

# CGCA SERIES GENERATOR

#### **CGCA Generator**

PureLin

A powerhouse in water treatment, the CG Generator is especially suited for cooling tower water treament, ship ballast water treatment, and municipal water treatment. Perfect for high capacity water treatment needs where chlorites are an issue. Its high capacity and on-demand production, supported by two feed streams, ensure it meets the demands of large-scale operations. Designed with the ability to accept high concentration acid precursors.

#### **Puretek Platform**

### **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

NaClO<sub>3</sub> + <sup>1</sup>/<sub>2</sub> H<sub>2</sub>SO<sub>4</sub> + <sup>1</sup>/<sub>2</sub> H<sub>2</sub>O<sub>2</sub> -> ClO<sub>2</sub> + <sup>1</sup>/<sub>2</sub> Na<sub>2</sub>SO<sub>4</sub> + H<sub>2</sub>O + <sup>1</sup>/<sub>2</sub> O<sub>2</sub>

 Accepts 78%-98% sulfuric acid built in continuous acid dilution/cooling system

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**

### **Specifications**

Course site of			
Capacity:	1 lb to 160 lbs per hr	Cabinet:	White polypropylene
Chemical Usage:	: PureMax – 4.2 lbs/lb of $ClO_2$ 78% Sulfuric Acid – 4.9 lbs/lb of $ClO_2$ 93% Sulfuric – 4.1 lbs + DI Water – 0.80 lbs/lb of $ClO_2$ 98% Sulfuric – 3.95 lbs + DI Water – 0.95 lbs/lb of $ClO_2$	Dimensions	<b>:</b> 52.25" x 75.5" x 53.88"
		Weight:	450 lbs
		HS Code:	8421.21.000
Electrical Power: 220 VAC, 1PH, 30A Service (60A for 160lb/hr model)		Co-Products:	
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)	<ul> <li>Excess H<sub>2</sub>SO<sub>4</sub> (3.7lbs per lb of ClO<sub>2</sub>, product pH 1-3)</li> <li>Oxygen Gas</li> </ul>	
PLC & HMI:	Allen Bradley PLC and Color Touch Screen		



The CGCA series generator is a two chemical system using PureMax (a proprietary blend of chlorate and reducing agents) and high strength sulfuric acid to produce chlorine dioxide at over 95% efficiency (Chlorate Conversion to  $CIO_2$  in the final product). This process is the most economical way to produce medium to large amounts of  $CIO_2$  (20 to 4000lbs/day). The CGCA generator produces  $CIO_2$  on demand, safely, efficiently and without the need for additional storage or delivery pumps (up

MOTIVE WATER

78% ACID

HOT

Motive Water

Booster Pump

HEAT EXCHANGER

78% ACID COOLED

Reactor

Colum

DILUTION

Motive Water Flowmeter

Eductor

PureMax

PLC

300-3500ppm

CIO2

FE

Pressure

PureMa

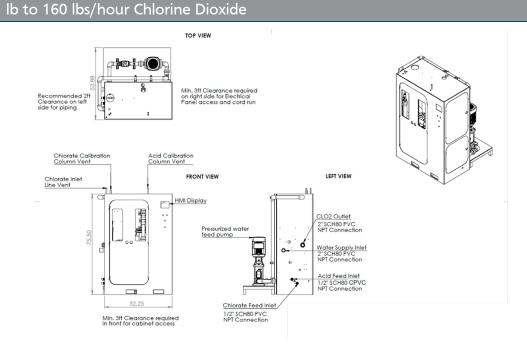
to 30psig delivery pressure without the need for a booster pump).

The CGCA 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.

### ▲ Process Flow Diagram





## Experts in the generation and application of chlorine dioxide

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



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