# SC3SERIES

# PureLine...

**GFNERATOR** 



Pure Advantages

- 100% stoichiometric conversion, 95%+ efficiency
- On demand generation
- Large production range (100:1 turn down)
- Expert engineering and technical support
- Few moving parts, Low Maintenance, High Reliability
- Low operating cost enhanced ROI

The SC3 series generator is a three chemical system using Sodium Chlorite, Hydrochloric Acid, and Sodium Hypochlorite to produce chlorine dioxide at over 95% efficiency (Chlorite Conversion to ClO2 in the final product).

This process is an economical way to produce medium to large amounts of ClO2 (20 to 4000lbs/day). The SC3 generator produces ClO2 on demand, safely, efficiently and without the need for additional storage or delivery pumps (up to 80psig delivery pressure without the need for a booster pump).

The SC3 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. All concentrated chemicals are injected into the stream, where the reaction takes place. The SC3 has the safest form of ClO2 generation, with the 3-precursor approach reducing acid usage. The system is built with redundant safety interlocks and all operations are performed within the generator cabinet providing a safe and clean operating system.

Its medium to high capacity and on-demand production, combined with three feed streams and flexibility in water quality requirements, make it an indispensable tool in the industry.

#### **Puretek Platform**

The Puretek Platform takes a multifaceted approach to measuring system production efficiency. Using optical sensors, it 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 🗟



 $NaOCl + 2HCl + 2NaClO_2 -- \rightarrow H_2O + 3NaCl + 2ClO_2$ 

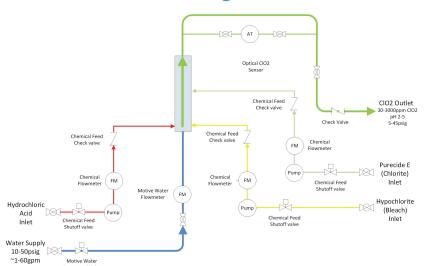


Pure Water for Your Operation

# SC3SERIES

### **GENERATOR**

#### **Process Flow Diagram**

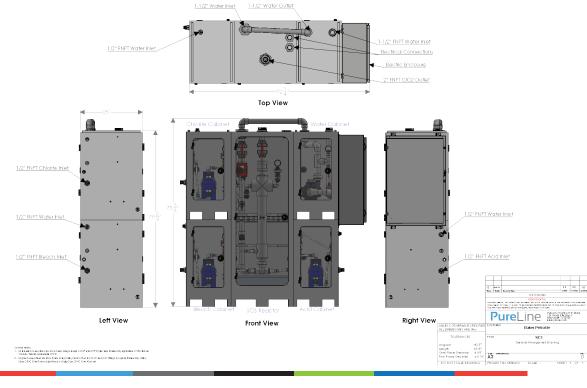


#### **Specifications**

Capacity	0.8 lbs /hr to 160 lbs/hr   0.4 kg/hr to 74 kg/hr
Chemical Usage	PureCide E 4.6 lbs/lb of Cl02 (31% Sodium Chlorite)
	Sodium Hypochlorite – 4.6 lbs/lb
Electrical Power	220 VAC, 3PH (Custom Power Options Available),
	30A Service (60A for 160lb/hr model)
Inlet Water	Type: 20 Mesh Filter Water (Process or Potable)
	Flow: Required Water flow is ~0.7 gpm per lb/hr
	(SC3-20 = 13.25gpm   SC3-40 = 26.5gpm)
	Pressure: 10-50psig (generator outlet pressure 10psi less than inlet pressure)
	*Injection pressure dependent on inlet pressure and application:
	water and ClO2 booster pumps available; consult with PureLine.
PLC & HMI	Allen Bradley PLC and Color Touch Screen
Cabinet	White Polypropylene
Dimensions	52.25" x 75.5" x 28.25"
Weight	450 lbs   Add 778 lbs for Crate
HS Code	8421.21.000

## SC3 Generator

COMMON PLATFORM: 20 LBS TO 4000 LBS/DAY



# **Pure**Line...

The leader in chlorine dioxide generation + application.

ClO<sub>2</sub>

#### pureline.com

info@pureline.com **847-963-8465** 

1241 N. Ellis Street Bensenville, IL 60106