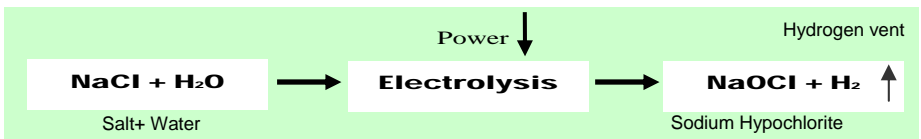


IEC offers On-Line Steriflo, Electro chlorination systems of capacities 12 Kg/day to 120 Kg/day using unit electrolytic cell of capacities 0.5 Kg/hr, 1 Kg/hr, 2 Kg/hr and 5 Kg/hr of chlorine equivalent production. Optimum combinations of these cells can be effectively employed for various desired customer capacity requirements. Steriflo Produces stable, low concentration hypochlorite solution by electrolysis process using only commonly available raw material such as salt, electricity and water.

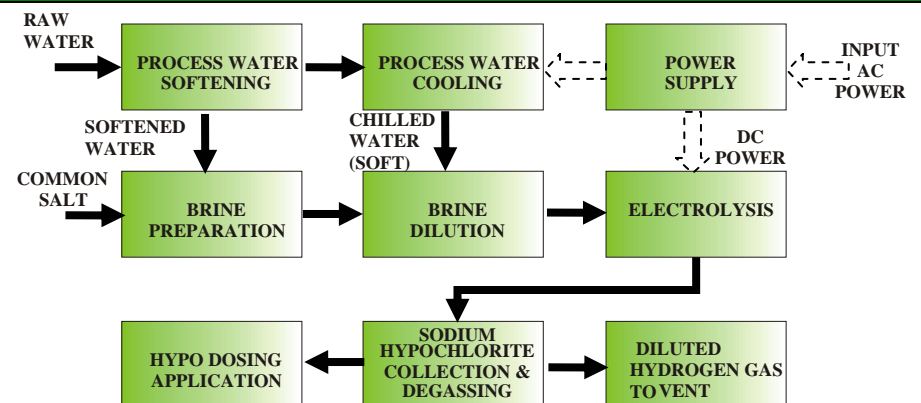
### SYSTEM FEATURES

- ❖ Dimensionally stable electrodes enabling longer & satisfactory electrolyser life.
- ❖ Compact bi-polar cells skid mounted, pre assembled & pre piped.
- ❖ Modular cell design of three unit capacities enables to install a system with any specific capacities.
- ❖ System built in with safety instrumentation & alarm system to safeguard against malfunctioning damages & faster trouble shooting.
- ❖ For higher capacities, unit modular cells can be connected in parallel to hydraulic and in series / parallel configuration to power to achieve required capacity.
- ❖ Online water softener reduces cell descaling frequency & downtime.
- ❖ Cell maintenance made easy with a separate cell cleaning system.
- ❖ Chilled water feed system eliminates the inefficient "in-process" hypo inter cooling requirement.
- ❖ Corrosion resistant construction.
- ❖ Continuous & intermittent duty design.

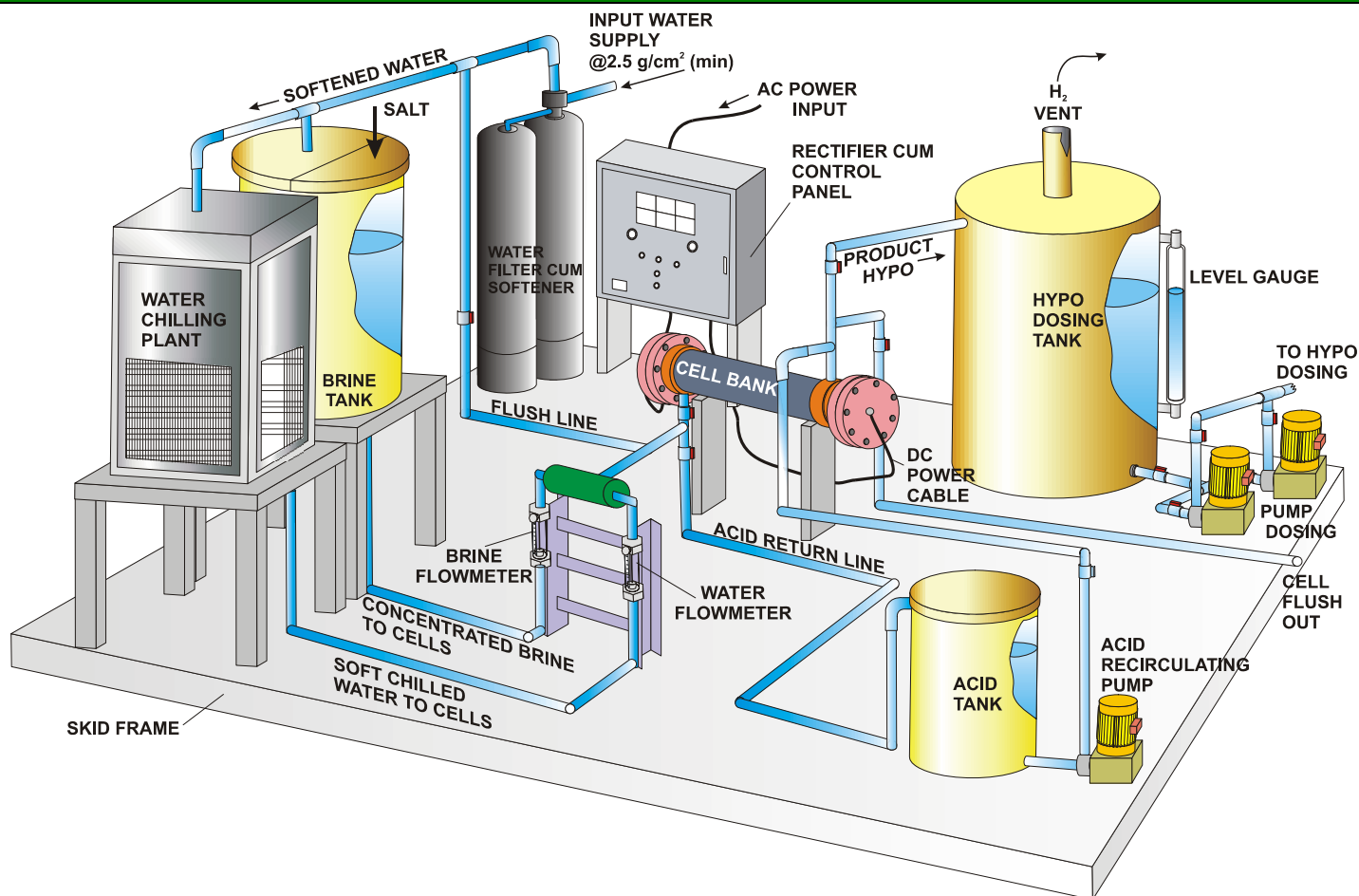
### PROCESS OF CHLORINE GENERATION



### PROCESS SCHEMATIC DRAWING



### TYPICAL SCHEME DRAWING



## SYSTEM ADVANTAGES

- ❖ Eliminates dependency of chemical supplier.
- ❖ Eliminates requirement of other chlorine sources such as chlorine gas, concentrated market sodium hypo chlorite, bleaching powder, etc.
- ❖ Eliminates the commercial loss on losing chlorine equivalent concentration due to decay on storage of bleaching powder & market hypo.
- ❖ Simple, safe and reliable operation.
- ❖ Operator friendly maintenance procedure & facility.
- ❖ Process feed water cooling facility ensures efficient system performance even in peak summer conditions of tropical countries.

### STANDARD SYSTEM

- ❖ On-Line water softener & accessories. (1Kg/hr and above capacities) / Water line strainer (0.5 Kg/hr)
- ❖ Water chiller with valves accessories.
- ❖ Brine preparation system with valves & accessories. (Daily salt addition)
- ❖ Brine & chilled water metering facility with valves & accessories.
- ❖ Electrolyser cell bank with inlet/outlet valves & piping.
- ❖ Rectifier cum control panel with annunciation facility.
- ❖ Process safety instruments with electrical interlock.
- ❖ Hypo collection tank (2 – 4 hrs. storage capacity) with hydrogen vent facility & accessories.
- ❖ Cell maintenance system consisting of acid tank, recirculation pump, valves & piping.
- ❖ Hypo dosing system consisting of electromechanical pump / Injector based dosing system with valves & piping.

### OPTIONAL FEATURES

- ❖ Brine preparation facility for weekly / monthly operation.
- ❖ Brine feed pump to cells (for large capacity system)
- ❖ Plant auto operation using PLC based control system.
- ❖ Automatic chlorine dosage based on chlorine residual analyzer & flow analyzer data inputs.
- ❖ Custom built high capacity systems.
- ❖ Higher capacity hypo storage facility
- ❖ Auto regeneration facility for softener.
- ❖ Repeat Annunciation facility for failure alarms in other plant areas.
- ❖ Blower operated forced air venting system(for large capacity system)
- ❖ Control and status compatibility with SCADA and DCS.

## APPLICATIONS

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>❖ Municipal &amp; colony drinking water system.</li> <li>❖ Cooling water treatment and algae control.</li> <li>❖ Waste water treatment.</li> <li>❖ Hospitals.(Sanitation &amp; waste treatment)</li> </ul> | <ul style="list-style-type: none"> <li>❖ Hotels.(Sanitation &amp; waste treatment)</li> <li>❖ Fisheries &amp; Poultry.</li> <li>❖ Effluent control including treatment of sewage.</li> <li>❖ Various bleaching applications.</li> </ul> |
|---|---|

## STANDARD CAPACITIES & TECHNICAL DATA

MODEL	SE500	SE1000	SE2000	SE5000
<b>Capacity (Available chlorine)</b>	500Gms/hr @ 0.8% concentration	1kg/hr @ 0.8% concentration	2 kg/hr @ 0.8% concentration	5kg/hr @ 0.8% concentration
<b>Connected load (For hypo generation)</b>	3.75 KW	7.5 KW	15 KW	37.5 KW
<b>Input supply</b>	AC - 3Ø - 440 V ± 10% , 50Hz ± 5%			
<b>Salt requirement</b>	1.8 kg/hr	3.5kg/hr	7 Kg/hr	18 kg/hr
<b>Product Flow</b>	62.5 Lph	125 Lph	250 lph	625 Lph
<b>Water supply (potable quality)</b>	1560 lpd@15-30 °C @ 2.5 Kg/cm <sup>2</sup> (g)	3000 lpd@15-30 °C @ 2.5 Kg/cm <sup>2</sup> (g)	6000 lpd@15-30 °C @ 2.5 Kg/cm <sup>2</sup> (g)	15000 lpd@15-30 °C @ 2.5 Kg/cm <sup>2</sup> (g)
<b>Specific Power consumption at electrolyser</b>	5.5 AC KWH			
<b>Electrolyser System space requirement (Room size)</b>	4 M x 4 M x 3 M L X B H	6 M x 4 M x 3 M L X B H	6 M x 4 M x 3 M L X B H	10 M x 6 M x 4 M L X B H



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