



## What is water balance?

Everything you need to know about spa water can be lumped into 2 categories: **Balance** and **Sanitation**. Sanitation is simple; it is a measure of how clean the water is. It is easy to determine if spa water has adequate sanitation. If the water looks good, smells good, and feels good, then it is sanitized adequately.

Balance, however, has nothing to do with how clean the water is, and you can not tell if spa water is balanced by merely looking at it. Balance is actually a measure of how corrosive or scaling the spa water is. Corrosive water will "eat away" at pumps, heaters, jets, gaskets, etc. Scaling water, conversely, will deposit gritty or flakey scale formations, usually calcium, on pumps, heaters, jets, seats, etc. Balanced water will not do either of these things. Unbalanced water, however, can damage any spa and can void the manufacturer's warranty. To determine if your spa water is balanced, you will need to test it. Using test strips is the most common way to determine if spa water is balanced.

There are three things to check for to determine if your water is balanced or not; **PH**, **Total Alkalinity (TA)** and **Calcium Hardness (CH)**. PH, which stands for Potential Hydrogen, is a measure of how acidic or alkaline water is. If the PH is low or acidic, then the water can be corrosive. If the PH is high or alkaline, then the water can be scale forming. Total Alkalinity, despite what most people think, is not a measure of how "alkaline" the water is. Rather, TA is a measure of how resistant the PH is to change. Low TA readings can result in the PH moving out of range much easier than normal. A TA reading in the "ok" range or on the high side = a more stable PH level. Calcium Hardness is a measure of how "hard" the water is; or, more specifically, how much calcium is in the water. Low CH can lead to foamy water and corrosive conditions. High CH can lead to cloudy water and scaling conditions.

Balanced water is water that tests in the "ok" range in all three areas. Please see the below spectrums to determine if your water is balanced or not.

**\*\*I can perform a free computer analysis of all 3 factors at your home\*\***

### PH SPECTRUM

CORROSIVE WATER      **OK**      SCALING WATER  
← ← ← 7.2 7.2      7.4      7.6 7.6 → → →

### TOTAL ALKALINITY SPECTRUM

PH MAY TEND TO MOVE OUT OF RANGE      **OK**      PH MAY BE HARD TO ADJUST  
← ← ← 80      80      90      100 110      120 120 → → →

### CALCIUM HARDNESS SPECTRUM

CORROSIVE WATER      **OK**      SCALING WATER  
← ← ← 150      150      200      250      300      350 350 → → →