



# Hyprolyser® iSEC®-2 Skid I & II 30-90

# State-of-the-ART chlorination system for pools.

Tailored to the unique needs of your pool facilities, our Hyprolyser<sup>®</sup> iSEC<sup>®</sup>-2 Modular Skid-I & II chlorine generation systems are flexible and versatile, providing efficient on-site pool water chlorination for Spa & Wellness, Schools and Community Pools. Hyprolyser<sup>®</sup> iSEC<sup>®</sup> electrochlorination systems provide an on-demand supply of <**1% sodium hypochlorite** solution, making it the safest chlorination system available. Using **harmless and inexpensive salt, water and electricity**, the sodium hypochlorite is generated through the electrolysis of the diluted brine solution, providing safe, non-hazardous chlorination.

#### Hyprolyser<sup>®</sup> iSEC<sup>®</sup> uses Adaptive Response Technology

Our latest generation of Hyprolyser® iSEC® systems give you even more. Our unique, state-of-the-art Adaptive Response Technology allows the system to adjust to changing environmental and site conditions, ensuring continued efficient and effective chemical generation.



The Hyprolyser<sup>®</sup> unit can detect the smallest irregularity within its process. Rather than immediately stopping chemical generation, it will automatically self-regulate and continue to function, whilst displaying the relevant warning annotation, enabling the operator to easily identify and resolve any issues without interrupting operation, avoiding nuisance and costly shutdowns.



## At a glance

- No more deliveries and handling of hazardous chemicals, COSHH made simple
- No more scaling at chlorine injector
- No more remedial cleaning of chlorine dosing pumps
- Generate your own chlorine when you need it from salt, water and electricity
- HSE/BPR compliant

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

### Safety is paramount

Health and safety are key to all operations, especially where hazardous chemicals are used, and this can be a challenge, especially in the plant room where space is at a premium. With Hyprolyser® there are no chemicals or hazardous substances to be transported, stored, or used, only harmless salt, removing all the concerns around COSHH. Hyprolyser® iSEC® is pinpoint in its efficiency, now using even less salt to generate sodium hypochlorite, this in turn maintaining lower TDS readings in the pool. A huge plus for the safety of the operation team and customers alike, as well as contributing significantly to sustainability goals.

### Cost saving

The costs of maintaining water hygiene can be a challenge for any pool leisure facility. Hyprolyser® can help to reduce those costs. The salt used is readily available and inexpensive and the efficiency of the vacuum-metering technology is highly effective, making Hyprolyser® an attractive and economical solution to disinfection needs.

### How does it work

The iSEC<sup>®</sup> system automatically draws a concentrated brine solution from a salt saturator which is then diluted to the correct strength with softened water for efficient electrolysis. The diluted brine is automatically fed to the electrolytic cell where electric DC current is passed through the solution, producing sodium hypochlorite. The automatic process cycle is repeated until the product storage tank is filled.

Commercial strength sodium hypochlorite can degrade quickly in storage, often losing up to 20% of its chlorine content. The iSEC® system does not require caustic buffer chemicals or additives to retain its <1.0% w/w chlorine content remaining stable for many months.



Hyprolyser<sup>®</sup> iSEC<sup>®</sup> Modular Skid-I/II equipment

## **Key Benefits**



#### Sustainable

Low environmental impact, minimal recyclable packaging, reduced transportation, no hazardous waste disposal.



#### Simple to use

Fill saturator with harmless, readily available salt. No remedial maintenance of chlorine injector needed. No technical intervention required by the operator. No chemical handling.



#### Reliable

Annual test and inspection. 2-year service interval. 2-5 year warranty. 6-8 year typical electrolyser life, +15 years system life span.



#### Economical

Low cost of salt, reduced pH correction chemical costs. Reduced operator labour. Low service and maintenance costs. Long service life means low total cost of ownership.



#### Low maintenance

Smart design and robust engineering require only simple, minimal periodic maintenance. Service contracts are available through our trusted network of Hyprolyser<sup>®</sup> trade partners.



#### Safe, low hazard system

Delivery and storage of salt, no toxic dangers to staff or neighbours? in transit or storage. No hazardous waste disposal. Excellent compliance to COSHH regulation.

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#### Skid system design

Hyprolyser<sup>®</sup> iSEC<sup>®</sup> systems are supplied in skid format. They have a compact footprint, ensuring plantroom space is fully utilised.

Each Hyprolyser<sup>®</sup> is delivered factory tested, ready for a quick and simple installation. Requiring only salt to be added, the system starts to automatically generate chlorine ready for use, within in a matter of hours.

Model	Chlorine Capacity		
iSEC <sup>®</sup> -2 30	30 g/h	1.60 lb/day	
iSEC <sup>®</sup> -2 60	60 g/h	3.17 lb/day	
iSEC <sup>®</sup> -2 90	90 g/h	4.76 lb/day	

## **Technical Data**

	iSEC®
Power consumption	4.0 – 5.0 kWh/kg Cl <sub>2</sub>
Salt consumption	3.0 – 3.5 kg/kg Cl <sub>2</sub>
Sodium hypochlorite strength	6 ±0.5 g/l Cl <sub>2</sub>
Weight	Max. 90kg
Supply voltage	240VAC

#### Quick Sizing Guide

	Total of Pool Volume(s) m <sup>3</sup>				
Approx. Capacity	3				
	180			iSEC <sup>®</sup> -290	
	500	iSEC <sup>®</sup> -230	ISEC°-260		
	Chlorine gas (Kg/day)	0.72	1.44	2.16	
	Sodium hypochlorite 14%, (L/day)	4.36	8.72	13.00	
	Calcium hypochlorite 70%, (Kg/day)	1.03	2.06	3.10	

Current daily chemical usage

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