

# THE GLOBAL WATERBORNE DISEASE SOLUTION

## SPRING™

### DISINFECTANT GENERATOR

RAPID • AUTOMATED • DURABLE



**AQUA**  
RESEARCH

The SPRING™ Disinfectant Generator is a fully automated system that converts a saltwater solution to liquid chlorine. The system comes with a chlorine storage tank with a high/low level switch. The system automatically stops and starts to keep the chlorine storage tank full. The chlorine-based solution generated by the SPRING™ Disinfectant Generator is ideal for health care facilities, drinking water treatment in small communities, hotels, apartment complexes, disaster relief, humanitarian aid, and industrial applications like cooling towers.

|                     |                                                  |
|---------------------|--------------------------------------------------|
| Capacity            | 1.3 PPD (0.6 kg/day) FAC                         |
| Power               | 110/220 VAC, 1 ph, 50/60 hz, 2A, or 12VDC at 20A |
| FAC Concentration   | 5,000 mg/L                                       |
| Flow Rate           | 1.2 GPH (4.8 LPH)                                |
| Feed Water Temp     | >50°F <86°F<br>(>10°C >30°)                      |
| Feed Water Pressure | 22 psi (1.5 bar) minimum                         |
| Dimensions          | 18" x 45" x 9"<br>(0.5m x 1.1m x 0.23m)          |
| Weight              | 26 lbs (12 kg)                                   |



**The SPRING™ Disinfectant Generator produces 1.3 lbs (0.6 kgs) of chlorine per day, which requires 4 lbs (1.8 kgs) of salt and 3.6 kw-hrs of power.**

- Treats 60,000 gallons (230,000 L) of drinking water per day at a 2.5 mg/L chlorine dose.
- Provides healthcare facilities with 30 gallons (115 L) of liquid chlorine per day – ‘ready to use,’ at 5,000 mg/l concentration as recommended by WHO for highly contaminated medical settings.
- Runs on 110/ 220 VAC, single phase 2A/1A or 12VDC.
- Includes a 40-gallon (150-liter) brine generation system.
- Includes a 40-gallon (150-liter) chlorine storage tank with high/low level switches.
- Components are mounted on a ½" PVC back panel that can be attached to 16" center studs or an aluminum frame.

**TREAT UP TO 60,000 GALLONS (230,000 L) OF WATER PER DAY AUTOMATICALLY, CONSUMING ONLY COMMON SALT, ELECTRICITY, AND WATER.**

## Options and Pricing:

The system can be ordered in many configurations, as shown in the table below. Pricing will vary on which system option is chosen. For more information on specific pricing, please contact us.

## System Chlorine Options:

There are two system configurations, both with complete control systems:

- The Mixed-Oxidant Solution (MOS) configuration produces 1.3 PPD (0.6 kg/day) free available chlorine (FAC) at approximately 5,000 mg/L concentration.
- The Sodium Hypochlorite (HYPO) configuration produces 2.0 PPD (0.9 kg/day) free available chlorine at approximately 6,000 mg/L concentration.

Mixed oxidants are a proprietary combination of sodium hypochlorite solution (i.e., chlorine bleach) and small amounts of hydrogen peroxide. This powerful mixed-oxidant combination kills all microorganisms, including viruses, bacteria, and protozoa, and removes biofilms in distribution systems, thereby eliminating water and airborne threats such as *Legionella*. Standard chlorine measurement methods can be used to measure the chlorine concentration in water treatment or sanitation applications. The mixed-oxidant solution is produced at the chlorine concentration recommended by WHO for cleaning highly contaminated medical settings.

## Tanks

The system can be purchased with complete tank assemblies or only the tank components to save on shipping. The tank components include an oxidant level switch, a brine float valve, and a spray ring.

|                              |                                |     |                                                    |
|------------------------------|--------------------------------|-----|----------------------------------------------------|
| MOS:<br>1.3 PPD (0.6 kg/day) | COMPLETE<br>TANK<br>ASSEMBLIES | IX  | MOS system, complete tank assemblies, IX softener  |
|                              |                                | RO  | MOS system, complete tank assemblies, RO softener  |
|                              |                                | --- | MOS system, complete tank assemblies, no softener  |
|                              | TANK<br>COMPONENTS<br>ONLY     | IX  | MOS system, tank components, IX softener           |
|                              |                                | RO  | MOS system, tank components, RO softener           |
|                              |                                | --- | MOS system, tank components, no softener           |
| HYPO:<br>2 PPD (0.9 kg/day)  | COMPLETE<br>TANK<br>ASSEMBLIES | IX  | HYPO system, complete tank assemblies, IX softener |
|                              |                                | RO  | HYPO system, complete tank assemblies, RO softener |
|                              |                                | --- | HYPO system, complete tank assemblies, no softener |
|                              | TANK<br>COMPONENT<br>S ONLY    | IX  | HYPO system, tank components, IX softener          |
|                              |                                | RO  | HYPO System, tank components, RO softener          |
|                              |                                | --- | HYPO system, tank components, no softener          |

- Water Softening**
- The system can be
- equipped with water
- softening to address the
- use of hard water, such as
- borehole water. Water
- softening dramatically
- reduces the need to acid
- clean the cell to remove
- carbonate scale, which
- typically allows the
- system to run for months
- with little maintenance.
- Customers can choose
- between reverse osmosis
- (RO) or ion exchange (IX)
- water softening. The RO
- softening configuration is
- less expensive than the IX
- water softener, but it
- requires periodic filter
- replacement -- typically
- once a year, depending on
- source water quality.

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