



Switching From Regular Chlorine

Some day we will have a better way of determining what size salt generator a given pool should have. For now, the best way to determine the size is to find out how much chlorine you are using now and then divide that by the percentage of available chlorine in the product.

For instance if you used say 50 pounds of trichlor in a month then you average daily usage would be 1.66 pounds per day. Then divide this by .90 (because trichlor provides 90 % available chlorine) and you get 1.86 pounds. Therefore you need a unit that is capable of supplying a minimum of 1.86 pounds per day. And if you only run your pool for 12 hours per day then you need to double that.

Another consideration is that you will lose about 1.0 to 1.5 ppm of free available chlorine (FAC) per day due to sunlight (UV) degradation even with cyanuric acid (CYA) in the water at 50 ppm. Each 1 ppm of FAC in 10,000 gallons of water is 1.3 oz. of pure chlorine. For a 40,000-gallon pool that would be 4 X 1.3 or about 5.2 oz. of pure Chlorine - about 1/3 of a pound. So you will at least need a a unit that will make 1/3 pound a day. If you are running your pool 12 hours it will need to make that 1/3 pound in 12 hours. This is only for sunlight and background chlorine demand. Bathers will use about .5 ppm FAC per day each.

A final consideration for commercial pools and sizing is that you want a device that is capable of providing a minimum of 1.0 ppm of FAC in the pool it is installed on in one hour. (Remember I said commercial.) And some health departments are considering a unit capable of supplying 2 ppm in 1 hour. This would also be true for a chlorinator, not just a chlorine generator. This recovery time and ppm is becoming more and more important.

The logic is this. If you had a large enough bather load and they used up all of the FAC in the pool, how soon would your sanitation system be able to put it back? Hours from now is not acceptable.