

## Think Green and keep your Water Blue!

### How can you keep your carbon footprint down to a minimum and save on annual running costs?

With the trend for new hydrotherapy centres to have much larger hydrotherapy pools, the added cost for heating and sanitising these larger pools must be considered carefully before committing to your purchase.

Four things that can help you reduce your carbon footprint and reduce annual running costs for all Hydrotherapy Pools are:

- 1: Air Source Heat Pump
- 2: UV light
- 3: Blue Connect
- 4: Variable Speed filter pump

#### **ASHP**

Installing the correct size heat pump results in considerably lower pool water heating costs and should be considered when buying pools with larger water volume. A heat pump can reduce your electrical heating costs by up to 75%. 1kW of power into a heat pump can result in 5kW of power coming out of the heat pump.

Most Hydrotherapy pools will have a Balboa Control panel installed to manage the filter, lights and Jets etc., this also has a 3kW inline heater. This heater can act as a backup or support heater to the Air Source Heat Pump, when occasional extremes of very cold weather are experienced during the depths of winter. **The Heat Pump** resembles an air conditioning unit and is positioned outside the building close to the swimming pool plant either on the floor or wall mounted.



#### **UV Disinfection Light**

Provides fresh, clean and clear water.

It efficiently and safely disinfects the water. It neutralises bacteria, viruses and other primitive organisms and prevents them from reproducing.

Whilst we do not recommend relying on the UV system to sanitise the water alone. Installing a UV light system can reduce the use of chlorine and other chemicals up to 80%



### Blue Connect

Blue Connect, the smart pool analyser, is a smart device that combines a water quality sensor and smart algorithms which mix water data, weather data and user data to provide you with real time information about the quality and the temperature of your pool water. This can help you monitor your pool even when your pool is closed and you are at home. The Blue connect will provide you with information on how much sanitiser and balancing chemicals to add taking the guess work out of chemical dosing. Multiple users can access the data via an App on their smart phone to allow both operators and managers to view the real time data and the hourly, daily, weekly and monthly history.



### Variable Speed Filter Pump

Standard filtration pumps are single-speed pumps. They operate at full horsepower whenever the pump is running.

**Variable-speed** pumps let you control the speed, whether low or high, or anywhere in between. Most of these energy-efficient pumps are powered by a different type of motor than the standard pump called a permanent magnet motor. This type of motor is used in magnetic resonance imaging (MRI) machines and electric cars. It's typically more efficient than the induction motors in single-speed pumps.

Filtration pumps don't need to run at full power all the time to keep your pool water clean. In fact, when you're filtering your water, your pump can run at a much lower speed than when it's doing more demanding jobs, such as backwashing or vacuuming. Purchasing a variable speed pump could save you up to 83% on your annual energy cost.



### Summary

When you choose any of the items detailed above you'll have a higher up-front cost, but bigger savings over time and the one complaint that we get from operators of large pools is the higher than expected running costs. So please consider these options carefully when making your decision.