

SWIMMING POOLS

MVE BULK CO₂ FOR SWIMMING POOLS

CASE STUDY #14

Company:

Chart Inc. is committed to providing its customers with the best bulk CO₂ equipment solution for their specific application and is proud to offer the MVE Swimming Pool System as a safe, reliable choice for pH balance in swimming pool water.

An MVE Platinum Distributor and an Authorized Chart Installation Agent installs and services the MVE Swimming Pool System, including a major water theme park in Orlando, FL. They have been in business since the early 80's and are dedicated to providing top quality customer service.

Problem:

While chlorine is used to disinfect swimming pools, it can create higher pH levels in swimming pool water causing several problems:

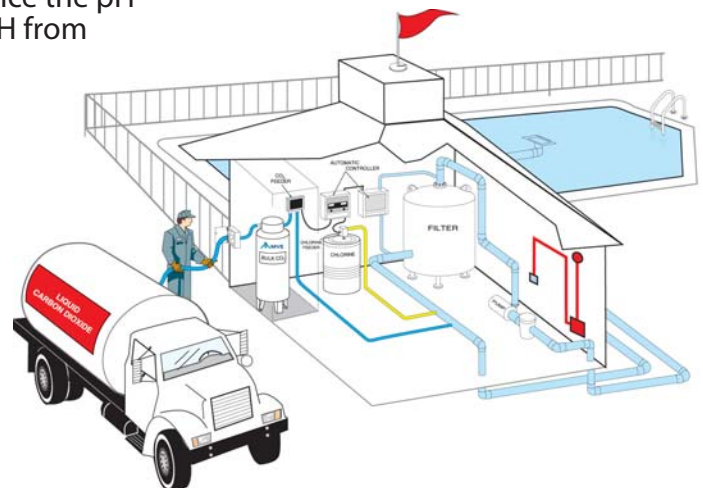
- Swimmers' eyes and noses may burn and their skin can get dry and itchy.
- Swimming pool water may become cloudy.
- The chlorine used to disinfect the pool becomes less effective, so more chlorine is required.
- Leads to crystalline scaling on the pool and equipment.

Pool operators typically use mineral acids to balance the pH levels of pool water caused by sudden spikes in pH from chlorine shock treatments.

Challenge:

Provide an easier, safer, cost-saving alternative to using mineral acids to balance the pH level of pool water to:

- Ensure safe water conditions
- Improve water clarity
- Reduce the amount of chemicals required to sanitize the pool
- Lessen the damage to pool surfaces
- Eliminate the dangers and costs associated with mineral acids



Innovation. Experience. Performance.™

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Solution:

Use carbon dioxide gas (CO₂), via the MVE Bulk CO₂ Swimming Pool System to help balance the pH levels in swimming pools. The CO₂ forms a weak carbonic acid that creates a natural buffer against sudden spikes in pH caused by chlorine treatments.

One stationary MVE Carbo-Series or bulk CO₂ storage tank, sized to meet your unique demands, supplies continuous CO₂ flow from inside your mechanical room to the pool water system. The tank is properly installed, maintained, and serviced by a trained technician, who uses a metered delivery system when filling the storage tank and charges you **ONLY** for the exact amount of CO₂ delivered.

Benefits:

Among the many benefits of the **MVE Bulk CO₂ Swimming Pool System** are that it ...

- Saves money – CO₂ is more cost effective than the mineral acids.
- Is permanently installed and requires no handling or adjustment.
- Provides CO₂ gas flow regulated by *your* automatic control system.
- Ensures continuous CO₂ gas flow with no run-outs.
- Is self-contained – NO electricity required.
- Provides hands-free operation – no employee intervention required.

Outcome:

This major water theme park **SAVED MONEY and INCREASED SAFETY** with the **MVE Bulk CO₂ Swimming Pool System** by ...

• **SAVINGS:**

- Lowering the cost of their pH balancing chemical usages overall.
- Doing away with the costs incurred for acid feed pump maintenance and/or tubing replacements.
- Eliminating the need to dispose of containers.

• **SAFETY:**

- Diminishing job related injuries with no material handling and dangerous fumes, no acid burns, no eyewash stations and no safety showers required.
- CO₂ is self-buffering so it is difficult to overuse CO₂ in high enough quantities to drop below the pH level of 6.5.