



Klorigen™ M-Series

On-Site Electrochemical Sodium Hypochlorite Systems

The **Klorigen™** M-Series Sodium Hypochlorite Generator is a smaller scale electrochemical system specifically intended for on-site remote applications and designed for safe and cost effective production of high purity, commercial-strength sodium hypochlorite solution using food grade salt. These systems can be configured to produce bleach at concentrations from 5 to 12.5-trade%. System generating capacities range from 40 to 200 gal per day as 12.5% (125 gm/L) NaOCl. One gal of 12.5% bleach is equivalent to one lb of chlorine gas.

The Klorigen™ M-Series systems eliminate hazards typically associated with the use of pressurized chlorine gas and bulk deliveries of commercial sodium hypochlorite. The M-Series units are ideal for industries and municipalities that are currently using or need a form of chlorine for disinfection, sterilization or bleaching.

Features & Benefits:

- Replaces pressurized chlorine gas to eliminate the potential for toxic gas release
- Membrane-grade sodium hydroxide is produced as a co-product
- On-demand bleach - Scalable from 10% to 100% of capacity
- Sodium hypochlorite system product range - 5% to 15 trade% as NaOCl
- Single-pass brine feed system using food-grade salt for maximum efficiency
- Touch screen PLC control system
- PLC compatible with SCADA systems for remote monitoring & control
- System utilizes NSF certified components
- Hydrogen safely diluted below LEL
- Multi-year warranty and maintenance contracts available

General System Performance:

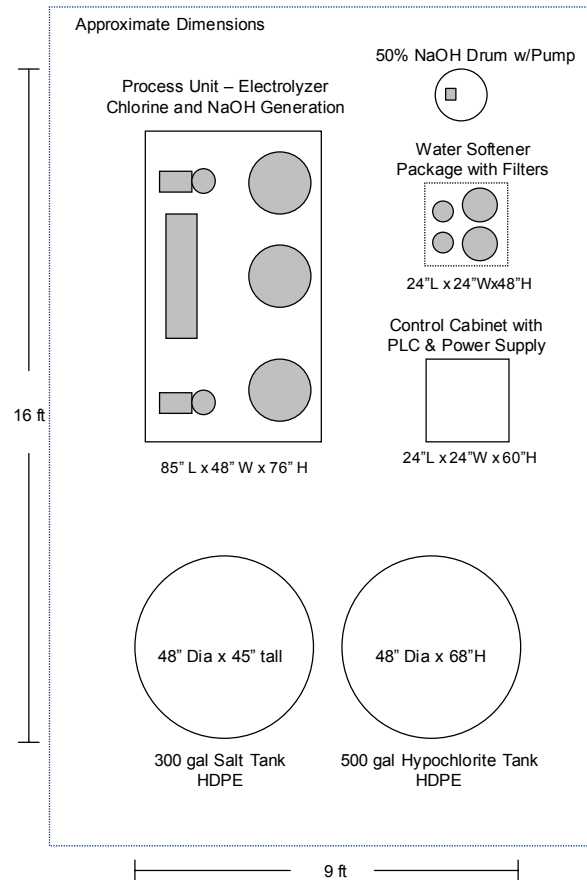
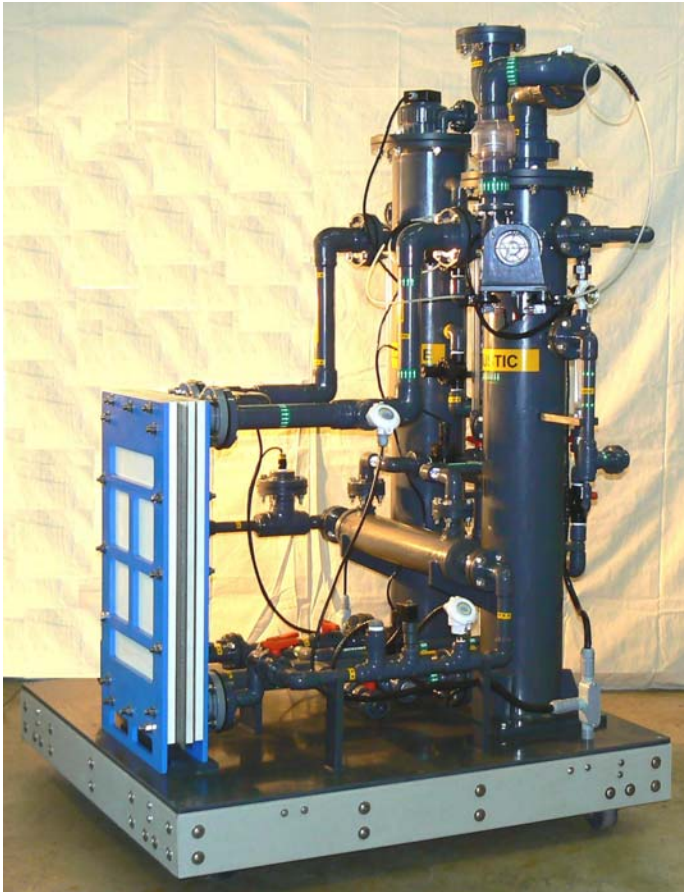
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| ▪ Power Consumption: | Less than 2.5 DC KWh per lb equiv Cl ₂ |
| ▪ Salt Consumption: | Less than 2.5 lbs NaCl per lb equiv Cl ₂ |
| ▪ Electrochemical Efficiency: | 70% to 85% |
| ▪ Sodium Hypochlorite: | 5 to 15 trade% (user option) |

Utility Requirements:

- 208 VAC or 460 VAC, 3 phase, power (depending on unit output capacity)
- Potable water supply for salt dissolving, caustic dilution and bleach dilution
- Cooling water: 5 - 15 gpm depending on capacity of unit

Klorigen™ M-Series 40-200 gal/day Hypochlorite System

Klorigen M-Series 200 gal/day Hypochlorite System Typical Layout



Simplified Process Flowsheet of the Klorigen M-Series Hypochlorite System

