

Section 4c – OPERATION

Monitoring and Maintenance

Water Chemistry - VERY IMPORTANT NOTE! Your Professional is designed to provide Purifier on a daily basis. We recommend the following water chemistry ranges and periodic checks to monitor your system and follow all local/state requirements.

Daily Checks:		Monthly Checks:			
Free Chlorine:	1.0 – 3.0 PPM	Calcium Hardness:	200 – 400 PPM	Salt Residual:	2500 – 3500 PPM
Or Bromine:	2.0 – 4.0 PPM	Total Alkalinity:	80 – 120 PPM	Langelier's Index:	± 0.3 pH of saturation
pH:	7.2 – 7.8	Cyanuric Acid:	60 – 80 PPM	Visual Cell Inspection	for wear, scale or debris

CHLORINE/BROMINE REQUIREMENTS: During Peak Purifier Demand (summer months, rainy season or heavy bather usage) it may be necessary to increase your Purifier output by increasing your output setting. Conversely, during Low Purifier Demand, you can decrease your output to a lower setting. For extremely Heavy Purifier Demand or to boost your chlorine residual levels quickly, you can supplement with a *Non-Chlorine Shock* containing POTASSIUM MONOPERSULFATE.

NOTE: During cold-water conditions, below 60°F, Purifier demand is reduced significantly. For colder climate regions with sustained low temperatures, contact your local pool professional for proper pool winterizing instructions.

pH: When your pH falls below the accepted range, your Purifier is used up very quickly. For pH levels higher than the accepted range, your Purifier becomes much less effective. Improper pH also contributes to the strong smell, red eyes, dry itchy skin and brittle hair conditions usually associated with “too much Chlorine”.

CALCIUM HARDNESS AND TOTAL ALKALINITY: Your Professional provides 100% pure sodium chloride and does not affect the calcium hardness or total alkalinity levels. When you start up and maintain your pool with proper water chemistry, it stays balanced much easier, until influenced by adding other ancillary chemicals or “out of balance” make-up water.

CYANURIC ACID (STABILIZER/CONDITIONER): This chemical goes by either trade name and allows your chlorine residual to last longer by protecting it from the UV rays of the sun. With low or no Cyanuric acid it is possible for the chlorine being produced, to be used up just as quickly as it is generated.

* Check your local commercial codes for maximum acceptable Cyanuric acid levels in commercial projects.

NOTE: For Bromine or indoor pools, it is not necessary to maintain a stabilizer level to protect the Purifier from the UV rays. However, it is recommended to maintain a minimal 15-ppm (0,015 g/l) to protect metallic fixtures from possible corrosion.

SALT RESIDUAL: Your Professional works most efficiently with salt levels between the above-recommended ranges. Low salt will cause premature deterioration on the Cell blades. For SALTWATER pools, your Professional is designed to handle up to 35,000 ppm (35,0 g/l) without harmful effects on the unit. However, high salt levels, above 6000 ppm (6,0 g/l) have been known to cause corrosion on metallic fixtures.

LANGELIER'S INDEX: (or Saturation Index) A mathematical formula used by Pool Professionals to ensure that your total water chemistry does not fall into a corrosive or aggressive condition. Either condition can cause premature damage to the Cell, any of your other equipment as well as your cementitious finish. Contact the factory for more details.

VISUAL CELL INSPECTION: Periodically inspect both ends of the cell. Follow the directions in the CELL section in the PARTS section, on page 5. The titanium Cell blades, seen inside the Cell body, should be straight and clear of any debris between the blades. Your Professional is designed to automatically self-clean calcium scale build up within the Cell. This is seen as a white flaky or crusty build-up on the edges or between the blades and will pre-maturely deplete the life of the cell. Certain conditions can cause a heavier scale build up that exceeds the self-cleaning capability and would need to be cleaned manually by the method described in the next section.

MANUAL CELL CLEANING:

With the Cell removed as described in the CELL section in the PARTS section, on page 5, use a high-pressure hose nozzle to spray off as much loose scale and debris as possible. Any remaining calcium scale can be treated with a mixture of one (1) part Muriatic Acid into four (4) parts water. Mix the solution in a pail, high enough to cover the Cell blades.

Remove the Cell cord and immerse the Cell so that the blades are completely covered in the solution for no more than 15 minutes intervals. Drain and flush with fresh water and re-inspect. Repeat the immersion if necessary.

 **CAUTION: ALWAYS ADD ACID TO WATER, never water to acid.**

NEVER USE ANY SHARP OBJECTS TO REMOVE SCALE. Scraping or scratching the titanium blade's edge or surface will allow chemical attack of the blade and cause premature failure of the Cell and will void your warranty.

FILTER BACKWASHING: We recommend turning off the circuit breaker on the Professional when backwashing the circulation filter.