



Pool Salt Chlorine Generator

General:

1. It is the intent of these specifications to describe a pool salt chlorine generator designed specifically for swimming pool, spa and other aquatic applications based on the **Aqua Rite Salt Chlorine Generator** manufactured by Hayward Industries.
2. The pool salt chlorine generator should generate the required amount of chlorine for pool or spa sanitation from a low concentration of salt (sodium chloride) in the pool water. The chlorine should revert back to sodium chloride in the pool after killing bacteria.
3. This specification includes criteria for the following CSI Master Format components:
 - 3.1. Division 13 – Special Construction
 - 131000 Special Facility Components
 - 130111 Operation and Maintenance of Swimming Pools.
 - 3.2. Division 22 Plumbing
 - 225000 Pool and fountain Plumbing Systems
 - 225119 Swimming Pool Water Treatment Equipment
4. The pool salt chlorine generator shall meet the criteria of the following standards:
 - UL – Underwriters’ Laboratory
 - NSF – National Sanitation Foundation
5. The pool salt chlorine generator shall be supplied to its site of installation in its original manufacturer’s packaging. The package shall clearly state the model name, model number and country of manufacture and include the relevant operating and installation instructions. The salt chlorine generator unit shall clearly indicate the manufacturer’s name and logo.
6. The pool salt chlorine generator shall be a manufactured by a company with at least 10 years of proven product experience. The manufacturing facility shall be a permanent, established facility that meets the relevant codes.
7. The salt chlorine generator shall be certified by NSF and ETL.
8. The salt chlorine generator shall be guaranteed by the manufacturer for workmanship, materials and performance for a period of 1 year. The warranty will not include abusive or improper treatment of the robotic cleaner during operation.
9. The salt chlorine generating cell shall have a life of 12,000 hours.



Product:

1. The pool salt chlorine generator shall generate the correct amount of chlorine when the concentration of salt is between 3000 and 3500 ppm.
2. The pool generator shall produce minimum 600 gms of chlorine per day while operating at 100% output. The output of the chlorinator shall be certified by NSF.
3. The pool salt chlorine generator shall consist of following:
 - a. Turbo Cell
 - i. The Turbo Cell shall be a Sch 80 PVC pipe stabilized for resistance to UV and shall have the appropriate unions.
 - ii. The Turbo Cell shall house the titanium plates which generate the chlorine from the salt.
 - iii. The Turbo Cell shall have a salt probe, temperature probe and flow switch built into it.
 - iv. The Turbo Cell shall be self-cleaning using reverse polarity technology.
 - b. Diagnostic Control Panel
 - i. The diagnostic control panel shall have a weather proof enclosure and connections. The panel shall be suitable for outdoor installation.
 - ii. The diagnostic control panel shall be equipped with a bonding lug to allow for bonding to the system and a door that can be closed to protect the screen.
 - iii. The diagnostic control panel shall have the following:
 1. Main Switch
 - a. AUTO: For normal operation according to the "Desired Output %".
 - b. SUPER CHLORINATE: To "super chlorinate" (shock) the water.
 - c. OFF: To prevent the Turbo Cell from energizing and generating chlorine.
 2. Diagnostic Indicators
 - a. POWER: Indicating the input power status.
 - b. GENERATING: Indicating steady normal operation.
 - c. SUPER CHLORINATE: Indicating a status of super chlorination.
 - d. REMOTELY CONTROLLED: Indicating remote control of the unit.
 - e. NO FLOW: Indicating no water flowing and no chlorine generation.
 - f. CHECK SALT: Indicating a low salt level.
 - g. HIGH SALT: Indicating high salt level.
 - h. INSPECT CELL: Indicating deficient chlorine production from cell.
 3. LCD screen that can display
 - a. Pool temperature in °F or °C
 - b. Cell voltage in Volts & Cell current in Amperes
 - c. Desired Output % ("0P" -- "100P" depending on knob position or input from remote pool automation controller)
 - d. Instant salinity in ppm or g/liter
 - e. Product name sent to the pool automation control display
 - f. Software revision level
 - g. Chlorinator cell type
 4. Chlorine output control knob