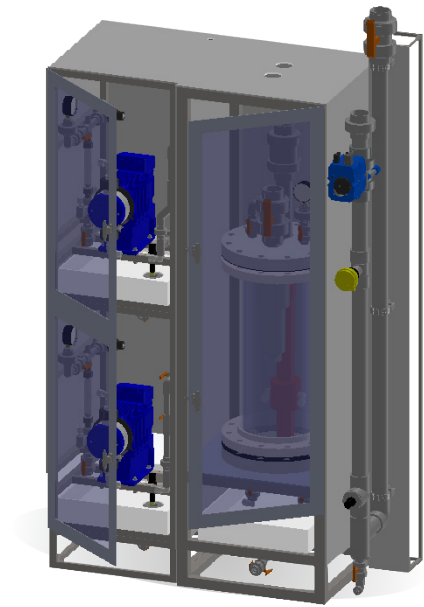


## SubSC2 GENERATOR



Our submerged SC2 system (SubSC2) line of generators takes the traditional 2-chemicals generator method to a new level. Utilizing 32% hydrochloric acid and 31% sodium chlorite, PureLine's SubSC2 generators can realize greater than 95% efficiency, far exceeding competing lines that are only capable of converting lower concentration precursors.

This is one of the safest generators available with the reaction completed in a vacuum ClO<sub>2</sub> reactor tube and process eductor completely submerged in a PVDF lined steel containment shell. The Process Eductor maintains vacuum on the ClO<sub>2</sub> Reactor while simultaneously mixing the ClO<sub>2</sub> from the reactor into the motive water stream to form the ClO<sub>2</sub> Product stream. The ClO<sub>2</sub> product solution discharges directly into the containment shell ensuring that any chemical leaks are contained within the the ClO<sub>2</sub> Reactor Assembly instead of out to the open environment. The product solution concentration is controlled by the hydraulic design of the eductor. The standard design is based upon maintaining the ClO<sub>2</sub> product concentration at or below 1000 ppm. Higher strength solutions (up to 3000 ppm) can be produced by modifying the Eductor and water booster pump design.

The standard SubSC2 is constructed in three polypropylene clad, stainless steel framed modules, the Water Feed Module, the ClO<sub>2</sub> Reactor module, and the Chemical Feed Pump Module. This modular design allows for maximum flexibility in the layout of the ClO<sub>2</sub> Process to meet site requirements. Alternate configurations (such as fully enclosed cabinet units) are also available.

The SubSC2 features low maintenance cost and reliable operation. The system has multiple safety interlocks and controls that allow the user to accurately maintain chemical feed ratios for optimal efficiency. The system is available with a water booster pump systems, batch tank(s), Injection pumps and automated manifolds that accept external control signals for flow pacing and/or residual control. The SubSC2 is ideal for affordable and safe ClO<sub>2</sub> generation from 1 kg/hr. to 30 kg/hr.

PureLine  
**SUB  
SC2**

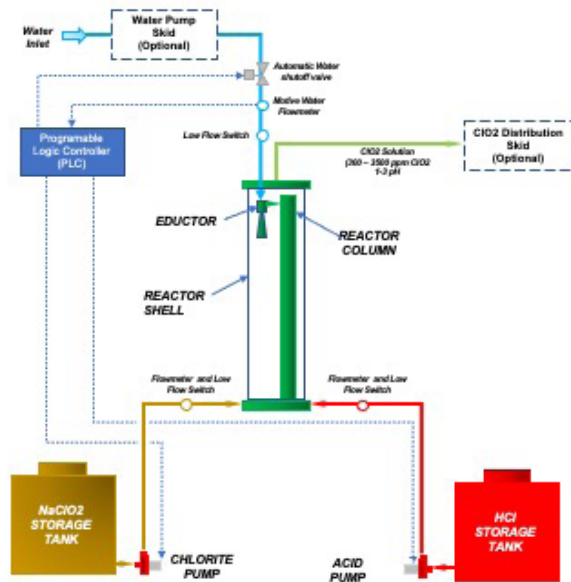
### Reaction Chemistry



### Specifications

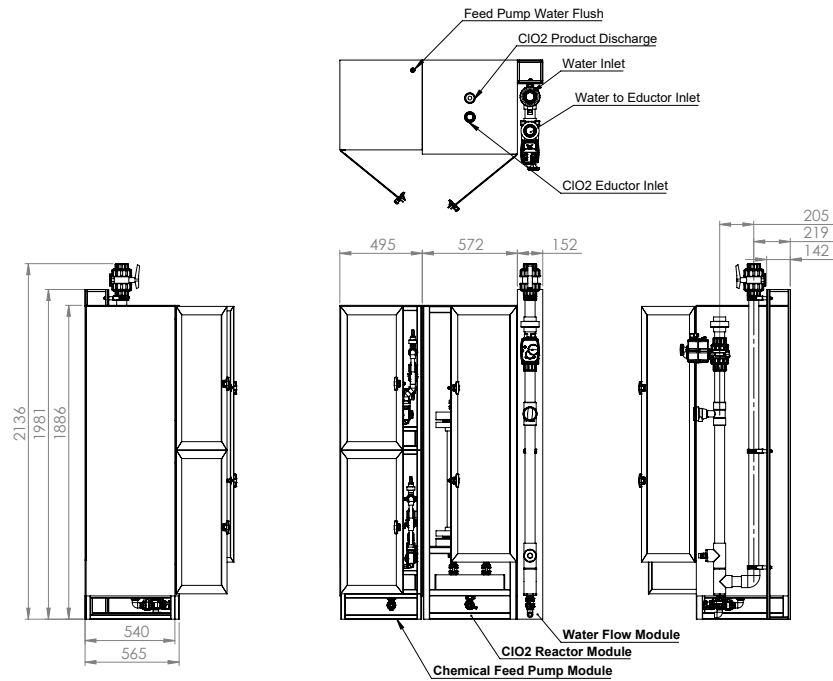
<b>Capacity:</b>	1 kg/hr, 5 kg/hr, 10 kg/hr, 20 kg/hr, 30 kg/hr.
<b>Chemical Usage:</b>	1.76 kg NaClO <sub>2</sub> (active ingredient) / kg ClO <sub>2</sub> @ 95% Yield 5.7 kg NaClO <sub>2</sub> (31% solution) / kg ClO <sub>2</sub> 5.1 kg HCl (32.0% solution) / kg ClO <sub>2</sub>
<b>Electrical Power:</b>	220 VAC / 60 Hz / 3 Phase – 20 A to 40 A (standard) Power requirement is site specific based on booster and distribution pumps Alternate electrical power supply available on request
<b>Inlet Water:</b>	(1.00 m <sup>3</sup> /hr) / (kg ClO <sub>2</sub> /hr) – Flow at 1000 ppm ClO <sub>2</sub> solution as product (0.33 m <sup>3</sup> /hr) / (kg ClO <sub>2</sub> /hr) – Flow at 3000 ppm ClO <sub>2</sub> solution as product
<b>Controls:</b>	Allen Bradley CompactLogix PLC Control System • Remote I/O for Start/Stop and monitoring 7" HMI (Standard) – Other sizes available on request
<b>Cabinet:</b>	Modular Units – Stainless Steel Frame with Polypropylene Sides Optional Painted Steel or Polypropylene cabinets available
<b>Dimensions:</b>	Water Flow Module 152 mm x 424 mm x 2135 mm ClO <sub>2</sub> Reactor Module 572 mm x 563 mm x 1884 mm Chemical Pump Module- 502 mm x 540 mm x 1884 mm
<b>Weight:</b>	300 – 500 lbs (assembled)

**HS Code:** 8421.21.000



▲ Process Flow Diagram

▼ SubSC2 Series Generator



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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