

SALT SYSTEM MYTHS

THERE IS NO denying that salt-chlorine generators (SCGs) have become increasingly popular in recent years. Pool industry data estimates that approximately 25 percent of in-ground and 10 percent of above-ground pools use an SCG to sanitize their pool water. Although SCGs do provide some benefits, it is important to realize that there are several myths associated with using these devices.

“I DON’T USE CHLORINE. I HAVE A SALT POOL.” Many of us in the industry have heard this statement or some variation of it from a pool owner while in the retail store or field. Then there is the story of the pool owner who claimed that the service technician ruined the pool by adding chlorine to the owner’s “salt” pool. Obviously, as pool professionals, we understand that a pool sanitized by an SCG is indeed a chlorine pool. However, there are still pool owners who truly believe they do not use chlorine. These pool owners may have simply gone out on their own to purchase and install a unit and just didn’t understand the technology, or worse, may have had a unit installed by someone in the industry who simply failed to inform them. In either case, it comes down to educating the pool owner about the SCG technology and sanitization process.

“JUST SET IT AND FORGET IT.” The fact is that all swimming pools, regardless of their sanitizer choice, require constant testing, adjusting and balancing. The SCG is simply producing chlorine for the pool; all other balances, including total alkalinity, pH, calcium hardness and cyanuric acid (CYA) need to be monitored and adjusted as needed. It is also important to note that the typical SCG unit simply runs for a set amount of time, based upon the percentage output (usually 20 percent–100 percent) set by the user. For example, a setting of 60 percent output would operate the unit 36 minutes for every hour the device is on. The typical SCG does not test for free available chlorine and does not know the bather load, amount of contaminants in the pool water, the weather, etc., and may need to be adjusted from time to time depending on these variables. In addition, as the unit ages, the device loses output strength and may need to be set at higher and higher output percentages. Bottom line: the pool owner/ service tech still needs to test and then adjust and balance the pool water based on water test results.

“SALT POOLS USE LESS CHLORINE.” All chlorine sources, whether an SCG, chlorine tablet, stick, granular or liquid, yield hypochlorous acid in the pool water. Most industry professionals and organizations recommend maintaining one to four ppm free available chlorine at all times. Bacteria and other contaminants in the water will require the same amount of chlorine for control regardless of how the chlorine gets added. And don’t forget, the SCG is only producing chlorine when the circulation system is operating and the device is turned on.

“SALT POOLS COST LESS TO OPERATE.” In addition to the cost of the SCG unit and installation, there are other costs to consider. An SCG typically needs a replacement cell three to five years down the road. There’s also the cost of additional electricity, not only to operate the SCG, but also to run the circulation pump, usually a minimum of 10–12 hours per day. After adding up all of the costs for these items, SCG pools could cost more to operate than traditional chlorine pools. If a customer has not been properly informed about the operation costs and they are ultimately higher than the customer believed they would be, there is the chance the customer’s trust and business could be lost forever.

“SALT POOLS ARE MAINTENANCE FREE.” The reality is salt pools do require maintenance. Most SCG manufacturers recommend periodic cleaning of the internal cell to prevent damage and premature failure, usually associated with scale formation. Even units that reverse polarity between the anode and cathode may require cleaning with either a salt cell specific cleaner or a form of diluted muriatic acid. It’s important to follow the manufacturer’s recommendations for preventing and removing scale. In addition to balancing the water, most salt pools will, at times, need additional shock, algaecides, flocculants and sequestering agents to protect the surface and maintain water quality. In fact, one survey¹ indicated that more than 70 percent of SCG pool owners used these types of products. Some of them even admitted to adding chlorine tablets to their skimmer to supplement their daily chlorine need. Also, since a by-product of the chlorine generation process is caustic soda, there is typically a constant need to lower the pH of the pool water. And along with a persistent high pH (>7.8), there is a reduction in chlorine efficiency. Finally, both the salinity and cyanuric acid levels of the pool water should be tested periodically. Pool salt and cyanuric acid should be added as needed to maintain their suggested levels, as each SCG manufacturer has specific recommendations for both salinity and CYA.

“SALT POOLS ARE ENVIRONMENTALLY-FRIENDLY.” The fact is that salt water is harmful to most plants and animals. SCG pool owners must understand that discharging pool water onto their property, their neighbor’s property or into the local storm sewers has the potential to cause harm to plants and animals either on-site or downstream. In doing so, they may be violating city or county codes. Several cities already prohibit SCG pools from discharging into either the storm drain systems or sanitary sewer systems, and others have banned SCG installations completely. As industry professionals, it is our responsibility to properly educate and advise our customers on any chemical or equipment we provide them. This includes the perceived benefits as well as the realities of using the products. By being upfront and honest, we not only earn the respect and trust of our customers, but help continue to positively move our industry forward.

Generators Understanding Myths and Truths SALT-CHLORINE by Paul Gillio 18 www.nespool.org

Paul Gillio is senior technical service representative, Arch Chemicals, a part of Lonza. He is a 25-year pool and spa industry veteran. His positions include commercial sales, retail sales, manufacturer’s representative and territory sales manager. Employed with Lonza for past 10 years, he is currently working in the technical services area and managing the firm’s water testing and diagnostic programs.