

The Planet Fitness Case Study

The Application and Challenges

Properly maintaining pool water chemistry is perhaps the most important aspect of maintaining a swimming pool. Proper water chemistry is required to keep a swimming pool safe and clean for

swimmers, which otherwise be susceptible to infection. Public pools are more likely to be contaminated with a greater diversity of disease causing organisms than domestic swimming pools because they are

open to community contamination. Disease causing organisms may be introduced from many sources but are mainly associated with bathers. Some of these disease causing organisms live and may even grow in pool water unless the pool water is properly and continuously disinfected.

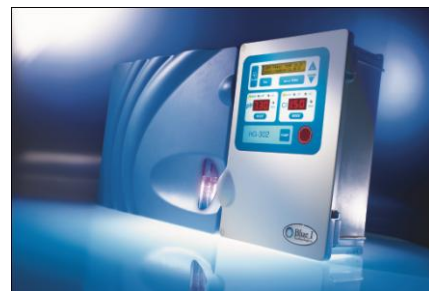


Disease causing organisms must be quickly and effectively killed in the pool water in which they are introduced, otherwise a disease may be transmitted. The swimming pool or spa pool needs to be designed and operated to enhance the action of the disinfectant. All treated water public swimming pools and public spa pools shall be equipped with an effective water circulation system, filter and continuous disinfectant dosing control system. Continuous dosing means the use of a metering device to feed a chemical at a relatively constant rate. If the process is performed manually, there is a risk of irregular dosing. Effective Chlorination of swimming pools requires continuous daily dosing that will maintain the water balance easily.

Blue I's Solution

Blue I's HYDROGUARD HG-302 provides an accurate, online, colorimetric monitoring and control for private pools & Spas. The HG-302 controller measures free chlorine as well as total chlorine, pH, Redox, turbidity, flow and the pool's temperature.

A reading is taken every 2 – 4 minutes, and if the Pool's chlorine or pH is less than a predefined set point, a solenoid valve opens and activates the appropriate chemical pump, which pours chlorine / Hydrochloric Acid into the swimming pool. When the free chlorine / pH reach the required value, the solenoid valve is closes.



The HYDROGUARD HG-302 solution's benefits

- Continuous, online water quality
- Automatic, hands free chemicals dosing
- Accurate readings, which are not affected by pH variations

- Precise dosing saves chemicals and maintains public health and environmental safety
- Extensive external communications includes wireless communication to the operation center for remote monitoring, control and alarm display
- Simple and straight forward displays

Summary

Disease prevention should be a priority for every water quality management program for pool and spa operators. Disinfection is critical to protect against pathogens, and is best managed through routine monitoring and maintenance of chemical feed equipment to ensure optimum chemical levels in accordance with the local regulations. Blue I Water technologies provide innovative water quality controllers for private and public pools and spas that flexibly and reliably monitor and control crucial water components promoting public health and environmental safety.