Salt water systems corrode the pool equipment.

The Facts - The salt itself has issues of attacking the cement in the plaster and deck materials. This is a relatively slow process when the salt levels are low. The salt also can kill any landscaping in or around the pool as well as in the backwash area.

If the sodium hypochlorite levels are too high, the corrosion is caused by the chlorine being produced by the electrolytic cell. Chlorine can bleach the test reagents, giving you a "false negative", and people can grossly over-chlorinate their pool damaging equipment, the pool surface, lighting fixtures, and ladders. Over time the salt will attack any area the water evaporates at.

A common problem is corrosion at the ladder. The deck anchors are usually cast aluminium and the ladder should be stainless steel. The salt water will corrode the anchors overtime and a "safety event" will be pending.

Buyers should be aware that if you have salt water above 2800 ppm, (often 4000 to 5000 ppm), you will need to reseal your coping every year, especially if it is a porous stone like limestone or travertine. Otherwise, the salt will dry and start to etch the coping. Besides sealing the stone, it is also advisable and an added precaution to hose down the coping at the end of any swim day with fresh water. Although the salt water in the pool may not be corrosive at levels of 3000-3500 ppm, when that water hits the coping and evaporates, it leaves pure salt behind. The pure salt is corrosive and is the main cause of the corroding coping. Most auto cover manufacturers now void their track warranty if a salt system is used.

Some pool builders are now refusing to build any salt water pools with cream limestone or taupe coping. Any customer that wants either coping for a salt water rock or gunnite pool must usually sign a release form. Pool builders have said that they have had to replace a significant amount of both these types of coping this past year. Cantilever designs simply disappear as the stone dissolves away.

Salt water systems require chemicals almost every week.

The obvious weekly use of muriatic acid is combined with the not so obvious need to use cyan uric acid to guarantee your salt chlorine generator can achieve 1-3 ppm chlorine residual in your pool. Since salt water pools produce chlorine, the sanitizing effectiveness of the system is impacted by changes in temperature, bather load, sunlight and rainfall. CYANIDE based, the CYANURIC acid is euphemistically referred to as conditioner or stabilizer and must be maintained between 35 and 85 ppm. Stabilized levels over 100 are harmful to children, pets, older swimmers, the pool itself and of course the environment.

Occasional algaecide, clarifier, stain and scale control and shock will be needed with a salt chlorine pool (maybe slightly more than a stabilized "puck" pool) and only the handling of the solid chlorine is avoided. Numerous other sanitation devices will cut overall chemical use, a salt system will not.

You must worry about the pH with a salt system and do regular maintenance or you will destroy the pool and have zero recourse.

The Fact - When the pH and alkalinity get out of balance, the chlorine is much less effective. The pH should be 7.4-7.6. Chlorinating with a salt water chlorinator is similar to chlorinating with liquid chlorine-- they both have a high pH (11.7). One common problem is that homeowners tend not to test their pools' pH and alkalinity enough. Unfortunately, too many builders and retailers sell these systems as a "set it and forget it" solution. Most people with salt systems will run their pH from 7.8-8.0. This is bad for two reasons: 1) the pool is in a scaling mode, and 2) the chlorine is locked up by the basicity of the higher pH. It is best to run between 7.4-7.6 when using chlorine. Lack of pH management can ruin the cell in less than 90 days, scaling up the swimming pool as well as the cell. "Improper chemical use" will void any warranty, a system employed by portable spa manufacturers on delaminated shells and first year heater failure.

Salt systems are more harmful to human health than conventional chlorine, bromine or bioguanide chemicals.

With a salt system your skin will absorb sodium, salt, AND chlorine, versus just the halogen with a chemical sanitizer such as chlorine or bromine. Sodium absorption through the skin has long been known to present health risks at levels far below the 3000-5000 ppm levels salt chlorine generators require. For nearly 20 years people with high blood pressure, stroke history or other circulatory system issues have been asked to stop using their water softeners (at 200-400 ppm sodium in the water for just ten minutes in the shower) to avoid the heart mortality risks. The chlorine level and skin absorption of the chlorine is still based on the same 1-3 ppm chlorine residuals found, dioxin forms (as do chloramines) and the backwash water contains 3000 ppm or more chlorides.

Salt systems are damaging to the environment and have been banned on all pools in areas such as Los Angeles County.