HP SERIES GENERATOR

LEGIONELLA CONTROL SYSTEMS EST. 1932

Common Platform Models

HP3, HP10, HP20, HP40, HP100, HP-250, HP-500

Our patented HP chlorine dioxide generator stands out for its unmatched **safety** and **purity**. This generator is specifically designed to eliminate the risks associated with multiple precursor systems, ensuring operational safety for hospitals, universities, hotels, and government buildings. Its ability to produce 99.5% pure, **chlorine-free ClO2 solution** makes it the preferred choice for food processing operations and facilities with sensitive equipment, such as thermal energy storage (TES) and nuclear operations. The HP series delivers pure ClO2 on demand without the need for an external storage tank, enabling **multiple dosage points** from a single generator. With on-site capacity upgrades, multiple safety interlocks, comprehensive reporting, communication options, expert engineering, and dedicated service support, the HP series sets the benchmark for **safe** and **reliable** ClO2 generation.

Pure Advantages

- Single-liquid precursor PureCide E (no acid)
- Produces 99.5% pure ClO_2
- pH neutral solution
- Long life electrolytic cells (no cartridges)
- Multiple control options: flow, residual, permissive, timers, & manual
- Distribution 800:1 turndown, 145 psi injection
- Customizable & scalable to 100lbs/day
- Expert engineering & technical support
- Low operating cost - rapid ROI
- No Vent Required
- Built-in chemical pump
- NSF/ANSI 60 & 61 Certified

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

$$2NaClO_2 + 2H_2O + \text{ELECTRICITY} \dashrightarrow 2ClO_2 + 2NaOH + H_2$$

888-416-8626 info@legcs.com request a quote

HP SERIES
GENERATOR

Hospital Secondary Water Treatment

Ensure the safety & hygiene of hospital water systems by treating biofilm and Legionella with high-purity, pH-neutral Chlorine Dioxide. This approach delivers reliable disinfection with minimal chemical usage, reducing operational risks and safeguarding patient health.

TES & Cooling Systems

Maintain efficient and safe cooling system operations by preventing biofilm buildup and microbial contamination. This solution offers a cost-effective way to reduce maintenance needs and extend equipment life through superior disinfection with minimal environmental impact.

Municipal & Potable Water Treatment

Enhance municipal drinking water with the highest purity Chlorine Dioxide available. This ensures effective microbial control without compromising water quality, providing a safe, consistent supply of drinking water that meets stringent regulatory standards.

Industrial Process Additive for Deodorizing

Improve industrial processes by integrating Chlorine Dioxide for effective deodorizing. This offers a reliable and eco-friendly option for controlling odors, enhancing workplace safety, and ensuring compliance with environmental regulations.

Food Processing

Enhance food safety and quality with high-purity Chlorine Dioxide in various food processing applications. This versatile solution ensures effective microbial control for fruit and vegetable washing, chiller systems, beverage processing, bottle washing, Clean-In-Place (CIP) procedures, and process water treatment. Achieve thorough disinfection without harmful residues, ensuring compliance with food safety standards.

CERTIFIED ISO 9001:2015 COMPANY

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Material Specifications

- PVC Schedule 80
- CPVC Schedule 80
- PTFE (Polytetrafluoroethylene)
- PVDF (Polyvinylidene Difluoride) (Kynar)
- Viton® (trade name for DuPont's fluoroelastomer)
- Kalrez® (trade name for DuPont's fluoroelastomer)
- Ceramic
- HDPE (high density polyethylene)

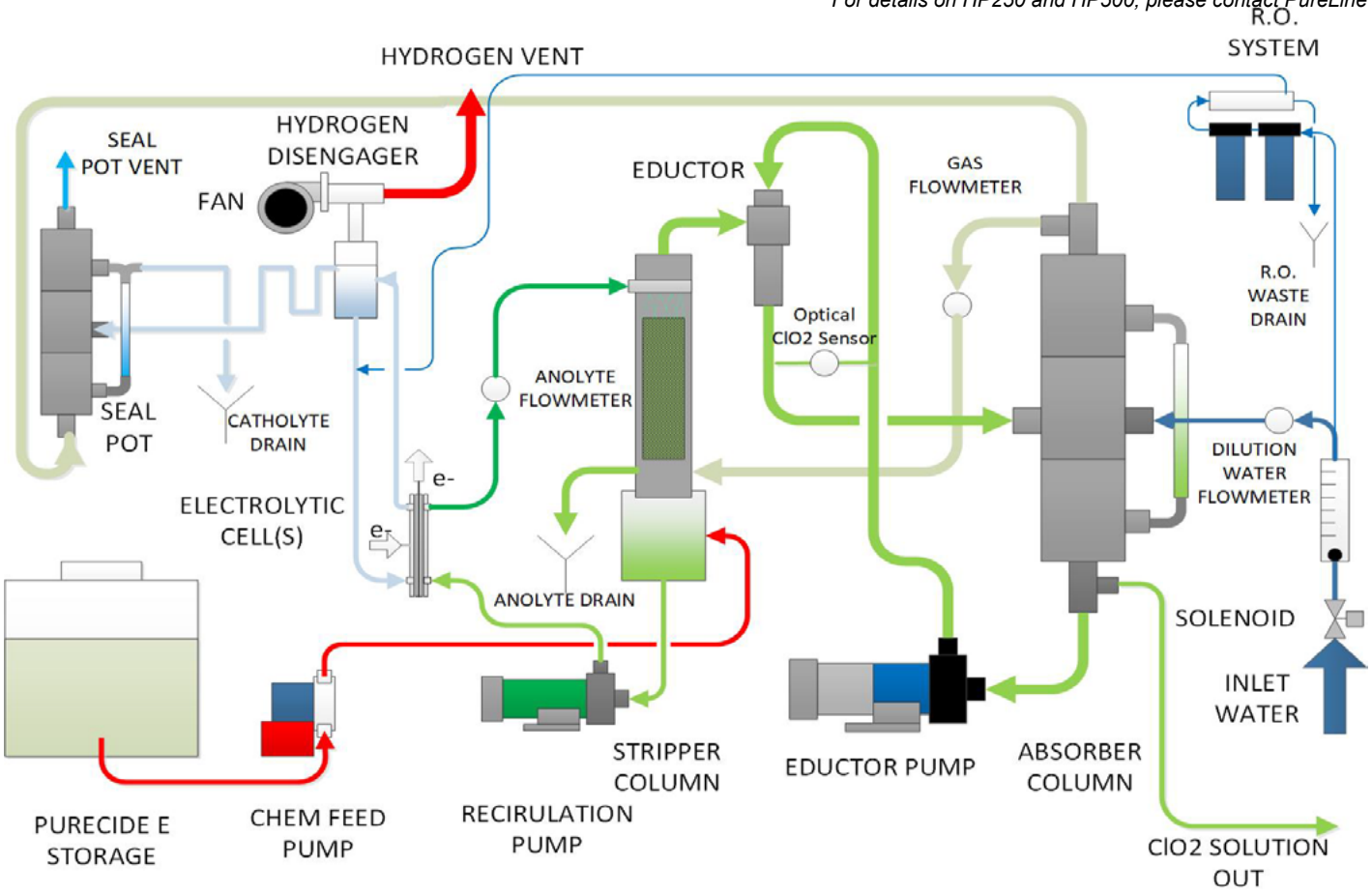
limited basis (tubing not in contact with sunlight)

Specifications

Capacity	Less than 1 lb to 100 lbs per day
Chemical Usage	PureCide E – 5.5 lbs-6 lbs / 1 lb ClO2
Electrical Power	208 VAC, 3PH, 30A Service (<15A NLD)
	Other Voltages Available on Request
	Power Requirements: 2.3 - 10.4 kW
Inlet Water	Clean/filtered min 50 psi (0.5 – 3.0 gpm)
PLC & HMI	Allen Bradley PLC and Color Touch Screen
	HMI with VNC Capability
Cabinet	White Polypropylene
Dimensions	63.25" x 75.5" x 28.50"
Weight	614 lbs | Add 778 lbs for Crate
Co-Products	Anolyte Waste: 20% NaOH solution (.01 - .1 gpm)
	Catholyte Waste: Spent Chemical (.01 - .05 gpm)
	RO waste (.5 – 1.0 gpm)
Soft Comms	Ethernet IP
Hard Comms	Remote Start/Stop, Generator Status, Flow Signals
HS Code	8421.21.000

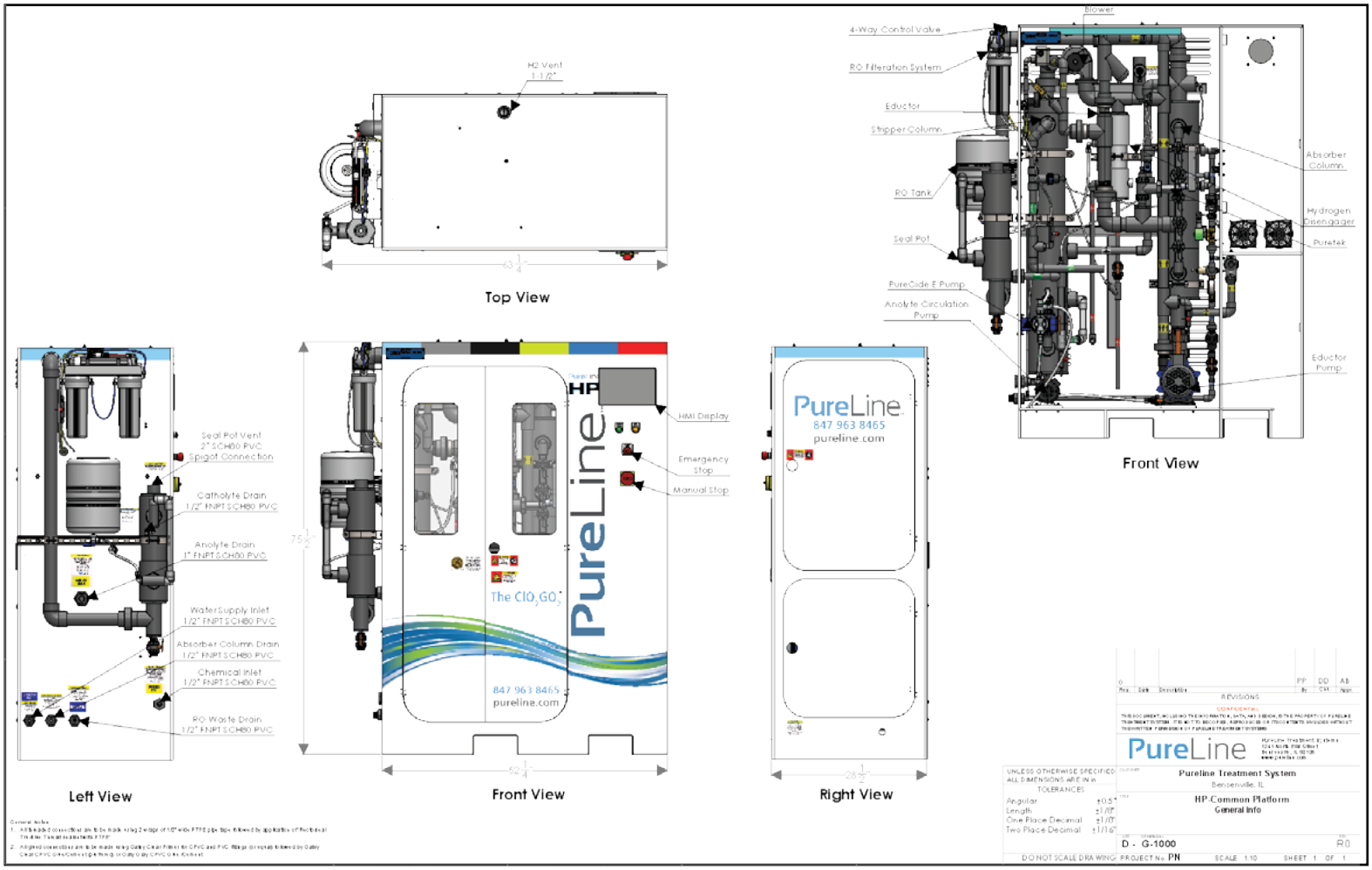
Process Flow Diagram

**For details on HP250 and HP500, please contact PureLine*



HP SERIES
GENERATOR

Electrochemical Generator
COMMON PLATFORM: UP TO 100LBS/DAY



Power Consumption Table

HP-3	**Power Consumption**: 18.4 kWh per lb ClO2 | 40.6 kWh per kg ClO2 **PureCide E Usage**: 5.7 lbs/lb ClO2
HP-10	**Power Consumption**: 6.35 kWh per lb ClO2 | 14.0 kWh per kg ClO2 **PureCide E Usage**: 5.7 lbs/lb ClO2
HP-20	**Power Consumption**: 3.78 kWh per lb ClO2 | 8.3 kWh per kg ClO2 **PureCide E Usage**: 5.7 lbs/lb ClO2
HP-40	**Power Consumption**: 2.49 kWh per lb ClO2 | 5.5 kWh per kg ClO2 **PureCide E Usage**: 5.7 lbs/lb ClO2
HP-100	**Power Consumption**: 2.49 kWh per lb ClO2 | 5.5 kWh per kg ClO2 **PureCide E Usage**: 5.7 lbs/lb ClO2