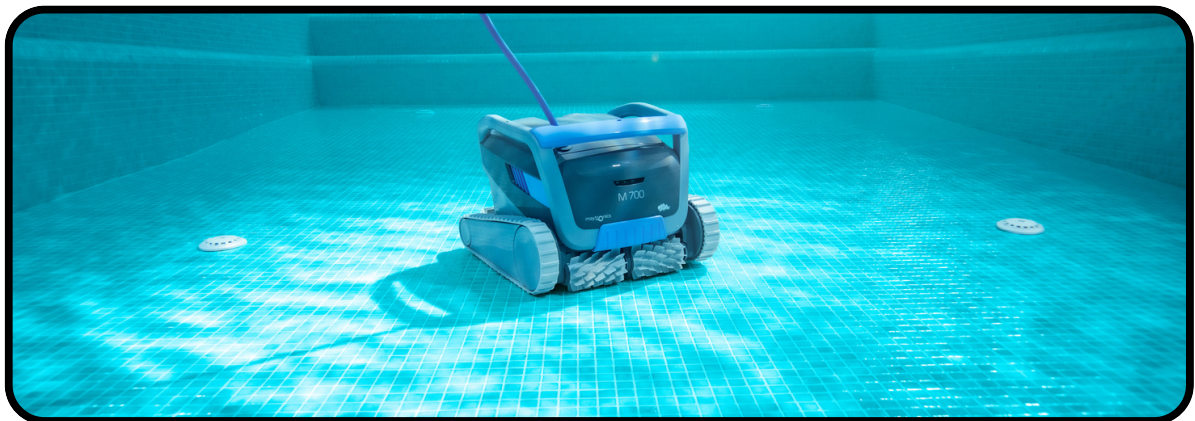


How Does Water Chemistry Impact your Robotic Pool Cleaner

Picture this: a pristine swimming pool glistening in the sunlight, inviting you to take a refreshing dip. Behind the scenes, a diligent robotic pool cleaner tirelessly glides through the water, scrubbing and vacuuming away dirt and debris. However, what if I told you that poor water chemistry could turn this idyllic scene into a maintenance nightmare? In this article, we will explore the often-overlooked but crucial relationship between water chemistry and the performance of robotic pool cleaners.



The Robotic Pool Cleaner's Vital Role

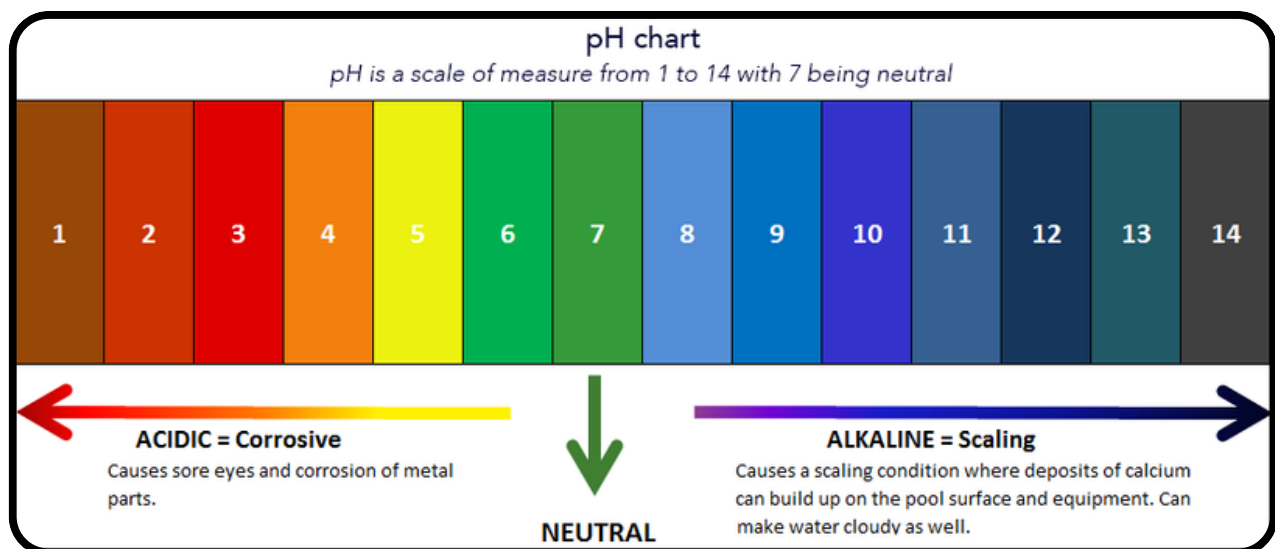
Robotic pool cleaners have become indispensable assets for pool owners, offering efficient, labour-saving solutions to maintain a clean swimming environment. These devices employ advanced technology to navigate the pool, scrubbing and vacuuming away dirt and debris from the pool's walls, and floor. While they're designed to handle a wide range of pool conditions, they are not immune to the adverse effects of poor water chemistry.

The pH Balance

One of the most critical aspects of water chemistry is maintaining the proper pH balance. The pH scale measures the acidity or alkalinity of water, with a neutral value of 7.0. For pools, a pH level between 7.2 and 7.8 is generally recommended. When pH levels stray outside this range, it can have detrimental effects on both the water and your robotic pool cleaner.

Effects of Low pH (Acidic Water):

- Corrosion: Low pH levels can corrode the cleaner's components, including its plastic casing, brushes, and internal mechanisms. This can lead to malfunctions, reduced lifespan, and costly repairs.



Effects of High pH:

- High pH can decay your robot's tracks and plastic parts, cause blockages of the filters and scale build up on the robot.
- High pH also creates slippery internal pool surfaces, these slippery surfaces prevent your robot from operating correctly and climbing walls. High pH is a common reason robotic pool cleaners do not climb walls.

Chlorine Levels

Chlorine is the most common pool sanitizer used to kill harmful bacteria and algae. Maintaining the right chlorine levels is crucial for water quality and the longevity of your robotic cleaner.

Effects of Insufficient Chlorine:

- **Algae Growth:** Inadequate chlorine levels can lead to algae growth in your pool. Robotic Pool Cleaners are not equipped to remove algae from the pool surfaces, this algae will rapidly block your robot's filter, causing it to malfunction.
- **Algae-covered walls** become very slippery, causing your robot to lose traction.

Effects of High Chlorine

- High chlorine levels are the biggest killer of robotic pool cleaners. Typically your chlorine level should be maintained at between 1 and 5 ppm. Exceed this level and your pool equipment including your robotic pool cleaner will quickly suffer. We see many robots within their warranty period that have been destroyed by excessive chlorine levels.

Signs of High Chlorine Damage



Discoloured Cable: In this image the cable that has been in the water is clearly discoloured when compared to the cable that has not entered the water.

Signs of High Chlorine Damage



Bleached Debris: Shown here inside the filter chamber of a Maytronics S Series robotic pool cleaner are leaves that have been bleached white by the extreme chlorine levels. If you see bleached leaves in your filter basket, remove and rinse your robot immediately and then correct the problem.



Decayed Tracks: When the rubber tracks of your robotic pool cleaner are subject to incorrect water balance they start to rapidly decay. This leads to them becoming soft and dissolving, when moving around the pool in this condition they will quickly fail. The tracks pictured are from an 18 month old robot that was subjected to 10+ chlorine levels.

How to Maintain Correct Water Balance.

The easiest way to maintain your water balance is by regular testing. A simple test kit can be purchased from Sydney Pool Robotics or any pool shop or supermarket. Test regularly and get to know how your pools chlorine levels react to the changing weather and pool usage.

High chlorine is a particular problem during winter when your pool chlorine demand plummets. Your chlorinator carries on generating chlorine, quickly building chlorine levels up into dangerous territory. We see many robots suffering chlorine damage each winter.



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