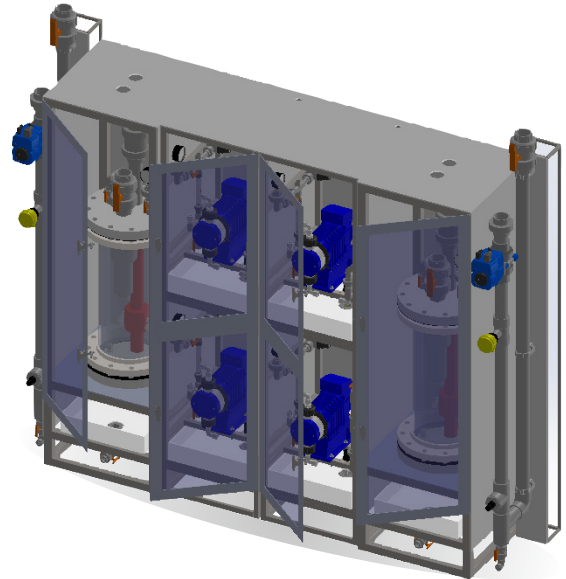


SubDC2 GENERATOR



Our submerged DC2 system (SubDC2) line of generators takes the traditional 2-chemicals generator method to a new level. Utilizing 32% hydrochloric acid and 31% sodium chlorite, PureLine's SubDC2 generators can realize greater than 95% efficiency, far exceeding competing lines that are only capable of converting lower concentration precursors. This generator is designed for ease of operation and maintenance while maintaining the highest safety standards.

The SubDC2 System is a dual system with one duty ClO₂ Generator System and one standby system. In the event of high demand both ClO₂ Generators can be operated simultaneously, doubling the ClO₂ capacity of the unit. The two generator systems are also configured so in the event of a problem with the duty ClO₂ Generator System; The duty system shuts down safely and the standby unit comes online automatically at the same operating conditions. ClO₂ production is not lost in the switch over.

This is one of the safest generators available. The ClO₂ Reactor Assembly consists of a ClO₂ Reactor and water powered Eductor contained inside a PVDF lined steel containment shell. The Process Eductor maintains vacuum on the ClO₂ Reactor while simultaneously mixing the ClO₂ from the reactor into the motive water stream to form the ClO₂ Product stream. The ClO₂ product solution discharges directly into the containment shell ensuring that any chemical leaks are contained within the ClO₂ Reactor Assembly instead of out to the open environment. The product solution concentration is controlled by the hydraulic design of the eductor. The standard SubDC2 design is based upon maintaining the ClO₂ 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 SubDC2 is constructed in polypropylene clad, stainless steel framed modules, there are two Water Feed Modules, two ClO₂ Reactor modules, and two Chemical Feed Pump Modules. This modular design allows for maximum flexibility in the layout of the ClO₂ Process to meet site requirements. Alternate configurations (such as fully enclosed cabinet units) are also available.

The SubDC2 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 SubDC2 is ideal for affordable and safe ClO₂ generation from 1 kg/hr. to 30 kg/hr.

PureLine
**SUB
DC2**

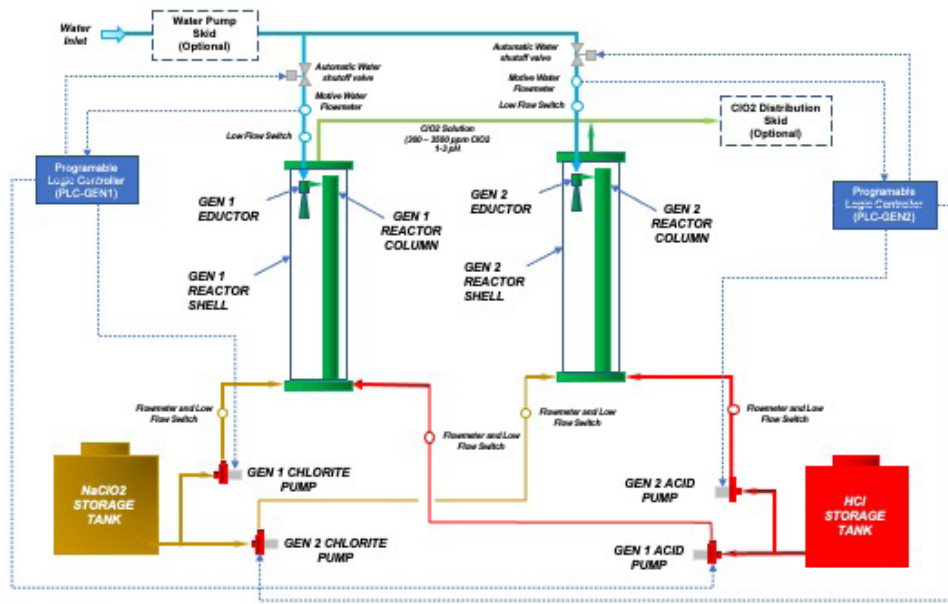
Reaction Chemistry



Specifications

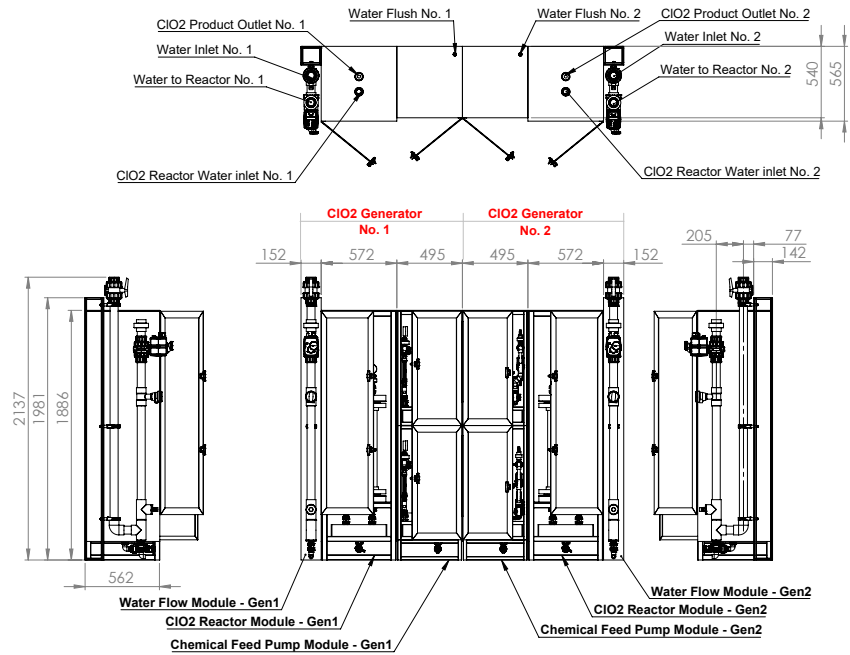
Capacity:	1 kg/hr, 5 kg/hr, 10 kg/hr, 20 kg/hr, 30 kg/hr. The capacity figures listed represent one ClO ₂ Generator System in operation Tandem operation doubles the ClO ₂ capacity
Chemical Usage:	1.76 kg NaClO ₂ (active ingredient) / kg ClO ₂ @ 95% Yield 5.7 kg NaClO ₂ (31% solution) / kg ClO ₂ 5.1 kg HCl (32.0% solution) / kg ClO ₂
Electrical Power:	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
Inlet Water:	(1.00 m ³ /hr) / (kg ClO ₂ /hr) – Flow at 1000 ppm ClO ₂ solution as product (0.33 m ³ /hr) / (kg ClO ₂ /hr) – Flow at 3000 ppm ClO ₂ solution as product
Controls:	Allen Bradley CompactLogix PLC Control System • Remote I/O for Start/Stop and monitoring 7" HMI (Standard) – Other sizes available on request
Cabinet:	Modular Units – Stainless Steel Frame with Polypropylene Sides Optional Painted Steel or Polypropylene cabinets available
Dimensions:	Water Flow Module 152 mm x 424 mm x 2135 mm ClO ₂ Reactor Module 572 mm x 563 mm x 1884 mm Chemical Pump Module 502 mm x 540 mm x 1884 mm
Weight:	300 – 500 lbs (assembled)

HS Code: 8421.21.000



▲ Process Flow Diagram

▼ SubDC2 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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