## WATER BALANCE



Water balance is important as it ensures:

- That the sanitiser works properly,
- That the mineral content of the water is in an appropriate state to protect the spa surface and equipment and
- The water is pleasant and comfortable

Water balance is affected by a wide range of variables - the quality of the source water, the temperature at which the spa is running, what chemicals are going into the water, chemicals/ detergent residue from bathing suits and cosmetic products/ anti-perspirants etc from bathers skin.

## When we test your water we analyse for and report on the following parameters: (In addition to looking at the level of sanitiser)

- Total alkalinity (TA) Keeping this value in the correct range prevents the pH from fluctuating wildly, enables sanitisers to work most effectively, extends equipment life and provides a comfortable bathing experience for the skin.
- **pH** This is the level of acidity/ alkalinity in the water. An ideal range for the spa is 7.4 7.6. If the pH level is too high or too low, there can be resultant damage to the running equipment, skin and eye irritation and lower effectiveness of sanitising agent.
- **Calcium hardness** The level of calcium (or hardness) of your water varies enormously between different geographical areas and source of water (e.g. rain water). The optimal level is dependent upon the type and surface material of the spa; we can advise on this in the shop. Generally calcium levels should be between 100-200 ppm. The actual range will vary depending on the type of shell and the type of sanitation you are using. It is important to keep calcium levels within the normal range to prevent scum, limescale build up and damage to the working parts of the spa. Generally in the Wellington area, we need to add calcium to the water using calcium hardness increaser.
- Total dissolved solids (TDS) This is the level of dissolved solids in solution and includes salts, chemical carriers, body fats and debris. The level of TDS in the spa increases with use. Once it reaches more than 1000 ppm, water becomes harder to balance and there is loss of water clarity. Once it reaches 1500, it is advised that the spa is drained and new water used. A high TDS makes everything work less effectively and impacts upon bather comfort.

## Products commonly used for spa water balance

Performance Up	Arbenness (F Manness (F Manness) Manness Manness	<ul> <li>Reduces pH fluctuation from rain, bather load and other chemicals</li> <li>Helps reduce corrosion of equipment from pH fluctuation</li> </ul>
Comfort Up	Control UP Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marcan Marca	<ul> <li>Prevents eye and skin irritation</li> <li>Assists in maintaining pH in optimum range (7.4 - 7.6)</li> <li>Correct pH levels maximise sanitiser performance, water quality and bather comfort</li> </ul>
Aquality		<ul> <li>Reduces skin and eye irritation caused by high pH and high total alkalinity (TA)</li> <li>Helps improve sanitiser efficacy</li> <li>Correct pH and TA helps prevent scale forming on surfaces, improves filtration, recirculation and reduces equipment failure</li> </ul>
Shield		<ul> <li>Raises the calcium hardness of spa water</li> <li>Prevents severe deterioration of spa surfaces, corrosion of metal fittings and equipment caused by low calcium levels</li> <li>Dependent upon required amounts, large doses need to be spaced at least 6 hours apart</li> <li>Add to spa on opposite side to filter(s)</li> </ul>

403 High Street, Lower Hutt • T: 04 570 0547 • E: info@poolsandspas.co.nz 18 Kapiti Road, Paraparaumu • T: 04 298 6984 • E: kapiti@poolsandspas.co.nz 156 High Street North, Carterton • T: 06 379 6645 • E: wairarapa@poolsandspas.co.nz