

Energy efficiency standards are coming

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Swimming pool energy efficiency standards are coming to Florida as a result of HB 7135. This means filtration systems will be much more energy efficient, potentially reducing the daily operating cost by 10 to 90 percent.

The regulations prohibit the least efficient pump motors, cutting electric cost up to 30 percent with this one change.

Greater savings come from the use of multi-speed pump motors. The concept is easy enough to understand, drive slower and save gas. The same is true for filtering pools, move water slower and it takes less energy.

Obviously slower means the filter pump needs to run longer but this is where pool owners really benefit. Physics dictate that running a pump at half speed, cuts the flow rate by half, but here is the kicker, the energy used is only one-eighth that used at high-speed.

If a pool is being filtered six hours a day costing \$800 a year, that same pool can be filtered for \$200 a year while skimming and filtering twice as long. Remember the flow rate is cut by half, meaning the pump will run twice as long to filter the same amount of water, but it is doing it with one-fourth the electricity.

To be fair, two-speed pumps are not very efficient at low-speed and the APSP Technical Committee research shows current pumps provide savings closer to \$400 a year in this example. However, apply variable-speed pumps, made with permanent magnet motors, (used in hybrid cars) and the savings can exceed 76 percent based on the same, real world research.

These savings are based exclusively on different pumps on the same system, install a variable-speed pump on low Total Dynamic Head (TDH) filtration system and savings of 90 percent are being achieved.

The emphasis on multi-speed pumps is there for a reason. In addition to saving a lot of energy, they provide the high performance capabilities a modern pool needs to run the fun stuff like therapy jets and pool cleaners.

Ready or not, energy efficiency standards are changing the pool industry and there is money to be made. Become an industry leader by installing energy efficient equipment ahead of the July 1, 2011 deadline.