



THE POOL PROFESSIONAL'S

# Guide to Salt Chlorination



### Objection #3

#### Cells don't last that long.

Salt cells are wearable items that need to be replaced periodically. How often? It depends on how well it is cared for—like an automobile. With proper care and attention to water chemistry, we expect consumers to realize the following total chlorine output over the life of the product:

Cell Type	Total lbs of chlorine generated*	Minimum Advertised Price (MAP)	Cost per lb of chlorine
T-Cell-3	210	\$225	\$1.07
T-Cell-9	385	\$389	\$1.01
T-Cell-15	580	\$549	\$0.95
TCELL925	480	\$429	\$0.89
TCELL940	725	\$599	\$0.83

\*as Trichlor equivalent

**Typically, we see cells last 5,6,7 years or more.**

U.S. EPA  
Freshwater is defined by the EPA as being comprised of 6000ppm or less salt. Ocean water has 30,000 ppm or more

## Objection #1

### Salt is corrosive.

Salt water pools at 3000 ppm have mild salinity—and meet the definition of freshwater by the EPA in the U.S. and Canada. With nearly 2 million salt systems installed, there are only a handful of reports of corrosive behavior including:

- Metals that are not properly bonded or grounded or are incompatible with pool water in general.
- Some stone will spall (or flake) when exposed to even mild salinity. These same stones have been found to be well behaved if they are properly sealed. In fact, all stone work around a pool, no matter what sanitizer is used, should be sealed.

## Objection #2

### I can find it cheaper online.

Today's consumers are internet savvy and they are always looking for a better deal. But internet shopping has its limitations and there are many benefits to shopping at a brick & mortar retailer:

- Product expertise
- Products are available to see and demo
- Instant gratification
- Professional installation - Consumers are typically not comfortable cutting and gluing plumbing, or performing the electrical work necessary during an install. Always quote new Salt Systems with professional installation.
- Professional Service - ensures proper care, product longevity, and a greater chance at gaining replacement cell business.

Benefits of Salt Chlorination.....	4, 5
How Salt Chlorination Works.....	6
Getting a Proper Start.....	7
FAQ's.....	8, 9
Common Misconceptions.....	10, 11
How to Service a Salt Pool.....	12, 13
Product Line up .....	14
The Truth about Salt Chlorination Costs.....	15
Making \$\$ from Salt .....	16
Worksheet .....	17
Common Sales Objections .....	18, 19
Hayward Knows Salt .....	20



## Comfort

Traditional chlorine, when combined with swimmer waste and bacteria in the water, creates chloramines. Chloramines cause common undesirable side effects associated with chlorine.

**Salt Chlorinators continuously oxidize, or eliminate chloramines, and create 100% pure "Free Chlorine"**. With salt chlorination, your customers will have:

- Less irritation to eyes and skin
- No bleaching of hair, bathing suits, and toys
- Elimination of chlorine odors, especially important in indoor pools
- Luxuriously soft water
- Unmatched water quality that they can actually feel the difference

## Common Salinity Levels

Salt Chlorination 2,500 – 3,500 ppm

Human Taste Levels 3,500 ppm

Human Tears/Body 3,500 ppm

Contact Lens Saline 6,000 ppm

Sea Water 35,000 + ppm

## Find out how much YOU can make from Salt Chlorination

### Conventional Chlorine

- (A) Enter the lbs (or gallons) of chlorine your customer will buy from you over a 1 year period
- (B) Enter the amount of money you pay (per lb or per gallon) for the chlorine referred to in (A)
- (C) Enter the amount of money you receive (per lbs or per gallon) for the chlorine referred to in (A)
- (D) Multiply (A) X (B) to find to your costs
- (E) Multiply (A) x (C) to find your sales
- (F) Calculate your annual profit for the chlorine sold. Subtract (E) - (D)

### Salt Chlorination

- (G) What salt system is your customer going to buy?
- (H) What price will your customer pay for the salt system? (include salt system, bags of salt and installation fee)
- (I) What are your costs for the system, salt and installation, or for items referred to in (H)
- (J) What rebates, if any, do you receive from Hayward for salt system sale?
- (K) Profit from Sale = (H) - (I) + (J)
- (L) # of years you would have to sell chlorine to acheive the same profit = (K)/(F)

# Making \$\$ from Salt

## How You can profit from Salt Chlorination.

Salt chlorination can yield large profits not achievable with traditional chemical chlorine until years of repeated sales from the same customer. The following worksheet is useful in providing this comparison

Useful data for Line (H)

System	Minimum Advertised Price
AQR3	\$779
AQR9	\$959
AQR15	\$1,119
AQR925	\$1,009
AQR940	\$1,149



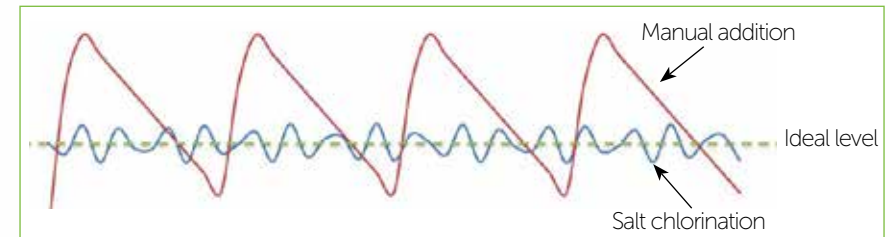
## Convenience

Salt chlorinators continuously and automatically chlorinate pool water. Customers will no longer have to:

- Buy, handle, mix or store chlorine weekly or bi-weekly\*
- Have direct contact with potentially harmful chemical chlorine
- Worry about the constant up's and down's of water chemistry
- Fight algae blooms due to irregular chlorine levels

*\*other than the occasional shock after a heavy bather load or abnormal weather*

## Salt Chlorination avoids highs and lows associated with manual addition of chlorine



## Cost

Salt chlorination can save customers 50% or more on chlorine costs. With salt chlorination:

- Chlorine is converted back to salt after use
- Salt does not wear out, degrade or evaporate\*
- A salt chlorinated pool will have a constant supply of salt to continuously convert into fresh, pure chlorine.

*\*salt only leaves the pool through splash out and backwash—not evaporation!*

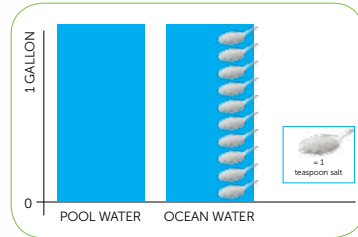
# How Salt Chlorination Works

## Salt Chlorination System Operation.

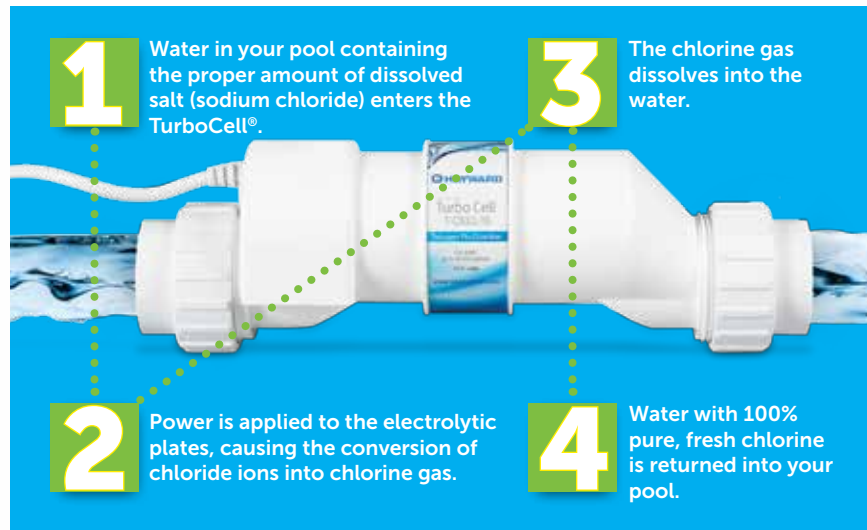
Salt chlorinators turn ordinary salt into an endless supply of chlorine. About 1 teaspoon of salt per gallon is all that is needed.

## Correcting Common Consumer Myths:

- Salt is not the sanitizer, chlorine is
- You don't need to drain your pool to convert to salt chlorination\*
- A salt pool is not ocean water
- Salt does not wear out, degrade or evaporate



\*unless you are using biguanides in which case draining may be the best option



# The Truth about Salt Chlorination Costs

**Salt Chlorination is the most cost effective way of delivering chlorine to a pool right from the onset of system purchase!**

The tables below demonstrate the very cost competitive nature of a salt chlorination system versus traditional chemical chlorine.

In the examples below, we use the most popular salt chlorination system (AquaRite®) and the most popular replacement salt cell (TurboCell®) to illustrate the point. While numbers may differ for various dealers, the conclusion remains the same---salt chlorination delivers chlorine for less!

## New System

System	Retail Price*	Installation Fee	Salt (initial)	Total Costs	Lifetime Lbs of chlorine made by cell*	Costs per lb of chlorine*
AQR940	\$1,149	\$250	\$125	\$1524	725	\$2.10



## Replacement Cell

System	Retail Price*	Installation Fee	Salt (initial)	Total Costs	Lifetime Lbs of chlorine made by cell*	Costs per lb of chlorine*
TCELL 940	\$599	\$0	\$150 over 5 years	\$749	725	\$1.03

\*as Trichlor equivalent

**National Average Cost of Trichlor \$2.49**



## Start your customer off on the right foot!

### Sell the correctly sized cell.

Under-sizing a salt system can lead to a dissatisfied customer because the chlorine production can not keep up with demand. The result is algae, extra chemical costs or worse, unhealthy water leading to illness. A cell can almost never be too big because the chlorine output can be easily adjusted downward by the controller.

### When adding salt, distribute it evenly.

After adding salt, brush through the pool so it dissolves quickly and doesn't sit in areas of the pool. This is especially important with newly plastered pools. We recommend waiting one month before adding salt to a newly plastered pool.

### Seal rock or concrete decks.

Salt itself can be corrosive, and sealing the surrounding deck will prevent corrosion before it can start. You should also encourage homeowners to rinse rock or concrete decks after swimming.

### Ensure salt chlorinators are bonded and grounded.

Failure to do so will result in galvanic corrosion and the potential for electrical shock.

Salt System Information						
	Pool Size (up to 1 gallon)	Warranty Control Box	Warranty Salt Cell	Chemistry Automation	Equipment Automation	Remote Control
<b>Residential Above Ground</b>						
AquaTrot®	18k	1yr	1yr			
Salt & Swim ABG™	23k	1yr	1yr			
<b>Residential In Ground</b>						
AquaRite® 900	40k	4yrs	4yrs			
Aqua Rite®	40k	3yrs	3yrs			
Aqua Rite® Pro	40k	3yrs	3yrs	🧪		📱
Aqua Plus®	40k	3yrs	3yrs	🧪	🔧	📱
Salt & Swim™ 3C	30k	3yrs	1yr			
Saline C® 6.0	125k	2yrs	2yrs	🧪	🔧	📱
<b>Commercial In Ground</b>						
Saline C® 6.0	99k	3yrs	2yrs	🧪		📱

## Can I use straight acid to clean a salt cell?

Yes you can, but it is not necessary. 4-parts water to 1-part muriatic acid is strong enough. The cleaning process takes about 10-20 minutes. You will know when the cleaning is complete as the bubbles (from the carbon dioxide being released) will stop.

## How often should I clean a salt cell?

The system will register an alarm every 500 hours, or when the cell is dirty. At each alarm point, physically inspect the cell. A dirty cell is visually obvious and low cell performance can also be assessed by looking at the amperage and voltage data.

## Can I use an object to scrap out calcium and debris?

Not recommended. The electrode coating can be scraped off with a sharp object which can cause a decrease in the performance of the salt cell.

## Why do I have to clean some cells more often than others?

The primary reasons cells get dirty is due to scale build up. Scale build up is dependent on the calcium hardness in the pool water. While pools are recommended to operate in the hardness range of 200-400ppm, many have hardness values above this level which can cause the cell to accumulate scale more quickly.

## Should I shock a salt pool?

Yes. Every pool can benefit from a periodic shock, especially after high bather loads. Shocking raises the level of chlorine in the pool quickly to 10 ppm chlorine, or to a high level of oxidation if using a non-chlorine shock. Shocking helps rid the pool of organic debris accumulated from sunscreen, bather waste, or other environmental causes. This debris can serve as a food source for algae and other microorganisms.

## Clean the salt cell every 3-6 months.

This is typically accomplished using a mild muriatic acid solution or a specialized salt cleaning solution.

This helps to clean off any scale build-up and keeps the cell running at full capacity, ensuring a full cell life.

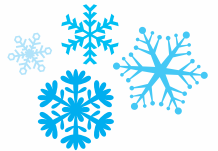


## Maintain a chemical log for pools.

This helps to track when you clean the cell or how often you add other chemicals.

## Winterize properly.

Per the manufacturer's instructions, but typically this means disconnecting the power source and draining all water from the unit and storing the cell for the winter months.

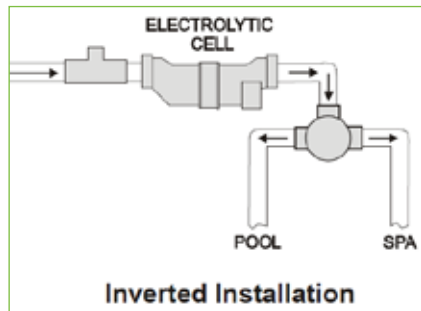




# How to Service a Salt Pool

## Check the water level and water flow.

Water needs to be continuously flowing through the cell to generate chlorine. When using Variable Speed Pumps, invert the cell to ensure it stays flooded with water.

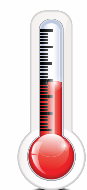


## Monitor the pH level.

A by-product of salt chlorination is sodium hydroxide. The presence of this substance in the water drives up pH levels from the ideal range of 7.4 – 7.6 to sometimes 7.8 or higher. Chlorine has a more difficult time killing bacteria if the pH is too high.

## Check salt levels.

Pools only lose salt through splash out, and backwashing. Test the salt level once a month to ensure it is on par. The only way to remove salt is to partially drain and refill a pool with fresh water.



## Watch the temperature outside.

Between 50°-60°F, the chlorinator will run at a maximum chlorine output of 20%. You may need to add chlorine manually in cases like these.

## Why do I continue to replace boards in some systems and not others?

Printed circuit boards contain dozens of components and are subjected to a variety of voltage conditions (i.e. spikes) that can cause individual component failures that cannot be predicted. Hayward has a no-hassle 3-year warranty on our AquaRite® PCBs.

## Why do some of my pools get white flakes building up below the return? Is the cell doing that?

The most likely cause of the white flakes is calcium scale coming off the electrodes. Recall that the cell is self-cleaning, so scale that tries to build on the electrodes is cleaned away. If the scale chunks are big enough to see, then they can usually be observed at the return. This is a good indication that the cell may need an inspection and cleaning.

## Should I consider bather load and not just pool volume when selecting a T-Cell?

Yes. Chlorine demand is based on how much organic matter is placed into the water. This demand can arise from natural causes due to the environment, but the heaviest demand is usually from bathers. Bathers emit body oils, urine, feces, suntan lotion, sweat, and other organic matter that must be combatted with chlorine. The more bathers, the more chlorine needed. One of the benefits of salt systems is that you can almost never oversize them.

# Common Misconceptions on Salt

## Misconception #1

**Regular Pool Water Chemistry is different than the chemistry of non-salt pools.**

**FALSE!** Recommended pool water chemistry is the same except for the fact that you need to keep the salt level within a specified range.

### Ideal Water Chemistry Level for All Pools\*

Chemical	Ideal Levels
Salt	2700 to 3400 ppm
Free Chlorine	1.0 to 3.0 ppm
pH	7.2 to 7.8
Cyanuric Acid (Stabilizer)	Outdoor pools- 30 to 50 ppm Indoor Pools - 0 ppm
Total Alkalinity	80 to 120 ppm
Calcium Hardness	200 to 400 ppm
Metals	0 ppm
Saturation Index	-.2 to .2 (0 best)

\*Recommended levels per APSP, NSPF and the CDC.

## Misconception #2

**With salt, customers have a “chemical free pool.”**

**FALSE!** Salt Generators only produce chlorine, just one of the chemicals needed to maintain a healthy pool. Stabilizer, Alkalinity, Hardness, metals, and phosphates still need to be tested and monitored. Even more importantly is monitoring pH, which tends to drift upwards in salt chlorinated pools.

## Misconception #3

**With salt, you NEVER have to add chlorine again.**

**FALSE!** Salt maintains a continuously stable chlorine level, however after a high bather load or weather event like drastic temperature swings, it may be necessary to oxidize (shock) a pool to bring it back to normal levels. This is also required when opening a pool after the winter.

## Misconception #4

**You have to drain a pool to switch it to salt chlorination.**

**FALSE!** No matter what type of type of chlorine is currently in use, all you need to do is plumb in a salt generator and add the correct amount of salt to get a pool started with salt chlorination.

## Misconception #5

**You can taste the salt in salt chlorinated pools.**

Typically not. Salt chlorinated pools have about 1/10 the salt concentration as the ocean. In fact, the salt levels in salt pools are about the same salinity as a human tear, and that’s why eyes aren’t irritated like they are after swimming in chemical chlorine-treated pools.

# Hayward Knows Salt



Could you benefit from a salt chlorination video, customized with your company name and logo to be played in-store, on the web or on television? Let's tell you how you can get that video for FREE and how you can get up to 50% of your marketing spend rebated under our Co-op program

## Over 1,000,000 pools and counting.

There are over 1,800,000 pools in the U.S. using salt chlorination, and the majority of them are Hayward's leading AquaRite® product. With decades of experience in salt chlorination, Hayward knows salt.

Did you know that salt chlorination is the most popular form of sanitization on newly constructed pools? Most consumers have heard about salt chlorination or have been in a pool that uses it. The demand is there. Will you be ready?

## Let Hayward help you.

With a complete staff of sales agents, technical and customer service representatives, and marketing specialists, we can help you seek a new level of profitability. And with our Totally Hayward® program, you can enjoy access to special products, financial rewards, marketing and social media benefits only available to you including:

- Salt Chlorination Videos/Commercials you can use in local TV advertising, eblasts to your customers, social media, or to play in your retail store
- Point of Purchase Displays
- Posters
- Counter mats
- Window Clings
- Brochures, Sell Sheets, and Tri-Folds

Hayward, Hayward Energy Solutions, AquaRite, AquaTrol, Salt & Swim 3C, AquaPlus and TurboCell are registered trademarks Saline C 6.0 is a trademark of Hayward Industries, Inc. © 2014 Hayward Industries, Inc.

All other trademarks not owned by Hayward are the property of their respective owners. Hayward is not in any way affiliated with or endorsed by those third parties.



LITSLTPAMP16