



The CG series generator is a two chemical system using PureMax (a proprietary blend of chlorate and reducing agents) and high strength sulfuric acid to chlorine dioxide at over 95% efficiency (Chlorate Conversion to  ${\rm ClO}_2$  in the final product). This process is the most economical way to produce medium to large amounts of  ${\rm ClO}_2$  (20 to 4000lbs/day). The CG generator produces  ${\rm ClO}_2$  on demand, safely, efficiently and without the need for additional storage or delivery pumps (up to 30psig delivery pressure without the need for a booster pump).

The CG series has very few moving parts making it very low maintenance and reliable to operate even under extremely harsh conditions.

The system has built in flow pacing capability (with the use of an external flowmeter signal), production tracking and communications allowing remote system monitoring. The system is built with redundant safety interlocks and all operations are performed within the generator cabinet providing a safe and clean operating system.

### **Pure Advantages**

- 95%+ Efficiency
- On demand generation
- Large production range (20:1 turn down)
- Expert engineering and technical support
- Few moving parts, Low Maintenance, High Reliability
- Low operating cost enhanced ROI

#### **Puretek Platform**

What is the Puretek Platform? A multifaceted approach to measuring system production efficiency. Using optical sensors, the Puretek Platform accurately measures generator output concentration. Flow sensors and chemical consumption data complete the picture of production efficiency. This enables end users to manage operating expenses and determine system health. Included with this technology is the option to have system performance data sent to PureLine HQ for monitoring. With Puretek, users have full control and a greater understanding of system health.



## **Reaction Chemistry**



 $NaClO_3 + \frac{1}{2}H_2SO_4 + \frac{1}{2}H_2O_2 --> ClO_2 + \frac{1}{2}Na_2SO_4 + H_2O + \frac{1}{2}O_2$ 

### **Specifications**

Capacity: 1 lb to 160 lbs per hr

Chemical Usage: PureMax – 4.2 lbs/lb of ClO2 78% Sulfuric Acid – 4.9 lbs/lb of ClO<sub>3</sub>

Electrical Power: 220 VAC, 1PH, 30A Service (60A for 160lb/hr model)

**Inlet Water:** Type: 20 Mesh Filter Water (Process or Potable with low Ba+, Sr+ or Ca+)

Flow: Required Water Flow is 7 times generator size

(CG-20 = 14gpm, CG-40=28gpm)

Pressure: 150psig with <5psig fluctuation. Booster Pump

Available (recommended)

PLC & HMI: Allen Bradley PLC and Color Touch Screen

**Cabinet:** White polypropylene

**Dimensions:** 52.25" x 75.5" x 28.25"

Weight: 450 lbs

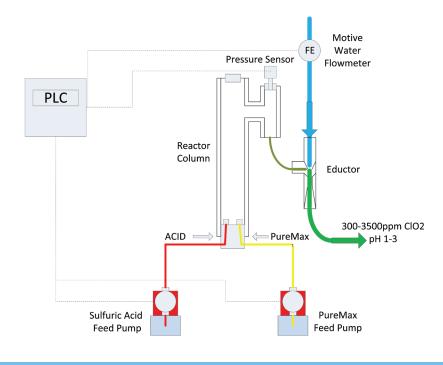
#### **Co-Products:**

- Excess H<sub>2</sub>SO<sub>4</sub> (3.7lbs per lb of ClO<sub>2</sub>, product pH 1-3)
- Oxygen Gas

**HS Code:** 8421.21.000

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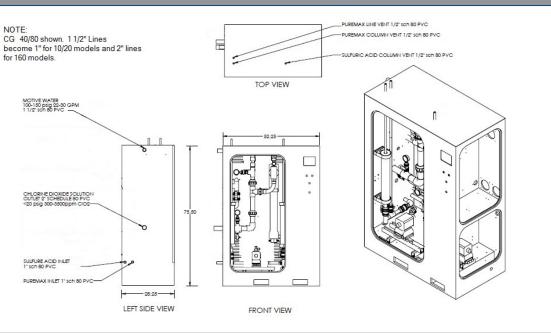




### ▲ Process Flow Diagram

## **▼ CG-Series Electrochemical Generator**

Common Platform — 1 lb to 160 lbs/hour



# Experts in the generation and application of chlorine dioxide

Pureline offers a complete line of chlorine dioxide products, solutions and accessories.



### **PureLine**

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