On-site Sodium Hypochlorite Generation Systems

ClorTec® T Series

2.7 to 16 kg/d (6 to 36 lb/d)

On-site sodium hypochlorite generation systems are unparalleled in safety and cost efficiency.

ClorTec® on-site systems generate 0.8% sodium hypochlorite by combining three common consumables:

NaCl + H₂O + electricity → NaOCl + H₂

or

salt + water + electricity = sodium hypochlorite + hydrogen gas

ClorTec® T systems easily control sodium hypochlorite production and provide a powerful disinfection method for any application. T systems meet requirements for 2.7 to 16 kg/d (6 to 36 lb/d) chlorine equivalent. Applications include potable water, wastewater, odor and corrosion control, cooling towers, oxidation and swimming pool disinfection.

The ClorTec® T systems are component based and consist of a modular configuration. This design allows for ease in serviceability and expansion potential. The primary components may be arranged to optimize available space and systems may be custom designed for unique applications.
Features
- Dual tank water softener
- Salt dissolver
- Brine proportioning system
- Electrolyzer cell panel cabinet & cell(s)
- Power supply
- Metering pump(s)
- Hypochlorite storage tank(s)
- NSF/ANSI 61 Certified for use in drinking water applications

Benefits
- Eliminate safety hazards
- Reduce operating costs
- Improved water quality
- Low raw material usage
- Risk Management Program & Process Safety Management exempt
- Guaranteed performance
- Superior warranty

Specifications

Capacities: 2.7 - 16 kg/d (6 - 36 lb/d) free available chlorine

Control: Automatic batch, controlled by storage tank level

Hypochlorite: 0.8% ± 0.05%

Raw Materials: Per kg (lb) of chlorine produced
- 3.5 kg (3.5 lb) salt, 5.5 kWh (dc) (2.5 kWh), 125 L (15 gal.) water

Water Supply: Potable water @ 1.9 - 3.5 bar (20 - 50 psi)

Temperature Range: 18°C - 27°C (65°F - 80°F)

Salt Quality: 99.7% pure dry weight solar salt or equivalent

Electrical Power: 208 or 240 Vac 1 Ø, 60 Hz

Options Available: 240 Vac 1 Ø, 50 Hz

Control Panel: Grey polyester coated NEMA 12 welded steel enclosure

Operator Interface: PLC-based LCD operator interface for control and monitoring system status, alarms, tanks and flows

Programmable Logic Controller:
- Expandable from 8 to 32 discrete I/O channels
- 4 to 16 analog inputs and 2 to 8 analog outputs
- Full custom integration available

Salt Dissolver: 78 gallon (750 lbs) cylindrical tank with cover (24" D x 41" H) constructed of rigid high impact nontoxic polyethylene (Other capacities are also available)
Sodium Hypochlorite Tank

Material: Linear polyethylene

Size: One days storage recommended (lb/d x 15 gal)

Level Control: Ultrasonic or mechanical level sensor in tank controls start/stop function of system

Hydrogen Vent: Waste hydrogen is vented to atmosphere either passively or by air dilution


Optional Water Heater: UL® listed