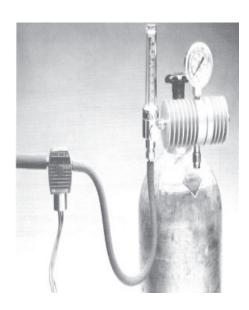
# **Chemtrol**®

## CO<sub>2</sub> pH Control

FOR SAFER

pH CONTROL

in POOLS AND SPAS



Carbon Dioxide  $CO_2$  is a natural non-corrosive gas that can be used as a substitute for other acids (such as Muriatic acid HCl) in chemical treatment of pools and spas.

 $CO_2$  is available in standard pressurized gas cylinders. When dissolved in water, it forms carbonic acid  $H_2CO_3$ , a weak acid which can be used to lower the pH of water. and neutralize liquid chlorine.

### **ADVANTAGES**

- √ No handling of corrosive acid containers.
- √ No corrosion of equipment and facilities from acid fumes,
- √ No dangerous chemical reactions with chlorine,
- Less danger of excessive low pH in water. Because carbonic acid is a weak acid, the lowest pH value that can be reachedis 6.8, even under accidental runaway conditions,
- √ Optional AUTOMATIC SWITCHOVER assures continued control of pH.

## **CAUTION**

- √ CO2 increases the alkalinity of water and is therefore not recommended for applications where high alkalinity is a proble. Total Alkalinity (TA) shoul be maintained between 80 and 125 ppm.
- High alkalinity increases acid demand, makes it difficult to lower the pH and may result in the formation of bicarbonate scale,
- √ High alkalinity may be reduced with muriatic acid
  HCl or dry acid.

#### **EXTENDED TECHNICAL SUPPORT**

Technical support from **CHEMTROL**<sup>®</sup> is based on our experience with over 30,000 installations worldwide. It is also available by toll-free phone, by fax or by e-mail.

Visit our Web Site at www.sbcontrol.com or call today for a free demo CD.



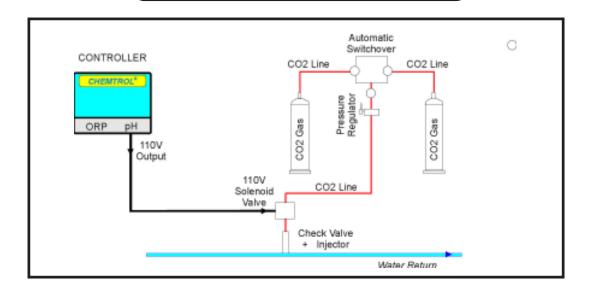
## SANTA BARBARA CONTROL SYSTEMS

5375 Overpass Road Santa Barbara, CA 93111 - USA TOLL-FREE PHONE FAX INTERNET

800-621-2279 805-683-8833 805-683-1893 www.sbcontrol.com

Leading in Automated Water Treatment Since 1976

#### INSTALLATION



The schematic shows the principle of installation with an Automatic Switchover System which is recommended to assure continuous pH control. Control of gas injection is done by connecting the 110V pH control output of the **CHEMTROL**<sup>®</sup> controller to the solenoid valve on the CO2 injection line. One or more CO2 gas cylinders can be manifolded together on each line, depending on the feed rate required to maintain proper pH. Select the proper pressure regulator as indicated below according to pool size.

#### **SPECIFICATIONS**

**ASCO SOLENOID VALVE**, brass body, 750 psi rating, 1/8" FPT, 110V, 500r 60Hz. For connection to pH output relay of the **CHEMTROL**® controller.

PVC CHECK VALVE/INJECTOR, 3/8" MPT.

FLOWMETER, 0-40 cfh.

FEED TUBE, 15 ft.

**VICTOR SR 311 PRESSURE REGULATOR**, factory set at 80 psi outlet pressure, 0-100 scfh flowmeter. Recommended for polls up to 500,000 ga.

#### **OPTION**

AUTOMATIC CO2 SWITCHOVER SYSTEM, designed for 2 or more cylinders on the same feed line, one being kept on standby until the first one is empty. The switchover automatically switches to the second cylinder when the pressure gets low. Addiotionally, more than one cylinder can be manifolded on each side of the switchover to further increas the CO2 supply.



REPRESENTED BY:		