

VacSC2 GENERATOR

Our vacuum SC2 system (VacSC2) line of generators takes the traditional 2-chemicals generator method to a new level. Utilizing 32% hydrochloric acid and 31% sodium chlorite, PureLine's VacSC2 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 Process Eductor maintains vacuum on the PVDF lined steel ClO_2 Reactor and simultaneously mixes the ClO_2 from the reactor into the motive water stream to form a 500 to 3000 ppm ClO_2 Product stream. In addition to the flow, leak and gas monitoring interlocks present in competing systems, the VacSC2 uses a pressure transmitter, mounted to the top of the reactor tube, safely shut down the process on loss of vacuum in the ClO, Reactor.

The standard VacSC2 is constructed in three polypropylene clad, stainless steel framed modules, the Water Feed Module, the ClO₂ Reactor module, and the Chemical Feed Pump Module. 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 VacSC2 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 VacSC2 is ideal for affordable and safe ClO₂ generation from 1 kg/hr. to 100 kg/hr.



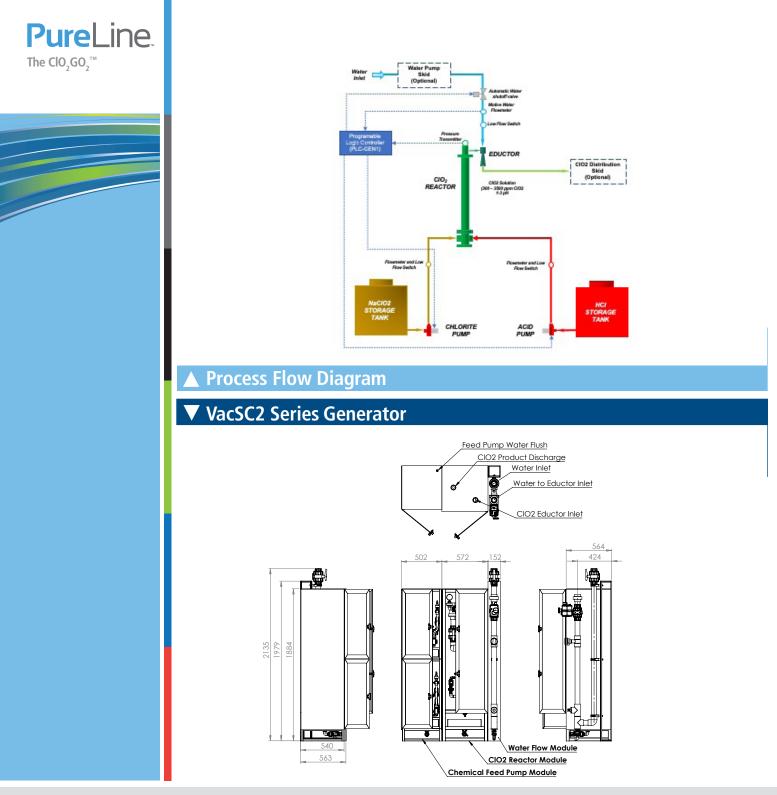
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Reaction Chemistry

 $5NaClO_2 + 4HCl --> 4ClO_2 + 5NaCl + 2H_2O$

Specifications

	00 – 500 lbs (assembled)
Capacities up to 100 kg/hr. available on request Chemical Usage: 1.76 kg NaClO ₂ / kg ClO ₂ @ 95% Yield 5.7 kg NaClO ₂ (31%) / kg ClO ₂ 5.1 kg HCl (32.5%) / 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 HS Code: 84	421.21.000
Inlet Water: Alternate electrical power supply available on request (1.00 m3/hr) / (kg ClO ₂ /hr) – Flow at 1000 ppm ClO ₂ solution as product (0.33 m3/hr) / (kg ClO_1/hr) – Flow at 3000 ppm ClO, 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	



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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