

Safe, reliable & efficient on-site generation of sodium hypochlorite



Hyprolyser® Standard models: 280, 560, 1100, 2200, 4250, 8500

Description

Safe Preparation of Sodium Hypochlorite

HYPROLYSER® electrochlorination systems provide an on-demand supply of <1.0% sodium hypochlorite solution, generated through the electrolysis of diluted brine solution.

Due to the low caustic and mineral content of the generated solution, injection point cleaning and descaling tasks are completely eliminated.

Commercial strength sodium hypochlorite can degrade quickly in storage, often losing up to 20% of its chlorine content. The <1.0% sodium hypochlorite solution produced by the HYPROLYSER® system does not require caustic buffer chemicals or additives to retain its chlorine content. It can retain its original chlorine concentration for months.

The combination of storing low strength solution, the avoidance of chemical deliveries, handling and operator involvement significantly reduce the likelihood of any accidental spillage.

Easy to operate

The operator is required to fill the salt saturator tank with salt. From this, the HYPROLYSER® system produces a concentrated brine solution which is then diluted to the correct strength for efficient electrolysis. The diluted brine is then delivered to the electrolytic cell where electric current is passed through the solution, producing sodium hypochlorite. The process is continued automatically until the product storage tank is filled. A range of metering and transfer pump options are available to convey the hypochlorite safely to the disinfection/treatment process.

Functions

- On site electrolysis of brine for safe generation and preparation of <1% sodium hypochlorite solution
- Safe and fully sealed electrolytic process
- Easy to operate
- Integrated control panel & OLED screen
- Manual and automatic operation
- Multilingual operating display option
- Telemetry alarm event & data logging option
- Chlorine production from 30 g/h to 8.5 kg/h

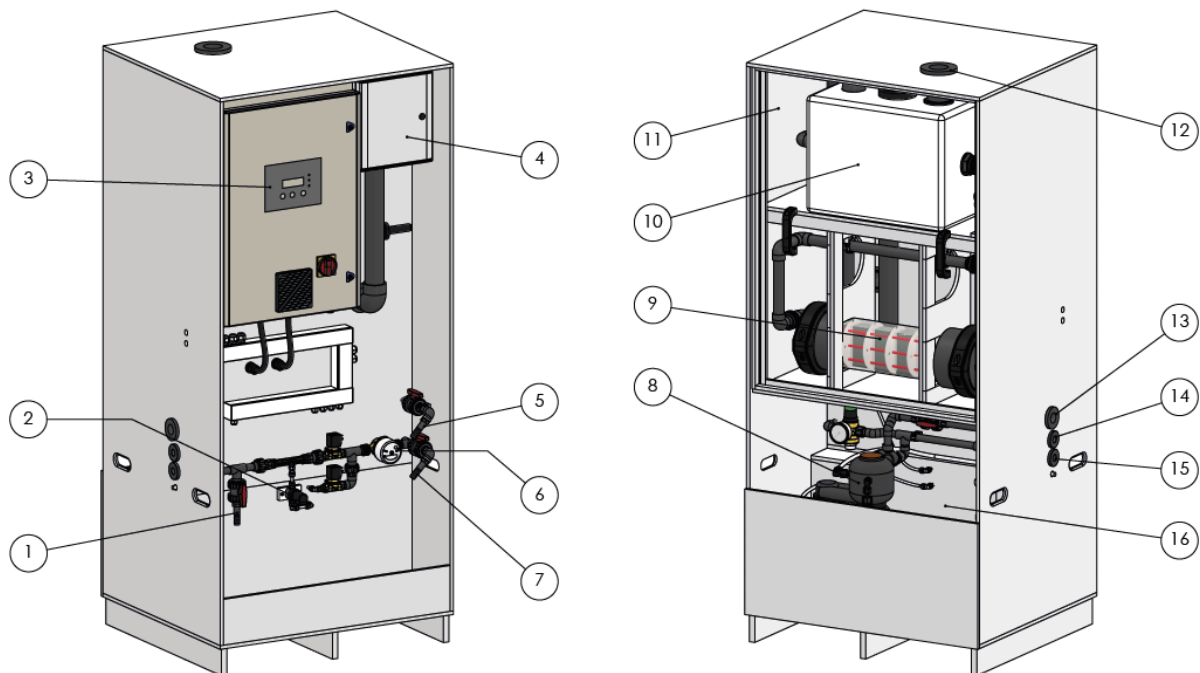
Benefits

- Eliminate delivery & handling of hazardous chemicals
- Handle only salt
- Generate on site for on-demand or residual storage
- Eliminate dosing pump air-locking associated with commercial hypochlorites
- Eliminate injection point scaling associated with commercial sodium and calcium hypochlorites
- Considerable Health & Safety benefit to operators

Areas of Application

- Swimming & Spa pool disinfection
- Chlorination of potable water supplies
- Food washing / processing treatment
- Dairies / Breweries cleaning in place (CIP)
- Cooling tower biocide treatment
- Secondary disinfection
- Industrial chlorination treatments

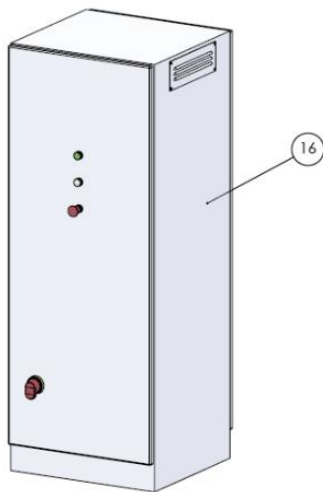
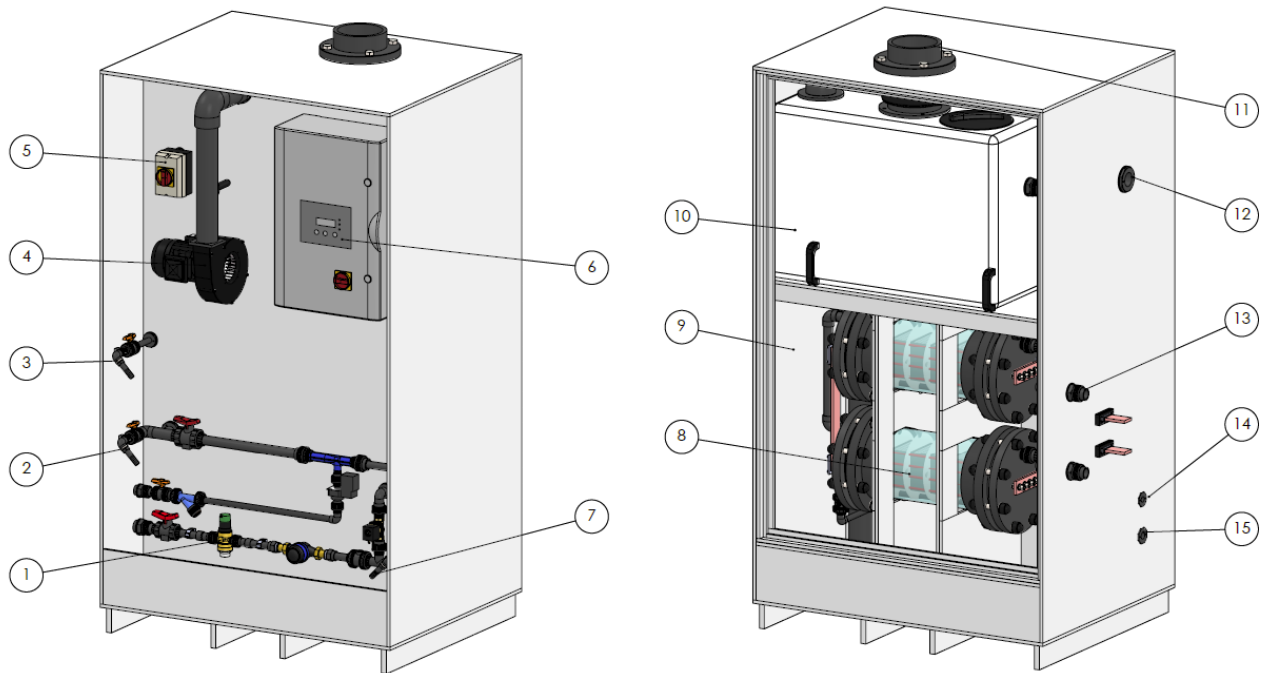
HYPROLYSER® STANDARD: 280, 560, 1100, 2200 g/h chlorine production



Item	Description
1	Diluted brine / salinity S.G. sample point
2	Brine control valve
3	Control panel
4	Centrifugal ventilation fan
5	Product sample point
6	Feed water flow management
7	Softened feed water sample point
8	Duplex softener system
9	Electrolyser
10	Integral product storage & degassing tank
11	Sealed electrolyser compartment
12	Ventilation exhaust connection
13	Product outlet connection
14	Softened water outlet connection
15	Feed water supply connection
16	Integral salt saturator

Product Description

HIGH CAPACITY: 4.25, 8.5 kg/h chlorine production



Item	Description
1	Feed water pressure regulator & water management assembly
2	Diluted brine / Salinity S.G. sample point
3	Product strength sample point
4	Centrifugal ventilation fan
5	Electric supply isolator
6	Control panel
7	Softened feed water sample point
8	Electrolyser
9	Sealed electrolyser compartment
10	Product degassing tank
11	Ventilation exhaust connection
12	Product outlet connection
13	Service connection (for acid wash)
14	Brine supply connection (from external saturator)
15	Softened water supply connection
16	DC Power supply unit

Technical Specifications

Description		Hyprolyser® Standard Models					
		280	560	1100	2200	4250	8500
Chlorine capacity	g/h	280	560	1100	2200	4250	8500
Chlorine concentration	g/l	5 - 7					
Power consumption	kWh	1.4	2.8	5.6	12	24	47
Power supply	ø	1		3Y	3Y		
Operating pressure	Bar	1.5 - 8					
Nominal water consumption	l/h	49	98	196	392	650	1300
Nominal salt consumption	kg/h	0.93	1.80	3.60	7.30	14.02	28.04
Protection class	IP	40				44 (PSU 20)	
Permissible ambient temperature	°C	5 to 40					
Max. Altitude	M	2000 (<i>Ambient temperature derating of 5°C/1000m for operating altitude higher than 2000m/6500ft.</i>)					
Pollution Degree		2					
Permissible feed water temperature	°C	8 to 20**					

* Tropical model variant (T), additional ventilation provided.

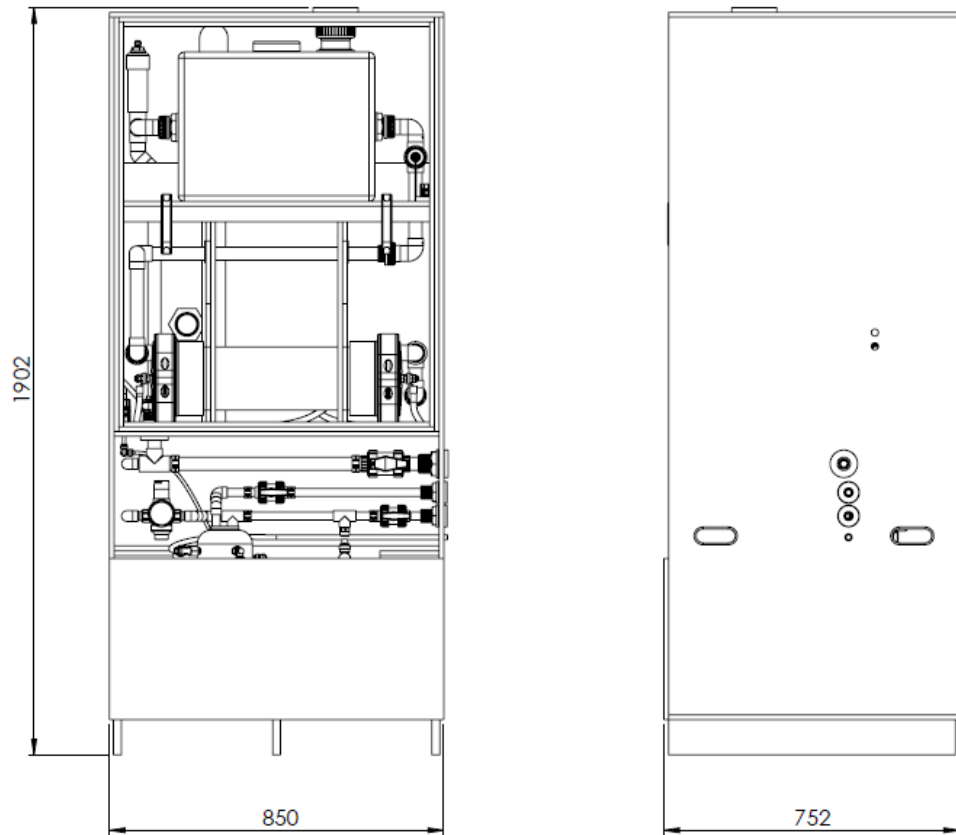
** chiller recommended above 20°C.

Other specifications available upon request.

Dimensions

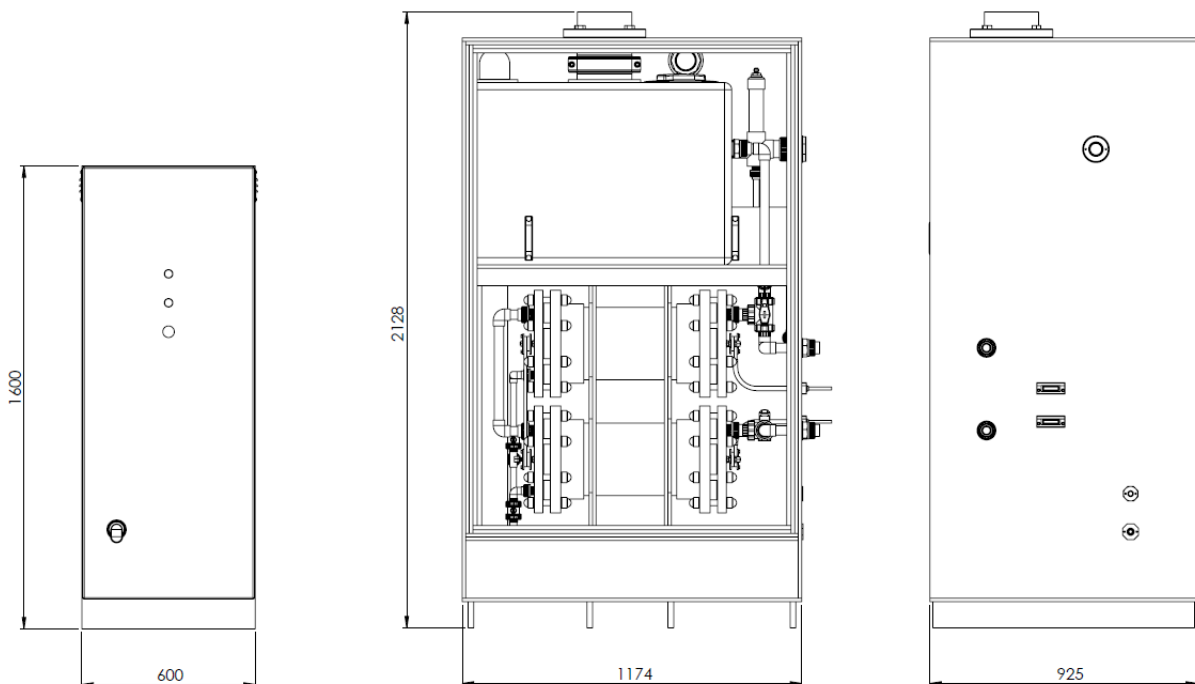
STANDARD

All dimensions in mm



HIGH CAPACITY

All dimensions in mm



HYPROLYSER® system components & accessories



Hydrogen gas detector for positioning in chlorine plant room adjacent to the HYPROLYSER® for fail safe detection and shutdown. Supplied as standard with every HYPROLYSER® unit.



External product storage tank option for use in conjunction with STANDARD and HIGH CAPACITY systems. Volume of 300, 500, 1000 and 2000 litres, made of MDPE plastic.



External product storage tank option for use in conjunction with STANDARD and HIGH CAPACITY systems. Salt capacities of 300, 500 and 1000 kilograms, made of MDPE plastic.



Hyprolyser® Test Kit contains all instruments, glassware and reagents to carry out all necessary routine and service tests to confirm and monitor the efficient operation of the system.

Partner: