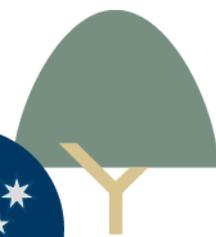


A C I D E

AQUAVIC MADE IN AUSTRALIA

QUERCUS MAGNAE A GLANDIBUS CRESCANT



THE OFFICIAL MOUTHPIECE OF THE AQUAVIC IONISER USER'S GROUP

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From the Director:

Any business that is seasonally-based is always sensitive to the vagaries of climatic changes, and a business such as ours, that is heavily dependant on the recreational waters industry is no exception. Having endured several consecutive *non-summers*, it was pleasing to receive a good old summer, one that not only carried on to the end of February, but almost to the Easter break.

Solar Update:

Whilst on the subject of the weather, we're now able to report on the next stage of the development of our solar powered pool ioniser packages, with the latest development being the installation (by Matt Wilson of Enviro Solar, 8 Arthuton Road, Northcote) and commissioning of our own "OTG" (Off The Grid) pool ionisation and filtration system. As reported earlier, we've been running the solar pump / motor / ioniser combination now for quite some time via "*simulated sunshine*" and are more than happy with the pump's performance. One glance at Pic. 5 will give you an idea of the pump's performance – and that's at less than 100% full speed.

Having got motor and pump selection out of the way some months ago, it was time to turn our attention to replacing the artificial sunshine with the real stuff, and that meant installing the PV array, the controller, and a set of batteries. If our calculations are correct, the two solar panels (pic.1) the battery pack (Pic. 2) and the controller (Pic. 3) should be sufficient to run the pool's filtration system and ioniser year round, rain, hail or shine.



Pic. 1



Pic. 2



Pic. 3

The ideal aspect for any PV array is north-facing but in spite of the fact that there was plenty of north-facing roof space available, we deliberately chose to have the two PV panels mounted facing due west, but also left sufficient room for expansion at a later date. The reason for choosing west-facing being that if the system was able to satisfy performance criteria facing west, a, it sure as hell would work facing North. We were pleasantly surprised to see from that performance data gathered thus far indicates that our estimate may have been a tad conservative as results exceed expectations.

Proof of the Pudding:

As luck would have it, Old Mother Nature supplied a perfect mixed bag of weather conditions for the performance trials, everything from hours of clear sunlight and high temperatures, right down to single-digit temperatures, and several days of full cloud cover with intermittent rain and strong southerly winds thrown in the for good measure. Typical Melbourne. Ideal testing weather in fact. Copybook perfect.

We have of course been monitoring the system closely since installation, and are very pleased with the results. The pump’s speed controller was set 85% full load (see below) and run times initially set for 3.0 hrs. per 24 which is about the norm for “a typical, ionised, domestic pool, of around 40,000 litres, in mid summer. With Easter now behind us, run times have since been reduced to the “*shoulder season*” setting of 2.0 hrs. per 24, with an occasional extra run to skim autumn leaves. Come winter, the run times will be further reduced to 1.0 hour per 24 - possibly less. For the uninitiated, because of the extremely robust residual properties of the copper and silver ions, our run times - not to mention power requirements - are significantly less than a typical salt-chlorinated pool, because unlike chlorine, ionised pools are not affected by high temperatures or the sun’s UV.

If you can’t lick ‘em. join ‘em:

Most of our readers will by now be very much aware of my views on VS (variable speed) pumps, and the extraordinary claims of energy dollar savings. Well, quite by accident, the Australian-made DC motors that drive our pumps, are supplied with – *wait for it* – a variable speed control! (See Pic. 4). No three speed motors for us. Ours are infinitely variable from 0 – 3000 RPM, and therefore far more flexible than virtually any other pool pump currently on the market! If you want variable speed, you’ve got it! This feature makes them ideal for indoor pools, water features and fountains where flow control is vital, and intrusive noise must be factored in. (Our pumps are whisper quiet). So pleased were we with the performance on the company pool that we installed one on the solar heating system. Our next project is to reconfigure this pump to run off solar power as well. But more of that later. Watch this space.



Pic. 4



Pic. 5

The Not-So-Good News:

At the moment, anything “solar” is relatively expensive, and, for reasons best know to themselves, some governments appear to be pro-fossil fuel / brown coal, and anti wind and solar renewable energy. The better news is that in spite of those disincentives, as solar becomes more widely accepted, component prices are steadily dropping. At the moment, a complete system such as the one above, retails at around \$5,000 - \$6000. By next season, we expect that to be significantly less, and therefore quite affordable.

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The Director.

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