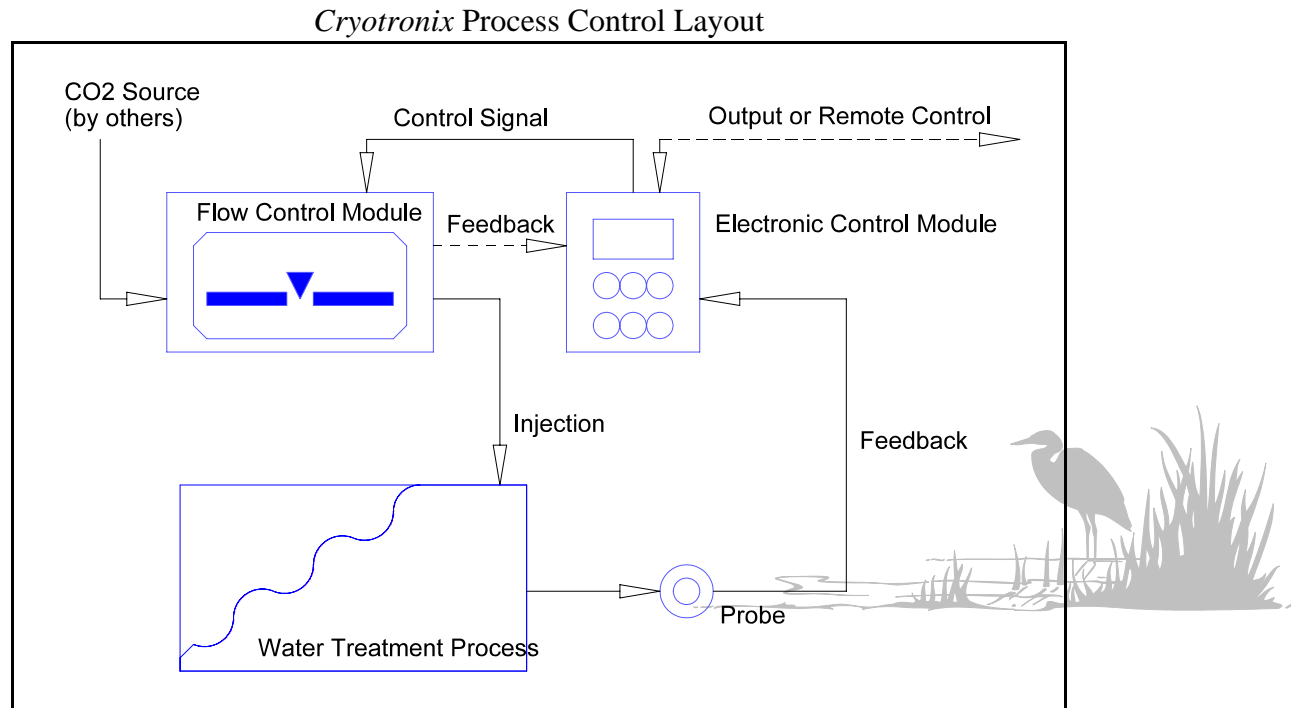


pH Reduction Systems Using Carbon Dioxide

In order to comply with today's standards, Carbon Dioxide (CO₂), a clean, safe and efficient chemical is used to reduce pH levels in wastewater treatment. With *Cryotronic's* advanced controlled injection and precise process monitoring, CO₂ will transiently dissolve in water to form carbonic acid and thus neutralize alkalinity.

As we approach the turn of the century, most industries face tougher laws on effluent wastewater standards. The discharge of industrial or municipal wastewater is controlled by permits issued by the governing bodies. These permits set specific limits and parameters for pollutants such as BOD, COD, pH, hydrocarbons, metals, phenol, .. etc. Being able to control the pH of effluent from industrial facilities is therefore essential to achieve these standards.



The pH reduction systems are designed by *Cryotronic* to efficiently control the flow of CO₂ for optimum dissolution in aqueous streams. These systems can be configured for liquid or gaseous CO₂ injection depending upon the specific application requirement. Injection assemblies are custom built to suit existing treatment facilities with little or no modification to basins, pipes or pumping stations.



Carbon Dioxide pH Reduction Systems

Concurrently with EPC series electronic feedback controls, **Cryotronic** CO₂ flow control systems offer many advantages over traditional acid systems :

- | | |
|--|--|
| <p><input type="checkbox"/> Elimination of safety hazards associated with handling of acids</p> <p><input type="checkbox"/> Low capital investment</p> <p><input type="checkbox"/> Low maintenance costs</p> <p><input type="checkbox"/> Precise control of pH levels</p> <p><input type="checkbox"/> No risk of over-shooting (associated with acids)</p> | <p><input type="checkbox"/> Increased storage capacity</p> <p><input type="checkbox"/> Reduced handling costs</p> <p><input type="checkbox"/> Increase equipment life due to non-corrosive CO₂</p> <p><input type="checkbox"/> Overall cost saving in water treatment</p> |
|--|--|

With the customer always in mind, **Cryotronic** also manufactures and supplies other system components such as pH controllers, liquid vapourizers, gas heaters, analyzers, ...etc; all assembled, calibrated, tested and carry our exclusive warranty of proper operation and your valued satisfaction.

Call **Cryotronic's** experienced personnel or fax a completed copy of this form to facilitate the evaluation of your requirements. For further information please contact us at (514) 956-9491 or Fax to (514) 956-9412 or e-mail us at info@cryotronic.com

pH Reduction system Data Form				
Name :			Telephone:	
Company Name :			Fax :	
General Information				
Type of Water :	<input type="checkbox"/> Process	<input type="checkbox"/> Potable	<input type="checkbox"/> Waste	<input type="checkbox"/> Other : _____
Average Flow	_____ gal./mi n	_____ m ³ /h r	At pH : _____	Desired pH : _____
Maximum Flow	_____ gal./mi n	_____ m ³ /h r	At pH : _____	Desired pH : _____
Existing Equipment Information				
Treatment Basin	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Capacity : _____ gal. _____ m ³	
Circulation Pump	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Capacity : _____ gal. _____ m ³	
Mixer	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Capacity : _____ gal. _____ m ³	
Acid Consumption				
Type of Acid	<input type="checkbox"/> H ₂ SO ₄	<input type="checkbox"/> HCl	<input type="checkbox"/> Other : _____	
Actual Consumption	_____ lbs/month		_____ kg/month	
Actual Control System	<input type="checkbox"/> Proportional		<input type="checkbox"/> Direct Make: _____	

100BA95.bul



Ordering Information :

Use the following order specification system to facilitate processing and delivery of your unit.

Series	Inlet & Outlet Size (in)	Operating Mode	Product Phase	Electronic Controls	Inlet	Outlet
100FEL	04 = 1/4" 06 = 3/8" 08 = 1/2" 12 = 3/4" 00 = Specify	A= Auto On/Off P= Proportional	G= Gas L= Liquid	0= No controls 1= With controls (Bulletin EPC602)	L= Left R= Right T= Top B= Bottom	L= Left R= Right T= Top B= Bottom
<p>Example : 100FEL-08PL0RL</p> <p>will denote a CO2 flow control panel for industrial effluent treatment. Panel comes with a proportional 1/2" liquid manifold with inlet source on the left and outlet to injectors to the right with electronic controls supplied by customer.</p>						

100BA95.bul