

Pass on the Salt

Many people are going the route of installing a salt generator system for disinfecting their pool water. Heschmeyer Pools **strongly** recommends **not** using salt in your pool. Let set some facts straight.

- Salt does convert to chlorine and will disinfect your pool.
- Salt does soften water.
- And salt systems are simple to use.

So, why not install a salt system? The disadvantages far outweigh the advantages.

- Salt is corrosive and damaging to your pool structure, equipment, pool deck, etc.
- Salt systems cost more to operate than using standard chlorine.
- You are not getting away from using chlorine as many people think. You are simply using salt to create chlorine.

A salt system begins with installing a salt cell to the swimming pool's circulation system. This device contains metal plates and is connected to a power supply. When salt water passes over the electrically charged plates, it separates salt into its two components: sodium and chlorine, which then disinfects the pool.

Most residential pools require adding 600 to 1200 lbs. of salt initially to activate the salt generating system. Then pool owners need to test and add more salt as needed during the season to keep the system operating effectively.

The drawbacks to this highly advertised system are many. Let's start with cost. First, the upfront cost for a residential salt cell, installation, and start up salt will usually be over \$1200.00. Salt cells last about 3 seasons so you have to replace the cell every few years. The current range for residential salt cell replacements runs from \$600.00 to \$900.00. Additionally, there is now another electrical appliance adding on to the electric bill every month. These are not the only costs; there are additional products that must be purchased for proper operations of a salt water pool.

Salt water systems run high on the pH scale. Chlorine does not work effectively in high the pH range, so pool owners need to add acid to lower the pH. Obviously, handling liquid or dry acid is dangerous. Pool owners also need to add stain protecting chemicals to keep the salt water from causing stains. They must also add scale control products to minimize the scaling effects of salt. The chlorine that is produced by a salt generating system is called unstabilized chlorine and is around a 12% available chlorine. This chlorine burns off rapidly in sunlight, so pool owners have to add stabilizer to their pool water each time they add salt.

Another major drawback from salt related chemistry is the soft water that salt creates. Sure it feels good on the hair and skin, but the water does not want to be “soft” by nature. It will begin taking calcium from your pool’s finish in order to maintain its natural hardness. This cause pitting and roughness on your plaster finish, with sore and cut feet as a result. Pool owners need to add calcium pellets to their pool to counteract this side-effect of salt.

Next consider the corrosive, destructive side –effects of salt. Even though salt generating companies claim that salt isn’t corrosive at the 3200ppm that their systems require to generate chlorine, they are misleading buyers. If the pool is not electrically bonded properly and there is a stray current—something no pool owner would know prior to purchasing a salt cell—the salt will create huge black staining around all metal objects in the pool, (i.e. lights, screws, ladders,...). Salt water on swimmers, gets transferred to the pool deck through splash out, footprints, etc. and leaves behind high levels of salt concentrations that can eat away at concrete and stone over time. Pool ladders that are anchored into the deck with metal anchors become wedged in and cannot be removed due to scale build up within one to two seasons of use. If salt is not corrosive, ask the salt generating companies why they also sell “sacrificial” metal rings to put in skimmer baskets. These are weaker metals designed to get eaten up instead of your metal ladder or light when there is a stray current issue.

Additionally, during the past few seasons of increased salt system usage, swimming pool pump companies have begun selling different, stronger motor seals for their pumps due to the high number of motor seals that have failed from salt complications. Pool heaters are beginning to fail due to scale build up caused by salt. Unsightly white scale deposits also form above the water line on tile, coping and decorative stone. Metal legs on pool deck furniture and tables will start showing signs of rust due to salt water as it evaporates and swimmers sitting on the furniture with salt water swim suits. Indoor carpet, tile, and furniture are not exempt from salt’s effects as swimmers enter the house and sit on furniture, use the restroom, or change out of their bathing suits.

Finally consider that the salt cells are not efficient. They do not produce chlorine in cool water so you still have to keep chlorine products on hand for use during cooler periods, or run your pool heater to keep the water at 80 degrees, or higher. Salt cells have limits on how much chlorine they can produce in 24 hours, so in extreme heat wave conditions, a pool owner may need to add more chlorine to keep up with the demand.

If you want chlorine in your pool add chlorine, not salt. If you want softer water you can simply add a bag or two of salt for a silky feel without the side effects of adding a ½ ton of salt to your pool.