



## CHLOROXTM S-SERIES

### S-50

The Chlorox™ S-Series comprises a specially engineered self cleaning and durable electrolysis cell designed for superior Sodium Hypochlorite (NaOCl) generation. The unit features optimized flow-paths, highly efficient hydrogen removal outlets, and self cleaning electrodes.

The S model generates NaOCl using water, common salt, and electrical power. Both the anode and cathode (electrodes) are coated using PURITA's high-performance precious metal coating technology, resulting in a uniquely designed reversing electrode electrolysis cell that delivers increased NaOCl production while also reducing total power and salt consumption.

## BENEFITS OF THE S-SERIES

- Safe and reliable on-site production of sodium hypochlorite (NaOCl)
- Stable Inputs: Water, Salt and Electricity
- Different grades/qualities of salt can be used
- No need for regular acid cleaning
- No water softeners are required
- No hazardous Cl<sub>2</sub> gas
- Low concentration NaOCl is non hazardous
- Complete hydrogen dilution included for safety
- Level control for automated production

## APPLICATIONS



COOLING TOWER  
WATER



DRINKING WATER



REMOTE VILLAGE  
WATER



SWIMMING POOL  
TREATMENT



INDUSTRIAL  
PROCESS WATER



SURFACE WATER

# S-SERIES SYSTEM COMPONENTS

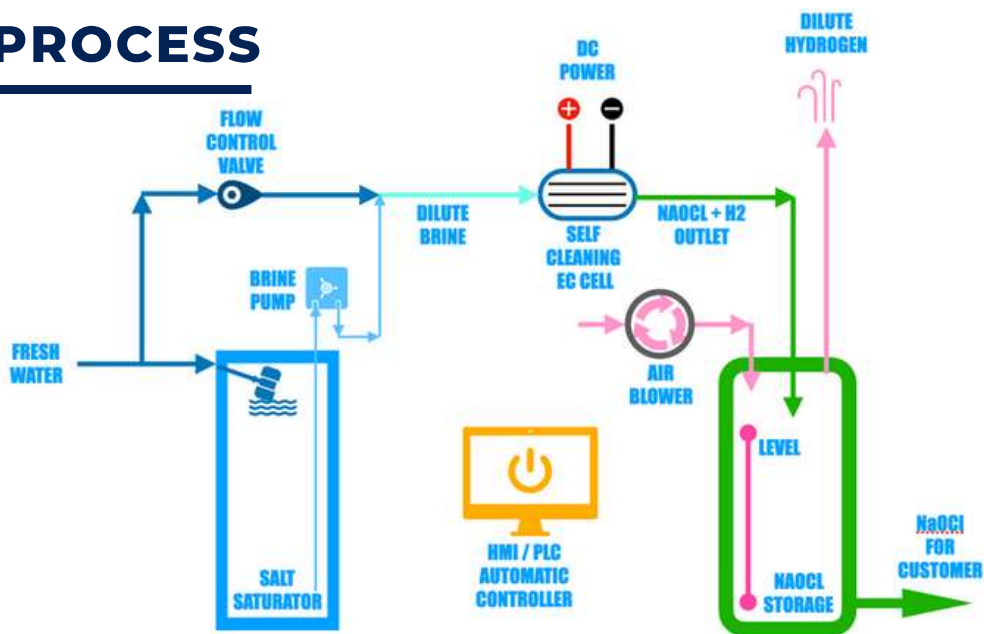
chlorox™ S Series is a fully self-contained electrochlorination system capable of generating NaOCl with minimal operator intervention.

The system is supplied complete with a salt saturator to create a suitable brine, a saturated brine pump, full HMI/PLC with automatic microprocessor control, pipework, a hydrogen dilution blower, and degassing column coupled with NaOCl storage tank to store the generated disinfection product.

There is a level control built into the NaOCl storage tank, allowing the system to start and stop automatically according to the level in the tank. The HMI/PLC visually displays the system status at all times and alerts the user via an alarm if the salt is running low and needs replenishing.

The Chlorox™ S system is supplied as a turn-key solution with all connections fully installed “out of the box”. The only external connections required are fresh water, dilute H<sub>2</sub> + air tubing and a connection to electrical power.

## THE PROCESS



The system raw materials include water, common salt, and electrical power. While the exact electrolysis reactions are complex, the key sodium hypochlorite (NaOCl) reaction can be simplified as follows:



HOCl (Hypochlorous Acid) and NaOCl (Sodium Hypochlorite) are powerful oxidizing agents, generated between 500-700 ppm. This level is ideal for water treatment and disinfection. NaOCl at this strength is not classified as a hazardous chemical.

### S - 50

Output Capacity	50 g/hr
No. of Electrolyzer Cells	1
Fresh Water Supply	1.0 to 4.0 bar
Voltage	90-264 AC
Frequency	47-63 Hz
Salt Saturator	100 l
Saturated Brine Dosing Strength	26%
Storage Tank	100 l
Water Treated to 1.0 ppm	50,000 l/h
Water Treated to 2.0 ppm	25,000 l/h