

# In-situ salt electrolyser



From 30 to 2200 g/h

- 3 kg of salt are equivalent to 1 kg of pure chlorine
- Concentration of 5-7 g/l of produced chlorine
- 13 kg of salt are equivalent to a can of 25 l of bleach

- Public pools
- Aquatic centers
- Hotels
- Campsites
- Private pools
- Any process with chlorine injection

**SYCLOPE**  
Electronique

# In-situ salt electrolyser

## ADVANTAGES



The use of salts offers a lot of benefits for the health and safety of operators:

### SECURITY

- No delivery and handling of dangerous chemical products
- H2 detector integrated
- No chlorine vapor emanation (hermetic container)

### QUALITY

- No product degradation: constant concentration
- On-site generation and production of chlorine
- One electrolysis system for several injection points using a common product storage tank and dosing pumps
- Less obstruction of injection point compared to sodium and calcium hypochlorites on the market because of the low mineral constant of the solution produced

### EFFICIENCY

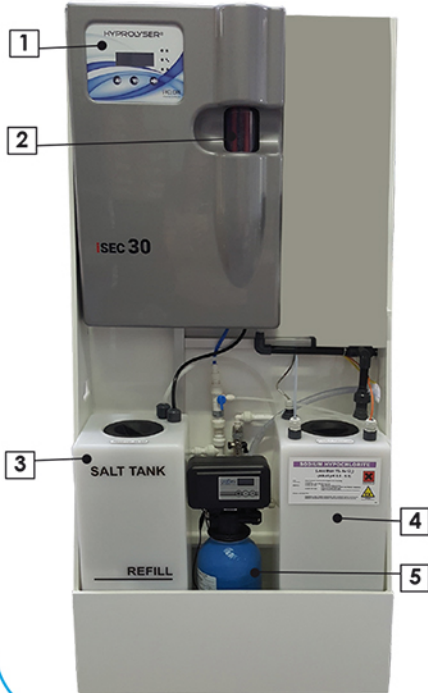
- Simple and low maintenance frequency
- Economical solution: salt cheaper than chlorine
- >5 years electrolyser long life span
- Simple, safe and reliable equipment: automatic process, open non-membrane system
- Mounted on skid
- Easy to install: "Plug and Play" system
- Simple supply of salt versus chlorine

*PRODUCT QUALITY - SIMPLE INSTALLATION AND USE  
ECONOMICAL SOLUTION - INCREASED SECURITY*



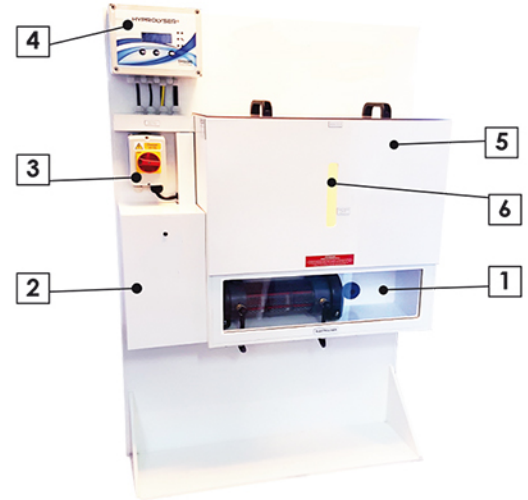
## DESCRIPTION

### Version from 30 to 90 g/h



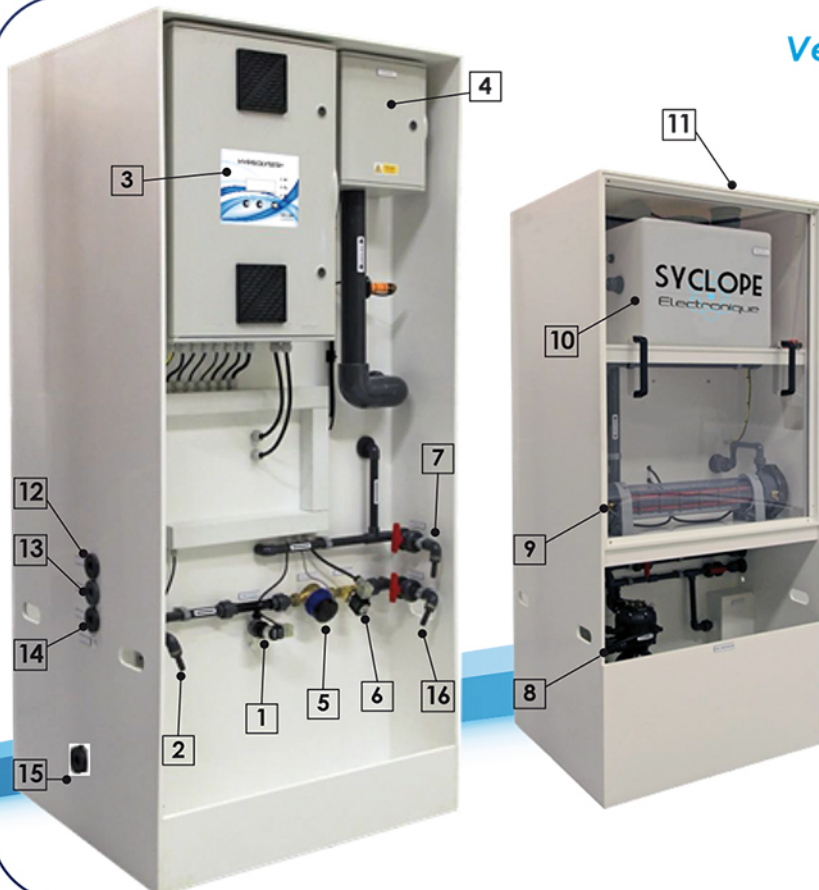
- 1- Control panel
- 2- Electrolyser unit
- 3- Salt saturator tank
- 4- Product tank
- 5- Softener

### Version from 240 to 480 g/h



- 1- Electrolyser unit
- 2- Water and brine control module
- 3- Power isolator
- 4- Control panel
- 5- Salt saturator tank
- 6- Salt level
- 7- Hydrogen evacuation
- 8- Product tank
- 9- Retention tank

### Version from 560 to 2200 g/h



- 1- Brine control solenoid valve
- 2- Sampling point of diluted brine
- 3- Control panel
- 4- Fan for hydrogen extraction
- 5- Management of the softened water flow
- 6- Softened water solenoid valve
- 7- Product sampling point
- 8- Self-regenerating double softener
- 9- Electrolyser cell
- 10- Internal tank for product storage and degassing
- 11- Hydrogen evacuation outlet
- 12- Product output to external tank
- 13- City water supply
- 14- Softened water output to external saturator
- 15- External saturator brine arrival
- 16- Softened water sampling point

# In-situ salt electrolyser

## From 30 to 2200 g/h

### TECHNICAL FEATURES

DESCRIPTION	Unit	ELECTROLYSER MODEL								
		30	60	90	240	480	560	1100	2200	
<b>Production features</b>										
Production capacity	g/h	30	60	90	240	480	560	1100	2200	
Chlorine concentration	g/l	5-7								
Equivalent in concentrated sodium hypochlorite	L/day	4,8	9,6	14,4	38,4	76,8	92	183	366	
<b>Production tank + degassing</b>										
Volume	Liter	30 or 200	30 or 200	30 or 200	200	200	500 to 2000			
Material	Type	PE	PE	PE	PE	PE	PE	PE	PE	
Monted on skid		✓	✓	✓	✓	✓	X	X	X	
Overflow safety		✓	✓	✓	✓	✓	✓	✓	✓	
Retention tanks		✓	✓	✓	✓	✓	X	X	X	
Diameter of degassing chimney	mm	20	20	20	63	63	63	63	63	
<b>Power supply</b>										
Power consumption	Watts	150	300	450	1750	3330	2800	5600	12000	
Power supply	Ø	240VAC/1Ø/50-60Hz						or three-phase three-phase		
<b>Consumables</b>										
Permissible pressure	Bar	2 à 8								
Nominal water consumption	l/h	5	10	15	40	80	98	196	392	
Nominal salt consumption	kg/h	0,1	0,2	0,3	0,7	1,44	1,8	3,6	7,3	
Protection class	IP	54					44			
Permissible ambient temperature	°C	+5°C to +45°C								
Permissible supply water temperature	°C	+8°C to +25°C								
Type of salt		special softener, certified biocide								
<b>Dimensions</b>										
Dimensions (L x l x H)	mm	670 x 460 x 153			1500 x 950 x 700			853 x 752 x 1800		
Weight	kg/h	16	16	16	92	96	159	173	197	