water conditioners at each restaurant and shut off or bypassed their water softeners.

The systems do not use salts or chemicals; rather they apply an electrical

Water conditioners resolve restaurants' spotty dishes



Green-HVAC Solutions installed a model HS-48 conditioner in each of the three Brookfields Restaurants.

Scale was an issue on all of the restaurants' hot water equipment.



field to the water and pipes that affects the ions in water that cause scale. The systems work via a Hydropath Signal, which travels throughout the water system at close to the speed of light and causes ions to form small suspended crystals in the water, rather than a mass of crystals on pipes or equipment. The electrical signal consists of high-frequency oscillations that gradually die away or decay, and then repeat at varying intervals.

Water can hold a certain amount of dissolved minerals. It becomes less able to hold minerals under certain conditions, such as when it is heated or when it experiences a drop in pressure. When this happens, scale begins to form on available surfaces, like the inside of a dishwasher or its contents. The Hydropath Signal induces an alternating electrical current in the water that causes atoms or molecules that have either a positive or negative electrical charge to combine and form crystals that are easily washed away by the water flow.

### Installation Outcomes

Within a few days of installing the new water conditioners, employees reported that flatware and dishes were shiny and clear. In addition, the stainless steel appliances were easier to clean. Minerals still left some water spots, but they could be easily wiped off with a dry cloth. After 30 days, it was determined that the Madison Avenue restaurant needed an additional small S-38 SteamKlear water conditioner for its dishwasher due to the higher mineral content of the incoming water at that location.

## Pure Elegance

What the well-accessorized kitchen sink is wearing these days – a new RO faucet available in eight designer finishes. Made of high quality lead-free brass for serious up-sell potential. Comes with an air gap; retrofits most brands. Call and order yours today!

**tomlinson**<sup>®</sup>

*World Class, Worldwide*

Phone: 216-587-3400 ext. 279  
Fax: 216-587-0733  
[www.tomlinsonind.com](http://www.tomlinsonind.com)

©Tomlinson Industries 2005 ELE-1-1



Certified to NSF/ANSI 41 Section 9-3

Write in 766

The staff reports that since installation, dishes have fewer spots and stainless steel appliances are easier to clean.



Manolakas was pleased with the results of the new water conditioners, reporting that the devices were remarkable in their ability to remove scale and produce shiny dishes and flatware. Each restaurant is able to save approximately \$1,800 per year on softener maintenance and salt.

The new water conditioners also allowed the restaurants to use fewer chemicals for cleaning and dishwasher care. Installation required no plumbing revisions and was completed in minutes. The systems require no maintenance and consume less than \$5 worth of electricity per year. Additionally, they take up less space than the restaurants' previous water softeners. *wqp*

James Follensbee is a managing member of Seamus Capital LLC, Illinois distributor for HydroFlow Holdings-USA LLC. Follensbee can be reached at [jfhydroflow@att.net](mailto:jfhydroflow@att.net) or 224.532.6065.

Jack Wallace is president and CEO of Green-HVAC Solutions. Wallace can be reached at [jack@green-hvac.com](mailto:jack@green-hvac.com) or 925.698.3776.

For more information on this subject write in 1004 on the reader service card or visit [www.wqpmag.com/lm.cfm/wq121104](http://www.wqpmag.com/lm.cfm/wq121104).

**UV SUPERSTORE**

Finding the right parts  
got you puzzled?

**WE CAN HELP!**

820 Tucker Ct. • Winder, GA 30680  
[t] 770.307.3882 [f] 770.307.3872  
[e] [Sales@UVSuperStore.com](mailto:Sales@UVSuperStore.com) [w] [www.UVSuperStore.com](http://www.UVSuperStore.com)

Write in 767