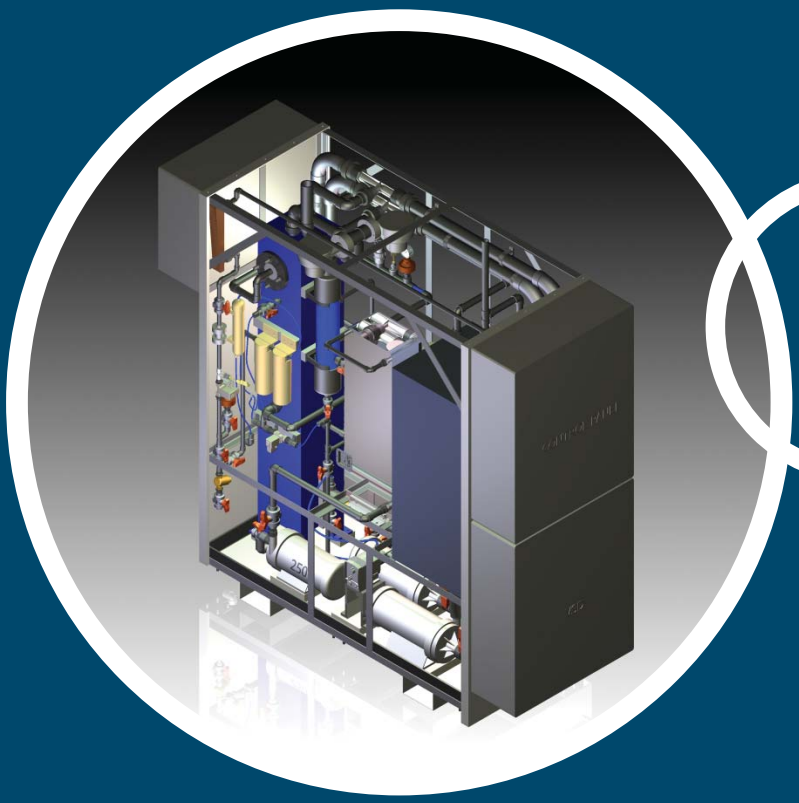
dioxide PACIFIC



OxiMax Electro-chemical Chlorine Dioxide Generators

Models:	Capacity	
CDE 2.5	2.5 ppd	47 g/hr
CDE 5	5 ppd	94 g/hr
CDE 10	10 ppd	189 g/hr
CDE 25	25 ppd	472 g/hr
CDE 50	50 ppd	945 g/hr
CDE 100	100 ppd	1890 g/hr
CDE 150	150 ppd	2835 g/hr
Precursor consumption: • ClO_2: As low as 5.5 lbs. $NaClO_2$/ lb. of ClO_2		

OxiMax
WATER DISINFECTION SOLUTIONS

Chemical Reactions - Electrochemical ClO_2 Production

① Anode (oxidation): $\rightarrow ClO_2^- \rightarrow ClO_2 + e^-$

② Cathode (reduction): $\rightarrow 2H_2O + 2e^- \rightarrow H_2 + 2OH^-$

① + ② (combined) $\rightarrow 2ClO_2^- + 2H_2O \rightarrow 2ClO_2 + H_2 + 2OH^-$

ClO_2 solutions eliminate:

- E coli, QUICKLY
- Persistent anaerobic bacteria, gone!
- Rust and dissolved iron; eliminated!
- Zebra mussels and other marine foulants
- Biofilms, best technology available
- Hydrogen sulfide, is oxidized to sulfate ion

ClO_2 solutions for purity and efficacy:

- Imparts no flavor taint to food, wine or beer
- Better cooling tower biocide for better heat exchange
- Chilled water loops, works perfectly in cold water
- Kills as well at pH 2 as it does at pH 10
- Foam and fog ClO_2 with detergent for mold inactivation
- Excellent and inexpensive sanitizer for milk cases
- Perfect for bottle rinsing prior to filling

CHLORINE DIOXIDE POWERFUL BIOCIDE

The ClO_2 molecule actually seeks out organisms, as it has an affinity for the disulfide linkages found in the amino acids of cell walls. Once it finds these organisms, it penetrates the cell wall through cellular respiration. When inside the cell, ClO_2 changes the permeability of certain cell walls, also disrupting RNA replication (which is the heart of cellular metabolism). The result is that the cell quickly dies. This is a completely different and more effective mode of death compared to typical biocides.

HIGH PURITY PROCESS WATER DISINFECTION

Water systems which contact or are used as an ingredient in food and beverage products require extremely high purity disinfection. The chlorine dioxide produced in the OxiMax e-chem generator is free of chlorite, chlorate and free chlorine and is therefore best for these applications.

HIGHEST SAFETY

Our electrochemical method of chlorine dioxide generation uses only one precursor chemical – OxiMate. No bleach or acid is required and therefore, storage and handling risks associated with incompatible Dangerous Goods are removed from consideration. The chlorine dioxide solution produced is dilute and ready for safe and accurate transportation to (multiple) dosing points.

Historic Problems, Innovative Solutions

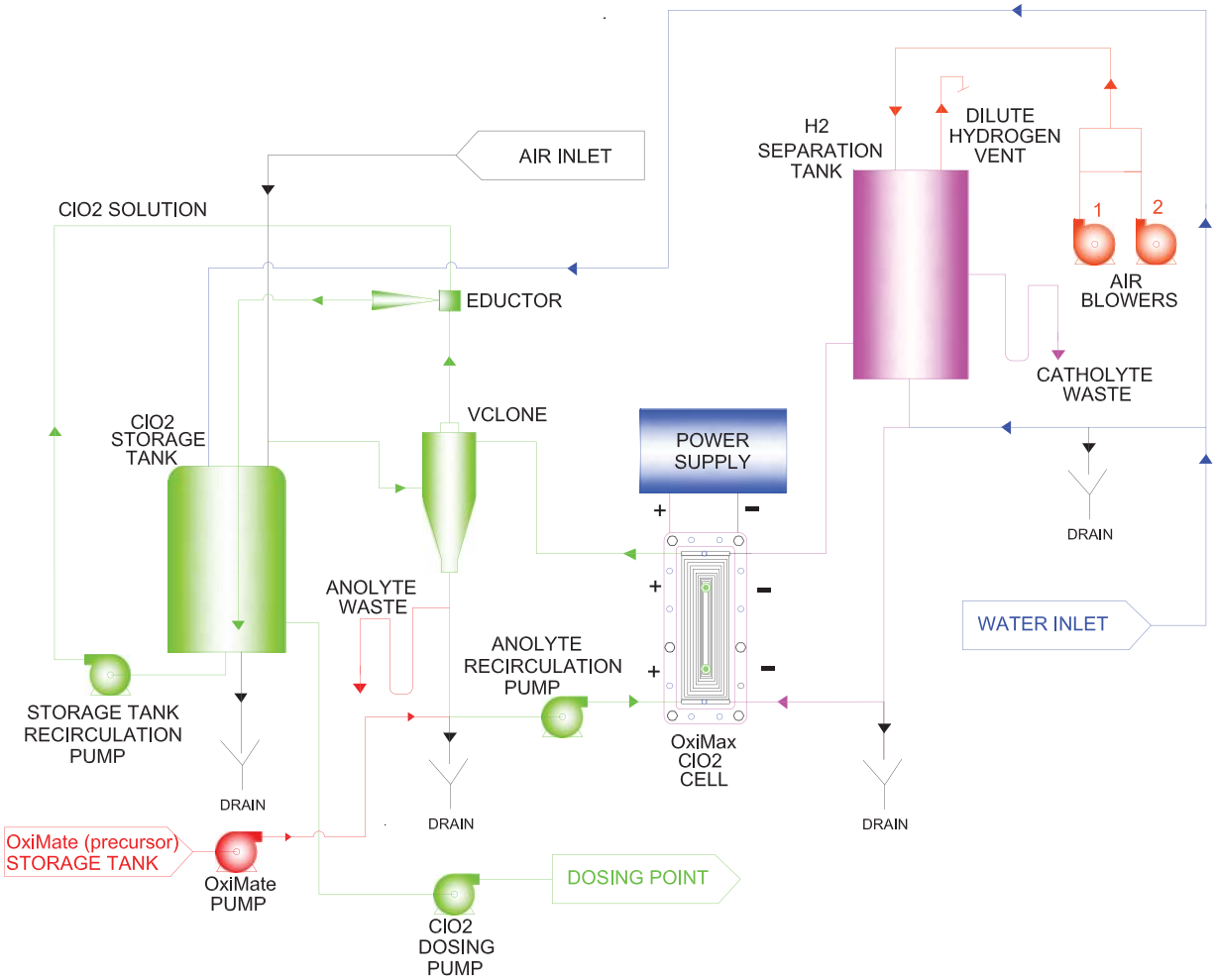
INDUSTRY LEADING ELECTRO-GENERATION TECHNOLOGIES

Chlorine Dioxide

OxiMax's innovative cell design and gas extraction process is the highest performing technology available to date. With greatly reduced chemical and electrical requirements, the operating costs of our CDE e-chem generator are the lowest available.

A single chemical process means no acid or chlorine is required for chlorine dioxide generation and our corrosion-free plating process protects the e-chem cell, helping to ensure low maintenance and long operating life.

Our gas extraction process for ClO_2 creates a nearly pure, neutral pH solution, using either fresh or process water as the carrier to deliver the molecule to the process. The resulting chlorine dioxide is free of contaminants, storage stable and safe to use.



Chlorine Dioxide

SYSTEM SALES

Please contact us regarding your needs. Our staff of experienced associates will assist you to identify the proper system and dosing regimen.

INTEGRATION AND INSTALLATION

We can create CAD drawings to ensure proper installation and connection to existing systems. All units are installed and started by Dioxide Pacific trained personnel

SUPPORT

Our network of service technicians will deliver the uptime you require with programs for preventative maintenance along with emergency service. All systems come with the option for either wireless or wired access so that our techs can identify and remedy most maintenance issues remotely.

dioxide
PACIFIC

www.dioxide.com

INDUSTRY LEADING ELECTRO-GENERATION TECHNOLOGIES

United States
P: 702-938-6418
F: 702-938-4118
2654 W. Horizon Ridge Pkwy,
Suite B5-204 Henderson NV 89052
E: salesus@dioxide.com

Sydney
P: 02 9999 4594
F: 02 9999 4534
PO Box 791 Narrabeen
NSW 2101 Australia
E: sales@dioxide.com

Perth (WA)
P: 08 9337 5415
Fax: 02 9999 4534
E: saleswa@dioxide.com

Melbourne Branch Office
P: 03 9005 1681
Fax: 02 9999 4534
E: salesvic@dioxide.com

Manufacturer of Electro-chemical Generators for the creation of:
• Chlorine Dioxide • Sodium Hypochlorite • Mixed Oxidants