YOUR BEST DISINFECTION OPTION: ON-SITE SODIUM HYPOCHLORITE GENERATION

MC-300, 300 pounds per day
MAKING BLEACH MADE EASY

- Safest OSHG Design
- Low Cost, High Quality Hypochlorite
- Vertical V-Ray Cell Design
- Multi Cell Configuration
- Immediate/Passive Hydrogen Removal
- No Hydrogen Containment
- Small Footprint
- Low Maintenance
- 24 Hour Service Provided

MC-1000
1000 pounds per day
As concerns mount and regulations change regarding the safety and security of using chlorine gas for water disinfection, many utilities are choosing sodium hypochlorite (bleach) as a safer disinfection alternative. Once the decision to convert to a safer alternative has been made the question remains whether to purchase or produce sodium hypochlorite. MicrOclor is the right choice to meet your disinfection requirements.

The items listed below are the most significant of the many benefits realized by upgrading to MicrOclor OSHG. We encourage you to contact the many Utilities currently using MicrOclor for further evidence supporting their decision to purchase a MicrOclor upgrade.

**SAFETY**
MicrOclor’s dilute (0.8%) hypochlorite solution is below the hazardous material concentration threshold of 1%. This reduces operator HazMat exposure and eliminates the need for diluting commercial hypochlorite to compensate for degradation which results in inconsistent solution strength.

**FEWER DELIVERIES**
The only raw material required for the OSHG process is common salt. This will reduce vendor deliveries by 66% compared to commercial bulk hypochlorite. Less truck traffic through the community and at the facility will reduce the potential for accidents and eliminate the associated carbon footprint. This furthers efforts towards Green Facility Management and improves the water security profile.

**CONTINUITY OF OPERATIONS**
MicrOclor OSHG will enable storage of larger quantities of raw materials (salt) necessary for your disinfection process. This will result in a more sustainable and robust treatment facility better able to withstand the demands imposed by a natural disaster or health emergency. OSHG is the only available disinfection technology that enables compliance with the Department of Homeland Security recommendations for Pandemic Flu Planning Guidelines.

**REDUCED OPERATIONAL COSTS**
Since all chlorine compounds are derived from salt, electrolytic conversion at the facility will result in significant savings to the owner. Typically, it costs 50-70% less to produce sodium hypochlorite compared to buying it.
MicrOclor is modular in design and utilizes standard components, which are easily customized to meet a wide range of requirements.

A typical MicrOclor system includes:
- Stainless Steel Skid Assembly
- Water Softener
- Brine Tank
- Brine Pump
- Electrolytic Cells
- Skid mounted PLC Control Panel
- D.C. Rectifier
- Hypochlorite Storage Tank
- Hypochlorite Metering Pump
- Hydrogen Dilution Blower

**Capacities:** 20-2400 pounds per day chlorine equivalent
**Control:** Automatic, regulated by storage tank level
**Percentage Sodium Hypochlorite:** 0.8% + 0.05%
**Consumables per pound of chlorine produced:** <3lbs of salt, 2KWH (AC), 15 gallons of water
**Water Input:** Potable water, 30-80 PSI, 45°F-85°F (5°C-27°C)
**Salt:** 99.7% pure dry weight Morton White Crystal or equivalent
**Power:** 20-80ppd systems - 208V or 240V AC, 1PH, 60HZ
60-2400ppd systems - 480V, 3PH, 60HZ
**Control Cabinet:** 304 stainless steel NEMA 4x
**Operator Interface:** 6” Color Touchscreen
**Programmable Logic Controller:** Allen Bradley Micrologix
1400 or equal

Brine & Hypochlorite Storage Tank, will be appropriately sized for each application.

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### MICROCLOR PRODUCT PARAMETERS

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**NOTE:** NOMINAL RUNNING AMPERAGE IS APROX. 75% OF KVA RATING
MAKING BLEACH MADE EASY

The safety and cost effectiveness of On-Site Hypochlorite Generation makes it the best option for disinfecting water.

Since 1988 On-Site Hypochlorite Generation has been recognized as an effective method for water treatment. Through the efforts of the team now at Process Solutions this technology has developed over three generations into the robust and durable design of today’s MicrOclor System.

The patented MicrOclor design is the result of over twenty five years of experience in the manufacturing, installation and servicing of hypochlorite generation equipment. Advancements in system safety and ease of operation make MicrOclor the overwhelming choice for facilities.

The combined benefits of the following unique features make MicrOclor the most robust and durable system available today:

- Vertical/Multi Cell Configuration
- Direct Hydrogen Management
- Continuous Process Control
- Full Wave DC Power
- Compact Cell Design
- High-Velocity Electrolyte Circulation

VERTICAL/MULTI CELL CONFIGURATION
MicrOclor’s vertical “V-Ray” cell arrangement is the most significant of the many features that distinguish it from the earlier generations of equipment.

DIRECT HYDROGEN MANAGEMENT
The V-Ray electrolytic cells are configured in a vertical array and vented directly to atmosphere. This prevents the chance of over pressurization by releasing all hydrogen directly from each cell. Other systems use the storage tanks as hydrogen separators which can contribute to excessive cell pressure and vibration in the discharge piping.

CONTINUOUS PROCESS CONTROL
MicrOclor’s integral brine pump is controlled by the PLC to optimize salt conversion efficiency and hypochlorite production. Automating precise brine control reduces operator intervention and improves system efficiency.

FULL WAVE DC POWER
Automated brine control allows full wave rectification which greatly reduces excess heat and the number of parts utilized in the rectifier. This reduces HVAC loads and improves system reliability.

COMPACT CELL DESIGN
The V-Ray cell’s vertical orientation not only allows better hydrogen separation but is also more compact, resulting in a more space-efficient footprint. The clear acrylic cell body supports the electrode array and eliminates the need for internal baffles and fasteners which reduces maintenance and repair costs over the life of the system.

HIGH-VELOCITY ELECTROLYTE CIRCULATION
The hydraulic lift created by the hydrogen separation circulates electrolyte through the cell loop at 3 FPS. This reduces the requirement for cell cleaning and minimizes heat buildup in the cell.

MC-1000, 1000 pounds per day
COMPREHENSIVE WARRANTY
It is our policy to provide every customer with a state of the art, fully tested system. Each MicrOclor Hypochlorite Generation System carries a full three-year support agreement covering all parts and labor. In addition, the electrolytic cells and cell housings are warranted on a prorated basis for years 4-7.

SERVICE & SUPPORT
PSI prides itself on our service and technical support. If you need assistance, we’re here to help. We offer complete support for your MicrOclor Hypochlorite Generation System including all peripheral components. 24/7 phone support and next day parts are available for your MicrOclor System. PSI guarantees next day field service, 7 days a week, with technicians located in all major markets plus an extensive factory trained representative network.

LEARN MORE ABOUT MICROCLOR
WWW.4PSI.NET/PRODUCTS/MICROCLOR/VIDEO/

Represented By: