

Energy Efficient Pumps

There are many new energy efficient pumps in the swimming pool industry. The newest are pumps that run at variable speeds (rpms, or horsepower) instead of the standard single horsepower pump that has been the only type available for decades. Energy efficient pumps are becoming increasingly as an eco-friendly option and to save on energy use, which means less burning of fossil fuels. In fact, California has mandated that all new construction and any replacement pumps must be of the variable speed variety.

The idea of saving on electrical usage and costs is a positive one. However, with a limited number of exceptions, energy efficient pumps are not recommended by Heschmeyer Pools for pools in climates where the swimming pool season is less than 6 months a year. For one, they are much more expensive than their single speed counterparts. More importantly, in our opinion as a service company, the disadvantages to energy efficient pumps outweigh positive of electrical savings.

Start with the fact that the pool pump is the life line, the backbone, of the entire circulation system. The pump creates suction for vacuuming the pool, and for leaves and debris to be drawn into the skimmer. It creates the suction at the drain on the bottom of the pool which draws filtered, chlorinated water downward in the pool. The pump push the water through the filter for cleaning, through the heater for heat, through the chlorinator for chlorine, and back to the pool. It only stands to reason that when these energy efficient pumps are on their lowest cycles that maximize electrical savings, they are not circulating the water very well at all.

Everything suffers. Leaves and debris fall on the surface of the pool and the pump is lazily humming along in its energy saving mode. The debris is not drawn over to the skimmer as it would be with a traditional pump. They become water-logged and sink to the bottom of the pool. This increases the need to vacuum more frequently. The center piece of your backyard, is perpetually covered with debris on the top and bottom. Not the look you are looking for when you had a pool installed.

Variable speed pumps leave dead spots from lack of circulation from these pumps being on low cycles. Heat and chemicals do not get distributed evenly in the pool. Algae soon develops from lack of circulation. This increases the need for more eco-unfriendly chemicals and the need to vacuum to waste and backwash more to keep up with your dirtier pool. This increases the need for more water replacement (which works against the eco-friendly model of the pump).

In short, with the high cost of the swimming pool installation, and with it being a seasonal entertainment feature, it is not worth saving a few dollars monthly to have it potentially be an eyesore and unusable. Save some money and be eco-friendly by turning off the porch light, the rec room lights, etc. but don't try to shave pennies off the heart of the pool—its pump.

The few limited cases where an energy efficient pump, or a two speed pump make sense is for the pools that have an automatic cover which is usually closed when the pool is not in use. These pools are not exposed to falling debris, rain, sunlight, etc. as the open-air pools are. They can get by with a pump running at a lower cycle. Also, spas are usually fitted with variable speed pumps since they are much smaller in nature.