

AFO

The Fall/Winter schedule is available at CESWaterQuality.com or call (800) 940-1557, prompt #5, for schedules and more information.

PIONEERING SALT/OZONE SYSTEM INSTALLED

CES is proud to announce the installation of an innovative treatment system on the JCC Campus pool in Boynton Beach. The system consists of three major components: a large salt chlorination system, a large ozone generator, and a CES pH/HRR controller. The system was donated to the JCC by a strong supporter of the JCC aquatic program, and was designed by CES and John Wahler of Aquadynamics in Miami. It received Department of Health (DOH) approval in December and was installed shortly thereafter by Larry Guest and AJ Falcha of CES.

Using an Autopilot Pool Pro six-module salt chlorination system, the pool is dosed with pure salt to a level of 2,500 PPM, which is below the level of detection. Water from the return line is then passed through a manifold of 6 Autopilot (15 blade) commercial reaction cells. As the water passes these cells, the saline solution is converted to chlorine through a reaction of the salt water, the titanium-bladed reaction cells, and a low voltage electrical current supplied by the Autopilot control system. The chlorinated water is then returned to the pool. The six cells have a combined chlorine output of over 15 pounds of chlorine a day and are designed to provide a percentage of the overall annual chlorine required on the property. The DOH classifies the salt chlorinator as a "supplement oxidation" system, which means that a primary form of chlorination must also be provided.

Salt chlorination is emerging as a popular form of chlorination in the residential marketplace. Its use commercially, while still in its infancy, shows a lot of potential despite the higher initial cost and limitations of the relatively small chlorine output per cell. Research and development is continuing to produce longer lasting and higher output reaction cells.

The JCC treatment system is also equipped with a large corona discharge

ozone generation system that is designed to provide 40-70% of the oxidation normally supplied by chlorine. This chlorine-free alternative has been extremely popular in the bottled water industry, food production, commercial aquariums, water & wastewater systems, and pools & spas since the 1970's. The system is manufactured by Clearwater Tech of San Luis Obispo California, a CES supplier since the late 1980's.

The ozone system consists of an oxygen generator, a corona discharge ozone generator, twin 120-gallon contact chambers, a booster pump and venturi injector system, and a system controller with monitoring gauges and meters. The system operation is very simple. First, pure oxygen (92%) is manufactured in the oxygen concentrator and piped into the ozone generator that converts the O₂ into ozone (O₃). Ozone is then drawn into the pool plumbing through the venturi system, and that's where the magic begins. Ozone is the strongest commercially available oxidizer, and is 1,500 times stronger and faster than chlorine in oxidizing swimming pool contaminants including soaps, body oils, and perspiration. Ozone will also oxidize ammonia, urea and amino acids, and is extremely effective for inactivating bacteria, viruses, spores and cysts. This strong killing action occurs instantly in the pool piping and the contact tanks, which provide 4 minutes of contact before returning the purified water to the pool.

The third component of the system is the CES controller along with two Stenner 85 GPD chemical feeders (one dispensing bleach, and the other dispensing dilute muriatic acid). CES provided a System3 package that is equipped with a special booster mode. The System3 monitors and dispenses muriatic acid to maintain the 7.4 setpoint and controls the Autopilot system to maintain the proper chlorine level. In the event the Autopilot cannot keep pace with the bather load, the System3 will automatically switch to the backup bleach system in order to assure that proper chlorine levels are maintained.

While the new JCC treatment system is still undergoing minor adjustments and refinements, it has already shown a great improvement in the already-stellar JCC water clarity. The biggest test will come

later this summer, when the popular JCC Summer Camp will provide instruction and fun to hundreds of camp kids a day. We will keep you apprised of the progress with this and other technological advances in our industry.

FREE - NEW CHEMICAL DOSING CALCULATOR

The updated Chemical Dosing Calculator is now available on the CES web site. The calculator is simple to use. Simply log on to CESWaterQuality.com, click on the TECHNICAL SUPPORT/SERVICE tab, then click on the HELP/UL HINTS/TROUBLESHOOTING tab. Click on the CHEMICAL DOSING CALCULATOR and it gives you an ACROBAT.PDF file, then fill in your pool gallonage (Call your CES customer service rep if you need help finding or calculating this number). You can also personalize the form by typing in your facility name and pool name in the space provided. Then press calculate and the Calculator will give you the estimated doses for a wide variety of applications. Whether you need the proper doses for algaecides, phosphate algae treatments, metal stain inhibitors, clarifiers, or enzyme treatments, the CES Calculator will give you doses in both ounces and quarts. The CES calculator will also give you new calculations for shocking with Advantage NON CHLORINE shock in both INITIAL and MAINTENANCE doses. It is also now equipped with calculations for DECHLOR (or removing excess chlorine from your pool water).

If you would like a laminated chart for your pump room, please contact your CES customer service representative and we will gladly print, laminate, and send it to you. Also, please contact us with any technical problems you encounter in using this new tool. Thanks again for allowing us to provide you with "Excellence in Water Quality Control".

SORRY WE'RE LATE

Due to vacation schedules and year-end computer work, the CES newsletter is a few days later than normal. We apologize for the delay. We will return to our normal schedule with the next issue.